

U.S. STEEL INDUSTRY

HEARING
BEFORE THE
SUBCOMMITTEE ON INTERNATIONAL TRADE
OF THE
COMMITTEE ON FINANCE
UNITED STATES SENATE
NINETY-EIGHTH CONGRESS
SECOND SESSION

JUNE 8, 1984



Printed for the use of the Committee on Finance

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1985

COMMITTEE ON FINANCE

ROBERT J. DOLE, Kansas, *Chairman*

BOB PACKWOOD, Oregon	RUSSELL B. LONG, Louisiana
WILLIAM V. ROTH, Jr., Delaware	LLOYD BENTSEN, Texas
JOHN C. DANFORTH, Missouri	SPARK M. MATSUNAGA, Hawaii
JOHN H. CHAFEE, Rhode Island	DANIEL PATRICK MOYNIHAN, New York
JOHN HEINZ, Pennsylvania	MAX BAUCUS, Montana
MALCOLM WALLOP, Wyoming	DAVID L. BOREN, Oklahoma
DAVID DURENBERGER, Minnesota	BILL BRADLEY, New Jersey
WILLIAM L. ARMSTRONG, Colorado	GEORGE J. MITCHELL, Maine
STEVEN D. SYMMS, Idaho	DAVID PRYOR, Arkansas
CHARLES E. GRASSLEY, Iowa	

RODERICK A. DEARMENT, *Chief Counsel and Staff Director*

MICHAEL STERN, *Minority Staff Director*

SUBCOMMITTEE ON INTERNATIONAL TRADE

JOHN C. DANFORTH, Missouri, *Chairman*

WILLIAM V. ROTH, Jr., Delaware	LLOYD BENSTEN, Texas
JOHN H. CHAFEE, Rhode Island	SPARK M. MATSUNAGA, Hawaii
JOHN HEINZ, Pennsylvania	DAVID L. BOREN, Oklahoma
MALCOLM WALLOP, Wyoming	BILL BRADLEY, New Jersey
WILLIAM L. ARMSTRONG, Colorado	GEORGE J. MITCHELL, Maine
CHARLES E. GRASSLEY, Iowa	DANIEL PATRICK MOYNIHAN, New York
STEVEN D. SYMMS, Idaho	MAX BAUCUS, Montana

CONTENTS

ADMINISTRATION WITNESSES

	Page
Hon. William E. Brock, U.S. Trade Representative	46
Hon. Lionel Olmer, Under Secretary for International Trade, Department of Commerce	66

PUBLIC WITNESSES

American Iron and Steel Institute, Donald H. Trautlein, chairman	84
George, F.A., manager of steel commodities, Caterpillar Tractor Co	342
Lynch, Leon, vice president, United Steel Workers	251
McNew, Ed, vice president, Davis Walker Corp., Los Angeles, CA, on behalf of the West Coast Ad Hoc Steel Wire Producer's Committee	334
Trautlein, Donald H., chairman, American Iron and Steel Institute, and chairman, Bethlehem Steel Corp	84
United Steel Workers of America, Lynn R. Williams, president	194
West Coast Ad Hoc Steel Wire Producer's Committee, Ed McNew	334
Wilkinson, Howard, vice president, Pacific Steel Corp	338
Williams, Lynn R., president, United Steel Workers of America	194

ADDITIONAL INFORMATION

Press release announcing hearing	1
Prepared statement of:	-
Senator John H. Chafee	1
Senator Daniel Patrick Moynihan	3
Senator Steve Symms	4
Letter and background information from the Heritage Foundation	7
Articles submitted by Senator Dave Durenberger for the record:	
"The Thing on the Hill"	29
"Steel Merger/New Threat to the Iron Range"	40
Prepared statement of:	
William E. Brock, U.S. Trade Representative	51
Hon. Lionel H. Olmer, Under Secretary for International Trade, U.S. Department of Commerce	67
Roger R. Reggelbrugge, president and chief executive officer, Georgetown Industries, Inc	85
Donald H. Trautlein chairman, American Iron and Steel Institute	89
James E. Chenault, Jr., president and chief executive officer, Lone Star Steel Co	125
David M. Roderick, chairman, United States Steel Corp	135
Dr. Adolph J. Lena on behalf of the Specialty Steel Industry of the United States and The American Iron and Steel Institute	165
Senator Bentsen's questions to Mr. Chenault and his responses thereto	190
Lynn R. Williams, president, United Steelworkers of America, AFL-CIO	197
Leon Lynch, international vice president (Human Affairs), United Steel- workers of America, AFL-CIO	252
Senator Pete Wilson, California	333
Ed McNew, vice president, Davis Walker Corp. for West Coast Ad Hoc Steel Wire Producer's Committee	336
Howard Wilkinson, vice president, Pacific Steel Corp	340
F.A. George, Caterpillar Tractor Co	343

IV

COMMUNICATIONS

Statements submitted for record by:	Page
Senator Robert C. Byrd	349
Eric A. Hanushek, Deputy Director, Congressional Budget Office	353
Ray M. Milke, Ph.D., University of Pittsburgh	367
Alan William Wolff on behalf of the American Iron and Steel Institute	566
Alton D. Sluy, on industrial base as it relates to national security	584
Dr. Paul W. Marshall on behalf of the American Iron and Steel Institute..	594
Wolfgang Jansen, chairman of the board, Ohio River Steel Corp.....	650
U.S. Council for an Open World Economy, David J. Steinberg, president ...	654
Embassy of the Republic of Argentina Economic Counselor's Office.....	657
West Coast Metal Importers Association, Inc.....	668
The Algoma Steel Corp. Ltd.; Dofasco, Inc.; and Stelco, Inc.....	699
R. C. Schnatterly, manager, marketing services, Copperweld Tubing Group, Copperweld Corp., Pittsburgh, PA.....	714
William H. Alexander, chairman, Cold Finished Steel Bar Institute.....	733
Gilmore Steel Corp., Thomas B. Boklund, president.....	752
John W. Feist, letter, Government Relations Associates, Inc. and state- ment, Kaiser Steel, Kenneth L. Gibson, vice president	755
Embassy of Venezuela.....	760
Briger & Associates, CVG-Siderurgica del Orinoco C.A.-SIDOR.....	807
Hon. Richard S. Caliguiri, mayor, city of Pittsburgh, PA.....	828
American Federation of Labor and Congress of Industrial Organizations ...	846
Canadian Embassy	849
Berg Steel Pipe Corp., Lewis E. Leibowitz, counsel	852
Cadwalader, Wickersham & Taft on behalf of American Wire Producers Association	869
Leo F. Buckley, member of the board of directors, American Wire Produc- er's Association	871
Algoma Steel Corporation, Limited, Peter Nixon	895
Article, "Countervailing or Coalescing Power? The Problem of Labor/Manage- ment Coalitions", Walter Adams and James Brock	877

U.S. STEEL INDUSTRY

FRIDAY, JUNE 8, 1984

U.S. SENATE,
SUBCOMMITTEE ON INTERNATIONAL TRADE,
COMMITTEE ON FINANCE,
Washington, DC.

The committee met, pursuant to notice, at 9:33 a.m. in room SD-215, Dirksen Senate Office Building, Hon. John C. Danforth (chairman) presiding.

Present: Senators Danforth, Packwood, Heinz, Durenberger, Symms, and Bentsen.

Also present: Senators Pete Wilson and Arlen Specter.

[The press release announcing the hearing and the prepared statements of Senators Chafee, Moynihan, and Symms, and letter and background material from the Heritage Foundation on the state of the U.S. steel industry follow:]

[Press Release No. 84-142]

SUBCOMMITTEE ON INTERNATIONAL TRADE ANNOUNCES HEARING ON THE STATE OF THE U.S. STEEL INDUSTRY

Senator John C. Danforth (R., Mo.), Chairman of the Subcommittee on International Trade of the Committee on Finance, announced today that the Subcommittee will conduct a hearing on Friday, June 8, 1984, on the state of the steel industry.

The hearing will commence at 9:30 a.m. in Room SD-215 of the Dirksen Senate Office Building.

In announcing the hearing, Chairman Danforth noted that the steel industry is one of several that have filed petitions under section 201 of the 1974 Trade Act seeking relief from imports. The hearing should afford an opportunity to examine future prospects for the U.S. steel industry as it restructures to compete more effectively.

STATEMENT BY SENATOR JOHN H. CHAFEE, AT A HEARING OF THE SUBCOMMITTEE ON INTERNATIONAL TRADE

Mr. Chairman: Few of us will disagree that the steel industry has suffered tremendous setbacks in the last ten years. Where we part company is on the causes of these setbacks and the solutions for making American steel a viable industry again both domestically and worldwide.

One solution proposed by the steel industry and its advocates is protection. S. 2380, which is presented by its sponsors as necessary to give the steel industry breathing room "to modernize and regain its competitive edge," would impose quotas limiting imports to 15 percent of U.S. consumption.

I do not believe in the concept of breathing room. Industry after industry comes to us to ask for breathing room from import competition. The auto industry, the footwear industry, and now the steel industry. Too often breathing room just means a chance to hike up prices and salaries. Breathing room is too often not used to get breath back but to further suffocate.

The protections given to this industry go as far back as the 1968 Voluntary Restraint Agreement with the European Economic Community. That breathing space merely allowed the industry to avoid necessary restructuring. The labor costs of U.S. steel makers were then and still are undermining its competitiveness. By 1978,

U.S. labor costs per ton of steel shipped exceeded that of any other major steel supplying country. Between 1969 and 1982, the real hourly cost of iron and steel wage employees increased from \$14.14 to \$23.78, or by 68 percent, all out of proportion with wage increases for all manufacturing. The premium of steel wages over wages for all manufacturing was 65 percent by 1982.

Precisely because they thought they could shield themselves from the world market, companies and workers postponed dealing with the industry's basic problems: old and inefficient plants, lagging technologies and high labor costs. As a result, the industry grew less competitive, and its retrenchment came as a sudden but inevitable shock.

Protection for steel has never been an economic success, because any benefits were quickly dissipated and because the problems with this industry did not originate with imports. The Comptroller General in his 1981 report to the Congress entitled, "New Strategy Required for Aiding Distressed Steel Industry," stated that imports are a result, not a cause, of the U.S. steel producers' problems. That report stated:

"The companies we interviewed frequently cited the unavailability or the restricted sources of certain steel mill products domestically, and the undependability or slowness of U.S. companies' delivery, as reasons for buying foreign steel.

Several of the firms we contacted said foreign mills were more willing than U.S. producers to work with them in solving problems. Additionally, the foreign mills would be more willing to tailor products to customer specifications or perform additional manufacturing operations at the mill before shipment."

Steel executives were late in seeing that cars would get smaller and plastics and aluminum would substitute for steel; that steel would not recapture the beverage can market for aluminum; that stronger steel and reinforced concrete would reduce the need for steel in construction; and that they didn't have the luxury of being lax with customers, using a marketing technique of take-it-or-leave-it, while foreign steel makers were in there competing.

These are fundamental changes taking place in our economy that no legislation can reverse. The simple fact is that we need less steel today than we did ten years ago. Ever increasing prices for steel will not stem but stimulate the movement toward substitutes.

The impact of these quotas on the cost of steel and steel products to the consumer has not yet been analyzed. According to a recent article in Europe magazine on "The High Cost of Protectionism," tariffs and quotas on steel imports cost about \$6 billion in 1980. The Trigger Price Mechanism cost consumers an additional \$1.1 billion. That doesn't include the costs of protection since 1980.

Higher steel prices in the U.S. will increase competition from finished steel products made abroad to the detriment of the vast number of U.S. steel product fabricators and their hundreds-of-thousands of workers, including a number of Rhode Island companies like Amtrol Inc. and Weatherking.

Then there are the metal working producers whose concerns and problems are rarely addressed because they don't have a lot of political clout to make their concerns heard. According to the U.S. Trade Representatives Bill Brock, this segment of the industry employs 20 times more people and accounts for almost 10 times the share of GNP than the integrated producers. Metal working firms are typically small, yet they are sensitive to imports. These producers would clearly be hurt by increased prices for their raw material and also by increased import competition as foreign producers shift from exporting steel to exporting finished products made of steel.

While increased domestic production as a result of quotas might lead to employment of about 10,000 additional steel workers, the loss of jobs in the metal working industries will be many times 10,000. This would hit a number of metal work producers in Rhode Island, where unemployment of that magnitude could have devastating effects. I for one cannot accept action by this Senate which helps one relatively uncompetitive part of the industry at the expense of another sector which makes a greater contribution to GNP and to employment.

Next we will be hearing a much larger chorus of fabricators and metal working producers who will seek protection from imports of practically all finished steel products. Where will we draw the line on all this protection?

The point is that if the problems of the steel industry stem from unfair trade practices, the Administration has sufficient authority under existing trade laws to provide relief. The docket of the International Trade Commission is full of such petitions. We should not short circuit or interfere with that legal process by taking action that could only lead to retaliation by our trading partners. The imposition of quotas would apply to fairly and unfairly traded imports alike, from all sources.

Those countries that trade fairly, like Canada, from which we import steel daily, will probably feel the most aggrieved by the quotas and would be the most likely to retaliate, in commodities other than steel.

I can, therefore, see no value whatsoever in imposing quotas. They will hurt, not help, the steel industry, by removing the stimulus for modernization. They are not needed, because we are now seeing a strong upturn in demand for steel of all types. Integrated steel producers are making an effort to restructure and modernize their plants, some are attempting to check increases in employment costs. The steel industry utilized 74.6 percent of its production capability in the first quarter of this year, compared with 49.3 percent in the same period in 1983, according to the American Iron and Steel Institute. The total employment cost of hourly paid workers per hours worked, was 21.17 in March of this year, compared with 21.68 in February and 22.50 in March 1983. Also according to the American Iron and Steel Institute, shipments of steel mill products by American mills continued to improve in the first quarter of this year.

Iron Age, the prominent industry publication, in its annual steel forecast in January, was very positive about the prospects for improvement in consumer markets. Steel shipments to the railroad industry will rise 80 percent in 1984, it estimates. Though it's far-fetched, Iron Age says, there may even be a steel shortage in 1984, since no one really knows how much effective steel capacity is available. "It's reasonable to consider that any surprises in the steel market situation should be on the upside," the forecast concludes. Throughout the industry there are signs of hope and improvement in demand. Hardly the time to limit supply by cutting off imports I'd say.

The future of the American steel industry may not lie with those companies requesting our assistance, but rather with those modern, lean and highly specialized operations dubbed mini-mills. Typically small, they use electric furnaces, state-of-the-art equipment in steel making, and have combined high productivity and low operating costs to invade the stodgy American steel market almost overnight. The result is an industry whose domestic prices match the lowest-cost foreign imports. According to a 1978 study by the Congressional Office of Technology Assessment, the number of manhours needed to produce a ton of steel with an electric furnace dropped 25.3 percent from 1972-77 compared with a 6.9 percent drop in integrated mills. And the cost of building a mini-mill was 10-20 percent of the cost of a new larger integrated plant.

These small mills match foreign producers in efficiency and costs. Between 1969 and 1983, mini-mill shipments more than doubled, increasing from about 6 million tons per year to 13 million tons per year. In that same period, the relative gain by mini-mills exceeded by nearly 50 percent the gain by imports.

Kenneth Iverson, President and Chief Executive Officer of one such mill, Nucor Corporation, the country's tenth largest steel producer, disdains any trade protection from foreign producers. In a National Journal interview, Mr. Iverson said, "I'm not pessimistic at all about the integrated steel industry. It can be rationalized so it can compete. But if we provide the steel companies with trade protection, it'll delay modernization. We won't need to modernize if we have that protection."

Mr. Chairman, I believe that steel quotas whether legislated or voluntary are contrary to the national interest. I wholeheartedly agree with the remarks of TRW Chairman Ruben F. Mettler made recently to a meeting of the American Iron and Steel Institute:

"We are not confronted with a choice. Either we try to raise a wall around ourselves, close out the world, and compete for shares of a shrinking home market; or we make up our minds to stay in the real world and compete as we have never had to compete before."

STATEMENT BY SENATOR DANIEL PATRICK MOYNIHAN (D., NY)

Mr. Chairman, I want to commend you for scheduling this most important hearing on the state of the domestic steel industry.

Members of this Subcommittee are all too aware of the monumental problems facing American steel workers and manufacturers. Hardly a State in the Nation has not been affected, either directly or indirectly, by the downturn in this industry.

Imports of foreign steel have increased dramatically in recent years. Twenty years ago, foreign producers shipped 6.4 million tons of steel into the United States. In 1983, foreign suppliers exported to America almost three times that amount, 17 million tons.

While foreign suppliers have been increasing their steel shipments to the U.S., American producers have been selling less here. Since 1974, the percentage of the

American market accounted for by foreign suppliers has steadily increased, from 13.4 percent to over 25 percent.

I ask the members of this Subcommittee to consider the human costs of increasing imports and the decline in the American steel industry. In the first quarter of 1984, unemployment among American steelworkers hovered near 16 percent; more than 70,000 American steelworkers are without work today. Just four years ago, the American steel industry employed more than 400,000 men and women. Today, only about 250,000 American steelworkers have jobs.

These human costs have been especially severe in my home state of New York. Two major steel plants have closed down since 1982—the Republic Steel plant in Buffalo and the Bethlehem Steel plant in Lackawanna—eliminating approximately 10,000 jobs. Today, the number of New Yorkers employed in the steel industry, 11,300, is less than half the number of only four years ago. This trend is alarming, and demands our utmost attention.

The causes of the recent increase in foreign steel imports are as complex as they are varied. The high and considerably overvalued American dollar must be considered one of the most important. According to the President's Council of Economic Advisors, between December 1980 and December 1983, the dollar appreciated some 52 percent against a basket of ten other leading Western currencies. After adjusting for inflation, the real rise in the dollar's value during this period was 45 percent. It is clear to this Senator that our import-sensitive industries, such as the steel industry, as well as our export industries simply cannot compete as well as they ought to with the dollar so overvalued.

Mr. Chairman, I must stress that American steelworkers have sacrificed much to meet the challenge facing the industry, by agreeing to lower wages and benefits in their labor contracts. In March 1983, the United Steelworkers of America and the major domestic steel companies agreed to a new labor contract of historic proportions. That contract lowered wages and benefits by a very substantial margin, nearly 11 percent, helping to increase the domestic industry's competitiveness.

I also would like to note that American steelworkers are some of the most productive workers in the world. American steelworkers can make a ton of steel in less than 6 hours, on average—the same steel Japanese steelworkers need more than 7 hours to produce and German steelworkers need more than 9 hours to produce.

Mr. Chairman, the steel industry clearly is facing the most critical period of transition and readjustment in its history. We simply cannot permit this industry—so important to the Nation's industrial base and defense interests—to continue to decline.

The government can, and indeed must, do all it can to stem the flood of foreign imported steel. If we do not act, we will commit an error of historic proportions, as our industrial base continues to be shipped overseas, funding employment and production in other nations.

I thank the Chairman for this opportunity to speak on this most important problem, one facing not only our steelworkers and management but, indeed, every American.

SENATOR STEVE SYMMS—SENATE FINANCE COMMITTEE—JUNE 8, 1984

It is hardly news that the U.S. steel industry is in trouble, and that the embattled industry is blaming import competition for a large share of its woes.

However, the U.S. steel industry's problems are deeply rooted. The steel producers solution—import barriers—might stem the tide for the very, very short term. But, past experience has shown that past barriers were no more than temporary palliatives that failed to address the steel industry's troubles at their many sources. Moreover, because steel is a major input in other industries, restricting steel imports would inevitably raise steel prices, thus adversely affecting the competitiveness of other U.S. industries. Although import restrictions might provide temporary relief over the very short term, the wisdom of such a policy is questionable from the viewpoint of the economy as a whole.

In examining the problems of the steel industry, I believe it would be short-sighted to attribute rising steel imports entirely to actual or alleged unfair foreign trade practices. A brief look at some of the basic factors proves otherwise.

The U.S. steel industry's woes arose partly from excess capacity in the worldwide steel industry. From 1953 to 1973, world steel consumption grew rapidly at 6 percent per year. The boom attracted vast amounts of public and private investment. Steel production capacity expanded in both the industrial and the developing nations in order to keep pace with the growth in demand in 1973.

The boom ended in 1973. By 1981, consumption in the industrialized countries had dropped to 86 percent of its 1973 level, but the drop was offset by increases in the developing countries and in the planned economies so that the net result was zero growth in world consumption.

While the growth in worldwide demand stagnated, steel production capacity continued to expand. From 1973 to 1981, capacity increased by 10 percent in the developed countries and by 7 percent in the developing countries. The resultant worldwide excess capacity set the stage for increasingly fierce price competition that threatens the continued survival of less-efficient, high cost producers.

Unfortunately, the U.S. steel industry has been among the less-efficient, high-cost producers in the world market, because of high labor costs and the use of outdated equipment, compared to those abroad.

Labor costs have increased in the U.S. steel industry—the hourly wage cost, including benefits rose from \$3.30 in 1956 to \$25.20 in 1982. The 6.6 times rise relative to a 2.5 times increase in consumer prices has meant a substantial improvement in the living standard of steel workers—at the expense of a profit squeeze in the U.S. steel industry and a deterioration in the industry's competitiveness compared to producers abroad.

The profit squeeze arose because the wage increases were not fully offset by productivity increases, and because the resultant rise in unit labor cost (labor cost per output) could only be partially passed on to steel users through price increases. Between 1956 and 1982, labor productivity in the U.S. steel industry rose by only 5.5 percent. Given the 6.6 times rise in the wage rate, this has meant a 3.9 times increase in unit labor cost, compared to a 3 times rise in average steel prices. Since labor costs account for about 40 percent of total production in the U.S. steel industry, the development has meant sharply reduced profitability in that industry.

True, labor cost has also risen rapidly abroad and in some cases even faster than in the United States. For instance, from 1956 to 1982, unit labor cost rose 4.3 times in the Japanese steel industry, compared to the 3.9 times increase in the U.S. industry. However, the relative shift was not large enough to have put more than a dent in the absolute cost difference. By 1982, \$265 per ton, the U.S. unit labor cost was still substantially higher than the \$144 per ton in Japan. Moreover, changes in labor cost only tell part of the story. The rapid expansion in production capacity abroad has also meant improved quality and availability of a wide range of products in steel users in the U.S. market. To remain competitive, the U.S. steel producers would have had to limit labor cost increases to a much greater extent than they have been able to.

Numerous studies have focused on the reasons that U.S. productivity growth has lagged behind growth rates abroad. In the steel industry, a major cause has been the continued use of relatively old plants and equipment. Steel experts generally agree that the most modern, efficient method of steel production is the so-called "continuous casting" process whereby molten steel is poured directly into molds. This process reduces the high energy and labor costs of the conventional practice of first casting steel and later reheating it for molding and rolling. According to experts, the more efficient process accounts for 71 percent of Japan's steel output, 45 percent of the EEC's and only 21 percent of the United States'.

But, why has the U.S. steel industry lagged so far behind in renovating its plant and equipment in comparison to other countries? One would think that, given the high labor cost, there should have been a strong incentive for the producers to economize on labor cost by substituting capital for labor. And, surely, there has been no lack of capital in the U.S. market relative to markets abroad.

Two explanations suggest themselves. First, high labor cost has brought about a severe profit squeeze in the U.S. steel industry, thus reducing the incentive for investment in capital renovation. Second, the worldwide excess capacity and the enhanced import competition have made it even less attractive for investors to pour large amounts of capital into the industry.

In the face of increasing import competition, U.S. steel producers have appealed to the government for protection and received various types of relief. For instance, "voluntary" agreements were concluded in 1969 with the EEC and Japan to restrict the growth of steel imports from those countries to no more than a five-percent annual rate. Since 1977, a "trigger price mechanism" has been in place to impose duties on steel imports should the import price fall below the production and transportation cost of the most efficient foreign producer, Japan. These measures were intended to protect domestic steel producers against abrupt, massive shocks from abroad and to give them the time to generate the much-needed cash for modernizing their production facilities.

Studies, however, show that capital expenditures in the domestic steel industry declined in the five-year period after 1968 even though the voluntary restraints reduced imports by 25 percent from what they would otherwise have been in the same period. Between 1969 and 1974, in contrast, capital expenditures more than doubled in the Japanese and EEC steel industries. Studies also show that the trigger-price mechanism did not have any measurable impact on the market shares of U.S. domestic steel producers.

Even if import barriers had been effective in keeping out or reducing imports, thus providing short-run relief to the U.S. steel industry, their ultimate effect would have been to raise U.S. steel prices. Since steel is a major input in so many other industries, the higher steel prices would clearly have deleterious effects on the competitive positions of the U.S. automobile, machinery, home appliance, and other industries. Thus, it does not seem that total employment would be helped by effective barriers against steel imports.

Furthermore, retaliation against other sectors of our economy by our trading partners could have a major impact on the economy as a whole.



A tax-exempt public policy research institute

May 30, 1984

Mr. Roderick A. DeArment
Chief Counsel
Committee on Finance
Room 8D-219
Washington, D.C. 20510

Dear Mr. DeArment:

I would like to submit to the Subcommittee on International Trade Professor Kent Jones' Backgrounder, "Saving the Steel Industry", which was written at the request of The Heritage Foundation.

Dr. Jones is a Professor of Economics at Babson College, Wellesley, Massachusetts and takes issue with suggestions that the government needs to take a more activist role in helping the steel industry.

If you have any questions regarding Dr. Jones' report please do not hesitate to call me.

Sincerely,

Virginia E. Gilbert
Director, Legislative Information

VEG:rm
Enclosure

Phil N. Truluck, *Executive Vice President*
Burton Yale Pines, *Vice President*
Richard N. Holwill, *Vice President*

Edwin J. Feulner, Jr., *President*

Wills Ann Johnson, *Senior Vice President*
Herbert B. Berkowitz, *Vice President*
John A. Von Kannon, *Treasurer*

Hon. Frank Shakespeare, *Chairman*
Hon. Ben B. Blackburn
David R. Brown, M.D.
Joseph Coors
Midge Deeter

Board of Trustees
Hon. Shelby Cullom Davis, *Vice Chairman*
Robert F. Das
Hon. Jack Eckerd
Edwin J. Feulner, Jr.
Joseph R. Keys

J. Frederic Rensch, *Secretary*
Robert H. Kriebler, Ph.D.
Lewis E. Ichnman
Hon. William E. Simon
Jack Wrather

214 Massachusetts Avenue, N.E. • Washington, D.C. 20002 • (202) 546-4400

 The Heritage Foundation

NEWS

FOR IMMEDIATE RELEASE
CONTACT: Barbara Gracey

Steel Industry Seen Hurt By Protectionism

WASHINGTON, May 25, 1984 — Additional measures to protect the ailing steel industry from allegedly unfair foreign competition would only hurt the U.S. economy by inflicting higher prices on consumers and creating new trade disputes, says a new study.

Author Kent Jones, Professor of Economics at Babson College, Wellesley, Mass., takes issue in the report with suggestions that the government needs to take a more activist role in helping the steel industry.

Those favoring a bigger role for government have proposed a variety of subsidies, special tax credits, and restrictions on foreign steel imports to help domestic producers.

The U.S. steel industry has run into hard financial times in recent years. Employment in the industry fell from 512,000 in 1974 to 245,000 in 1984.

But Jones says in his study, published by The Heritage Foundation, a Washington think tank, that protectionist measures would harm both the competitiveness and the market structure of domestic producers by delaying needed changes in the industry.

The long-term goal of the proposed protectionist policies, Jones says, is to give the industry "breathing space" while it slims down to a more efficient, more competitive size. But in the process, he says, the measures will maintain production levels above those that would occur in an open market, allowing the industry to avoid or delay taking needed restructuring measures.

"The very factors contributing to competitive decline — pricing practices and the wage-productivity gap in the case of steel — provide the motivation for a protectionist campaign which in turn allows these factors to remain entrenched," explains Jones. "In addition, plant closings and modernization by the steel companies have been delayed because the industry has been insulated from the brunt of international competition," he says.

Emphasizing the anti-consumer nature of protectionist policies, he calls protectionist devices "highly contagious," and notes that a successful plea for protection could prompt other industries to seek similar relief. "Protectionist industrial policy," says Jones, "therefore, might prove an ideal catalyst for protracted trade disputes, along with a general deterioration in international economic relations and a decline in world and domestic economic welfare."

(more)

Recommending that Congress phase out trade restrictions and avoid protectionist policies, Jones says the salutary effect of international competition should be the principle on which an effective U.S. steel policy is based. "Removing the painful sting of competition subverts the objective of creating a healthy, robust steel industry. Adjustment cannot be spurred by a benevolent government bureaucracy; it must proceed in the marketplace." He also emphasizes that steel mergers must be accompanied by a reduction in import barriers.

Jones warns that without substantial import competition, any restructuring of the U.S. steel industry based on mergers and acquisitions would invite inefficient and uncompetitive behavior by the steel producers. "The Justice Department's initial decision to block the merger of LTV and Republic was based on inadequate domestic competition due to trade restrictions," says Jones.

He concludes that a consumerist policy is needed, because "an industrial policy for steel . . . must ultimately serve short-term producer interests to the detriment of consumers and the economy as a whole — and ultimately to the steel industry itself."

###

The Heritage Foundation **Backgrounders**

No. 354

The Heritage Foundation 214 Massachusetts Avenue N.E. Washington, D.C. 20002 (202)546-4400

May 21, 1984

SAVING THE STEEL INDUSTRY

INTRODUCTION

No industry appears to be in more dire need of help than steel. But as the recent confused debate over mergers and foreign imports has shown, there is little consensus about what should be done. Employment in the industry declined from 512,000 in 1974 to 245,000 in February 1984 as the steel slump continued.¹ This severe process of adjustment is particularly disturbing to many Americans because of steel's association with economic growth and well-being. How can the American economy prosper, they ask, when such a basic industry as steel is not strong, large, and healthy?

Many politicians have embraced the concept of a national industrial policy and import controls as the key to steel's improved competitiveness and "orderly" adjustment. Through a variety of federal programs, subsidies, tax credits, and trade restrictions, the proponents of industrial policy would seek to achieve target levels of output and employment (particularly in economically depressed regions), the retirement of excess steel-making capacity, and the modernization of remaining facilities.

Yet these advocates of industrial policy have largely ignored the reality of international trade in their proposals. They call for protectionist barriers, such as the steel import quota bill now being considered by Congress, or they seek relief under Sec. 201 of the Trade Act of 1974, the so-called escape clause. But international trade restrictions would harm both the competitive-

¹ William T. Hogan, World Steel in the 80s: A Case of Survival (Lexington, Massachusetts: D.C. Heath, 1983), p. 119; American Metal Markets, April 18, 1984, p. 7. In January 1983 employment reached a low point of 229,600.

ness and the market structure of the American steel industry. Moreover, proper consideration of import barriers is relevant to any assessment of the competitive impact of mergers, as was shown in the recent LTV-Republic case.

A close relationship exists between industrial policy, trade policy, and competition policy in the steel industry. An examination of this relationship uncovers three major themes that should guide policy:

1. "Fair trade" protectionism in steel creates an incentive structure that actually prevents the industry from improving its competitiveness.
2. Restrictions on steel trade would invite protracted trade disputes and the disruption of international economic relations in general.
3. An industrial policy for steel would damage competition domestically and provide a framework for the progressive cartelization of steel markets world wide.

These conclusions lead to three important policy recommendations, which should form the basis of congressional action designed to save the steel industry. First, Congress should phase out quantitative trade restrictions and avoid creating new barriers. Second, industrial policies should be avoided, since they would delay or distort adjustment to international competition. And third, Justice Department decisions on steel mergers should be linked more closely to considerations of existing trade restrictions and their effect on domestic competition.

STEEL PROTECTIONISM AS AD HOC INDUSTRIAL POLICY

Industrial policy is essentially just another form of trade protection. In the case of steel, the goal is to maintain domestic production above the level that would occur in an open market--even if its final goal is a reduction in the size of the industry. This is achieved primarily through a variety of direct or indirect "temporary" subsidies.

Not surprisingly, many of the arguments used in support of protectionist trade policies in general are utilized by proponents of an industrial policy for steel: the need for a strong national industrial base, "breathing space" to facilitate adjustment, the prevention of economic turmoil in steelmaking communities, and the establishment of "fair trade."

The Challenge to the American Steel Industry

The declining international competitiveness of the American steel industry became apparent in 1959, when the U.S. became a net importer of steel. This decline was the result of fundamental

competitive factors. West European steel industries, for instance, had recovered from wartime destruction and begun to compete with U.S. steelmakers for American customers. Japan also emerged as a major steel exporter during the 1960s, and by the 1970s, was setting the standard for cost efficiency in world steel production.² In addition, American cost advantages in raw materials were eroding, particularly for iron ore and coking coal.

Rigidity and inflexibility in the American steel industry made it vulnerable to increases in foreign competition. The oligopolistic structure of the American steel market permitted price setting in times of depressed demand.³ And as long as American steel producers enjoyed significant competitive advantages, imports could not penetrate the American market. But years of isolation from the world market left American steelmakers unprepared for the severe challenge of new and vigorous international competition.

The absence of serious competitive pressure had reduced the incentive to develop new steelmaking technologies.⁴ An even more intractable problem, associated with the lack of competition, arose from the growing gap between productivity and wage rates (Table 1). The structure of the domestic market had allowed producers to agree to generous labor contract settlements by passing the increased costs along to consumers. But as imports increased their penetration of the U.S. market, these wage rigidities became a serious impediment.⁵

Protectionism and the "Breathing Space" Theory

Adaptation to the new competition was deterred by the efforts of those who had a vested interest in the *status quo*. When imports surged in 1967 and 1968, the industry and the steelworkers' union launched a protectionist campaign. Heavy lobbying for protection in 1968 led to the first postwar "industrial policy" for steel: a three-year "voluntary" restraint agreement (VRA), under which producers in the European Economic Community (EEC)

² It is important to recognize that Japanese success in this and other areas was not dependent on government subsidies or industrial planning. See Katsuro Sakoh, "Industrial Policy: The Super Myth of Japan's Super Success," Asian Studies Center Background No. 3 (Washington, D.C.: The Heritage Foundation, 1983).

³ See Federal Trade Commission, Staff Report on the United States Steel Industry and Its International Rivals: Trends and Factors Determining International Competitiveness (Washington, D.C.: U.S. Government Printing Office, 1977), pp. 157-170, and citations therein. An oligopolistic market is one effectively controlled by a handful of firms.

⁴ Walter Adams and Joel Dirlam, "Big Steel Invention and Innovation," Quarterly Journal of Economics, May 1966, p. 169.

⁵ See Kent Jones, "Impasse and Crisis in Steel Trade Policy," Thames Essay No. 35 (London: Trade Policy Research Centre, 1983), p. 40.

and Japan limited their steel shipments to the U.S. The agreement was renewed for another three years in 1971. The idea of the trade restriction was to provide a "breathing space" for the U.S. industry to close the capital expenditure gap that had contributed to its competitive decline in the 1960s. However, the incentive structure created by protection worked in exactly the opposite direction. By reducing competition it also reduced the pressure for adjustment. Capital expenditures actually declined through most of the VRA years, 1969-1974, while expenditures in competing countries rose rapidly (see Table 2).

The "breathing space" afforded by the VRA merely allowed the industry to avoid undertaking necessary restructuring. The labor costs of U.S. steelmakers continued to undermine competitiveness. By 1978, U.S. labor cost per net ton of steel shipped exceeded that of any other major steel supplying country (Table 3). From 1972 to 1977, hourly earnings of U.S. steelworkers increased 68 percent, while their output grew by only 3 percent--a gap much wider than the average for all manufactures (see Table 1).

The continued deterioration in American steelmaking competitiveness thus left the industry even more vulnerable than when steel demand collapsed in the mid-1970s. The oil price shock of 1973 and the ensuing worldwide recession, combined with increased steel production in Japan and the EEC, set the stage for radical price cutting on world steel export markets. Steel imports into the United States jumped to 17.4 million tons in 1977, a year that can only be described as one of "protectionist panic" in the U.S. industry.

Dissatisfied with the performance of the VRA agreements of the previous decade, U.S. steelmakers nonetheless sought relief from imports through trade laws and filed several antidumping suits in 1977. The protectionist campaign eventually resulted in the establishment of the Trigger Price Mechanism (TPM), which remained in effect for most of the period from March 1978 to January 1982. Aimed primarily at Japanese imports, it established import price guidelines based on Japanese production costs. If imports entered at prices below the TPM levels, an antidumping investigation automatically would be triggered. The protective effect of this system lay in the way it intimidated suppliers of low-priced foreign steel, who feared violating the trigger prices even if they could legitimately undersell them.⁶

Japanese steel exports to the U.S. did in fact decline as a result of the TPM. The U.S. industry then turned its efforts toward protection from EEC steel imports. This goal was achieved in October 1982 with an arrangement limiting EEC exports to the United States for a five-year period.

⁶ Ibid., pp. 40, 64-65.

Table 1

Percentage Increase of Average Hourly Earnings (current dollars)
and in Output per hour of Labor Input, selected periods

	Hourly earnings		Output per hour	
	All workers ^a	Production workers	All workers ^a	Production workers
All Manufactures^b				
1955-1977	195	182	69	n.a. ^c
1957-1967	43	40	33	n.a.
1967-1972	35	35	16	n.a.
1972-1977	53	49	9	n.a.
Steel and steel products^d				
1957-1977	224	227	37	47
1957-1967	36	34	19	23
1967-1972	42	43	13	14
1972-1977	68	70	3	5

Source: Richard G. Anderson and Mordechai E. Kreinin, "Labour Costs in the American Steel and Auto Industry," The World Economy London, June 1982, p. 202. Calculations by the authors from data in United States Census of Manufactures for 1957, 1967, 1972 and 1977, Bureau of the Census, United States Department of Commerce, Washington, for hourly earnings; Handbook of Labor Statistics, Bureau of Labor Statistics, U.S. manufacturing; and Productivity Indexes for Selected Industries, Bureau of Labor Statistics, U.S. Department of Labor, Washington, 1979, for SIC 331 and 371.

- ^a Non-production workers are assumed to work the same annual hours as production workers.
^b Output originates from gross domestic product (GDP).
^c No index is available from the Bureau of Labor Statistics.
^d Standard Industrial Classification (SIC) 311; "output" is a physical production series constructed from the Bureau of Labor Statistics.

Table 2
 Capital Expenditures of Steel Industries in Selected
 Major Steel-producing Countries

(in millions of dollars)^a

Year	United States ^b	European Community ^c	United Kingdom	Canada	Jápan
1965	1,823	932	139	141	510
1966	1,953	848	117	187	540
1967	2,146	730	136	114	843
1968	2,307	802	119	61	1,167
1969	2,047	1,005	102	95	1,494
1970	1,736	1,615	191	193	1,889
1971	1,425	2,310	414	236	2,607
1972	1,174	2,810	411	209	2,443
1973	1,400	3,033	401	215	2,039
1974	2,104	2,850 ^d	400 ^d	300 ^d	2,700 ^d

Source: Steel Industry Economics and Federal Income Tax Policy (Washington, D.C.: American Iron and Steel Institute, June 1975), p. 52.

^a

At official exchange rates.

^b

Includes non-steel-producing activities of steel companies.

^c

The European Community here refers to the original six member countries.

^d

Estimated.

Table 3

Labor Productivity, Wages and Employment Costs per Net Ton of Steel Shipped in the United States, West Germany, the United Kingdom and Japan, 1978

<u>Country</u>	<u>Manhours per Net Ton Shipped</u>	<u>Employment Cost per Hr. (\$)</u>	<u>Employment cost Net Ton Shipped (\$)</u>
United States	7.7	14.73	114.10
West Germany	9.4	11.43	107.35
United Kingdom	16.5	5.83	96.21
Japan	7.3	9.86	71.46

Source: New Strategy Required for Aiding Distressed Steel Industry. Report by the Comptroller-General of the United States (Washington, D.C.: U.S. Government Printing Office, 1979), p. 4.8.

Lessons of Protectionist Policy

This most recent steel crisis and its associated protectionist campaign illustrate the contrasting incentive structures of international competition vis-à-vis trade protectionism. Insofar as the increased world competition was allowed to penetrate the United States market, adjustment and increased competitiveness were encouraged--chiefly in the form of improved steelmaking technologies and the retirement of excess capacity. From 1977 to 1981, for instance, 12.5 million tons of steelmaking capacity were closed.⁷

On the other hand, efforts to aid the industry through trade restrictions have allowed many competitive disadvantages to persist. In 1977 and 1978, when protectionism was at its height, steel prices in the U.S. rose more rapidly than the indexes of consumer goods or industrial commodities. In 1976, 1979, and 1980, when import competition was more threatening, steel price rises were held at or below the average rate of inflation. Unfortunately for the industry, labor-management negotiations apparently internalized protectionism. Despite increased imports, for example, the union's settlement in 1980 included a pay increase that, given the comparative structure of steelmaking labor costs and productivity world wide, would probably have been impossible under freer trade.⁸ The relatively minor cuts in pay and benefits

⁷ Hogan, *op. cit.*, pp. 93-123.

⁸ See Wall Street Journal, May 28, 1980, p. 1.

accepted by the United Steelworkers in 1983 have done little to close the wage/productivity gap. In addition, plant closings and modernization by the steel companies have been delayed because the industry has been insulated from the brunt of international competition.

The failure of protectionism--or of any industrial policy--to aid an industry's competitiveness lies in the perverse incentive structures it creates. The very factors contributing to competitive decline--pricing practices and the wage-productivity gap in the case of steel--provide the motivation for a protectionist campaign, which in turn allows these factors to remain entrenched. Furthermore, the success of one protectionist campaign tends to lead not to restructuring, but to renewed pleas for trade restrictions. The TPM, for instance, led eventually to the steel arrangement with the EEC, which in turn has led to a call by the steel industry for comprehensive import quotas to cover all remaining foreign suppliers.⁹ Removing the painful sting of competition subverts the objective of creating a healthy, robust steel industry. Adjustment cannot be spurred by a benevolent government bureaucracy; it must proceed in the marketplace.

INDUSTRIAL POLICY AND THE "NEW PROTECTIONISM"

The Dispute with the EEC

A protectionist industrial policy for steel would also encourage trade disputes and the deterioration of international economic relations. Evidence of this phenomenon can be found in the experience of the European Economic Community (EEC) and its industrial policy for steel. The record suggests that increased government involvement in planning, investment, and trade restrictions merely postpones and worsens the inevitable process of adjustment for the industry, and in addition, motivates suspicion and retaliation that easily lead to spiraling protectionism world wide.

When the world steel market collapsed in 1975, countries in the EEC were already burdened with overcapacity. In an attempt to soften the shock of sharply declining demand, the EEC Commission implemented policies of ever deeper government involvement and protectionism. The initial measures included voluntary "reference" prices and measures intended to restore "orderly" conditions to the European steel market. To prevent a disruption of its program by import competition, the Commission also concluded a "voluntary export restraint" (VER) agreement with Japan in 1975, similar in form to the U.S. VRAs eight years earlier.

⁹ The proposed Fair Trade in Steel Act and the petition for relief under Sec. 201 both call for a global import quota set at 15 percent (maximum) of domestic steel consumption. See American Metal Markets, March 2, 1982, p. 16, and January 25, 1984, p. 1.

As the steel crisis worsened, the EEC Commission sought to increase the scope of intervention. In 1976 it organized an EEC-wide steel producers' cartel, Eurofer, through which it could establish firm-by-firm production quotas and mandatory minimum prices. Typical of an industrial policy, the plan's purpose was to avoid extensive plant closings and layoffs, thereby providing a breathing space for reorganization.

According to the Commission's plan, export markets--particularly the lucrative U.S. market--would play a major role in the recovery of European steel. EEC representatives even began to talk of their "rightful" share of the U.S. market. And accordingly, EEC exports to the U.S. increased sharply. The U.S. International Trade Commission and Commerce Department concluded in 1982 that injurious dumping and subsidization had occurred, and were on the verge of imposing definitive duties, when the investigations were abruptly terminated by the five-year arrangement with the EEC limiting steel exports to the U.S.

The Danger of "Rebound" Protectionism

Although the United States does not have an export-oriented steel industry, the introduction of an industrial policy for steel could lead to similar crises in trade relations. For instance, the General Agreement on Tariffs and Trade (GATT) provisions (article XVI and the Subsidies Code) note that countries can invoke rules for consultations and dispute settlement not only when state subsidies cause increases in exports that injure the importing country, but also when such subsidies cause reduction of imports to the subsidizing country, thus injuring the exporter. Industrial policies that displace imports to the large and lucrative U.S. market would be of serious concern to many steel exporting countries and could result in "rebound" protectionism.

Such rebound protectionism would not be new to the steel trade. It first appeared when the European Coal and Steel Community negotiated a VER agreement with Japan in 1971 in response to the American VRA of 1968, which had apparently diverted Japanese steel exports toward the EEC. And a long string of rebound effects can be traced to the 1975 VER agreement between the EEC and Japan, which apparently played a role in increasing Japanese exports to the U.S.--bringing about the subsequent antidumping suits and TPM policy. This, in turn, led to the EEC's basic price mechanism and new VER agreements in 1978. But increased EEC exports then led to the five-year steel quota agreement between the EEC and the U.S.--which again caused the EEC to tighten its system of VER agreements. The subsequent diversion of exports toward the United States has led to the current quota proposals.¹⁰

¹⁰ Jones, op. cit., pp. 21-25, 37-89.

The use of these new protectionist devices, therefore, is likely to be highly contagious. And aside from being contagious internationally, the demonstration effect of a successful plea for protection could prompt other industries to seek similar relief. Protectionist industrial policy, therefore, might prove an ideal catalyst for protracted trade disputes, along with a general deterioration in international economic relations and a decline in world and domestic economic welfare.

HOW INDUSTRIAL POLICY LEADS TO CARTELS

As the foregoing analysis shows, an industrial policy and its related trade restrictions are likely to hurt, not help, the process of adjustment in the steel industry. An equally serious conflict appears in the tendency of such policies to contradict the goals of competition policy. In the steel industry, the American policies of production controls and trade restrictions have actually forced foreign steel producers to engage in collusive activities. Although both the EEC and the United States have modified their laws to accommodate such activities (thereby eliminating an overt legal conflict), the objective of advancing general economic welfare through competition appears to have given way to an anticonsumer, cartel approach.

Why Cartels Fail

Any comprehensive government program to restructure the steel industry would probably require a cartel arrangement, including firm-by-firm production quotas and official pricing guidelines. Such measures are invariably utilized in a declining industry to reduce market supply, raise prices and profits, and spread the burden of capacity-reduction among firms. The EEC's steel cartel, Eurofer, has experienced the typical problems of any collusive arrangement: dissatisfaction and haggling among steel producers over their production quota allotments, dissension over official minimum prices, and failure to adhere to prescribed quota and price decisions. The U.S. would doubtless experience the same results if a comprehensive policy to "assist" steel were implemented.

Aside from the inherent problems and contradictions involved in a government's enforcement of cartel decisions, the efficacy and legitimacy of government-directed investment, production, and pricing decisions in the steel industry is questionable. Assuming that the industry must contract in order to become more competitive, which firms should contract and by how much? Competitive, market-driven adjustment mechanisms decide this automatically in a dispassionate manner based on efficiency criteria. An overall government policy of production cutbacks, however, would have to allocate such reduction to firms of varying size, product structure, and efficiency level. And it would be naive for anyone not to assume that local political conditions would be the overriding factor in many instances. It is impossible for any crisis cartel,

no matter what industry expertise is involved in its management, to restore competitiveness to an industry, when the very basis of competitive adjustment requires the market-driven allocation of resources.

The Danger of Worldwide Cartels

The proliferation of voluntary export restraint (VER) agreements has also created a dangerous trend towards the cartelization of the entire world steel export market. This development will surely continue if the U.S. adopts an industrial policy for steel. The rebound effect of restrictive policies has encouraged the spread of collusive trade agreements to a large portion of the world steel export market. The most politically convenient method of reducing this rebound effect would be to include all steel importing and exporting countries in worldwide market-sharing agreements, similar to the multifiber agreement in textiles. Such a system would provide the structure for a world steel export cartel.

NEEDED: A CONSUMERIST POLICY FOR STEEL

It is important to remember the anticósumer nature of protectionist policies. Industrial policy calls for "cooperation" among domestic firms, implying higher steel prices. Controls on "disruptive" international trade lead to collusive behavior by foreign firms, again raising prices. And government-directed production and investment decisions under "burden-sharing" cartel arrangements mean resource misallocation, which taxes the economic growth of the country. An industrial policy for steel, therefore, must ultimately serve short-term producer interests to the detriment of consumers and the economy as a whole--and ultimately to the steel industry itself.

The salutary effect of international competition should be the unifying principle on which an effective U.S. steel policy is based. Restrictions on trade are inevitably counterproductive. Existing trade restrictions should be phased out and new barriers avoided in order to improve the performance and efficiency of the American industry. Consequently, industrial policies that would artificially increase prices and production above market levels, or otherwise distort market-driven adjustment to international competition, should be rejected. Such devices include subsidies, minimum prices, production quotas, and other collective "burden-sharing" arrangements.

Restructuring through mergers should be accompanied by trade liberalization in order to minimize market concentration. It should be remembered that exposure to international trade is perhaps the best antitrust device available to ensure competition in the steel industry. As the U.S. economy has become increasingly open to international competition, traditional measures of domestic market concentration have given way to a examination of

market shares held by foreign, as well as domestic, producers in dealing with antitrust issues.

The Justice Department's initial decision to block the merger of LTV and Republic was based on inadequate domestic competition due to trade restrictions.¹¹ Since the economic benefits of mergers, such as scale economies, can be effectively realized only in a competitive environment, trade liberalization in steel must go hand in hand with a policy of permitting mergers to facilitate reorganization and capacity reduction. Without substantial import competition, any restructuring of the U.S. steel industry based on mergers and acquisitions would invite inefficient and uncompetitive behavior by steel producers.

CONCLUSION

The record of government intervention and protectionism in the steel industry provides a guide to the probable consequences of a national industrial policy for steel. The United States has had considerable experience with trade protectionism in steel, and such measures have only delayed adjustment in the industry, while inflicting higher prices on consumers and creating trade disputes. Yet trade restrictions and their damaging consequences would have to be intensified in order to provide the "breathing space" for the restructuring that industrial policy requires. And pleas for temporary protection invariably reappear, because the incentives implicit in protectionism actually work against the adjustment it is supposed to promote.

The record of government intervention in the EEC's steel industry provides more direct evidence of the failure of industrial policy. Neither the crisis cartel Eurofer nor its complex web of trade restrictions has managed to solve the industry's basic problem of overcapacity and reduced competitiveness. Instead, industrial policy has merely created a formula for internal disputes over burden sharing and international disputes with the United States over exports. Similar consequences would result if the United States adopted such policies.

The recent decision of the government of France to reverse its industrial policy for steel clearly illustrates the futility of resisting inexorable international market forces. After many years of subsidies, protectionist barriers, and other government policies that artificially kept inefficient steel plants in operation, French President Francois Mitterrand announced in April 1984 that 20 percent of French steelmaking capacity would be eliminated within the next year. American policymakers should heed the lesson in basic industrial economics evidently learned by the socialist President: "Either France is capable of facing

¹¹ See American Metal Markets, February 16, 1984, p. 1.

up to international competition and prosperity, or it will be pulled down and head toward decline."¹²

If government policy is really to help the adjustment process, it should concentrate on measures to promote the needed redeployment of labor, such as job information services and retraining assistance. Trade problems based on instances of dumping and export subsidization should be resolved within the framework of trade laws and international negotiations designed to halt the violations, and not by reciprocal U.S. protectionism. Policies that move in this direction will begin to truly save the American steel industry by restoring international competitiveness in the U.S. steel industry and stability in U.S. commercial relations.

Prepared for The Heritage Foundation
by Kent Jones, Professor of Economics
Babson College, Wellesley, Massachusetts

¹² New York Times, April 5, 1984, p. 1.

Senator DANFORTH. This is a hearing on the state of the American steel industry. Clearly, if there is any single foundation of America's industrial base it is the American steel industry.

There are two major issues, I think, which should be addressed at the hearing. The first is the survivability of the steel industry in the United States, and the second is the continuing availability of steel at a reasonable price, a competitive price, to American users of steel.

While there have been signs of recovery in the steel industry in the past few months, 1982 and 1983 were disastrous years for steel in our country—disastrous in terms of losses, in terms of unemployment, in terms of plant closings.

Imports today are in the neighborhood of 26 percent, and these imports are clearly a part of the problem for the U.S. steel industry.

There are several things going in the trade area now: A 201 case has been filed, and on Tuesday the International Trade Commission is scheduled to make its determination as to whether or not there is injury.

In addition to that, Senate bill S. 2380 has been introduced, which is a quota bill. Finally, there are antidumping and countervailing duty cases which are still outstanding.

The point of this hearing is to focus attention on the state of the American steel industry and to examine what if anything can be done to help the industry but to do so in a way which does not cause undue damage to the overwhelming portion of American business which is dependent on a competitively priced supply of steel.

This subcommittee had hearings a week ago on the subject of footwear, today on steel. We are planning later this month several days of hearings on specific industries—autos, for one. So we are focusing on a number of different sectors of the American economy.

But I have to say that, in addition to focusing on specific sectors, I think we should be giving some thought as to whether or not the whole trade system we are involved in is adequate to today's situation.

We are now experiencing a trade deficit which, if last month's figures are projected over a year, would be a \$150-billion trade deficit. There is a certain amount of philosophical arguing as to whether deficits are bad. I suppose some free-trade philosophers would claim that they are not all that bad. I think they are and I am concerned whether or not the international agreements and the trade laws we have in the United States are now up to dealing with this situation.

I certainly do not want to be a protectionist. I don't think that the United States should just be erecting high barriers; but a \$150 billion deficit, our markets open, other markets generally closed, and the misery that this causes human beings I think is something that deserves general review, not just a sectoral review as we have been conducting in this subcommittee but a general review of the state of U.S. trade.

Earlier this week the International Trade Commission decided that there was no injury to the footwear industry caused by im-

ports, and therefore section 201 relief was not available. If I had ever been certain of anything since I have been in the Senate, I was certain that the ITC would find injury to the footwear industry. And how we can have 70 percent import penetration and have whole communities in our country being closed down by imports and not have a finding of injury is something which to me is baffling.

I don't say this as a criticism of the International Trade Commission; I say it by way of raising questions as to the adequacy of our law and the adequacy of our whole system in the United States to deal with problems of this proportion.

It seems to me that the last thing we can afford to do is to just forget about the situation. And comparable to forgetting about the situation is to deal with it in a piecemeal manner, in an ad hoc manner, and that's generally the way we do things here in Congress—we move from crisis-to-crisis, we move from sector-to-sector, we deal with today's emergency today and then forget about it tomorrow.

But it seems to me that one of the jobs of this subcommittee in the near future, and indeed one of the jobs of the Senate and of the Government as a whole, is to review the bidding with respect to the whole international trading system and to make sure that we are embarked on a course which is healthy for our country and for the world economy.

Senator Heinz?

Senator HEINZ. Mr. Chairman, thank you very much. First let me ask unanimous consent that a statement by Senator Moynihan be entered in the record at the appropriate point.

Mr. Chairman, I welcome this hearing on the American steel industry and the question of our continuing drive for fair trade for that industry. I hope this is the first of several steps that the Congress will take. I would note that with this hearing the House and Senate, the Congress, has completed its hearings on the steel quota bill, if not on every aspect of the steel crisis.

I just want to make a few brief points. As you yourself touched on, Mr. Chairman, this is an industry that is in crisis. We have seen some pickup in employment—there has been a return to greater capacity utilization; but as we sit here today, 90,000 steel workers are unemployed. The steel industry now employs half as many people as it did roughly 8 or 9 years ago.

Second, the industry, while other industries like the auto industry have had record years in terms of profits, is experiencing—at least in 1982 and 1983—record years of losses: \$3 billion in 1982 and nearly that much, according to the statistics I have, in 1983.

When an industry that has been as troubled as the auto industry, which 3 or 4 years ago we said was a basket case and doubted whether it was going to survive, is having the greatest year in its history, and one of that industry's suppliers—among other industries—the steel industry, is so sick that it is in critical condition, we need to ask what is wrong.

What, I submit, is wrong is that foreign countries over the last decade have gotten into the steel business. As a matter of national pride, every country large and small has decided it has got to have a steel mill. They do not care whether the steel can be used in

their country or even in their region. We have contributed to this problem by being part of the international developed country cartel, subsidizing the construction of those steel mills sometimes at our own taxpayers' expense. The result is worldwide overcapacity, owned in significant part by countries that are so broke, so up to their ears in debt, that they sell their steel in the one market that remains free worldwide, ours, and they sell it here at any price, which means they are dumping, they are subsidizing, they are literally giving that steel away. And that is why nobody in the steel industry can make any money. And if you can't make any money, the bottom line, the big question is, are you going to survive?

Now, it is possible that the steel industry can limp along for a few more years and close a few more plants here and a few more plants there, and slowly constrict and strangle to death. I would submit it has already been strangled half way. And unless we want to see an industry totally undercut by unfair foreign competition against which our trade laws are supposed to protect, we are going to have to take some action.

Now, it is proper to ask, why don't our existing trade laws do the job? after all, didn't we rewrite them in 1979? And indeed, the Trade Agreements Act did strengthen the antidumping and countervailing duty statutes we had on the books prior to that time. What we had on the books prior to that time wasn't worth a hoot. What we have on the books now is better, but those petitions against subsidies and dumping are complex—you have to file one for each country, for each product, for each producer. It means you have to have dozens if not hundreds of cases, and they will take up to a year or more to conclude, if you get them concluded.

I submit that this industry, its employees, its workers, cannot wait for the dozens of cases to come to their conclusion, that this industry cannot afford a third year of huge losses, that the 90,000 people who are now laid off cannot afford to be laid off for another year or two.

Now, Mr. Chairman, we need import relief. We can either get it through the 201 route, which will be ruled on next Tuesday, or we can get it through my legislation, the Fair Trade and Steel Act, the quota bill.

I can tell you that there will be critics of the quota bill. There will be some people who say it is inflationary. There will be some people who say it will start some kind of a trade war. There will be some people who will say that it will cause a net loss of jobs.

To respond to those questions, let me draw our colleagues attention to a study by the Congressional Research Service that refutes each of those contentions. I will not dwell on it today, but the fact is that the inflationary impact of the steel quota bill is minimal. If one accepts the Federal Trade Commission's estimate that a 15-percent quota would raise steel prices \$5 a ton, which by the way is less than 1 percent, then the effect on prices downstream in the economy would be less than one-tenth of 1 percent, specifically sixty-five one-hundredths of 1 percent.

Mr. Chairman, the issue of import relief which we will hear testimony on today is really only part of the solution. This import relief is needed not just as a means of helping a few people who have

been devastated get back to work; it is necessary for this industry in order to generate the cash flow it needs to invest and become more competitive and modern and be able once again to stand on its own two feet. But it is not ever going to get back on its feet if it does not have the breathing space needed to achieve that.

I would submit that the steel industry has been victimized by a double standard, and that double standard is illustrative of, in contrast to automobiles, how this administration has failed to develop any coordinated policy dealing with the steel industry.

That's in sharp contrast to what happened on automobiles. When Bill Brock, Drew Lewis, and others formed a task force at the outset, met with Chairman Danforth, the chairman introduced quota legislation on autos, a negotiating team flew off to Japan, voluntary import restraints were negotiated on behalf of autos—I guess we can say that now, Bill—the industry was given special regulatory relief, air bags were bagged, and a variety of other steps were taken. And look where the industry is today. It is sitting high and pretty—God bless it.

Look where the steel industry is today. It is going down the tube because there has not been any similar effort on behalf of an absolutely vital and essential industry.

I call that unequal treatment. But worse, I call it shortsighted. And if we are going to ever make any sense out of Government action, we are going to have to coordinate what the Special Trade Representative does, with what the Commerce Department does, with what the Justice Department does and indeed what we in the Congress do. We shouldn't be sitting here having to deal with one piece of the issue—in this case, the quota legislation or the 201 case—we should have a policy.

Now, I understand the fear about the word "industrial policy." But, unfortunately, every decision we make around here impacts on business, industry, consumers. We make policies all the time despite our fear of calling anything an "industrial policy," for fear it will trigger some idea of creating a national industrial development bank, which I don't know that any Senators have even co-sponsored. That poses a barrier to us and to the administration in dealing with real problems that have to be solved.

Mr. Chairman, I have taken too much of your time I know. I have to say to our colleagues that this is a problem that is not going to go away; we are going to have to deal with the problems of the steel industry. It cannot be solved without significant import relief. The import relief is necessary for the survival, for the capital investment, for the modernization of this industry. And although some people may wish that the problem would go away, we are not going to let the problem simply be put in a back room someplace and be ignored. It is going to be on the front burner, and we are going to have to deal with it.

Mr. Chairman, I commend you for holding these hearings, and I thank you for bringing to the committee a very talented group of witnesses.

Senator DANFORTH. Senator Durenberger?

Senator DURENBERGER. Thank you, Mr. Chairman.

I was going to play my first game of golf this year at about 7:30 this morning, and I called it off because I needed to come here to

remind everybody in this room we would not be here today if it weren't for the State that I represent. We wouldn't have the problems we have today if the Good Lord hadn't bestowed a substantial part of my State with a natural resource that was unique to the United States of America.

But the reality is, our colleagues wouldn't have been celebrating the 40th anniversary of D-day this week if it hadn't been for the fact that about 85 percent of the steel that went into, in effect, winning the Second World War came out of mines in the northeastern part of the State of Minnesota.

There was a lot of optimism that that sort of thing was going to go on forever. Between 1965 and 1980, which is our very recent past, Mr. Chairman, we moved the capacity of ore production in the Great Lakes area and the Lake Superior area in particular up from something like 27 million tons which it was in the mid-1960's up to 86.3 million tons, with the help of some of the people who will be testifying here today.

But there is no question—and I would like to have, instead of an opening statement, and these comments will be very brief, Mr. Chairman—I would like in part my comments to reflect the concerns of the people of Minnesota as reflected in a series of articles in the Minneapolis Star and Tribune in May and a very good article in Corporate Report magazine.

In looking that over, I think you will find why you, Mr. Chairman, have been so consistent in trying to give some direction to trade policy. And all of us, I think, have been trying to do something about the future of basic industries in America.

This one article in Corporate Report begins with a quotation from Cervantes. He says, "Traveler, there is no path. Paths are made by walking."

It strikes me, Mr. Chairman, that in part what you are undertaking with this series of hearings on the future of one of our important basic industries is whether or not we are going to use a whole series of paths that have been marked for us over the last 75 years or so in this country, and all of the tools and all of the vehicles that we use—tax policy, trade policy, energy policy, labor policy, transportation policy—and just sort of modify them a little bit, put a patch on here and a patch on there, or whether or not there is any interest among my colleagues here and the people in the industry to strike a new path in favor of the basic industries in this country.

Our tax policies are prejudiced against steel, they are prejudiced against all of the basic industries in America. Our transportation policies are prejudiced against the basic industries in America, and transportation is one of our basic industries. And it has a serious problem.

Our lack of an energy policy is a serious prejudice. And obviously our effort to develop a trade policy in light of a wide series of foreign relations problems has to be most difficult.

I could dump all over my administration about helping to create a big ore and steel operation in Brazil, and yet I understand there are foreign policy consequences behind a lot of that; and unfortunately, that is the bind that all of us find ourselves in as we try to make some policy.

So Mr. Chairman, let me just express, on behalf of a lot of people, most of whom came over from Eastern Europe, some of them stayed off in John Heinz's State of Pennsylvania, some of them stayed off around Detroit, and those that were the hardier stock somehow got to northern Minnesota——

[Laughter.]

Senator DURENBERGER. And for generations they have been a part of the future of America and in particular the national security of the world. Today they don't know where we are going. Obviously they are looking to you, Mr. Chairman, and to our colleagues here and to the people in this audience for some direction.

[The articles follow:]

ARTICLES SUBMITTED FOR THE RECORD BY SEN. DAVE DURENBERGER

Corporate REPORT

Minnesota



The Thing on the Hill

Northeastern Minnesota's benign tyrant, King Taconite, has taken ill. Is there a doctor in the house?

By D.J. Tice

Traveler, there is no path; paths are made by walking.
—Cervantes

On the evening of July 19, 1982, the city council of Mountain Iron, Minnesota, held a meeting. The burden of the meeting was a proposal by Mayor Frank Cerkevnik to lay off one-fourth of Mountain Iron's public-works crew—a four-worker cutback—in order to bring the city's spending into line with its shrinking revenues. Richard Anderson, Mountain Iron's public-works director, and Carla Newcomb, a councilman, angrily objected to the mayor's plan, insisting that the town's work force had already been cut to the bone

and that this was no time to be putting people out of work.

When Cerkevnik took the floor, he came right to the point. "You know what that thing on the hill is going to do," he told the council. "Now they're talking about not opening until after the first of the year."

There was further discussion of the proposed layoffs that evening, with Newcomb and Anderson clinging tenaciously to their position. But the mayor had made his point. In Mountain Iron, there is really no arguing with the thing on the hill.

The thing on the hill above Mountain Iron is "Minnitac," U.S. Steel's colossal taconite mine and processing plant. It is a great, gray, bobbing beast of modern industrialism, looming over the 4,000 residents of Mountain Iron from the opposite ridge of a man-made canyon. When Minnitac is up and running, 4,300 people work on the hill, earning between \$15 and \$18 per hour, fringe benefits included. The quiet, idyllic community below takes its life from the thing on the hill. Even for the thing on the hill. During most of the

past century, it has been a fairly good life.

This year, the thing on the hill is playing dead. It fell silent on June 6; in late July, management made the duration of the shutdown officially indefinite. Mountain Iron is a town without purpose right now. In midsummer it seemed almost a town without people, save for the lonely, chatty guard who sits in his shack and turns away all who would drive up the wide, winding road that leads to the thing on the hill. A lot of people were at the lake, the guard supposed, and a lot were in the bars, which have never had it so good.

Minatoc is the largest of eight taconite plants on Minnesota's Mesabi Iron range, a jagged, 85-mile-long by three-mile-wide slash of civilization cutting north by northeast across the vast forest of the state's archedwood. It is one of seven that have been shut down for some period this year, and one of two that still lack an official reopening date. Minnesota's taconite industry will ship something like 30-million long tons of taconite pellets in 1979, down from 49-million last year and barely half of the all-time record 99-million tons shipped in 1979. Those 30-million tons will top off a horribly glutted market. At current steel-production levels, there is something like a year's supply of taconite piled up outside steel mills in places like Gary, Indiana, and south Chicago. In places like Mountain Iron and Hibbing and Colesburg, which live for the things on the hills, the only good business left is the business of helping the unemployed find their time.

It would be hard to exaggerate the importance of the taconite industry to Minnesota, and in particular to northeastern Minnesota—roughly, that part of the state east of a line from Lake of the Woods to Duluth, containing a population roughly equal to St. Paul's, or, put another way, that part of the state lacking fine agricultural soil. In 1979, Minnesota taconite was a \$2-billion business. The industry covered a payroll of nearly \$400 million. It purchased more than \$900 million worth of goods and services from about 2,200 Minnesota companies—900 of them in the archedwood. It paid \$120 million in various state taxes. It represents a \$2.5-billion—that's \$2.5-billion—investment in northeastern Minnesota, an investment made over the past two decades almost entirely with funds flowing in from eastern states. At least 15,000 jobs owe their existence entirely to the taconite industry, and

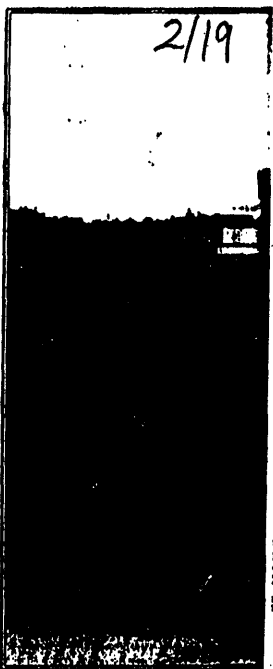
according to an economist at the University of Minnesota-Duluth, taconite mining accounts directly and indirectly for 25 percent of northeastern Minnesota's gross regional product.

For those reasons, taconite's current crisis has not gone unnoticed. Twin Cities reporters descended on the range this summer like so many crows on a fallen rabbit. They generally filed stories of human suffering—suffering that has been real on the range this year, although happily not yet severe. The state's politicians, particularly its gubernatorial candidates, have taken to rather casually observing that taconite "will never come back" to what it was just a year or two ago, and all are proposing grand strategies—peel development, jobs programs, diversification—to take up the slack.

All of this smacks of the sincere but crisis-triggered concern Minnesota's mining country has received, with little noticeable effect, for the better part of the past 100 years. Rumors of the mining industry's imminent death have circulated before, and have always proven to be wildly exaggerated. Ironically, the greatest danger facing northeastern Minnesota is the fact that the mining industry certainly will come back, and will, for a time, bear a resemblance to its vigorous youth. The headlines will fade, and the politicians' attention will wander, because the real virus afflicting northeastern Minnesota is of the complex, slow-spreading variety that makes for neither good copy nor good slogans.

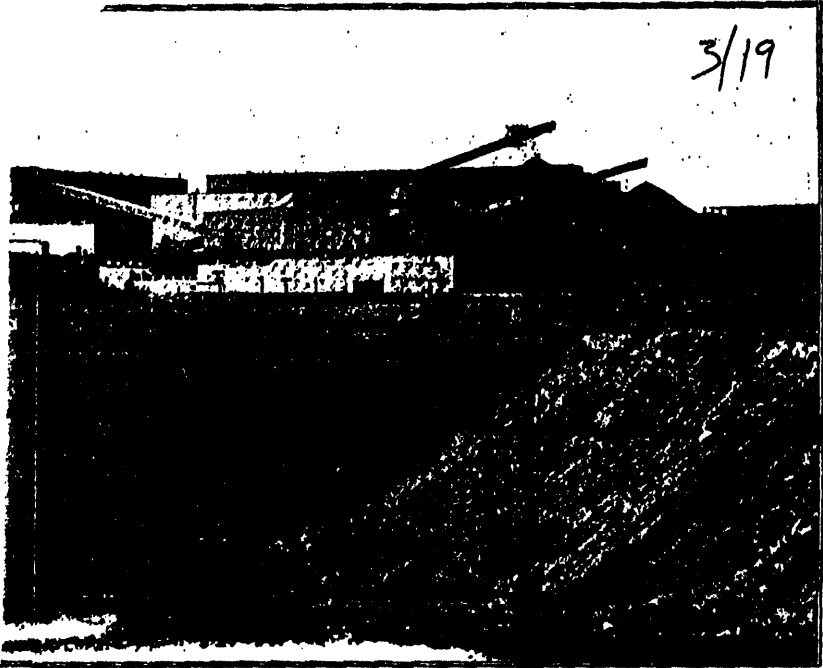
The things on the hills are benign tyrants whose generosity government is utterly helpless to match. The now-famous "2002 Fund," which the Minnesota Legislature tapped this summer to create 4,000 temporary mine-sweeping jobs for unemployed miners, was established for the range 31 years ago, when the crisis at hand was the imminent depletion of Minnesota's natural ores. The 2002 Fund now holds about \$47 million. If the entire sum were immediately committed to emergency jobs programs, it would replace the taconite industry's payroll for about six weeks.

There is, of course, a story about the discovery of the Mesabi (Ojibwe for "sleeping giant"). It is said to have happened one afternoon during the summer of 1887, as Aandrus and Cassius Merritt, two of the four Merritt brothers who pioneered development on the Mesabi, tramped across a stand of timber



U.S. Steel's Minatoc plant, the largest of the things on the hills, can put out 18.3 million tons of taconite pellets per year, nearly double the capacity of any other Mesabi plant. The campus in the foreground is an abandoned open-pit mine that now serves as a water reservoir for the plant.

the family owned near the modern site of Mountain Iron. The Merritts were moving along a low ridge that we now know to be a three-way continental watershed—the Laurentian Divide. According to the story, Cassius tripped and fell headlong while surveying the timber on the ridge, and in the falling came upon a piece of soft red rock eight inches in diameter. The rock turned out to be high-grade ore, well over 60-percent pure iron. Cassius Merritt had stumbled upon the largest iron-ore deposit yet found on the face of the earth—a deposit that has thus far yielded 3-billion tons of ore.



Word of Minnesota's iron treasure spread quickly, and it acted as a magnet on immigrants, who in the 1890s and early 1900s were pouring through the gates at Ellis Island in fantastic numbers. Thousands, most of them from eastern Europe and Scandinavia, came to the Mesabi directly from their ports of entry, eager to do the kind of work they knew for pitiful wages that were beyond their wildest dreams. Robert Samargia, an immigrant from Croatia, in Yugoslavia, stopped first for several years in the East, where he worked in a steel mill. He arrived on the iron range in 1896.

Samargia worked in the underground mines that marked the early Mesabi. Each morning an elevator would carry him hundreds of feet down into the dark, damp shaft. He would then move carefully, hunch-backed, along the narrow tunnels that radiated from the main shaft like the spokes of a fan. He would

set dynamite charges, and, when the dynamite had freed the ore, he would scoop it up with a shovel and load it on to the elevator. He worked like that 12 hours a day, for one dollar.

George Samargia, Robert's son, had it a little better. As heavy machinery improved, open-pit mining, less dangerous and back-breaking than the underground work, became the preferred method of harvesting iron. George worked in a number of pits on the range over the course of 40 years. He became a grievance man for the union, in the days when that job was as dangerous as deep-shaft blasting had ever been.

Joe Samargia, a third-generation iron-range steelworker, lives in a world that his father and grandfather would scarcely recognize. He is a welder at Minntac, where half of the employees maintain equipment while the other half operate it. He is also, like his father, a union man—president of Steelworkers local

#1938, which represents the 4,500 servants of Minntac. But there is no longer anything unusual or dangerous about union work, and there is no longer so much pothos in the plight of an iron-range steelworker.

In a full year of work—which steelworkers on the range enjoyed almost without interruption for 15 years until last year—Joe Samargia earns well over \$30,000, counting fringe benefits. Only 19 years ago, when Samargia started, his wages were barely one-third of that. "I never really thought about doing anything else," Samargia says. "I kinda like living up here, and it's decent-paying job. Compared to an average industrial shop in the Twin Cities, our wages are a lot higher. You have to go a long way to do better than we do here. It's nice to have been involved in that."

Involved, Samargia has certainly been. He is a firebrand in a society



The Merrill family, pioneers of the Mesabi Range. Seated at far left and standing in center are, respectively, Cassius and Andrus Merrill, who discovered iron on the Mesabi while surveying timber near the modern site of Mountain Iron during the summer of 1877. It took America's voracious industrial machine little more than half a century to devour the Mesabi's natural ore deposit—the largest yet found—and to set the stage for taconite.

firebrands, a maverick in a stampeding herd of mavericks. His political and economic views veer sharply to the left of left-center, although he rejects the label "socialist." His fierce devotion to the union cause, unremitting hostility to the steel companies, and engaging, swashbuckling manner have made him a hero and an icon to the members of his local. In 1981, moreover, he came within 700 votes of becoming the director of Steelworkers District 33, a sprawling region representing 27,000 workers from Michigan to Montana.

If Sasmargia is more militant than the average union member in northeastern Minnesota (and he probably is), it is not by a wide margin. There is a bitterness and a deep philosophical enmity in labor-management relations on the range that rarely surfaces any longer in the Twin Cities. Minnesota's mining companies—all of which are owned by consortia of large out-of-state firms—are unlikely to win any awards as corporate citizens. But the unions have likewise shown little concern for the overall economic well-being of their region.

In 1979, 550 grain handlers walked off the job and stayed off for almost four months, leaving dozens of ships waiting for weeks on end in Duluth harbor, and

coating farmers and shipping companies something like \$1 billion. Talking with businessmen in the arrowhead, one routinely hears stories of companies' being driven out of business, or out of the state, by unreasonable union demands. Even union leaders have urged their northeastern-Minnesota locals to wait at least until a young company gets on its feet before pressing their issues. But the story one hears most often, the story that is most fervently told, is of the 1977 Steelworkers strike, in which the Steelworkers of the range called a wildcat walkout—the legality of which is still in question—that lasted for 138 days. It was the longest strike in Steelworkers history, and it was led by Joe Sasmargia.

The steel industry, of course, has both an inglorious history of labor strife and, as a result of trying to establish peaceful coexistence, the most burdensome labor costs of any industrial sector in this country—given the recent concessions by the auto workers. During the two decades following the end of World War II, Big Steel was plagued by one bitter, economically brutal strike after another. A destructive pattern emerged. Like squirrels preparing for the inevitable freeze, steel consumers took to making large purchases as contract negotiations

approached. The anticipated strike always arrived on schedule; once it was settled, the market remained glued for months, so well had the squirrels prepared. A recession in steel became the natural aftermath of labor negotiations.

By 1972, both labor and management recognized that these strikes had become an ensnaring habit. That year, an "experimental negotiating agreement" was forged, under which the steel companies and the unions vowed that there would be no further strikes, that all issues would be worked out one way or another. The results have been relative labor peace during the past decade (the iron-range strike notwithstanding), soaring labor costs, and constant changes from inflexible critics (which is not to say that they are wrong) that Big Steel has become too accommodating of its whims.

This past summer, the steel companies changed their tune, asking that negotiations for the 1983 contract be opened early and that steelworkers accept concessions to aid their ailing industry. Unlike the auto workers, the steel unions gave this proposal an emphatic thumbs-down. The experimental negotiating agreement seems almost certain to be a casualty of next year's talks, and neither

5/19

of the two predictable outcomes—a lengthy strike or another large boost in labor costs—seems likely to improve Big Steel's deteriorating health.

These days, Joe Samargia sounds a little like the mouthy baseball fan who roasts his home team unmercifully, yet bristles at an out-of-towner's slightest criticism. "What we do up here depends on what the steel mills are doing," he says. "And right now the steel mills ain't doing shit. It's not just a depression in the steel industry. From here to Chicago to Gary to Detroit to Cleveland to Pittsburgh to Buffalo, the major industrial power base of this country is in deep trouble. You can go through small recessions and the normal highs and lows, but you don't have this kind of problem unless the government is being unresponsive. You don't make steel unless you're selling cars and refrigerators and building bridges, and with the interest rates we've had, we're not doing any of those things."

David Roderick, chairman of U.S. Steel, never said it better. Samargia goes on to echo the steel industry's favorite refrain: "America is a free trader," he says, "not a fair trader." He refers, of course, to the growing presence of foreign-made steel in the American marketplace. Subsidized imports now account for about 20 percent of all the steel consumed in the U.S., and just about everyone expects that percentage to grow unless more-stringent import restrictions are imposed. But Samargia, quickly growing weary of all this brotherly solidarity with his adversaries, offers a decidedly unkind and wishful, albeit not the government's laudatory response to Big Steel's cries for help.

"It's very hard for the government to feel too bad about the steel industry," he says, "because on one hand the American steel industry screams about steel imports, but on the other, they don't complain about imports of iron ore. The mining industry up here is doing a lot worse than the rest of the steel industry. Unemployment is running 35 to 40 percent in the rest of the industry. Up here it's running 21 percent (this was among low-range steelworkers in mid-summer 1982. During the same period, for all of northeastern Minnesota, unemployment exceeded 20 percent. In the city of Duluth it was 2.7 percent.) If they're running steel mills at 40 percent of capacity, why are we running at 10 percent?"

"I'll tell you why. It's because U.S.

Steel and the other steelmakers have interests in iron mines in Venezuela and Brazil. Labor costs are lower in those countries, and there are tax advantages in operating there. The bottom line for the companies is where they make the most dollars, not loyalty to American workers. They've gotten what they wanted from the workers."

The subject of iron-ore imports brings out Samargia's full combat rhetoric, as well it might. Brazil, which has enormous reserves of high-grade natural ore, has launched a vigorous campaign to become a major force in the world marketplace, and it is succeeding famously. Perhaps a dozen other countries—including Canada, Venezuela,

and that fact poses a grave long-term threat to northeastern Minnesota. That threat is unlikely to be stunted aside by the steel companies' loyalty to American workers (or, for that matter, by the loyalty of more than a million steelworkers, whose jobs ultimately depend on steel-industry efficiency, to the 18,000 miners whose jobs depend on spurning foreign ore). But, for the time being at least, it is being kept at bay fairly effectively by simple geography.

The recipe for a ton of steel calls for one ton of iron and two tons of coal. For that reason, America's steel industry grew up in a lazy arc along the southern shores of the Great Lakes. The steel mills are found in Chicago and Pittsburg and Benton Harbor, Michigan—close to both the major markets for steel and the traditional sources of coal in West Virginia and Pennsylvania, yet not too far by water from the traditional sources of iron in Minnesota, Wisconsin, and upper Michigan. This configuration may save Minnesota's taconite industry, because the large, ocean-going vessels foreign corporations must use to efficiently transport their product cannot squeeze through the St. Lawrence Seaway, and thus cannot reach the bulk of America's steel-making plant. All of that could change, of course, if Big Steel should decide to coast itself, moving more of its capacity to coastal areas where the cheaper raw material could be exploited.

Joe Samargia doesn't expect that to happen. "We have a very large investment by the steel companies on the range," he says, "and they're not going to walk away from that investment. Besides, taconite is the best damn thing there is for making steel. Ore can vary in its chemical properties and react [unpredictably] in the blast furnace. Taconite is low in silica [a troublesome mineral in a blast furnace] and very consistent chemically."

"Steel is going to come back. It's a basic industry that every government wants and needs—for defense, if nothing else. Right now, I think the steel companies are using the recession and all their other problems to make the workers bleed. But I don't believe that even if U.S. Steel and Bethlehem Steel go out of business, that means we won't have a steel industry in this country. If the steel companies can't make a profit making steel, then the government will have to run these mills. Taconite is going to supply these mills. We'll be back to full production." ~~and then we can't~~

"Steel is going to come back. It's a basic industry that every government wants. We'll be back to full production, and then we won't hear from you reporters for another 20 years."

and a number of emerging African nations—export natural ore, and all can deliver their product at a fraction of the cost of Minnesota taconite. Brazilian ore, for example, can be laid down at European ports for around \$33 per ton of costalined iron. Minnesota taconite, traveling perhaps one-tenth the distance, is being laid down this year at Lake Erie ports for \$52 per ton of iron content. Drastically lower labor costs in developing countries account for part of this discrepancy, but for only a part. The far more fundamental problem—an unsolvable problem, really—is that taconite is a highly processed product, while natural ore can be fed into a blast furnace pretty much as it comes from the ground.

Neither Samargia nor anyone else claims that foreign ore is being unfairly "dumped" in the United States, although that is what they say about foreign steel. Natural ore is simply a cheaper raw material than taconite,

6/19

hear from you reporters for another 20 years."

The story of taconite is one of the great stories of scholarship in action. Nowadays, "applied research," the practices of universities and colleges' working hand-in-hand with private industry to develop marketable products, has become controversial as a threat to academic freedom (see cover story and Epilogue, *CORPORATE REPORT*, June 1982). It apparently was less so during the years that E.W. Davis headed the University of Minnesota's Mines Experiment Station (1918-1955). Davis's triumphantly productive working life consisted largely of a single-minded crusade to develop taconite as a profitable raw material for steel—in the course of which Davis worked tirelessly with private investors and companies and even managed an experimental taconite plant for a private consortium while retaining his association with the University. It is no exaggeration to say that there would be no taconite industry today had it not been for E.W. Davis, or if he had been thwarted in his efforts by some heady notion of "pure" scholarship.

Taconite is an incredibly hard, black rock containing anywhere from 20-

30-percent iron. It is quite common throughout the world—particularly on the Mesabi, where it formed the cradle that held the soft, red natural ore. Taconite is essentially worthless as it comes from the ground, but when Davis encountered it in 1913, he saw an immeasurable treasure just waiting for someone to learn how to mine it. Through decades of research, Davis learned that the treasure could be recovered through a process he called "beneficiation," in which the rock is crushed to the consistency of baby powder, then mixed with water and put through a magnetic separator. The separator removes those particles that are high enough in iron content to be of value and discards those (called "tailings") that are not. The resulting "concentrate" runs about 65-percent iron, as good as the best natural ore, and can be rolled into pellets the size of marbles that melt more efficiently in a blast furnace (because they allow for greater air circulation) than natural ore ever will.

Although the taconite process was largely perfected by the 1930s, there was little incentive to move forward as long as natural ore, which requires little or no treatment before sale, was available. But then the world went to hell. Between 1939 and 1945, the United States put over 1,000 warships to sea, and

those warships were made of steel. The war greatly accelerated the depletion of the Mesabi's natural ore, and by the 1930s there was a very great incentive indeed to put Davis's process to work. It was not until 1964, however, when the "taconite amendment" was added by referendum to Minnesota's Constitution, that the taconite industry really blossomed. The taconite amendment freed the taconite companies from the *ad valorem* tax—essentially a property tax on mineral holdings—that had been paid by the natural-ore mines. The reasoning was that taconite is not, in itself, a valuable mineral, that taconite processing is fundamentally a manufacturing process, and that, therefore, the taconite companies should be burdened only with the same sorts of taxes paid by other manufacturers.

The taconite companies now feel very strongly that the state has gone back on its word. They argue that the production tax on taconite has increased tenfold since 1964, and wonder what other manufacturer has faced such an increase in "property" tax. (A lawsuit embodying that complaint now awaits the judgment of the Minnesota Supreme Court.) But the taconite amendment remains a monument to the efficacy of tax incentive, even as the things on the hills stand as colossus reminders that there is *taconite* in

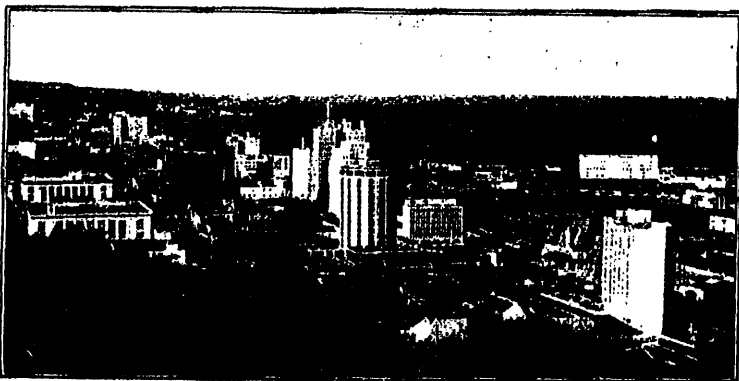


Photo by Victor Gault

Duluth clings to its fresh water sea like a lamprey to a lake trout. Only a port could explain a city that is 26 miles long and three miles wide.

the world as good as a good and dedicated scientist like E.W. Davis.

Bill Cortes is a gruff, rough-hewn bear of a man, given to expensive, unapologetic blarney at matters that are too unpredictable or too ethereal for his consideration, and to blunt, impatient proclamations on issues close to his heart. A veteran television-news reporter and director, Cortes is now public-affairs director for the Seaway Port Authority of Duluth. In other words, he is the port's lobbyist, lining up legislative support on such issues as grain embargoes, user fees, and bonding. He works out of a low, gray building set not very prominently near the public docks.

The port is to Duluth what the thing on the hill is to Mountain Iron—its reason for being. There is no other way to explain a city—even a classy, complete city of 100,000 residents—that is 26 miles long and three miles wide. Yet even the port, an extraordinary asset that might have made Duluth a major center for national and international commerce, has fallen under the tyranny of the mining industry. Taconite constitutes about two-thirds of all cargo shipped out of Duluth.

Understandably, 1982 has not been a banner year for the port. During the six months ended June 30, 8.8-million tons of cargo left Duluth, down 27.3 percent from the 12.1-million tons shipped during the same period a year ago. The decline is due entirely to a 37-percent drop in taconite shipments, since both international and domestic grain shipments increased during the first half of the year. The port's experience, Cortes says, is instructive of Duluth's relationship with the taconite industry. The city's economy is diversified enough so that no single sector is crippled by the mining industry's stupor, yet no sector escapes unharmed. "It hasn't had that much effect on employment at the port," Cortes says. "And it probably won't. The guy who operates the lift bridge has to be there whether one ship goes through in a day or five ships go through."

That said, Cortes devotes himself to more-philosophical musings on the peculiar position of northeastern Minnesota. The region, he thinks, is a part of Minnesota only in name. It is really an outpost of the eastern industrial establishment—Pittsburgh's colony, if you will. "Up here," Cortes says,



An early open-pit mine on the Mesabi, complete with manual hoist. Workers here earned \$1 for a 12-hour day. Men standing on ridge at right provide a sense of scale.

"we're a lot more concerned about what's going on in Cleveland and Detroit and Pittsburgh than we are about what's happening in the Twin Cities. We really don't need you. "Of course, the trouble is, they don't really need us."

Jerrold Peterson calls it "the liquidation scenario," but he means essentially what Cortes means: The steel companies don't need northeastern Minnesota's taconite. To be more precise, they don't need so much of it as they thought they'd need, and over time they'll need less and less.

Peterson is an economist at the University of Minnesota—Duluth. For the last couple of years, he has been working with economist Wilbur Maki and minerals researcher Ken Reid (both of whom work at the U of M's Minneapolis campus) studying America's steel industry, trying to determine what it will do over the next few decades and what that will mean to northeastern Minnesota. Their conclusions are very modest, very plausible, and very troubling.

Basically, the liquidation scenario says that American steel companies, in order to make steel profitably, will have to make less steel over the next 20 years. They will have to retire their obsolete equipment, of which they have an abundant supply, replace it with newer, better

equipment—such as continuous casters—and put that equipment to work in smaller, more efficient mills. The liquidation scenario projects that U.S. demand for raw steel, 101-million tons in 1980, will reach 151-million tons by 2000. American steel companies will supply 70 percent of the total in 2000 (103.7-million tons), the liquidation scenario projects, down from 83 percent in 1980 (84-million tons).

So the liquidation scenario foresees modest growth in American steel production over the next two decades—though certainly not enough to fuel any expansion in Minnesota's taconite industry, which has yet to see its annual capacity of 63-million tons. Still more distressing for northeastern Minnesota, however, is the liquidation scenario's conclusion that American steel companies will increasingly locate their newer, smaller, more efficient mills in coastal areas, where cheap foreign ore will be available. Peterson speculates that more steelmaking capacity will find its way to such places as Texas, close to the expanding markets of the Sun Belt and still within reach of the ore boats. The liquidation scenario does not expect Big Steel to walk away from its investment in Minnesota. It expects average annual demand for Minnesota taconite to fall by a total of 9.11 percent over the next 20 years—hardly a Chicken Little forecast.

That is not to say that the sky won't

8/19

fall on northeastern Minnesota. Peterson's research shows that in 1980, the arrowhead region, Duluth included, had a gross regional product of \$3.42 billion. Taconite mining accounted directly and indirectly for \$1.9 billion of that total. Under the liquidation scenario, that gross regional product would decline to around \$3.1 billion by 2000. Peterson's study describes in summing detail how this essentially modest contraction could have a crushing effect across every sector of northeastern Minnesota's economy. (For example, he estimates that every dollar decrease in taconite sales will cost the power-generation industry 4.3 cents.) An economic contraction, Peterson says, has a way of feeding on itself, and what might seem to be a minor loss of regional wealth will, if unchecked by the rise of new industry, sow the seeds of social disintegration.

"We would still be mining and processing taconite in the year 2000 (under the liquidation scenario)," says Peterson, "but the taconite industry would be in decline. You would see a gradual decline in population. You would see social services deteriorate as the demand for them dropped off, and then a further loss of population. You would see educational services declining. You would see, essentially, a decaying civilization."

Perhaps this forecast sounds more ominous than Peterson's numbers would seem to warrant. But by the same token, Peterson's liquidation scenario is by no means the gloomiest forecast available for Minnesota's taconite industry. The ripple effect of any contraction in the taconite industry is going to be enormous in northeastern Minnesota, because from Marquette Steel in Duluth, to the two Zhanger Inc. facilities in the area, to the Black Brothers Tire Shop in Hibbing, the economy of the region is dominated by companies that depend on the taconite industry as their major, or sole, customer. Beyond this, one can see that Duluth's principal growth industries—medical and educational services—are industries that depend on a prosperous population, not industries that create a prosperous population. And whereas northeastern Minnesota, indeed the entire state, has been strongly buoyed in the past by capital investment in the taconite plants and enormous grain sales to the Soviet Union, neither of those crutches seems likely to be available in coming years.

At any rate, Americans have had very little experience with long-term

economic contractions. The bottom line of the liquidation scenario is that unless it can develop new industry, northeastern Minnesota is going to need a lot of emergency jobs programs. Given the state of the state's finances, the worst scenario of all may be that it will get them.

The liquidation scenario is not, of course, a given. Other, more cheerful scenarios are possible. But Peterson thinks the overwhelming bulk of the evidence supports his sobering forecast.

"There are lots of examples. The best, most recent evidence, I suppose, was U.S. Steel's acquisition of Marathon

"Look, the economists are all tearing their hair out. I wouldn't dare to predict what is going to happen to the steel industry, and I don't think they should dare, either."

Oil. If U.S. Steel really saw a way to make steel profitably, to upgrade the quality of its product and expand the steelmaking capacity of the company, it would have used the sizable amount of cash it had generated—interestingly enough, by selling off a large portion of its metallurgical coal reserves—to expand steel resources, rather than to become another conglomerate. They didn't do that. Now, here is the largest steel company in the country acting out the liquidation scenario in full view for everyone to see. It appears to me to be a fact that the steel industry is trying to diversify out of steel and into other, more profitable areas."

Big Steel has been somewhat lackadaisical in its efforts to deny this strategy. U.S. Steel chairman Rodrick has been quoted (*Fortune*, April 6, 1981) as saying that he has "a very heavy ob-

jective" for his corporation's steel operations. He wants to make them "consistently average." It seems safe to assume that he has headier goals for the company as a whole.

It is important to keep in mind that the liquidation scenario is not a dire forecast for America's steel industry. The scenario would lead to a leaner, tougher, far more profitable steel industry 20 years from now—an industry that had committed itself to serving a smaller segment of the market efficiently rather than to repelling the foreign invaders—whose penetration of the American market is a *fait accompli* fueled by a number of factors. Among them, Peterson says, are labor costs (which run about \$22.80 per hour for American steelmakers, versus \$12 per hour in Japan's pollution-control costs (which are vastly higher in the U.S. than in Europe. "In effect," says Peterson, "we are exporting some of our pollution to those countries."); the thoroughly modern facilities steelmakers in Japan and Europe enjoy (made necessary by the complete destruction of their industrial plant during World War II, and made possible by the extraordinary American generosity that followed); the willingness of foreign governments to subsidize their steel industries rather than pay benefits to the workers who would otherwise be unemployed (in effect, exporting some of their unemployment to the U.S.); and, of course, the lower raw-material costs for steelmakers using natural ore from Brazil and elsewhere.

Some of these factors (such as the foreign producers' head start in modernizing their equipment, and, to some degree at least, the discrepancy in labor costs) are uncontrollable. Others (such as pollution-control costs and the freedoms of foreign producers to sell subsidized steel in the U.S.) could be controlled, but the cure might easily prove more dangerous than the disease. Still others (such as the discrepancy in raw-material costs) can be, and probably will be, addressed. There is little to be done for northeastern Minnesota.

Evelth, Minnesota, is the home of the U.S. Hockey Hall of Fame. That fact is emblazoned on just about every exposed surface in town, most prominently on the city's small, cylindrical water tower. Some indistinct and wonderfully persuasive sign painter must have passed this way in recent

9/19

years, because just about every iron-range town has its claim to fame boldly imprinted on its water tower. Chisholm is "The Home Of The Minnesota Museum Of Mining," while Buhl has "The Finest Water In America"—not, in all likelihood, an unreasonable boast. But in midsummer 1982, Eveleth had a claim to fame that all of the other range towns envied unashamedly: a functioning taconite plant.

Jack Banke, general manager of ore operations for Ogeby Norton—the managing partner in a five-company consortium that owns Eveleth Mines—has been in the iron-mining business for 30 years. He is a handsome, nervous, plain-speaking man, content to manage his own company's affairs and generally loath to speculate on macroeconomic quandaries. Eveleth Mines is owned by two Canadian steelmakers, plus Arco, Ogeby Norton, and Rouge Steel (a spinoff from Ford Motor Co. that recently announced negotiations to sell a majority interest in itself to a group of Japanese steel firms).

The plant did not shut down this year, Banke says, simply because he chose a method of cutting back operations different from the other taconite firms'. Eveleth chose to lay off 130 of its 1,400 workers, to work 32-hour weeks, and to shut off one of its pellet lines. The net result, Banke says, will be a production cutback of around 21 percent—not out of line with what the other mining companies are doing, so far.

Banke points out that the taconite companies are as much at the mercy of the steel industry as any company in northeastern Minnesota is at the mercy of taconite. "We're large-scale job shops," he says. "We don't produce a finished product. We're simply producers of what our customers order." Banke doesn't pretend to know what is wrong with the American steel industry, or even whether there is anything wrong with it apart from the national recession. He's heard all the theories, though, including the liquidation scenario. They bring a smile to his face that is almost a grimace.

"I've never believed in long-range projections. I don't think anyone is able to predict the factors that influence any particular trend line. Back in the early 1960s, we had predictions that led to the development of 65-million tons of taconite capacity on the Iron range! People wonder whether the industry didn't get carried away with itself. Well, we were just meeting the projected demand. Now it looks like those projections were wrong, and we've got the same people making other projections. Why should they be right now?"

"Look, the economists are all tearing their hair out, because their econometric models just don't conform to the influences that turn out to be predominant. I wouldn't dare to predict what's going to happen to the steel industry, and I don't think they should dare either."

"Why did we have a depression during the 1930s? The whole world economy just slowed down to nothing, and nobody ever really figured out why. Greater minds than mine have tackled



An early mining camp. From the beginning, a colonial economy.



8/19

In thousands of arrowhead bogs like this one lies an enormous energy resource—peat. Whether that resource can be profitably exploited any time soon remains an open question, but no vision of northeastern Minnesota's future generates more excitement than the image of the region as an energy producer.

nesota. There is no primary benefit in producing an energy product that is more expensive than the alternatives.

There would be three winners were we to tax the state's profitable sectors in order to prop up an unprofitable energy industry: the people who receive the subsidies, the people who wish to stay in northeastern Minnesota but would be forced to leave without the development of such an industry, and the state treasury. Depending on the cost and the return to the state, there may be an argument to be made for such a subsidy, even as there is an argument to be made for "subsidizing" the state's tourist industry through advertising or the state's timber industry through spending on forest management. It seems clear, in any case, that without significant long-term subsidies, northeastern Minnesota will not become an energy producer any time soon.

All of which brings us back to the question of industrial development—diversification—and to L&M Radiator in Hibbing. L&M was founded in 1937 on the same premise that has launched hundreds of companies in northeastern Minnesota. The firm would produce a product that the things on the hills, the taconite industry, needed. In L&M's case, it was to be heavy-duty radiators for the giant trucks and

earth-movers that roam the mines of the Mesabi. Early on, L&M succeeded in designing a superior radiator that withstands intense vibration better than standard radiators and is easier to repair. By 1964, L&M was fabricating all of its own parts and doing a thriving business with the taconite companies.

If L&M Radiator were typical of small businesses in northeastern Minnesota, that would be the end of its developmental history. I would have continued to serve the things on the hills, following them slavishly through boom and bust. But L&M's president, Alex Chisholm (inducted this year into the Minnesota Business Hall of Fame), realized something that has escaped most entrepreneurs in the arrowhead: Products needed by the taconite industry are needed equally by mining operations all over the world and, indeed, by any operation that employs heavy, off-road equipment. Chisholm set about marketing his product aggressively outside northeastern Minnesota. Today, L&M Radiator has manufacturing facilities in Mexico, Australia, Canada, South Africa, and Texas, in addition to its main plant in Hibbing. The company employs 250 persons, and in 1981 had sales exceeding \$13 million.

L&M Radiator has not entirely escaped the tyranny of the things on the hills, and its fate is securely tied to America's basic industries, all of which

suffer to some degree from the same illness that aunts the taconite companies. This summer's collapse of the iron range, coupled with the lurching of the heavy-construction and oil-drilling industries, has forced L&M to temporarily close its Hibbing plant, although its overseas operations are faring better. Galea Erickson, the exuberant manager of L&M's Hibbing plant, says he will be delighted if the company can repeat last year's sales performance in 1982.

Still, with all of its troubles, L&M Radiator has achieved a measure of independence almost unknown to manufacturing companies in northeastern Minnesota. Ask an arrowhead businessman for an example of what his region needs more of, and he will direct you to L&M without hesitation. Erickson, for his part, tells the story of his company's achievements with relish, but is at something of a loss to explain why L&M, almost alone among arrowhead firms, has been able to identify and reach a larger market. "I guess that's attributable to Alex Chisholm's personality," Erickson says.

There are at least 900 northeastern Minnesota businesses that sell products or services to the taconite industry. Presumably, a good many of those products and services would be of use to mining and heavy-manufacturing operations around the world. What the arrowhead seems to have lacked is entrepre-



The Hull-Rust mine, which lies beneath the original site of Hibbing, Minnesota. The Mesabi is as marked by man as any landscape on earth.

these questions, and come up with nothing."

The Iron Range Resources and Rehabilitation Board is 41 years old this year. It was established as America prepared to enter the second world war and the Minnesota Legislature recognized that the demands of the war machine would hasten the inevitable day when Minnesota's natural iron treasure played itself out. The IRRRB's purpose was and is to foster the development of new industry on the range. It has some peculiar methods. Since 1977, when the legislature gave IRRRB a cut of the income-production tax and thus made it, for the first time, a formidable agency, the IRRRB has largely devoted itself to environmental matters (mine-land reclamation projects, studies of health conditions among mine employees, and the like), water and sewer projects for the range towns, and the building and operation of tourist attractions such as

the Iron Range Interpretative Center outside Chisholm. This year, the IRRRB has even invested \$60,000 in a movie that is being made on the range. As for the efforts to attract or develop new industry, Pat McCauley, executive director of IRRRB, calls the results "not great."

The agency has tried. Tourism is clearly one of the more promising opportunities for the range, and the Interpretative Center appears to be quite successful, attracting about 500 visitors per day. Adequate public works are likewise essential to any economic development in the area, and the IRRRB's water and sewer projects are even more common on the range than message-bearing water towers. In addition, the IRRRB has made available hundreds of thousands of dollars in loans, grants, and interest buy-down programs to small businesses. It has invested in a Control Data-sponsored Rural Venture project. But for all of this, McCauley readily admits that the range still has "a one-horse economy": "When you can count on


one hand the companies that aren't dependent on one industry," he says, "you have a problem."

Like nearly everyone else encountered on the range, McCauley has a profound, invincible love for the place, for the deep, impenetrable forest that advances on all fronts—from the floors of the manmade canyons, to the tops of the flat red ridges of stockpiled low-grade ore, to the very edge of the roadways—in a relentless guerrilla campaign to reclaim its own from the hands of man. More than this, of course, McCauley has a hard-headed admiration for the tough, decent people who have kept the forest at bay, and who have, in his words, "been through hust times before."

Like nearly everyone on the range, McCauley is persuaded that the blemish and richness of the land, and the indomitable spirit of the "rangers," will somehow prevail. But he is less confident than usual this year, and he thinks he detects a change of mood in north-eastern Minnesota.

"When things have been slow in the past, people have recognized that since the beginning of the ore mining, there have been good times and bad times, and that you just ride out the bad times. But people always thought, 'We've got the ore. They've got to come here to get our ore.' Now people have realized that there's iron ore all over the world—better ore, cheaper ore—and they know when the Japanese can sell steel for. They're aware that there are many things beyond our control, and that they don't have to come for our ore. People are thinking, 'Maybe we're not competitive. Maybe we're not ever going to go back to work.' That's pretty heavy."

"You know, I've heard [people say] that rangers have always been taken care of, that there's a kind of dependency. On the government. On political leaders. On the companies. And that they think in the end they will always be taken care of. Maybe that's a big part of the problem."

"But I think there's always something positive that comes out of something like this. People are seeing that the industry that's taken care of them all their life is vulnerable. It gets hit, and it gets hit pretty hard. So, I don't know, maybe this will bring a change." 

"The Thing of the Hill" will continue in the November issue. B. J. Lee is managing editor of *Consciousness* Review, Minnesota.

Steel merger / New threat to the Iron Range



Staff Photo by Martin Levinson

Millions of dollars worth of facanilla pellets are stockpiled at the Reserve Mining Co. plant in Silver Bay, Minn.

duly

More reductions ahead for mines

The Iron Range will mark the 100th anniversary this year of the first shipment of iron ore to be dug from a Minnesota mine, but it may be a jubilee without much jubilation, because for many workers on the Iron Range, the past may have offered more promise than does the future.

By Mike Meyers
Staff Writer

In January, the president of a Cleveland-based company that operates two mines on Minnesota's Iron Range warned that the dwindling demand for steel would have serious consequences for companies and workers who are in work-steady periods called locusts.

■ Joblessness, uncertainty are part of Range life. Page 15A.

"There may well be additional permanent mine closings, and we may see some combinations of operations," said Robert Williams, president of Richards Mather & Co., which operates Hibbing Taconite Co. and Erie Mining Co. "In addition, there will be divesting of some mines and operations. These actions will result in a smaller capital base and fewer employees."

That prophecy may have come closer to reality on Friday with the largest steel merger in U.S. history. Shareholders of LTV Corp. and Republic Steel Corp. approved a \$780-million deal to combine their companies. Although LTV Steel officials

said Friday they were not going to close any major steel mills over the next 18 months, they would not make the same promise for the company's mines on the Iron Range.

The story behind the merger and its potential consequences is a case study of the problems facing the steel industry and the mines linked to it.

With one from Minnesota in its growing forge, a prosperous American steel industry expanded with the country. For generations, its mills rolled out the metal that built the nation's economy, from lower-

ing skyscrapers and hydroelectric dams to farm tractors and family cars.

But the industry's grand days are over. An era of painful contraction has arrived, forced by a convergence of forces that pose a long-term threat to the steel industry — and to the eight mines on the Iron Range that feed its furnaces.

"The U.S. steel industry is uncompetitive as it is but the best of periods," said Ronald Short, senior consultant at Bear Stearns & Co., a New York brokerage firm.

The same may be true of the iron mines that work at the bidding of the steel companies.

Steel continued on page 14A.

Steel merger New threat to the Iron Range

STEEL: More reductions, closings ahead for mines

Continued from page 1A

"Plans that are operating at less than 50 percent of capacity are probably operating at less than their break-even point. That is, they're operating at a loss," said Jerome Fennema, a University of Minnesota-Duluth mineral resources economist.

Two Iron Range mines — Erie Mining Co. in Hoyt Lake and Reserve Mining Co. in Silver Bay and Soudan — are running at less than 50 percent of capacity, and a third — U.S. Steel Corp.'s massive plant of Mesabi Iron — is operating barely over that mark.

Reserve owns half of Reserve and 10 percent of Hibbing, Minnesota, and LTV's Jones & Laughlin Steel subsidiary has a 50 percent share of Erie. However, E. Bradley Jones, chairman and chief executive officer of LTV Steel, said Friday that neither Reserve nor Erie is operating at a loss.

Even steel industry officials are skeptical about a turnaround evident in the value of a commodity that could start rising a year or longer, they have started to put up to check a disappointing steel job — operating losses that surpassed \$1.4 billion a day throughout 1983 and 1984.

"The steel industry has been in a state of self-cannibalism for two years," said Peter Hoffmann, U.S. Steel Corp. vice president. Hoffmann said congressional action to provide the industry "I think it will just continue."

Both LTV and Republic started losing money in 1982 as the nation slid into one of the deepest economic slumps since the end of World War II. But the losses eroding the strength of both companies — and the steel industry as a whole — cannot be traced to a single cause, but rather to the industry's high fixed costs, which have been plagued by more overcapacity than control.

At the nation's production growth has slowed and so has its demand for steel.

In 1983, the steel industry's capacity was 100 million tons, but demand was only 80 million tons.



Operations of Erie Mining Co. in Hoyt Lake, Minn. — one of two Iron Range mines running at less than 50 percent of capacity.

It's been years since steel in its industry when virtually every company was losing money.

In 1983 and 1984, Republic's sales represented about 10 percent of the total of the U.S. steel industry, according to the Bureau of the American Iron and Steel Institute. But Republic's operating losses amounted to nearly 50 percent of the total reported by more than a score of companies over that two-year period.

It was Republic's Republic wouldn't

and would average 100 million tons annually through 1988. This year it finished the contract to 90 million tons.

Less steel production also means a declining demand for iron. Last year, Hanna believed the annual demand for iron ore would average 80 million tons. Now it says 70 million tons will be closer to the mark.

If the combined LTV/Republic company were to shut, making capacity by 30 percent, how big the

growth in demand seems out of the question.

But LTV and Republic have invested hundreds of millions of dollars in the Iron Range and have purchased in those operations who might stand, plans to consolidate or close facilities.

"I don't see them abandoning these plants," said the Rev. Vernon J. Galt, a Portland, Oregon, minister. "When business gets tough and operations will, most these plants

will, and the other troubles in their path, and prospect of losses of tens of millions from steel working their way up the chain.

It's a problem they've begun to first about, even though dramatic steel market haven't yet been pronounced.

Bob McInnes of Pittsburgh-based, "There's no doubt American steel industry is in a bind in Cleveland, Pittsburgh, Detroit and Chicago."

to see large supplies of imported steel.

Bob McInnes of Pittsburgh-based, "There's no doubt American steel industry is in a bind in Cleveland, Pittsburgh, Detroit and Chicago."

Mesabi Range

MINNESOTA

Even steel industry officials have stopped talking about a triangular market in the wake of a recession that closed more than a year ago. Instead, they have started to plot ways to check a surging flow of raw iron — especially from the expanded Mid-America steel plant through 1952 and 1953.

"The steel industry has been in a state of self-deception for two years," said Peter Schaefer, U.S. Steel Corp. vice president. "Rapidly quieting competition action is probably the industry's first task in 1952."

Both LTV and Republic started losing money in 1951 as the market took into one of its deepest slumps — deeper than the end of World War II. But the firms are riding the strength of both companies — and the steel industry as a whole — toward a new cycle of boom and bust in the economy. The steel industry had been plagued by severe losses beyond a doubt.

The nation's population growth has driven part of its demand for steel.

It is thought that new home construction in Michigan, especially in the Detroit area, may result in a heavy surge in steel demand.

Last year, the average American car contained 1,200 pounds of steel — 200 pounds more than eight years ago. In 1951, the average car contained 1,400 pounds of steel.

In a flood of imported steel, coming from the country of origin, the average level was 1,200 pounds of steel. The average level of steel used in the United States in the first three months of this year was 1,400 pounds, 200 pounds more than the average level of steel used in the United States in the first three months of 1951.

The steel industry is looking for ways to improve its import situation on steel, but many of the changes improving the health of the industry "don't" go to the steel industry.

The LTV-Republic merger suggests that even major U.S. steel makers considering their own way out of trouble. But California steel does all but certain with the complete operating independently.

Although LTV and Republic remain in the steel industry since 1952 have been along 60 percent greater than LTV's 1951 output. Republic's 1951 output was 10 percent greater than LTV's, the latter's 1951 output was 10 percent greater than LTV's.



Operations at Erie Mining Co. in Hoyt Lakes, Minn. — one of two Iron Range mines remaining of less than 60 percent of capacity.

Its losses were starting even in an industry where virtually every company was losing money.

In 1952 and 1953, Republic's sales represented about 10 percent of the total of the U.S. steel industry, according to the figures of the American Iron and Steel Institute. But Republic's operating losses amounted to nearly 10 percent of this total, as reported by years since a score of companies over those two years.

"I was fearful Republic wouldn't make it through another recession," said Greg Droboschek, vice president of Incoeur & Stager, a regional brokerage firm based in Philadelphia.

LTV, a Delaware-based conglomerate that owns Jones & Laughlin Steel in Pittsburgh, was one of the first to announce its plan to merge with Republic. In the merger proposal, LTV purchased 50 percent of Republic's stock as a reward for deep pockets, distributed to pure steel companies in a single, profitable transaction.

"I think you'll have a healthier company after the merger," said G. V. Smith, the vice president of the Erie Mining Co. in Hoyt Lakes, Minn. "I think you'll have a better plant and a better steel plant."

Paterson, the U.S. Steel president, said that not all of LTV's assets might be included in the merger, although he indicated it might be possible to include as part of the merger, Erie & Incoeur as potential assets.

LTV's Jones & Laughlin subsidiary had 20,000 employees at the end of last year, while Republic employed an average of 20,000 people last year. Officials of the merged company, to be based in Erie, Pa., said that the company will, in time, promise to cut out steel production capacity by 20 percent through plant sales or shut-down.

Reducing steel-making capacity has become a familiar strategy in the case of steel producers across the country. Many plans to shut down plants are expected.

After producing a record 53 million tons of steel in 1951, demand for domestic steel declined to a low of 75 million tons in 1952.

Its losses were starting even in an industry where virtually every company was losing money.

In 1952 and 1953, Republic's sales represented about 10 percent of the total of the U.S. steel industry, according to the figures of the American Iron and Steel Institute. But Republic's operating losses amounted to nearly 10 percent of this total, as reported by years since a score of companies over those two years.

"I was fearful Republic wouldn't make it through another recession," said Greg Droboschek, vice president of Incoeur & Stager, a regional brokerage firm based in Philadelphia.

LTV, a Delaware-based conglomerate that owns Jones & Laughlin Steel in Pittsburgh, was one of the first to announce its plan to merge with Republic. In the merger proposal, LTV purchased 50 percent of Republic's stock as a reward for deep pockets, distributed to pure steel companies in a single, profitable transaction.

"I think you'll have a healthier company after the merger," said G. V. Smith, the vice president of the Erie Mining Co. in Hoyt Lakes, Minn. "I think you'll have a better plant and a better steel plant."

Paterson, the U.S. Steel president, said that not all of LTV's assets might be included in the merger, although he indicated it might be possible to include as part of the merger, Erie & Incoeur as potential assets.

LTV's Jones & Laughlin subsidiary had 20,000 employees at the end of last year, while Republic employed an average of 20,000 people last year. Officials of the merged company, to be based in Erie, Pa., said that the company will, in time, promise to cut out steel production capacity by 20 percent through plant sales or shut-down.

Reducing steel-making capacity has become a familiar strategy in the case of steel producers across the country. Many plans to shut down plants are expected.

After producing a record 53 million tons of steel in 1951, demand for domestic steel declined to a low of 75 million tons in 1952.

growth in demand drove out of the market.

But LTV and Republic have involved hundreds of millions of dollars in the Iron Range and have partners in those operations who might block plans to consolidate or close inactive mines.

"I don't see them abandoning these mines," said the Rev. William Hooper, a Northern Delawarean lawyer. "When business picks up, steel operations will need these plants. You don't close away investments because you've had one or two bad years."

But Republic abandoned before finding a merger partner. American Mining Finance Corp. had been in the Iron Range and is now, now that LTV and Republic are working to create a stronger company, it has been sold.

Other changes that the future of the Iron Range steel industry will be the fate of the industry itself.

For instance, changing technology — including a number of methods of steel-making — has been called "outdated" by some steel industry officials. The industry is now looking for ways to improve its production costs in the future.

"It's an important question we are being forced to accept," said Robert F. Anderson, U.S. Steel's chairman and president.

Another development working against the Iron Range industry may be harder to accept: even as production costs by foreign governments have dropped up sharply in the past few years, the industry has been forced to accept a lower price for its steel.

"I believe if any domestic price you'll find in recent years will be lower," said William of U.S. Steel. "You're not trying to

with all the other troubles in their path, the prospect of larger quantities from Brazil sending their way up the Mississippi is a worry U.S. domestic producers don't mind. But it's a problem they're trying to first steel, even though domestic steel makers haven't yet been permitted

to use large supplies of imported iron ore.

Steel industry officials are worried that the steel industry will be the fate of the industry itself.

For instance, changing technology — including a number of methods of steel-making — has been called "outdated" by some steel industry officials. The industry is now looking for ways to improve its production costs in the future.

"It's an important question we are being forced to accept," said Robert F. Anderson, U.S. Steel's chairman and president.

Another development working against the Iron Range industry may be harder to accept: even as production costs by foreign governments have dropped up sharply in the past few years, the industry has been forced to accept a lower price for its steel.

"I believe if any domestic price you'll find in recent years will be lower," said William of U.S. Steel. "You're not trying to

Conditions in the steel industry

Year	Production (Million tons)	Consumption (Million tons)	Exports (Million tons)	Imports (Million tons)	Stocks (Million tons)
1947	52	48	0	0	0
1948	52	48	0	0	0
1949	52	48	0	0	0
1950	52	48	0	0	0
1951	53	48	0	0	0
1952	75	48	0	0	0

Source: The American Iron and Steel Institute, Washington, D.C.

Amalgam, it will shed another 200 pounds of steel.

■ A flood of imported steel, flooding into the country at unprecedented levels, warns many steel domestic steel makers a slip-slip slide down the road. One of every four tons of steel sold in the United States in the first three months of this year was made in Great Britain, West Germany, South Africa and other steel-producing nations, according to the American Iron and Steel Institute.

The steel industry is helping Congress to improve steel import restrictions on steel, but many of the changes hampering the health of the industry aren't going to go away.

The LTV-Republic merger suggests that even major U.S. steel makers' combining their assets may face trouble. But combined, even more, all but certain with the complete opening internationally.

Although LTV and Republic remain to be set, Republic's heavy steel LDC has been about 60 percent greater than LTV's even though Republic's steel is greater than that of LTV, the nation's steel-largest steel company.

Republic, the country's 10th-largest steel maker, appeared to many to be sliding with financial collapse. The company sustained operating losses of \$67 million in 1982 and \$82 on sales of \$1.5 billion. Republic

LTV predicted that to Republic shareholders it is running with deep losses, identified in heavy costs. The combined operations of the two companies will be a single, profitable venture.

"I think you'll have a healthier company after the merger. But obviously, the idea is to have fewer plants closed and lower the cost of operations," said Dick McCon, a consultant director at Duffield, Phelps, Inc., a Chicago financial consulting firm.

LTV's James J. Laughlin subsidiary had 32,000 employees at the end of last year, while Republic employed an average of 33,200 people last year. Officials at the combined company, to be named only in U.S. Steel Corp. in late, promise to cut raw steel production capacity by 70 percent through plant sales or closings.

Reducing steel making capacity has become a familiar strategy to cut costs of steel producers across the country since plans to meet distribution needs.

After producing a record 121 million tons of raw steel in 1982, demand for domestic steel declined to a low of 75 million tons in 1983 and is expected to fall to 50 million tons this year, Laughlin forecasts of domestic capacity are revised downward.

For instance, Simon Mining Co. last year estimated the steel de-

"It is my opinion you won't see the dramatic changes in the steel industry as concerning LTV, for some period of time, at least some months," says Laughlin, who was president of LTV's James J. Laughlin steel subsidiary before the merger.

Petersen, the LTVD consultant, explained that not all of Republic's eight facilities plans may survive — although he believes in plant in Denver, D's or Illinois as possible facilities.

"I think there's a possibility that in a year there may be one that's closed down. It's not determined yet, but waiting for better times," Petersen said.

Other possibilities, Petersen said, include an exit of closing plants for several months and year of consolidating operations of two facilities plants to create a larger, more economical operation.

Demarest, of Butler & Singer, said he thinks the combined LTV-Republic will have to act fast to cut costs in every part of its business — including raw materials.

"You can't close up a merger like this to clean house quickly. You've already had one shock. Get the others out of the way," Demarest said.

"You can't close up with a good amount of time taken. The fact they can do to hold their own. It's

Other changes under the terms of Republic plans consider that the fate of the steel industry itself.

For instance, changing technology — including a method of steel — steel called continuous casting — allows mills to produce more steel with less scrap. An early mill built in the continuous casting to cut costs, improve air, the Republic mills will be slower to join the steel industry in any savings to steel demand.

"It's an important element we are being forced to accept," said Robert J. Anderson, Simon Mining's chairman and president.

Another development working against the Republic industry may be further to accept, but are production caused by foreign governments have stepped up pressure on raw materials. Steel companies may be forced to accept a lower price than Republic mills can produce the steel plant.

"I believe if any domestic price you will see the lowest price that will be found," said chairman of U.S. Steel. "They are not trying to talk it a profit."

Instead, industry said, foreign producers of steel and increase want to lower themselves in their countries that will keep their people employed.



Conditions in the steel industry

Year	Production (Million tons)	Capacity (Million tons)	Utilization (%)
1979	120	150	80
1980	110	150	73
1981	121	150	81
1982	121	150	81
1983	75	150	50
1984	50	150	33

Source: U.S. Department of Commerce, Bureau of Economic Analysis, "Steel Industry Outlook, 1984-1985," p. 10. Figures are in million tons unless otherwise noted.

Taconite mine ownership, capacity and production

Company	Ownership (%)	Capacity (Million tons)	Production (Million tons)
Iron Mining Co. (New Mexico)	Republic-Butler & Co., 100%	11.0	4.4
Republic Mining (Illinois)	Republic-Butler & Co., 100%	0.0	0.0
Republic Mining (Illinois)	Republic-Butler & Co., 100%	2.0	0.2
Republic Mining (Illinois)	Republic-Butler & Co., 100%	0.0	0.0
Republic Mining (Illinois)	Republic-Butler & Co., 100%	0.0	0.0
Republic Mining (Illinois)	Republic-Butler & Co., 100%	0.0	0.0
Republic Mining (Illinois)	Republic-Butler & Co., 100%	0.0	0.0
Republic Mining (Illinois)	Republic-Butler & Co., 100%	0.0	0.0
Republic Mining (Illinois)	Republic-Butler & Co., 100%	0.0	0.0
Republic Mining (Illinois)	Republic-Butler & Co., 100%	0.0	0.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis, "Steel Industry Outlook, 1984-1985," p. 10. Figures are in million tons unless otherwise noted.



The Iron Mining Co. plant where raw ore is transformed into taconite pellets.

Merger

Continued from page 1A

in Hoyt Lakes, while Republic owns part of Reserve Mining Co. in Silver Bay and Babbitt, and Hibbing Taconic Co. in Hibbing.

Questioned about the future of these mines, Hay said LTV has not decided where they fit as part of the \$750 million merger, expected to win federal court approval sometime next month. Hay and other officials emphasized that other steel companies that own parts of the mines would have to be consulted about any consolidation or closing, a move that Hay said has not yet been discussed.

E. Bradley Jones, LTV Steel chairman and chief executive officer, acknowledged LTV has invested millions of dollars in taconite-mining facilities that may never be needed.

"The basic problem with raw materials is that the facilities were constructed to match old (overly optimistic) forecasts for the demand of steel," Jones said. "In 1981, steel production hit the levels of the Great Depression."

LTV has told shareholders the merged company plans to pare its steel-making capacity by at least 20 percent. Half of those cuts will come from the sale of two steel mills — in Ohio and in Alabama — which don't use taconite from the Iron Range. Where the other cuts will go later, effect remains in doubt.

Whatever the case, Hoag made it clear LTV isn't wedded to obtaining taconite from Minnesota as matter want the company's future need for iron ore.

Asked if LTV might consider importing taconite from overseas, Jones said: "We have not given up hope that producing taconite (at a favorable price) can be done in this country."



E. Bradley Jones

But, he quickly added, LTV will be "realistic" in studying whether to buy taconite from abroad. "We're not excluding it as an option," Jones said.

LTV did give Iron Range workers some reasons to take heart, however. Although Erie and Reserve mines are operating at roughly half their capacity, neither is producing financial losses, Jones said. Improved productivity, Jones said, also has made the mines more competitive with rival sources of supply.

In 1981, Reserve employed 5,700 people to produce 2 million tons of taconite, Jones said. This year, he said, Reserve will yield more than half the taconite with less than half the work force — 4.5 million tons with 1,100 people.

"It really makes their future more secure," Jones said.

LTV also said the combined operations of LTV and Republic will make a healthier company — and presumably a more reliable customer for Minnesota taconite mines.

After the merger, Hay said, LTV will have a one-time cash savings of \$400 million by cutting inventories and idling plant and equipment expenses that would have been required if LTV and Republic had continued to operate independently.



David A. Hoag

Within three years, lower freight and operating costs provided through "streamlining of steel-making and raw material operations" will help the company save \$200 million a year.

"We are ready to move ahead with the creation of a steel company that can compete successfully in today's demanding marketplace," Hay said.

effects on Iron Range unclear

By Mike Meyers
Staff Writer

Dallas, Texas

The chairman of LTV Corp. pronounced a one-year reprieve on closing steel mills Friday, shortly after the company won shareholder approval of the largest merger in the history of the steel industry. But that view was not extended to taconite mines and plants on Minnesota's Iron Range.

"I want to emphasize that we do not plan to permanently shut down any entire basic steel-making facility in the first 12 months following the merger," said Raymond A. Hay, LTV chairman and chief executive officer.

But answering reporters' questions later, Hay declined to make the same pledge about the three taconite mines on the Iron Range in which LTV and Republic Steel Corp. — to be merged into a new company called LTV Steel — own part owners. The mines are Reserve Mining Co., Erie Mining Co. and Hibbing Taconic Co.

What's more, LTV officials said, in looking for ways to cut costs, they might consider buying taconite from overseas. In recent months, Brazil and other countries reportedly have offered steel mills taconite at prices as much as 20 percent lower than the domestic price.

Workers on the Iron Range, however, apparently won't have to brace for any sudden disruptions.

David A. Hoag, president and chief operating officer of LTV Steel, would only say the company won't rush to a decision on the fate of Iron Range plants in which the company has an interest. Each of them has been operating at less than capacity for more than two years.

"It is my opinion you won't see any dramatic change on the Iron Range, as concerning LTV, for some period of time, at least some months," said Hoag, who was president of LTV's Jones & Laughlin Steel subsidiary before the merger.

LTV owns a share of Erie Mining Co.

Merger continued on page 12A.

■ Economic recovery in northeastern Minnesota has reached a plateau and is unlikely to advance without significant changes in regional industry, observers say, Page 6B.

Senator DANFORTH. Senator Bentsen?

Senator BENTSEN. Thank you very much, Mr. Chairman.

I too congratulate you on the hearings. I will not be able to stay the full amount because of the fact that we are having a tax conference, as you well know, and you are a part of it.

I certainly share the views of my friend from Minnesota and Senator Heinz when they talk about the fact that we need the basic industries.

You can read "Megatrends and The World After Oil" and all that, about moving into the service industries and high tech, and that is important. But the thought that we would lose something like the steel industry makes no sense at all.

What I am particularly concerned about is the administration not vigorously pursuing, in my opinion, a fair and equitable resolution on the issues raised by the excessive importation of pipe and tubing into this country. I would say that is especially true of the oil country tubing. Today the importation of pipe and tubing into this country is three times the level agreed upon in the 1982 pipe and tubing arrangement.

In my own State of Texas, we have lost thousands of jobs. I am not talking about antiquated facilities; I am talking about modern state-of-the-art plants, the kind I wish they were building all over America today, that will compete with any plant in Japan or any plant in Europe. And yet they can't against subsidized rates that we are seeing in the oil country pipe and tubing coming into this country.

It is ironic to me that the 1982 agreement should work to the point of providing protection sometimes for the more inefficient plants in this country and bringing about a diversion of European production into pipe and tubing, and competing head-to-head for some of our most modern facilities.

Now, I have informed Secretary Baldrige by letter that I am anticipating and hoping that he will make that pipe and tubing arrangement work as he said he would on so many occasions.

When H.R. 3398 comes to the floor, and I hope it comes to the floor soon, I am seriously considering making an amendment to section 213 to change that law, where we don't just authorize the executive branch to enforce the trade agreement but that we mandate that that be done if that's the way it has to be done to get this thing accomplished. The results to Europe will be the same, but nevertheless I think that we have to take those kinds of aggressive steps.

When my friend from Pennsylvania says that some folks say that we may get into a trade war, we're in a trade war, and we have been in one for some time. And if we turn around and have \$26 billion trade deficits as we have had in the first quarter, and go well over \$100 billion this year, we will have never had anything like that in the past. There is no way we can continue to sustain that type of a situation, and we have to take some vigorous action, in my opinion, to try to correct that.

Thank you very much, Mr. Chairman.

Senator DANFORTH. Senator Specter, while not a member of the Finance Committee, is obviously very interested in this subject. We

are glad to have you with us, Senator Specter. Would you care to make a comment?

Senator SPECTER. Thank you, Mr. Chairman. I would like to say a word or two on this important subject.

I commend the Chairman and the subcommittee for holding these very important hearings. They are very important to the Nation and especially important to Pennsylvania, as illustrated by the fact that three of the witnesses—Mr. Trautlein, Mr. Roderick, and Mr. Williams—all are headquartered and based in Pennsylvania.

It seems to me that there has to be some action taken by the administration or by the Congress on the very serious problems posed by subsidized steel and by dumped steel which is coming into this country.

I would pick up on the note of what Senator Bentsen has had to say. My own judgment is that in the long run we are going to have to act to open up our Federal courts to grant injunctions to stop subsidies and to stop dumping. Those practices are clearly illegal under our laws, but there is no effective remedy now. We are trying hard with the International Trade Commission on the 201 petition filed by Bethlehem and the United Steel Workers and by the Fair Trade and Steel Act, which has been pressed by Mr. Roderick. Senator Heinz has taken the lead, has some 19 cosponsors in the Senate and I understand 190 in the House. But the long-range solution in my judgment is to get justice in the courts and stop sacrificing American industry and especially the steel industry in the name of foreign policy.

I certainly commend you, Mr. Chairman, for having these hearings. And I think, with enough focus and enough attention, we can find an answer. But my sense is that time is running short, and we have to act with speed. Thank you very much, Mr. Chairman.

Senator DANFORTH. Thank you.

Ambassador Brock, we are delighted to have you back.

STATEMENT OF HON. WILLIAM E. BROCK, U.S. TRADE REPRESENTATIVE

Ambassador Brock. It is nice to be back, Mr. Chairman.

We have an obvious difference of views on some of these subjects, so we may have an interesting process. I appreciate the chance to address the question.

I would like to begin, though, by agreeing with those of you who have said that we really do have to look at this subject comprehensively, not just in terms of this particular industry but in a more comprehensive fashion, and I particularly appreciate the comments of the Senator from Minnesota and his view that this has to be dealt with in a very comprehensive and inclusive fashion.

I do not believe, as you will hear me say several times, that you can put the burden of this particular problem on imports. There are a lot of factors involved in the difficulty but to suggest that the imports are the exclusive source of the problem simply is not correct.

We do have a steel industry in a slow state of recovery. It has had the worst recession since the 1930's; production for 1983 was

just 84 million tons. Although this is a 12-percent improvement over 1982, it still is 30 percent below production in 1981 and 40 percent below production in 1979, the last reasonably good year in the United States.

In 1983, our production was equivalent to just 55 percent of U.S. capacity.

The demand for steel and domestic production is continuing to grow, bringing an increasing amount of productive capacity back into operation. This improvement, in turn, is bringing steel workers back to work. Production through mid-May was 31 percent higher than it was 12 months ago. Capacity utilization is up to 80 percent. The number of workers on either layoff or short work-week status has declined significantly over recent months, and man hours worked are up.

Despite these signs of recovery, many continue to argue that the enactment of the so-called Fair Trade in Steel Act of 1984 is the only way to save this industry. I fundamentally disagree. This bill would impose import quotas of approximately 15 percent on steel products for a 5- to 8-year period.

Arbitrarily established quotas on all steel imports would in my view be counterproductive to the industry's efforts to further improve its competitiveness by providing a false sense of security not unlike the situation in some other countries, particularly in Europe, where protection from imports has delayed modernization.

This bill would also undermine the competitiveness of many industries dependent on steel as a raw material. These industries already faced strong import pressures. Imposing quotas on all steel imports would raise costs to steel consumers in a way they cannot afford to absorb, and thus shift the burden from steel producers to consumers.

Some might suggest that Congress then extend the quotas to apply to these downstream industries as well, but where would the line be drawn? You can see a downward spiral as protection becomes necessary for one industry after another, and we never deal with the problem.

Furthermore, protectionist action like this is inconsistent with our international obligations not to impose import restrictions without an impartial investigation and a finding of injury. If the U.S. ignores these obligations and legislates import relief, our trading partners will almost certainly retaliate, resulting in fewer jobs and slower growth in some of our most competitive industries.

The steel industry admits that its current trade problem is caused primarily by just that one-third of our imports coming from countries other than the EC, Japan, and Canada. The imposition of quotas, however, would apply to fairly and unfairly trade imports alike, to all countries. Imagine trying to explain to our major exporting industries that they are the object of retaliation by certain fair-trading countries for a U.S. action that was really directed at unfairly trading countries. You can't do it.

The EC has already restricted imports of certain U.S. chemicals, plastics, and sports equipment in retaliation for U.S. import relief on imports, especially steel, taken last year. The reaction of the European Community and other suppliers to comprehensive quotas on

all steel imports unrelated to findings of injury is likely to be even stronger.

Our action on specialty steel was taken in accordance with the rules of the GATT, and the President had the authority to negotiate agreements with the supplying countries. Through these negotiations, we were able to settle the claims of most of our supplying countries without having to suffer comprehensive retaliation.

While 1980 to 1982 average U.S. imports of specialty steel from all countries amounted to about \$300 million a year, only \$135 million of U.S. exports were subject to retaliation. U.S. imports of steel products that would be covered by this bill could exceed \$6 billion. Passage of the bill, therefore, would result in retaliation against an enormous amount of U.S. exports and affect an enormous amount of U.S. jobs.

As some of you have already noted, the steel industry's problems are in fact far more complex than this bill would suggest. All steel firms do not suffer the same problems, and workers at different firms have been affected in different ways. Some firms are doing considerably better than others.

We are most aware of the problems of the large integrated steel producers and sometimes perceive their problems as those of the entire industry. That's not correct. Clearly, the integrated producers dominate the industry and are the force behind S. 2380. These integrated producers operate what have become less-efficient, older facilities, in some instances located far from their market. Furthermore, throughout the 1970's wages and salaries rose faster than gains in productivity. This has been a tough combination to overcome.

The main problem of these producers has been their inability to raise adequate capital to improve their competitiveness. Other parts of the steel industry, however, view imports very differently. The so-called minimills, for example, are the fastest growing segment of the industry. These mills have lower costs, higher productivity, and have considerably more profitable operations than the major producers. Several mini-mills have plans for expanding, not contracting, capacity.

A third part of the steel industry is the specialty steel producers. These producers have suffered some of the same problems as the integrated producers, although they have done far better at adopting and even developing the newest technologies and in staying cost-competitive with foreign producers.

Nevertheless, there have been surges of specialty steel imports over the past few years, and there is considerable global excess capacity in this sector. Thus, pursuant to a section 201 finding in July of 1983, U.S. specialty steel producers are currently receiving import relief.

There is also a very important and yet often overlooked segment of this industry, the metal-working producers. The concerns and problems of these producers rarely get the attention they deserve, and yet this sector employs 20 times more people and accounts for almost 10 times the share of GNP that is accounted for by the integrated producers. These producers would clearly be hurt by increased prices for their raw material and also by increased import competition as foreign producers shift from exporting steel to ex-

porting products made of steel, which is exactly what would occur if this kind of legislation were to pass.

I think it is important for us to note that there are certain fundamental changes taking place in our economy that no legislation can reverse. The simple fact is that we need considerably less steel today than we did 10 years ago, 20 years ago, and 30 years ago. We are using less than half as much steel as a percentage of GNP as we did in 1950. Automobile manufacturing requires less steel, plastics, aluminum, and other materials are now often cheaper and more efficient substitutes. The steel industry itself has developed lighter, stronger, more sophisticated steel to substitute for the heavier, bulkier steel made in the past. Thus, less steel is being demanded and less produced.

The only way for the U.S. industry to deal with these changes is to continue the major restructuring process already underway. We do not need legislative quotas for this modernization to occur. As a matter of fact, they might be counterproductive, as I said earlier.

That modernization is occurring now. The integrated producers are in the midst of a major effort that has already resulted in the closure of millions of tons of steel making capacity.

Although the integrated producers do not like to boast, they have made fairly remarkable progress in recent years to improve their competitive situation. Recent capacity reductions and productivity improvements have lowered break-even operating rates from 80 percent of capacity to 69 percent of capacity in this period. Industry adjustment efforts are not complete, but they are occurring without this bill and will continue.

Some of our foreign steel competitors operate highly efficient, unsubsidized steel facilities. These producers, like U.S. mini-mills, provide an incentive to our integrated producers to continue modernizing to be as competitive as possible. Incentives of this nature are in the interest of all of us and should not be discouraged; however, other foreign steel producers operate inefficient plants which continue to produce and export significant quantities of steel products.

A large quantity of uneconomic excess steel capacity has sprung up in the world, severely distorting the international steel market. Certain countries have attempted to insulate their steel industry from this situation when the flow of subsidies are with closed markets. The result of these practices could have been predicted.

In the name of restructuring, the European Community has used extensive subsidization and import protection.

Some would say that the quota bill is no worse than EC's protection. My fear is that it is no better. Needed restructuring in Europe has been delayed endlessly, due in part to the false security provided by subsidies and import protection.

If the U.S. industry wants to modernize, the example of Europe should demonstrate that protection is not the way to encourage it.

U.S. producers have brought an unprecedented number of cases against unfairly traded steel. The Commerce Department has investigated a record number of antidumping and countervailing duty cases since January of 1982. The first batch of these cases resulted in the EC/U.S. Carbon Steel Arrangement, which is now limiting steel imports from the European Community.

I was told recently that two-thirds of the steel imports coming from countries other than Europe, Japan, and Canada are now either under investigation or subject to some restraint action. Once these cases, and others that still may be filed, are resolved, we will have a comprehensive response to unfairly traded steel imports.

Thus, I strongly urge that we not preempt this process by moving to a legislated solution before the final determinations are even in.

Given the range of actions currently underway, I am surprised at the urgency some attach to enacting steel quota legislation. U.S. producers have taken the time and expense of bringing a record number of cases under our established laws. United States Steel, in its written submission to the ITC on the 201 case said, "United States Steel is encouraged by the fact that both the Department of Commerce and the International Trade Commission have done quite a good job in enforcing the unfair trade statutes." They continued, "We at United States Steel remain cautiously optimistic that we may achieve this needed relief from imports via the unfair trade practices route." Yet, even before the investigation currently underway has been given a chance to produce results, many are now proclaiming that these processes have failed and are pleading for a legislated solution.

Why should anyone bring cases under our existing statutes? And why should the Government provide the resources to investigate these claims if the petitioners have already concluded that the statutes are unworkable?

I recognize, Mr. Chairman, the serious trade problems that exist in this important industrial sector, but we are in the process of addressing these problems under several of our existing trade statutes.

As I have said before the House committee, I do not believe the need exists to skip over these procedures until it can be proven that they simply don't work. That time has not come.

It is my judgment that when we complete the process of the consideration of these cases, as I've said, we will have had dealt with the problem as defined by the industry, and then we can go about doing those things which we should have been doing a long time ago, and that is to look at our own domestic laws, our own domestic circumstances, to see what steps we have taken that are a disadvantage to this industry and change those, so that they have an opportunity to compete on a fair basis.

Senator DANFORTH. Thank you, Mr. Ambassador.
Secretary Olmer.

[Ambassador Brock's prepared statement follows:]

STATEMENT OF
WILLIAM E. BROCK
U.S. TRADE REPRESENTATIVE

I WANT TO THANK YOU, MR. CHAIRMAN, AND THE MEMBERS OF THIS SUBCOMMITTEE FOR THE OPPORTUNITY TO PRESENT MY VIEWS ON THE PROBLEMS FACING THE U.S. STEEL INDUSTRY.

OVER THE PAST SEVERAL MONTHS, THE U.S. STEEL INDUSTRY HAS BEEN UNDERGOING A SLOW RECOVERY OUT OF ITS WORST RECESSION SINCE THE 1930'S. PRODUCTION FOR 1983 WAS JUST 84 MILLION TONS. ALTHOUGH THIS IS A 12 PERCENT IMPROVEMENT OVER 1982 PRODUCTION, IT REMAINS OVER 30 PERCENT BELOW PRODUCTION IN 1981 AND ALMOST 40 PERCENT BELOW PRODUCTION IN 1979, THE LAST REASONABLY GOOD YEAR IN THE UNITED STATES. IN 1983 PRODUCTION WAS EQUIVALENT TO JUST 55 PERCENT OF U.S. CAPACITY.

DEMAND FOR STEEL, AND DOMESTIC PRODUCTION, IS CONTINUING TO GROW, BRINGING AN INCREASING AMOUNT OF PRODUCTIVE CAPACITY BACK INTO OPERATION. THIS IMPROVEMENT, IN TURN, IS BRINGING STEEL WORKERS BACK TO WORK. PRODUCTION THROUGH MID-MAY WAS 31% HIGHER THAN IT WAS 12 MONTHS AGO. CAPACITY UTILIZATION IS UP TO 80%. THE NUMBER OF WORKERS ON EITHER LAY OFF OR SHORT WORK WEEK STATUS HAS DECLINED SIGNIFICANTLY OVER RECENT MONTHS AND MAN-HOURS WORKED ARE UP.

DESPITE THESE SIGNS OF RECOVERY, MANY CONTINUE TO ARGUE THAT THE ENACTMENT OF THE SO-CALLED FAIR TRADE IN STEEL ACT OF 1984 IS THE ONLY WAY TO SAVE THIS INDUSTRY. THIS BILL WOULD IMPOSE IMPORT QUOTAS OF APPROXIMATELY 15 PERCENT ON STEEL PRODUCTS FOR A FIVE TO EIGHT YEAR PERIOD.

ARBITRARILY ESTABLISHED QUOTAS ON ALL STEEL IMPORTS WOULD IN MY VIEW, BE COUNTERPRODUCTIVE TO THE INDUSTRY'S EFFORTS TO FURTHER IMPROVE ITS COMPETITIVENESS, BY PROVIDING A FALSE SENSE OF SECURITY NOT UNLIKE THE SITUATION IN SOME OTHER COUNTRIES WHERE PROTECTION FROM IMPORTS HAS DELAYED MODERNIZATION.

THIS BILL WOULD ALSO UNDERMINE THE COMPETITIVENESS OF A GREAT MANY INDUSTRIES HIGHLY DEPENDENT ON STEEL AS A RAW MATERIAL. MANY STEEL DEPENDENT INDUSTRIES ALREADY FACE STRONG IMPORT PRESSURES. IMPOSING QUOTAS ON ALL STEEL IMPORTS, AS COMPREHENSIVELY AS PROPOSED BY THIS BILL, WOULD RAISE COSTS TO THESE PRODUCERS IN A WAY THEY CANNOT AFFORD TO ABSORB, AND THUS MERELY SHIFT THE BURDEN FROM STEEL PRODUCERS TO THEIR CONSUMERS.

SOME MIGHT EVEN SUGGEST THAT CONGRESS EXTEND THE QUOTAS TO APPLY TO THESE DOWNSTREAM INDUSTRIES, AS WELL. BUT THEN WHERE WOULD THE LINE BE DRAWN? I CAN SEE A STEADY DOWNWARD SPIRAL AS PROTECTION BECOMES NECESSARY FOR ONE STEEL-RELATED INDUSTRY AFTER ANOTHER, RESULTING IN A CUMULATIVE COMPETITIVE BURDEN ON OUR ECONOMY AND A CUMULATIVE COST ON THE CONSUMER.

FURTHERMORE, PROTECTIONIST ACTION LIKE THIS IS INCONSISTENT WITH OUR INTERNATIONAL OBLIGATIONS NOT TO IMPOSE IMPORT RESTRICTIONS WITHOUT AN IMPARTIAL INVESTIGATION AND A FINDING OF INJURY. THE GATT PROVIDES FOR IMPORT RELIEF ONLY AFTER A FINDING OF INJURY. IF THE UNITED STATES IGNORES THE GATT AND LEGISLATES IMPORT RELIEF, OUR TRADING PARTNERS WILL ALMOST CERTAINLY RETALIATE AGAINST OUR EXPORTS, RESULTING IN FEWER JOBS AND SLOWER GROWTH IN SOME OF OUR MOST COMPETITIVE INDUSTRIES.

THE STEEL INDUSTRY ADMITS THAT ITS IMPORT PROBLEM IS CAUSED PRIMARILY BY THAT PORTION OF OUR IMPORTS - JUST ONE-THIRD OF THE TOTAL - THAT COMES FROM COUNTRIES OTHER

THAN THE EC, JAPAN OR CANADA. THE IMPOSITION OF QUOTAS, HOWEVER, WOULD APPLY TO ALL COUNTRIES, FAIRLY AND UNFAIRLY TRADED IMPORTS ALIKE. IMAGINE TRYING TO EXPLAIN TO OUR MAJOR EXPORTING INDUSTRIES THAT THEY ARE BEING RETALIATED AGAINST BY CERTAIN FAIR TRADING COUNTRIES FOR A U.S. ACTION THAT WAS REALLY DIRECTED AT AN UNFAIRLY TRADING, THIRD COUNTRY.

THE EC HAS ALREADY RESTRICTED IMPORTS OF CERTAIN U.S. CHEMICALS, PLASTICS, AND SPORTS EQUIPMENT IN RETALIATION FOR THE QUOTAS AND TARIFF INCREASES WHICH THE UNITED STATES IMPOSED ON IMPORTS OF SPECIALTY STEEL. THE REACTION OF THE EUROPEAN COMMUNITY AND OTHER SUPPLIERS TO COMPREHENSIVE QUOTAS ON ALL STEEL IMPORTS, UNRELATED TO FINDINGS OF INJURY, IS LIKELY TO BE MUCH STRONGER. U.S. EXPORTS OF PRODUCTS SUCH AS TEXTILES, CHEMICALS, ELECTRONICS, AND MACHINERY WILL BE SUBJECT TO IMPORT RESTRICTIONS IN OTHER COUNTRIES WITH RESULTING LOSS OF MARKETS.

OUR ACTION ON SPECIALTY STEEL WAS TAKEN IN ACCORDANCE WITH THE RULES OF THE GATT AND THE PRESIDENT HAD THE AUTHORITY TO NEGOTIATE AGREEMENTS WITH THE SUPPLYING COUNTRIES. AS PART OF THESE NEGOTIATIONS, WE WERE ABLE TO SETTLE THE CLAIMS OF MOST OF OUR SUPPLIERS WITHOUT HAVING TO SUFFER RETALIATION. HOWEVER, THIS WAS NOT POSSIBLE WITH OUR LARGEST FOREIGN SUPPLIER, THE EC, WHICH RETALIATED.

WHILE 1980-82 AVERAGE U.S. IMPORTS OF SPECIALTY STEEL FROM ALL COUNTRIES AMOUNTED TO ABOUT \$300 MILLION A YEAR, ONLY \$135 MILLION IN U.S. EXPORTS ARE CURRENTLY SUBJECT TO RETALIATION. HOWEVER, U.S. IMPORTS OF THE STEEL PRODUCTS THAT WOULD BE COVERED BY S. 2380 ARE VALUED AT MORE THAN \$6 BILLION! PASSAGE OF THE BILL, THEREFORE, COULD RESULT IN RETALIATION AGAINST UP TO \$6 BILLION OF U.S. EXPORTS. MR. CHAIRMAN, I HOPE YOU'LL AGREE THAT THIS IS A STAGGERING AMOUNT AND THAT THE HARDSHIP AND DISLOCATION THAT COULD RESULT FROM SUCH RETALIATION COULD BE ENORMOUS.

I BELIEVE THAT THE STEEL INDUSTRY'S PROBLEMS AND THE SOLUTION ARE FAR MORE COMPLEX THAN THE AUTHORS OF THIS BILL SUGGEST. ALL STEEL FIRMS DO NOT SUFFER THE SAME

PROBLEMS AND WORKERS AT DIFFERENT FIRMS HAVE NOT BEEN AFFECTED IN THE SAME WAY. SOME FIRMS ARE DOING CONSIDERABLY BETTER THAN OTHERS.

WE TEND TO BE THE MOST AWARE OF THE PROBLEMS OF THE LARGE INTEGRATED STEEL PRODUCERS, AND TO PERCEIVE OF THEIR PROBLEMS AS THOSE OF THE ENTIRE INDUSTRY. CLEARLY, THE INTEGRATED PRODUCERS DOMINATE THE INDUSTRY AND ARE THE FORCE BEHIND S. 2380, THE SO-CALLED FAIR TRADE IN STEEL ACT. THEY ACCOUNT FOR THE BULK OF STEEL PRODUCTION, PRODUCING IT THROUGH THE TRADITIONAL PROCESS OF TAKING RAW MATERIALS, MELTING THEM INTO IRON AND USING THESE MATERIALS TO MAKE STEEL. THE VERY NATURE OF THIS PROCESS REQUIRES HUGE PRODUCTION BATCHES AND THE PRODUCTION OF A WIDE RANGE OF STEEL PRODUCTS. THESE INTEGRATED PRODUCERS OPERATE WHAT IN MANY CASES HAVE BECOME RELATIVELY OLDER, LESS-EFFICIENT FACILITIES, IN SOME INSTANCES LOCATED FAR FROM MARKETS FOR THEIR OUTPUT. FURTHERMORE, FOR MOST OF THE 1970'S WAGES AND SALARIES ROSE FAR FASTER THAN GAINS IN PRODUCTIVITY. THAT HAS BEEN A TOUGH COMBINATION TO OVERCOME.

THE MAIN PROBLEM FOR THE INTEGRATED PRODUCERS IS THEIR INABILITY TO RAISE ADEQUATE CAPITAL TO IMPROVE THEIR COMPETITIVENESS. THESE PRODUCERS HAVE DOCUMENTED THE GAP

—

THAT EXISTS BETWEEN THEIR CAPITAL REQUIREMENTS AND THEIR INVESTMENTS. THIS GAP RANGES BETWEEN TWO AND THREE BILLION DOLLARS PER YEAR. AS A RESULT, THERE HAS BEEN A SLOWNESS TO INTRODUCE NEW TECHNOLOGIES AND A FURTHER LOSS IN COMPETITIVENESS.

OTHER SEGMENTS OF THE STEEL INDUSTRY HOWEVER, DO NOT VIEW IMPORTS WITH THE SAME ALARM AS DO THE INTEGRATED PRODUCERS. CONGRESS MUST TAKE THOSE SEGMENTS INTO ACCOUNT. THE SO-CALLED MINI-MILLS, FOR EXAMPLE, ARE THE FASTEST GROWING SEGMENT OF THE INDUSTRY, PRODUCING A SELECT RANGE OF PRODUCTS AND SERVING A RELATIVELY LIMITED MARKET. THESE MILLS HAVE LOWER COSTS, HIGHER PRODUCTIVITY AND HAVE BEEN CONSIDERABLY MORE PROFITABLE THAN THE MAJOR PRODUCERS. THESE FACTORS ALLOW THESE FIRMS TO SELL STEEL AT VERY COMPETITIVE PRICES. SEVERAL MINI-MILLS CONTINUED TO BE PROFITABLE THROUGH THE RECENT RECESSION AND MANY HAVE PLANS FOR EXPANDING, NOT CONTRACTING, CAPACITY.

A THIRD SEGMENT OF THE STEEL INDUSTRY IS THE SPECIALTY STEEL PRODUCERS. THESE PRODUCERS DIFFER FROM THE MINI-MILLS IN THAT THEY MAKE HIGHER GRADE STEEL PRODUCTS FOR MORE

SOPHISTICATED APPLICATIONS, AS OPPOSED TO THE COMMODITY GRADE PRODUCTS GENERALLY MADE BY BOTH THE MINI-MILLS AND THE INTEGRATED PRODUCERS. THE SPECIALTY STEEL PRODUCERS HAVE SUFFERED SOME OF THE SAME PROBLEMS AS THE INTEGRATED PRODUCERS, ALTHOUGH CAPITAL AVAILABILITY HAS NOT BEEN AS MUCH OF AN ISSUE. THIS SEGMENT OF THE INDUSTRY HAS DONE FAR BETTER AT ADOPTING -- AND EVEN DEVELOPING -- THE NEWEST TECHNOLOGIES AND IN STAYING COST COMPETITIVE WITH FOREIGN PRODUCERS.

NONETHELESS, THERE HAVE BEEN SURGES OF SPECIALTY STEEL IMPORTS OVER THE PAST FEW YEARS AND THERE HAS BEEN AN ARRAY OF UNFAIR TRADE PRACTICES FOUND IN THIS SECTOR. AS IN CARBON STEEL, THERE IS CONSIDERABLE EXCESS GLOBAL CAPACITY IN THIS SECTOR WITH THE RESULT THAT PRICES HAVE BEEN ARTIFICIALLY SUPPRESSED. LOW PRICES HAVE LIMITED NEEDED INVESTMENT IN CERTAIN PARTS OF THIS SECTOR. AS A RESULT, U.S. SPECIALTY STEEL PRODUCERS ARE CURRENTLY RECEIVING IMPORT RELIEF PURSUANT TO A SECTION 201 FINDING IN JULY 1983.

THERE IS ALSO A FOURTH SEGMENT OF THIS INDUSTRY, THE METAL-WORKING PRODUCERS. THE CONCERNS AND PROBLEMS OF THESE

PRODUCERS RARELY GET THE ATTENTION THEY DESERVE. THIS SECTOR EMPLOYS 20 TIMES MORE PEOPLE AND ACCOUNTS FOR ALMOST 10 TIMES THE SHARE OF GNP THAN THE INTEGRATED PRODUCERS AND SO THEIR INTERESTS MUST BE CONSIDERED. METAL-WORKING FIRMS ARE TYPICALLY SMALL, WITHOUT ENORMOUS POLITICAL MUSCLE, YET THEY ARE ALSO SENSITIVE TO IMPORTS. THESE PRODUCERS WOULD CLEARLY BE HURT BY PASSAGE OF THIS BILL, WHICH WOULD CAUSE INCREASED PRICES FOR THEIR RAW MATERIAL AND INCREASED IMPORT COMPETITION, AS FOREIGN PRODUCERS SHIFT FROM EXPORTING STEEL TO EXPORTING PRODUCTS MADE OF STEEL.

THERE ARE CERTAIN FUNDAMENTAL STRUCTURAL CHANGES TAKING PLACE IN OUR ECONOMY THAT NO LEGISLATION CAN REVERSE. A SIMPLE FACT IS THAT WE NEED CONSIDERABLY LESS STEEL TODAY THAN WE DID 10 YEARS AGO. AUTOMOBILE MANUFACTURING REQUIRES LESS STEEL. PLASTICS, ALUMINUM AND OTHER MATERIALS ARE NOW OFTEN CHEAPER, LIGHTER AND MORE ENERGY EFFICIENT SUBSTITUTES. THE STEEL INDUSTRY ITSELF, HAS DEVELOPED LIGHTER, STRONGER, MORE SOPHISTICATED STEEL TO SUBSTITUTE FOR THE HEAVIER, BULKIER STEEL MADE IN THE PAST. THE RESPONSE TO THIS DECREASE IN DEMAND IS THAT LESS STEEL IS BEING PRODUCED. THE ONLY WAY FOR THE U.S. INDUSTRY TO ADJUST TO THESE CHANGES IS TO CONTINUE THE MAJOR RESTRUCTURING PROCESS ALREADY UNDERWAY.

WE DO NOT NEED LEGISLATED QUOTAS FOR THIS MODERNIZATION TO OCCUR. RESTRUCTURING IS OCCURRING NOW AND HAS BEEN UNDERWAY FOR SEVERAL YEARS.

THIS MODERNIZATION EFFORT BY THE INTEGRATED PRODUCERS HAS ALREADY RESULTED IN THE CLOSURE OF MILLIONS OF TONS OF STEEL-MAKING CAPACITY. SOME OF OUR LARGEST INTEGRATED MILLS SHUT DOWN OR CURTAILED SIGNIFICANT OPERATIONS IN 1983. MAJOR CLOSINGS WERE ANNOUNCED AT U.S. STEEL, BETHLEHEM STEEL, KAISER, AND ARMCO. THE RESULT WAS THE ELIMINATION OF 15.9 MILLION TONS OF STEEL-MAKING CAPACITY IN 1983, A 9.6 PERCENT DROP FROM 1982. U.S. STEEL ALONE ANNOUNCED THE CLOSING OF ROUGHLY 6.6 MILLION TONS OF CAPACITY, REDUCING THEIR TOTAL CAPACITY BY 20 PERCENT. THESE CLOSINGS INCLUDED THE SHUTDOWN OF FIVE MAJOR FACILITIES AND THE ELIMINATION OF OVER 11,000 JOBS IN THE STEEL-MAKING SECTOR.

ALTHOUGH THE INTEGRATED PRODUCERS DO NOT LIKE TO BOAST, THEY HAVE MADE FAIRLY REMARKABLE PROGRESS IN RECENT YEARS TO IMPROVE THEIR COMPETITIVENESS. IN THE PAST TWO YEARS THESE PRODUCERS HAVE REDUCED TOTAL COSTS BY 18% AND INCREASED PRODUCTIVITY BY 25%. RECENT CAPACITY REDUCTIONS HAVE LOWERED BREAK-EVEN OPERATING RATES FROM 80% TO 69% OVER THIS PERIOD. ADJUSTMENT EFFORTS IN THIS INDUSTRY ARE NOT COMPLETE. BUT ADJUSTMENT IS OCCURRING WITHOUT THIS BILL.

THE INDUSTRY'S MODERNIZATION EFFORTS HAVE BEEN COMPLICATED BY THE RECESSION THAT HAS STRUCK THE STEEL INDUSTRY. AS A RESULT OF THE RECESSION, WHICH WAS CAUSED LARGELY BY THE MISTAKEN POLICIES OF PREVIOUS ADMINISTRATIONS, ROUGHLY 40 MILLION FEWER TONS OF STEEL WERE CONSUMED IN 1982 AND 1983 THAN IN THE PREVIOUS YEARS. THIS DECLINE HAS HAD A DEVASTATING EFFECT ON THE INDUSTRY. IN ADDITION TO THE REDUCED PRODUCTION AND JOB LOSSES I'VE MENTIONED, THE INDUSTRY LOST MORE THAN \$6 BILLION DURING THIS TWO YEAR PERIOD.

THE INTEGRATED STEEL PRODUCERS CONTINUE TO FACE SIGNIFICANT INVESTMENT AND RESTRUCTURING REQUIREMENTS. THE PLANT CLOSINGS, THE MERGER OF LTV AND REPUBLICAN STEEL, AND THE KIND OF COOPERATIVE COLLECTIVE BARGAINING AGREEMENT NEGOTIATED BETWEEN THE INDUSTRY AND THE UNION DEMONSTRATES A RECOGNITION OF THE NEED TO MODERNIZE AND TO CUT COSTS. THE NATIONAL STEEL-NIPPON KOKAN MERGER MAY BE ANOTHER STEP IN THIS DIRECTION. I WOULD EXPECT ADDITIONAL MODERNIZATION EFFORTS TO OCCUR TO IMPROVE THE INDUSTRY'S COMPETITIVENESS IN THE FUTURE. PAINFUL, YET ESSENTIAL COST REDUCTIONS MUST CONTINUE IF THIS INDUSTRY IS GOING TO SURVIVE AND PROSPER.

SOME OF OUR FOREIGN STEEL COMPETITORS OPERATE HIGHLY EFFICIENT, UNSUBSIDIZED WORLD-CLASS FACILITIES THAT ARE BEING CONTINUALLY MODERNIZED. THESE PRODUCERS, LIKE OUR OWN MINI-MILLS, PROVIDE AN INCENTIVE TO U.S. STEEL PRODUCERS TO MAXIMIZE EFFICIENCY AND TO MARKET THEIR PRODUCT AT THE LOWEST COST POSSIBLE. INCENTIVES OF THIS NATURE ARE IN THE INTEREST OF ALL OF US AND SHOULD NOT BE DISCOURAGED.

HOWEVER, OTHER FOREIGN STEEL PRODUCERS OPERATE INEFFICIENT PLANTS WHICH CONTINUE TO PRODUCE, AND TO EXPORT, SIGNIFICANT QUANTITIES OF STEEL PRODUCTS. A LARGE QUANTITY OF UNECONOMIC, EXCESS STEEL-MAKING CAPACITY HAS SPRUNG UP IN THE WORLD TODAY, GREATLY DISTORTING THE INTERNATIONAL STEEL MARKET. FOREIGN PRODUCERS HAVE TRIED TO MODERNIZE THIS INEFFICIENT CAPACITY, OFTEN WITH LITTLE SUCCESS, LARGELY BECAUSE OF SOCIAL AND POLITICAL CONSTRAINTS. COMPLICATING THIS IS THE DESIRE OF MANY DEVELOPING COUNTRIES TO BUILD SHOW-CASE STEEL MILLS WHOSE PRODUCTION CANNOT BE JUSTIFIED BY DOMESTIC OR INTERNATIONAL MARKET CONDITIONS AND WHO HAVE ONLY A MARGINAL CHANCE OF PROFITABILITY. THIS DEVELOPMENT HAS BEEN EXACERBATED BY THE HASTE WITH WHICH MANY DEVELOPED COUNTRIES HAVE RUSHED TO PROVIDE SUBSIDIZED FINANCING FOR THE EXPORT OF STEEL-MAKING EQUIPMENT TO BUILD MILLS IN THE DEVELOPING COUNTRIES.

CERTAIN COUNTRIES HAVE ATTEMPTED TO INSULATE THEIR STEEL INDUSTRY WITH A STEADY FLOW OF SUBSIDIES OR WITH CLOSED MARKETS. SUBSIDIES HAVE BEEN USED TO SUSTAIN OTHERWISE FAILING STEEL COMPANIES, TO PROMOTE EXPORTS INTO WEAK WORLD MARKETS OR, IN THE CASE OF DEVELOPING COUNTRIES, TO EXPAND THEIR INDUSTRIAL BASE. THE RESULT OF THESE PRACTICES COULD HAVE BEEN PREDICTED. FOR EXAMPLE, IN THE NAME OF RESTRUCTURING, THE EUROPEAN COMMUNITY HAS USED EXTENSIVE SUBSIDIZATION AND IMPORT PROTECTION THAT INCLUDES BOTH A BASIC PRICE SYSTEM SIMILAR TO OUR OLD TRIGGER PRICE MECHANISM AND BILATERAL QUOTA ARRANGEMENTS WITH BOTH QUANTITATIVE AND PRICE ELEMENTS. SOME WOULD SAY THAT THE QUOTA BILL IS NO WORSE THAN THESE SCHEMES. MY FEAR IS THAT THE QUOTA BILL WOULD BE NO BETTER. NEEDED RESTRUCTURING IN EUROPE HAS PROGRESSED MORE SLOWLY THAN NECESSARY, IN PART DUE TO THE FALSE SECURITY PROVIDED BY SUBSIDIES AND PROTECTION FROM IMPORTS. IF THE U.S. INDUSTRY WANTS TO MODERNIZE, THE EXAMPLE OF THE EC SHOULD DEMONSTRATE THAT PROTECTION IS NOT THE WAY TO ENCOURAGE IT.

AS YOU ARE ALL PROBABLY AWARE, U.S. STEEL PRODUCERS HAVE BROUGHT AN UNPRECEDENTED NUMBER OF CASES AGAINST UNFAIRLY TRADED STEEL. THE COMMERCE DEPARTMENT HAS INVESTIGATED A RECORD NUMBER OF ANTIDUMPING AND COUNTERVAILING DUTY CASES

SINCE JANUARY 1982. THE FIRST BATCH OF THESE CASES RESULTED IN THE U.S.-EC CARBON STEEL ARRANGEMENT, WHICH IS NOW LIMITING MOST STEEL IMPORTS FROM THE EUROPEAN COMMUNITY. COMMERCE IS NOW INVESTIGATING 30 COMPLAINTS INVOLVING STEEL IMPORTS FROM BRAZIL, KOREA, ARGENTINA, SPAIN, AUSTRALIA, TAIWAN, FINLAND, CZECHOSLOVAKIA AND POLAND. I WAS TOLD RECENTLY THAT TWO-THIRDS OF THE STEEL IMPORTS COMING FROM COUNTRIES OTHER THAN THE EC, JAPAN AND CANADA ARE CURRENTLY EITHER UNDER INVESTIGATION OR SUBJECT TO SOME RESTRAINT ACTION. ONCE THESE CASES ARE RESOLVED, WE SHOULD HAVE A FAIRLY COMPREHENSIVE RESPONSE TO UNFAIRLY TRADED STEEL IMPORTS. I STRONGLY URGE THAT WE NOT PRE-EMPT THIS PROCESS BY MOVING DIRECTLY TO A LEGISLATED SOLUTION BEFORE THE FINAL DETERMINATIONS ARE EVEN IN.

GIVEN THE RANGE OF ACTIONS CURRENTLY UNDERWAY, I AM SURPRISED AT THE URGENCY SOME ATTACH TO ENACTING STEEL QUOTA LEGISLATION. U.S. PRODUCERS HAVE TAKEN THE TIME AND EXPENSE OF BRINGING A RECORD NUMBER OF CASES UNDER OUR ESTABLISHED STATUTES. U.S. STEEL, IN ITS WRITTEN SUBMISSION TO THE ITC ON THE CURRENT 201 CASE SAID THAT "U.S. STEEL IS ENCOURAGED BY THE FACT THAT BOTH THE DEPARTMENT OF COMMERCE AND THE INTERNATIONAL TRADE COMMISSION HAVE DONE QUITE A GOOD JOB IN ENFORCING THE UNFAIR TRADE STATUTES." THEY ADD, "WE AT U.S. STEEL REMAIN CAUTIOUSLY OPTIMISTIC THAT WE MAY ACHIEVE THIS NEEDED RELIEF FROM IMPORTS VIA THE UNFAIR TRADE PRACTICES

ROUTE." YET, EVEN BEFORE THE INVESTIGATIONS CURRENTLY UNDERWAY HAVE BEEN GIVEN A CHANCE TO PRODUCE RESULTS, MANY IN THE INDUSTRY ARE PROCLAIMING THAT THESE PROCESSES HAVE FAILED AND ARE PLEADING FOR A LEGISLATED SOLUTION.

I HOPE THE ABSURDITY OF THIS SITUATION IS AS CLEAR TO MEMBERS OF CONGRESS AS IT IS TO THE ADMINISTRATION. WHY SHOULD ANYONE BRING CASES UNDER OUR EXISTING STATUTES, AND WHY SHOULD THE GOVERNMENT PROVIDE THE ENORMOUS RESOURCES TO INVESTIGATE THESE CLAIMS, IF THE PETITIONERS HAVE ALREADY CONCLUDED THAT THE STATUTES ARE UNWORKABLE?

I RECOGNIZE THE SERIOUS TRADE PROBLEMS THAT EXIST IN THIS IMPORTANT INDUSTRIAL SECTOR. HOWEVER, WE ARE IN THE PROCESS OF ADDRESSING THESE PROBLEMS UNDER SEVERAL OF OUR EXISTING TRADE STATUTES. I DO NOT BELIEVE THE NEED EXISTS TO SKIP OVER THESE PROCEDURES UNTIL IT CAN BE PROVEN THAT THESE PROCEDURES DON'T WORK. THAT TIME HAS SIMPLY NOT COME.

IF CONGRESS PASSES THIS LEGISLATION ONE WONDERS WHY ANY INDUSTRY WITH ANY POLITICAL STRENGTH WOULD EVER AGAIN FOLLOW THE ESTABLISHED PROCEDURES. THE ANSWER WOULD BE CLEAR: IGNORE ESTABLISHED PROCEDURES, AND UNDERTAKE A MASSIVE LOBBYING EFFORT TO GET CONGRESS TO LEGISLATE AWAY YOUR PROBLEM FOR YOU.

IN CLOSING, I WANT TO REITERATE THAT THE ADMINISTRATION STRONGLY OPPOSES H.R. 5081 AND ENACTMENT OF THE LEGISLATION WOULD NOT BE IN ACCORD WITH THE PROGRAM OF THE PRESIDENT.

**STATEMENT OF HON. LIONEL OLMER, UNDER SECRETARY FOR
INTERNATIONAL TRADE, DEPARTMENT OF COMMERCE**

Under Secretary OLMER. Thank you, Mr. Chairman. I just have a few remarks to make. I agree completely with what Ambassador Brock has said, of course, on behalf of the administration.

I would just like to perhaps not even summarize my statement for the record but make a few related comments.

That is, perhaps, to emphasize the enormous changes in the world economy and in our own that have occurred and are affecting and will continue over the next several years to affect the steel industry not only in this country but in every corner of the globe.

To me, a tremendously revealing fact is the decline over the last 30 years in particular in the consumption of steel in our economy as a percentage of GNP, a fact that can't be attributed to imports.

Our economy consumed about 111 million tons of steel for each million dollars of real GNP in 1954 and only 56 million tons of steel per million dollars of GNP in 1984.

The results are a revolution in the industry itself—the growth of minimills which now provide fully 18 percent of the market in the United States and, with anticipated technical breakthroughs over the next couple of years, may well capture an even larger segment of the market now unavailable to them in products such as structurals, bars, rod, and the larger flat-rolled steel products.

Second, the growth of steel-finishing plants, which are dependent on a steady supply of semifinished steel. U.S. producers are facing increasingly tough choices on whether to modernize the "hot end" facilities or to build upon reliance on imports of raw steel.

The industry itself is not unknown to the process of importation, and it currently does import a substantial amount of steel from foreign sources. The U.S. steel industry has returned to profitability recently, and that will continue.

Presently, consumers of many steel products—sheet products especially—are experiencing delays, and U.S. producers have lead times of 10 weeks or longer in making deliveries.

We are dealing with unfair trade practices, and I am pleased to note in Ambassador Brock's testimony a quote from David Roderick of United States Steel that the Commerce Department and the International Trade Commission are doing a good job in administering the AD—antidumping—and countervailing duty laws.

Since January of 1982 we have had 140 of those cases filed from 23 different countries; we now have 48 investigations pending from 13 different countries.

We are in the process of consultations on pipe and tube products from the European Community, and there is reason for believing that we will see a rapid amelioration of that problem in the near future.

Roughly 20 percent of all imports were from the European Community. And there are no complaints. About 40 percent of our imports are from Japan and Canada, and there are few complaints. The remaining 40 percent are from the so-called nontraditional suppliers, and fully 70 percent of those imports are now subject to some form of import restraint or unfair trade practice investigation.

Moreover, unilaterally, some of these nontraditional suppliers have announced recently their intention to restrain exports to the United States because of unfair trade cases which had been filed against them or which are threatened to be filed. I anticipate that that may extend to other countries as well in the near future.

Factors such as these and a number of others need to be weighed by the companies and decisions need to be taken by them as to when, where, and how to modernize and to respond to changing market conditions and to these challenges. Government can't do it for them, neither Congress through a quota bill nor an executive branch fiat.

What we can and should do is to provide for a sound economic environment that enables long-term planning and decisionmaking to occur, and of course to apply our trade laws effectively.

The human costs of industrial restructuring, which is taking place, can't and shouldn't be ignored. I know that communities across America have been disrupted and many, many workers have lost their jobs.

In the last 3 years the administration has provided well over \$53 million in trade adjustment assistance for workers who have been affected by imports. That's not enough to make them whole, I know; they need jobs, and they need security for the future for themselves and their families. This quota bill won't do it; a sound economy will.

Thank you, Mr. Chairman.

[Under Secretary Olmer's prepared statement follows.]

STATEMENT OF LIONEL H. OLMER, UNDER SECRETARY FOR INTERNATIONAL TRADE, U.S. DEPARTMENT OF COMMERCE

Mr. Chairman and members of the subcommittee, I am happy to have this opportunity to discuss the American steel industry, and to comment on why S. 2380, "The Fair Trade in Steel Act of 1984," will damage the industry's chances of successfully meeting the challenges which confront it now and in the future.

The key is the degree to which the steel industry is capable of adapting to changes—in markets, technology, product application and the work place. The industry must survive enormous structural changes resulting from a permanent long term decline in demand for steel at the same time as global steelmaking capacity is expanding. The debate centers on what industry actions and government policies are necessary to the making of the right choices, and what policies need to be avoided because they would undermine or reverse the progress already achieved.

Fundamental economic and technological changes have contributed to the structural decline in demand for steel products. In 1954, our economy consumed 111 tons of steel per \$1 million of real GNP. By 1974, this figure had slipped to 92 tons, and last year it stood at 56 tons—or half of what it was twenty years ago.

At the same time, we are increasing the services side of our economy, and the goods we produce contain less steel. Plastics, aluminum and other materials increasingly substitute for steel because they are often less expensive, lighter weight and more energy efficient. Technological improvements in the strength and durability of steel products have also reduced steel requirements.

As steel demand has declined, world steelmaking capacity has grown. In recent years, the industrialized West has made lurching progress towards the shedding of excess capacity. But these reductions have been outweighed by the steady growth of capacity in many developing and Eastern Bloc countries—countries whose economies are neither diversified nor market-oriented and who therefore perceive basic steelmaking capacity as the key for earning hard currency through exports.

During this time, domestic mini-mills have also provided increased competition for integrated producers. The mini-mills' share of the U.S. market has grown from less than three percent in 1960 to roughly 18 percent today. These companies now claim a large portion of the rod, bar and light structural shape markets. Future

technological breakthroughs may enable them to penetrate markets for larger flat-rolled, structural, bar and tubular products.

The rise of mini-mills is due to a number of factors which tend to make their cost structure lower than that of integrated producers. These include lower labor and capital costs per ton, and specialization in serving product markets. While these companies were also hit hard by the 1982-1983 downturn in the steel market, several were able to weather the downturn in much better shape than that the integrated producers. Notably, one of the leading mini-mills, Nucor Steel, recorded a net income of \$22 million and \$28 million in 1982 and 1983, respectively, while integrated producers were posting record losses.

There is no doubt that the steel industry confronts very serious problems. But S. 2380 is not a real solution and, for this reason, we oppose its passage. It would provide only illusory assistance to the steel industry, at great cost to our broader economic interests and, ultimately, to the steel industry itself:

Enactment of this bill could stall our economic recovery.

Global steel quotas would not discriminate between fairly and unfairly traded steel imports.

Higher steel prices to steel-using industries would make them less competitive and cost this country thousands of jobs.

It would lead to billions of dollars in compensation demands or retaliation against U.S. exports by our trading partners.

And it would retard—not encourage—our steel industry's adjustment to changing international competitive conditions.

Quotas would sharply reduce the supply of steel just as domestic demand is improving. The Federal Trade Commission (FTC) recently estimated that a 15 percent quota on carbon and alloy steel imports would cost U.S. consumers \$768 million annually. The FTC also estimated that the 15 percent quota would create only 8,000 additional jobs—and at an annual cost to consumers of \$97,000 per job. Significantly, these estimates do not take into account the possibility that the U.S. steel industry would use market protection to raise steel prices.

Artificially higher steel prices would dramatically raise production costs for many industries—ranging from nut and bolt manufacturers to auto and appliance makers—that use steel as a raw material. In addition, quotas could force our steel trading partners to shift their export mix “downstream” into steel-fabricated products. Metal-working industries alone employ 20 times more workers than the steel industry, so the job-creating effects of a steel quota would be vastly outweighed by the loss of jobs in these industries.

The reduced competitiveness of these downstream industries would also mean a valuable loss of exports for our economy. And many of these industries already face stiff import competition. Faced with both inflated costs and more import competition, these industries would be likely to seek import protection themselves. Such “downstream protection” demands—all stemming from quotas on steel—could spread through much of our industrial base.

The negative effects of global steel quotas would ripple throughout the entire economy. Quotas would result in either increased inflation or a decline in demand for other goods and services, which would slow U.S. economic growth. Quotas also would distort the efficient market allocation of capital and other resources to all other industries. In the end, we would be granting questionable short term benefits to one industry to the detriment of our nation's overall competitiveness and economic vitality.

Despite their intent, quotas would not benefit all sectors of the steel industry and could seriously impair the activities of certain producers. In 1983, at least 10 percent of our steel imports were imported by domestic steel producers for processing into other basic steel mill products or to fulfill supply contracts. These imports include such products as plate, wire rod, bar, pipe and tube and semi-finished steels. Drastically curtailing foreign steel supplies could therefore hamper or even close down some steel operations, particularly those on the West Coast which rely heavily on imported supplies.

The question of semi-finished steel imports is an important one for the steel industry. Because the steel-finishing facilities of many U.S. producers tend to be more modern than their steelmaking ones, these producers must eventually face the critical choice of either raising and spending substantial amounts of money to modernize or replace their “hot end” facilities—or begin importing large amounts of semi-finished products. Obviously, this question also concerns steelworkers since the decision could greatly affect the long term level of employment in the industry. Enacting global quotas would alter the underlying market dynamics upon which such a decision would have to be based. Quotas could therefore force a decision on the in-

dustry that would be different from one made in consideration of normal market conditions.

Whether or not global quotas could provide any immediate benefits to U.S. steel producers, they would certainly be counterproductive in the long term. By eliminating supply choices and increasing steel prices, quotas would accelerate the long term decline in steel demand by encouraging consumers to move more rapidly to substitute products. At the same time, they would induce foreign suppliers to shift much of their steel exports into higher-valued product lines—precisely those products which many analysts believe offer the best promise of future competitive advantage and profitability for domestic, integrated steelmakers.

Global quotas would discourage the industry from making the adjustments necessary to regain international competitiveness. They would artificially sustain some U.S. steelmaking facilities that are now obsolete, and would insulate producers from the competitive dynamics of past and future technological change. By arbitrarily reducing competition, quotas could not help but perpetuate inefficiencies and delay the painful but necessary rationalization of the industry. The truth of the matter is that "temporary" quotas could easily evolve into long term protection for a chronically uncompetitive American steel industry.

Finally, legislated quotas would violate our international obligation not to impose import restrictions without an impartial investigation and injury finding. It would contradict our repeated commitments to resist protectionist measures, and would leave our export industries vulnerable to either an immense compensation bill or severe foreign retaliation. In retaliation for U.S. import relief for specialty steel last year, the European Communities (EC) imposed tariffs and quotas on U.S. exports of security alarms, athletic equipment and chemical products. Recalling that in 1983 we imported only \$343 million worth of specialty steel versus total steel imports valued at \$6.4 billion, we risk losing billions of dollars in export trade if S. 2380 is enacted.

This Administration has instituted policies which provide a favorable environment for the steel industry to restructure to meet international competition. We have changed the tax laws to permit the accelerated depreciation of equipment and facilities. This has helped both the steel and steel-consuming industries to accumulate capital for further investment and modernization. To provide a more immediate stimulus, we extended special tax leasing provisions for the steel industry through last year. We also modified environmental compliance regulations to allow for more cost-effective methods of compliance, and to free scarce additional capital for modernization projects.

Above all else, we have laid the groundwork for sustained, non-inflationary economic growth. While the economy has been expanding for some time, the steel industry is normally among the last to participate in an economic recovery. In the latter part of 1983, flat-rolled producers began to benefit from increased demand in the automotive and consumer appliance sectors. More recently, demand in the capital goods sector also has increased.

The steel industry operated at 81 percent of its production capability in April, and fluctuated between 78 and 82 percent during the month of May. By comparison, capability utilization averaged only 55 percent in 1983, following a low of 34 percent in December 1982. Raw steel production in April reached nine million tons, 23 percent above the level produced in April 1983. Data Resources, Inc. (DRI) has forecast 1984 apparent steel consumption to be 96 million tons, up 16 percent from last year and 28 percent from 1982. DRI forecasts annual consumption to average 103 million tons for the remainder of the decade.

Not surprisingly, economic recovery and increased steel demand, particularly in the consumer goods sector, have caused steel imports to rise in recent months. Imports in the first four months of 1984 were 91 percent above the level imported in the comparable period of 1983. Over 40 percent of this growth was in sheet products, where domestic producers have experienced delivery lead times of up to 10 weeks or more.

Where imports have increased as a result of unfair trade practices, we continue to enforce vigorously our unfair trade laws to correct the problem.

Since January 1982, the Department of Commerce has conducted nearly 140 anti-dumping and countervailing duty investigations on steel imported from 23 countries.

This year, we have completed or are now conducting 48 investigations concerning 15 steel products from a total of 13 countries.

I submit that our unfair trade laws are working to correct the problem of unfairly traded steel imports.

Twenty-two percent of our steel imports in the first four months of this year were from the EC. You rarely hear complaints from the industry about those imports, except with respect to pipe and tube products. EC steel producers are subject to export limits under the U.S.-EC Steel Trade Arrangement, which was negotiated by the Department of Commerce in 1982 in exchange for the withdrawal of 44 dumping and subsidy complaints by U.S. steel producers. The Arrangement is operating effectively to relieve the U.S. industry of injury from unfairly traded EC steel. Imports from the EC fell from 5.6 million tons in 1982 to 4.1 million tons in 1983, and their share of our market dropped from 7.4 percent to 4.9 percent.

Nor do you hear significant complaints from the industry regarding imports from Japan and Canada, which comprise approximately 40 percent of total imports. Imports from Japan decreased from 5.2 million tons in 1982 to 4.2 million tons in 1983, reflecting the depressed market conditions of last year. The upswing in Japanese imports this year reflects their producers' tendency to follow closely the direction of our market.

What remains—about 40 percent of our imports—comes from developing countries and other non-traditional suppliers that have significantly increased their share of our market in recent years. These imports are a source of concern, but domestic steel producers have moved aggressively under existing laws to counter increases that are due to unfair trade.

Where unfair trade is uncovered, we have assessed stiff penalties. For example, we recently found subsidies of 37 percent on hot-rolled and cold-rolled sheets from Brazil and issued a preliminary dumping finding of 176 percent on wire rod from Argentina. Approximately 70 percent of our 1983 imports from countries other than the EC, Japan and Canada are now subject to either pending unfair trade investigations, antidumping or countervailing duty orders, suspension agreements or unilateral export restraints.

In an effort to avoid severe unfair trade penalties, Mexico, South Africa and Brazil have unilaterally and voluntarily promulgated laws and regulations to sharply reduce most of their steel exports to the United States. Each country's restraints are scheduled to last for three years:

The Mexican program specifically limits 13 products, with a tonnage reduction of 32 percent from 1983 levels in the first year and further sharp cuts thereafter.

South Africa is restricting exports of seven products, bringing its U.S. market share down to that country's 1979-1981 average.

Brazil is reducing exports of four products, to slash exports in the first year of restraint by 47 percent from 1983.

In the cases of Mexico and South Africa, the petitioning U.S. company has withdrawn its unfair trade complaints because it believes that the export restraints will mitigate the injury caused to the U.S. industry.

The strict enforcement of our unfair trade laws is eliminating the unfair advantages held by certain foreign producers in our market. But it will not, and should not, eliminate the competitive advantages those countries may have from lower costs and greater efficiencies. If the domestic steel industry is to regain its competitiveness, it must be exposed to fair international competition that will spur steel industry restructuring and benefit the economy. Global steel quotas would discourage restructuring and reduce the competitiveness of our economy. In the interests of both the steel industry and the economy as a whole, we should continue to follow those policies that encourage the industry to complete the process of adjustment it has already begun.

Senator DANFORTH. Thank you both very much.

Let me see if I can characterize your position and maybe anticipate an extension of your position, and tell me where I am wrong if I am.

Your view is that with respect to the trade aspects of the steel problem we should enforce the law against unfair trade practices, we should enforce the antidumping and countervailing duty laws. We are doing that, and in your view we should continue to do that.

However, you do not believe that we should go further and provide general import relief against not only unfairly traded foreign steel but against foreign steel in general.

Therefore, you oppose S. 2380 because it would be a universal quota bill.

It would seem to me that you have also foreshadowed the administration's position, should the ITC find injury and make a recommendation for relief on the 201 case. Who knows what the ITC is going to do? We will find out on Tuesday. But it would seem to me that every argument that you have made against the enactment of S. 2380 would also apply to any possible relief to be granted under section 201.

Ambassador BROCK. No. I don't agree with that.

Senator DANFORTH. Why not?

Ambassador BROCK. First of all, I think neither of us would want to leave any indication as to what we might do on the basis of what the ITC might do. We are simply not going to take that position. That's a finding that they have to make on their own merit. We have to judge and submit a recommendation to the President on merit.

But there is an enormous difference, Mr. Chairman, between a 201 case filed under the normal GATT rule, an article 19 approach which requires the finding of injury, and then subsequent action to remedy that injury. There is an enormous distinction between that and a bill that is introduced in the Congress which makes no such finding but is simply a response to the industry's request.

Senator DANFORTH. Supposing we have made a legislative finding of injury?

Ambassador BROCK. I can't imagine anybody being able to argue very successfully that that was the normal way to achieve an injury finding. You normally go through a considerably more detailed process.

Senator DANFORTH. Well, if we assume that section 201 isn't working very well, and that what Congress had in mind by way of injury is something that clearly is not the way the law is being interpreted by the International Trade Commission, and if we therefore reaggregated to ourselves the power to determine trade policy in this country and made a legislative finding that in fact there has been injury?

Ambassador BROCK. Senator, you have the constitutional authority to reaggregate trade policy any time you want it; but, while I think you might make a case on footwear that would be somewhat different from that on steel, I think you would have a good deal of trouble broadly addressing the whole steel question with a congressional finding in the face of the numbers that the steel industry itself has provided—an industry that has recovered from as low as 49 percent of capacity to 80 percent of capacity, an industry that has begun to return to a profit circumstance, an industry that has reemployed people, an industry whose import penetration is only 26 percent. And I say "only," because in footwear it was 70 percent.

Senator DANFORTH. Let me just press my original question then: It seems to me, listening very carefully to what you have said and to what Secretary Olmer has said, it sounds to me as though the administration has prejudged any decision on a remedy under 201, even assuming that the ITC finds injury.

Ambassador BROCK. If we left that impression, Senator, we were wrong; there is no such inference to be drawn from what we have said.

Senator DANFORTH. Why wouldn't it be exactly the same situation under 201 as it would be under the bill? That is to say it would be a global remedy, it would be one that would be subject to retaliation. In either event, just as the specialty steel 201 case was the subject of retaliation, why wouldn't we be in the same position with the 201 case as we would be with the quota bill?

Ambassador BROCK. I know of no comparable action. We haven't been able to find a lot of fair trade in the world of steel, as you know; but I don't know of any government that has done quite what is being proposed in this legislation. The EC has negotiated quotas country by country; when other countries have made such a finding, they have done so within the normal GATT processes; there is a substantial difference.

Senator DANFORTH. There is a substantial difference between country-by-country quotas and global quotas?

Ambassador BROCK. Well, yes, there is that; but there is a substantial difference in approach, too. In the case of the European Community, where the quotas are the tightest and in my judgment the most egregious, they at least have gone to the extent of negotiating on a country-by-country basis.

Senator DANFORTH. Let me ask Secretary Olmer: If the ITC were to find injury and make a recommendation for relief, the Trade Policy Committee would then make a recommendation to the President. The Secretary of Commerce is a member of the Trade Policy Committee. In your view, has the Commerce Department prejudged this issue? Does the Commerce Department take the position that it does not want an overall remedy other than countervailing duty and antidumping relief?

Under Secretary OLMER. If I might, I would like to answer your question after I make a comment on the earlier question that you posed, Senator.

On the one hand, even though section 201 cases are not decided on the basis of an unfair trade practice, they are institutionalized in the multilateral system of trade remedies; they are recognized. Provisions are made for compensation, but the term that the Europeans are frequently given to assign to that form of trade remedy is escape clause, an escape from the normal regime of remedies that are only for rectifying an unfair trade practice.

So I think that a legislated approach would ignore that process which has been recognized in the multilateral situation.

Senator DANFORTH. Let me put it this way: If in fact the administration has made up its mind that the end result that it wants is no relief other than countervailing and antidumping duties, then it doesn't matter what happens in the ITC and it doesn't matter what happens in the Congress. It would veto a quota bill passed by the Congress, it would give no relief in a 201 case, and any proposal for any kind of legislative relief by Congress would get bogged down into a long debate in the Trade Policy Committee, and we would just be going nowhere.

So I guess my basic question to you is: Is the administration so determined that the steel problem is a problem of modernization and tend to your own problems, plus we will help you insofar as enforcing the unfair trade laws?

I mean, if that is the administration's policy, if the administration's policy is that there should be no general relief because people are hurting, because the steel industry is weak, then I think we are just involved in a series of dry runs.

Under Secretary OLMER. No, sir. I think that there is traditionally a disposition against awarding relief for less than an unfair trade practice, but past experience in this administration as well has demonstrated a willingness of the President to award relief in certain cases other than where an unfair trade practice has been found.

So I would maintain that there has been no prejudgment made as to the question of injury.

One of the other virtues of the International Trade Commission is—

Senator DANFORTH. But I mean injury will be determined by the International Trade Commission.

Under Secretary OLMER. Exactly.

Senator DANFORTH. What I am saying is let's suppose they do find injury. I must say, after the shoe case I think that that would take some doing; but let's suppose that they do find injury. Then, given an ITC finding of injury, the question is: As a matter of remedy, has the administration prejudged the case?

Under Secretary OLMER. No, sir. No, sir. One thing that comes along with the recommendation of the ITC and its finding on injury is a very exhaustive report on that issue. And we have not available to us at the present time the analyses and the judgments made by the ITC on that very question. We are very reluctant to even offer judgments on the question of injury because that is their responsibility. So I would say that a recommendation to the Secretary of Commerce will be based first and foremost on an analysis of the report prepared by the ITC on that question and a judgment as to the costs and benefits, were relief to be warranted, in his mind.

Senator DANFORTH. Senator Heinz?

Senator HEINZ. Thank you, Mr. Chairman.

Ambassador BROCK, you said at the outset of your testimony that the problem is not imports in the steel industry. At what point would you consider imports to be a problem in the steel industry, and under what circumstances?

Ambassador BROCK. I think imports are a problem, and if I said it that way I didn't really mean to. I was trying to say that they are not the only problem. But more importantly than that, they are a problem at any level, Senator, when they are unfairly traded, when they are subsidized. We have lost a deal with that; we are dealing with it under those laws, and I think with reasonable effectiveness.

Senator HEINZ. But would imports be a problem if, for example, import penetration was 26 percent, prices were on average \$199 a ton lower than they were 2 years ago, and you knew that because every analyst you ever talked to said that prices were low because there were people coming in undercutting the market, using unfair trade practices, certainly, and that shipments were going down and the industry was losing \$3 billion? Would you at that point say imports are a substantial problem?

Ambassador BROCK. I would say that good, tough competition is always a problem, but it may not be the solution.

Senator HEINZ. All right. And you are unwilling to define at what point imports are a problem? If the industry was losing \$6 billion, if twice as many people were out of work, if import penetration was 35 percent, you would still be saying, "That's tough, and tough competition," right?

Ambassador BROCK. No. I am saying that you have to look at the elements of the equation—why are there losses?

Senator HEINZ. Why are there \$3 billion losses in the steel industry when everybody else is making money? What is your judgment as to why that is?

Ambassador BROCK. Well, part of it is unfair competition from overseas, and we are dealing with that under our trade laws. But part of it, Senator, comes from the fact that in 1979, the last good year of the steel industry, wages were \$16 an hour, and in 4 years, when the industry was tumbling into the worst depression since the Great Depression, wages went up 50 percent—far higher than any other industry in the United States that I am aware of, far higher than the industrial average for the American workers generally—and the same is true for management. And I think the question can legitimately be asked: Which is the larger element of costs?

Senator HEINZ. Is there any evidence that U.S. steelmaking is inherently less competitive than the Europeans?

Ambassador BROCK. No. As a matter of fact, Mr. Roderick's statement says the American steel industry is still cost competitive in its own home market, and I think he is correct.

Senator HEINZ. So you accept the principle that the U.S. steel industry, notwithstanding what you just said about steelworkers' wages, is cost competitive? Therefore, if it is cost competitive, what is happening?

Ambassador BROCK. We have a depressed market because the world capacity was substantially overbuilt, and management errors of enormous proportions were made in all countries in the 1970's.

Senator HEINZ. So there is a worldwide overcapacity.

Ambassador BROCK. That is correct.

Senator HEINZ. But as a general rule you maintain that imports are really not the problem.

Ambassador BROCK. It is part of it, but it is not all of it.

Senator HEINZ. Well, let me ask you a different line of questioning.

In 1981 the auto industry was not cost competitive. Imports, you found, were a part of the problem, and you went to Japan and negotiated a quota with the Japanese on autos.

Now, there was an industry that in a sense was much less competitive, by your own admission a moment ago, than the American steel industry. Here we have a competitive industry that is being destroyed by uncompetitive steel industries and worldwide overcapacity.

In the case of autos, we had a noncompetitive industry that was being destroyed by a competitive competitor, namely, Japan. In the latter case you went and negotiated quotas; in this case you say quotas and import protection is not the answer. How do you justify

helping the auto industry which was not competitive and refusing to endorse this kind of help for the steel industry which is competitive?

Ambassador BROCK. Senator, I am going to remind you that part of the automobile's industry problem is that it was paying higher prices for steel than other competitors of theirs overseas; where, because we in this country were protecting the steel industry and had a trigger price mechanism which raised the cost to our automobile producers, that's part of the problem.

Second, in 1979 there were 300,000 Japanese small cars sitting on the docks unsold because we didn't buy small cars. The Irani-Iraqi war started, our gaslines hit, everybody started desperately trying to buy a small car, and you can't move into a competitive production of small cars in 1 or 2 years in the automobile industry; they needed some time to catch up with the change in demand that was caused by an external event—in this case, a war. That is a very different situation. This problem has been around for 30 years.

Senator HEINZ. It is different, but I don't know if the differences get to the heart of the question.

Sure, I can think of lots of other differences, too, but the fact remains that you protected—you yourself protected it—this administration protected a less competitive industry.

And by the way, on the trigger prices, they were set at a level equal to the lowest cost producer, namely, Japan, and they allowed the Europeans to legally dump and subsidize, as we both know. But let's not get into a few of the minor details of fact.

Let me ask you this: Let's assume that the International Trade Commission on Tuesday rules in favor, across the board, on the Bethlehem 201 case, that it grants import relief equivalent to and maybe identical to that which is in the Fair Trade and Steel Act, the steel quota bill that I have introduced.

Now, which of those two approaches would be preferable? If you had to choose, and I'm not saying this is the choice you have, but if you had to choose between the ITC recommendation, an identical one to the steel quota bill, and the steel quota bill, which would you choose?

Ambassador BROCK. Your 201.

Senator HEINZ. That's an interesting response, because under the 201 you have no authority to compel or require the reinvestment of the fruits of the 201, which are going to increase prices and increase profits and cash-flow—you will have to increase cash-flow a lot to get to a profitable position—and you have no power under section 201 to get a quid pro quo from the industry, from the steelworkers and from its constituents; you can't stop the industry from granting large dividends to its shareholders; you can't stop United States Steel from buying another oil company; you can't stop the steelworkers from doubling their wages under 201.

Yet under the steel quota bill there is a requirement that all of the cash-flow or substantially all of the cash-flow from steelmaking operations must go back into steel.

Why would you prefer the 201?

Ambassador BROCK. First of all—

Senator HEINZ. Or would you care to reconsider your answer?
[Laughter.]

Ambassador BROCK. No, I don't want to reconsider.

It is going to be a costly decision in either case in terms of the opportunity for other countries to retaliate against uninvolved U.S. workers—workers in chemical plants, workers on the American farm, workers in American insurance companies. They will be affected if there is compensation or retaliation against whatever action we take.

There clearly is a much better opportunity to negotiate a rational compensation package under 201. If you go to the legislative route, Senator, we are thrown effectively into retaliation almost immediately. The cost in terms of American jobs could be horrendous.

Senator HEINZ. Well, let's examine that for a moment. You say that a legislated quota—even if that was exactly the same remedy recommended by the ITC, and even though you followed both remedies—that it would be preferable not to have the legislated remedy. I don't understand that.

The hypothetical question, and it was a hypothetical question, I understand that you can do anything the ITC does; but I ask the question: If you have to choose one route or the other—you know, a 201 quota of 15 percent or a quota bill of 15 percent, and the remedies are exactly the same in both cases—which would you choose?

Let me tell you how they could be the same in both cases: You know, the ITC rules on Tuesday, we rewrite the steel quota bill so that it is exactly the same as what the ITC recommends, and we give you your choice. You would still be for the ITC approach even though under this hypothetical question you can't do any negotiating under it?

Ambassador BROCK. Well, I am not sure why I can't do any negotiating. In fact, I am always negotiating.

Senator HEINZ. Well, you would say you could negotiate and be flexible, and in fact of course you can be very flexible and you can ignore it.

But let me try another line of questioning.

You mentioned retaliation. Either an ITC remedy or the steel quota remedy, according to the Congressional Research Service, would reduce steel imports from 18.1 million tons to 15.8 million tons, a 2.3-million-ton reduction.

Now, if you grandfather the European deal we have with them, if you treat the Canadians fairly—no one accuses them of unfair trading practices—and if you treat the Japanese just a little bit like you treated them on autos, yet a voluntary restraint, who are you left with that is in any position to retaliate?

Ambassador BROCK. Well, we are big enough and strong enough to beat up on most people in the world, and I guess we could make it very tough for the Brazilians to retaliate.

Senator HEINZ. Well, I'm not saying we want that, but I am asking a factual question: Who is there left to retaliate?

We run huge trade deficits with just about all the other countries.

Ambassador BROCK. Yes.

Senator HEINZ. What do they have to retaliate against us on?

Ambassador BROCK. Everything we sell.

Senator HEINZ. As a matter of fact, I'm sure that you as the U.S. Trade Representative watch the American trade deficit soar off the charts, and you probably wonder the same thing.

Ambassador BROCK. Well, there are a lot of things I wonder about. But the Canadians and other countries that are legitimate friends of ours would be damaged by this; there just is no way out of it. If you are going to put a tight quota on, you are going to hurt good and bad alike.

I grant you, we are strong enough to minimize the damage and push them; but, Senator, the price you pay for that may not be quantified in dollars but there is going to be a price paid.

You know, you quoted the FTC. Let me quote the other part of the FTC statement, which said that this protection would cost us \$97,000 per job. Now, is that worthwhile?

Senator HEINZ. Frankly, the issue to me is not a question of whether you take one number and divide it into a larger number. If the number of jobs is the measure of the survival of an industry, that's a new measure, and no correlation with that has ever been established.

Ambassador Brock. But, Senator, are we talking about survival?

Senator HEINZ. The question I asked earlier is, how many years can an industry continue to experience billion dollar losses? And it seems to me that the question of the survival of an industry is its ability to generate a positive cash-flow. Otherwise, if it doesn't, it goes into bankruptcy and out of business.

While I would prefer to have more people employed in the steel industry than not, I think we should all worry that if the steel industry goes away, what the implications of that for us are from a national security and other point of view.

But let me ask Lionel Olmer one last question.

Lionel, in your testimony you argued or stated that there was a great and growing dependence of the steel industry on semifinished steel products, products produced hot end from someplace else coming into this country. It sounded to me that having a viable hot end, having blast furnaces and so forth in the United States, wasn't particularly important. Does our industry lack competitiveness in the hot end, or is it being distorted by unfair trade practices?

Under Secretary OLMER. The case that I tried to make in my written statement was that the industry in the United States has got to make some difficult choices now as to whether to modernize the hot end of the steelmaking process. I believe that you remember well the Secretary of Commerce's position with respect to then-pending proposals for joint ventures between certain foreign producers of semifinished steel and the U.S. steel industry components that were interested in importing the hot end.

We believe that there should be a viable end-to-end steelmaking industry in this country—both the finishing end and the hot end.

We would be concerned if there were artificial attempts, particularly to be supervised by the Federal Government, as to the proper mix. And that seems to me the more insidious part of the fair trade in steel bill; that is, of injecting the executive branch in making the determination of what ought to be modernized and what ought not to be modernized, what products should be at the forefront of

the industry's competitive drive and what can be left to be supplied by imports and so on.

I don't mean to say in that testimony, Senator, that we in any way, shape, or form believe that hot end facilities should be allowed to dry up and go away.

Senator HEINZ. Well, that's an encouraging statement.

Now, I am very fortunate that you are the witness from the Commerce Department, because as my recollection serves me you and Secretary Baldrige had a few moderately unkind things to say about the Justice Department's initial decision on one steel merger. Is that not correct?

Under Secretary OLMER. That is correct.

Senator HEINZ. I commend you on having spoken out about the need for a more rational policy where steel is concerned. My question is, we have had a rational policy on autos for the last 3½ years that has worked extraordinarily well. Why have we not had any rational policy having to do with the steel industry?

Under Secretary OLMER. Senator, stay tuned. Within the next couple of months there will emanate from the Steel Advisory Committee a report on the state of the industry and on trade policy initiatives or assessments of the steel industry itself. Ambassador Brock is an active participant in that process, and Ambassador Lighthizer chairs the subcommittee dealing with trade policy, as someone in the Commerce Department chairs the industry component of that committee. And we expect the report will be produced within a couple of months.

Senator HEINZ. There might be some cynics among us—

Under Secretary OLMER. I can't believe that.

Senator HEINZ [continuing]. Who would say, among them myself, "Have you only waited until 2 or 3 months before elections to come up with policy recommendations which clearly are coming a little late and may be a little little as well?" I mean, why do we have to wait until just 2 or 3 months before the election for the Steel Advisory Committee which in a sense goes back 8 years to come up with recommendations?

Under Secretary OLMER. Well, I know I can't give you an answer that will satisfy you; I'm not sure I could give you an answer that would satisfy myself.

I guess I would like to reemphasize that the industry is healing itself in many, many respects, that the economy of the United States is providing the best medicine that that industry needs, and it is using that medicine to heal itself.

Senator HEINZ. The biggest dose of medicine that this committee was asked to provide for American industry generally was tax incentives to modernize and expand and become more competitive.

Now, I believe in your statement somewhere you stated that the steel industry received accelerated depreciation for equipment and facilities. How much does accelerated depreciation mean to an industry that is losing money at the rate of \$3 billion a year? Does accelerated depreciation get you anything except a larger red number?

Under Secretary OLMER. I have two parts to my answer: In the aggregate, clearly no; but there were a number of steel companies in the United States—not insubstantial producers—that did pretty

damn well in the height of the recession that we experienced. One, the Nucor Corp., had a return on sales that was I think well above anticipated averages, and it produced about 1 million or 2 million tons of steel a year.

If you want to look at the integrated producers, you can ask about safe harbor leasing, and that did provide the steel industry with substantial benefits, and the Congress in its wisdom and beneficence extended that provision for an additional year.

Senator HEINZ. Yes, it's true we passed it in 1981 and repealed it in 1982 and let the steel industry hang in there on it until December 1983. It was there, shall we say, briefly—out, out, brief candle.

In 1982 in TEFRA we, as a consolation prize to the steel industry, at the end of 1983, provided that they would be able to use finance leasing when they got over using, however briefly, safe harbor leasing, and that was supposed to happen in 1984 as another favor to them. At the request of the administration, the Congress, at least the Finance Committee, has postponed finance leasing availability until 1988.

You know, if this is help from your friends, I'd hate to think what calumny from your enemies would be.

Mr. Chairman, I am delighted to have our two witnesses here. They have made an excellent case for doing something rather than what I fear is the implication of their remarks, doing nothing. Maybe they will prove me wrong.

I must say that in Bill Brock and Lionel Olmer we have two civil servants—maybe that is too kind a word—two public servants that I admire greatly. [Laughter.]

Ambassador Brock. And we are civil. [Laughter.]

Senator HEINZ. I will not ask the question that occurred to me yesterday—I will just pose it—[Laughter.]

Senator HEINZ [continuing]. About the decision in the footwear industry where, in spite of the fact that import penetration had risen from 40 to 70 percent over the last 4 or 5 years, the International Trade Commission, because most of the companies that had been in the footwear industry had gone out of business and there were a relative handful of I suppose you could say “nonhot end producers” left in the industry, some of whom and indeed I guess most of whom were making money, the International Trade Commission by a vote of 5-to-nothing ruled that the people who died had not been hurt.

The theory under which they had proceeded, as I understand it, was: If you get hit by a car, and you break your leg or fracture your neck, you've been hurt. But if you get killed, you haven't been. I find that a unique theory and hope they will not apply it again this Tuesday.

Thank you.

Senator DANFORTH. Senator Symms?

Senator SYMMS. Mr. Chairman, I would like to ask unanimous consent to have my opening statement put in the record at the appropriate place, and before I start with a couple of questions I would ask, I would yield to Senator Specter who is on a tight time schedule.

Senator SPECTER. Mr. Chairman, I have just one question I would like to ask Ambassador Brock, if I may.

Senator DANFORTH. All right.

Senator SPECTER. Ambassador Brock, the line of questioning that Senator Heinz has posed I think is a strong argument in favor of the Fair Trade and Steel Act of 1984; but a number of your responses have disagreed with his position in a way that would not be in disagreement with opening up the Federal courts for injunctive relief, because a large part of what you have had to say has been that we shouldn't punish everybody with the exclusion. And you say that imports are a problem when they are subsidized.

My question to you is, since subsidized imports are illegal, why shouldn't we have a direct and an effective remedy like the injunctive relief simply stated to keep out the imports, instead of having the matter then go to the administration for a decision on whether there will be any remedy at all where foreign policy considerations are taken into account, our other relationships with Great Britain or the Benelux countries or Japan or Brazil or Taiwan or Korea, and do it in an effective way which would not be a countervailing duty, where the money goes to the Treasury, but simply stated stop the imports and let the courts make that decision?

Ambassador BROCK. Senator, first of all, injunctive relief, the need for an action of that degree of urgency, implies that there is a surge that is sufficient to destroy an industry in a matter of weeks. There is no possibility of any such surge in the steel industry; it's too big for that.

Therefore, it would be my conviction that the present law, which clearly allows us to deal with subsidized imports or not imports very effectively is entirely adequate and can provide a sufficient remedy.

Let me point out to you that not only would violate all of the commitments that we have made internationally by such an approach, but I am not sure that you would really come to grips with the problem as effectively as we are doing now.

We have already mentioned the fact that Japanese shipments have been reduced; European shipments have been reduced. The 40 percent that remains—about 80 percent of all of those shipments in the remaining 40 percent which would constitute the problem area are under consideration, under case consideration, now. And those cases will be solved and settled in the next couple of months, I would guess, the majority of them.

So we will have before the end of this summer the problem pretty well behind us. Why then would you need injunctive relief?

Senator SPECTER. Thank you, Mr. Chairman.

Senator DANFORTH. Senator Symms?

Senator SYMMS. Mr. Secretary and Mr. Ambassador, I thank you for your testimony, and I think we are running very short on time here. I will try to be very brief.

I think you pointed out in your testimony that this just didn't happen overnight. We had a tax policy in the United States—we have had—over the last 40-50 years that double taxes capital, so any corporation that makes a profit and tries to pay a return on the investment, we have a double taxation scheme there that cuts right at the heart of the new equipment that we should be putting back into the steel mills so they can be more competitive. We have had a labor monopoly that there just hasn't been—you know, I

don't know how you justify \$25-an-hour wages vis-a-vis what the competition or what the traffic will bear out in the hinterland. It is very hard for somebody who works at a potato plant out in Idaho for \$7.50 or \$8 an hour to buy steel that has been processed by workers who make \$25 an hour. There hasn't seemed to have been the standoff, somehow, between the management and labor. Maybe they should have forced some strikes 20 years ago or so and broken that continual escalation instead of just passing it on to the consumers. They finally reached the point where it just wouldn't work.

Now we have big steel and big labor asking for protection, and it is very difficult for those parts of the country where we rely on exporting to the Pacific Rim. I find myself in a lot of sympathy with what you are saying here this morning.

Senator Heinz asked an interesting question about the rationality of the auto policy, but I was just sitting here thinking how poor we are doing on exporting agriculture right now, due to a lot of factors and the dollar being one of them, and the other thing is that we have overpriced the grain, I think, with Government intervention in the grain prices. So we are a little bit out of competition.

But how much did this rational auto policy cost the consumers per car? Just looking at it from a consumer's point of view. Has there been any numbers run on that? Is it \$1,000 a car, or \$500?

Ambassador Brock. It is my judgment, Senator, that the first couple of years there probably was virtually no cost because the market was so depressed that the restraint on Japanese automobiles was in fact no restraint. I think there is an increasing cost now. As there is a boom in the U.S. market, that restraint takes on a pretty precise bite.

But I am not sure that I really believe anybody's numbers on the thing; I have seen estimates running from about \$300 a car up to as high as \$1,000 a car. But there is a cost. There is to any protectionist action, Senator, and there has to be.

Can I just shift gears and go back to something you said earlier? You made a point that intrigued me a bit. You know, I can criticize most of our industries for one thing or another, just like I can criticize us in the administration. We are all subject to human error. But look at the history of this industry.

The steel industry has been particularly battered around by Government. You know, Harry Truman nationalized the industry, and it took the Supreme Court to throw that one out. Roger Blough got roused out of bed at 4 o'clock in the morning by the FBI by a President who didn't like his price increase. We hit them in the 1970's, in the latter part, with \$500 million a year's worth of social costs, environmental cleanup. You can ask whether or not we should have put all that burden on that one industry or whether we as a country are going to have to pay an increasing share of that sort of thing.

I mean, they have been pretty beat up. So give credit where credit is due. I happen to think that the wage increases in the face of their recession in the last 5 years were out of sight. But then the labor and management got together and cut some of that back. So they have been making a pretty good effort.

Senator Symms. Well, I don't mean to make it sound as though I am being critical of the managers or the labor leaders. I mean,

people have to survive. But it is very troubling if I go to Morris Knudsen in my State. They have a railroad car repair where they rebuild railroad trains and engines and transit authority trains, and these people are really skilled workers doing highly skilled electrical work, highly skilled welding on stainless steel, and all kinds of requirements for highly skilled workers. Their wages are nowhere near what the steelworker in Cleveland is making.

Ambassador BROCK. That's right.

Senator SYMMS. We have got it out of balance some way, and I think that we have to go through this period. It is going to be difficult.

But the question I wanted to ask is, on page 7 of your testimony you mention about the minimills, and you both commented on it, that the so-called minimills are the fastest growing segment of the industry, and so forth, producing a select range of products.

The minimills have to live in the same environment as the big steel companies, so what is it about minimills that is more attractive? Why are they able to come in and make more profit than say a big well-integrated steel company?

Under Secretary OLMER. I think, Senator, there are a lot of reasons for it; among them, minimills are electric fired, they use scrap in many cases, they are very much product selective. They are not trying to fill a broad range of products. And in consequence, they don't have the inventory costs that are associated with a large, integrated producer.

They are not heavily dependent on the raw materials. The raw material cost is substantially less, and in some instances minimills are not unionized. Some of them are.

Ambassador BROCK. I was just going to say that generally small business is lighter on its feet than big business, and they can move faster; they can be more adaptive, more flexible. And I think it is true that the productivity numbers are substantially better in the minimills. The productivity per hour of management and labor effort are much higher in the minimills.

Under Secretary OLMER. I mentioned one company and I know of another one that was a greenfield plant, built during the course of the recent recession. It has come onstream and has been producing a million tons of steel a year and making a substantial profit at it.

Senator SYMMS. What is the effect of the quotas on the Western part of the United States?

Under Secretary OLMER. Oh, it would be devastating. It would cost you exports and it would cost you jobs.

Ambassador BROCK. And it would cost you money; it would cost you higher prices. You would lose, every way.

Senator SYMMS. Well, don't some of the steel companies need the import slabs and so forth?

Ambassador BROCK. Absolutely.

Senator SYMMS. So then we have to square that, also.

Ambassador BROCK. Right.

Senator SYMMS. Did you make a comment—I missed it if you did—in your testimony about the philosophy of whether or not Government should be allowed to force industry to reinvest in any particular—

Under Secretary **OLMER**. I did, Senator. I didn't characterize it that way; I took the other point of view that the Government is not capable of making those kinds of decisions for the industry, and probably not capable of doing it for one segment of an industry as diverse as the steel industry.

Indeed, one of the many limitations in this fair trade in steel bill that I noticed is that it doesn't define the industry. It doesn't say whether steel distributors or service centers are included within the ambit of its reach. And its reach is so enormous that I think we would have to build another Department of Commerce just to manage the decisions that would be required to determine whether or not a given component of the industry was reinvesting the savings that were ostensibly being earned because of the imposition of quotas.

Senator **SYMMS**. I can see the chairman wants to move on. Thank you very much.

Senator **DANFORTH**. Thank you.

Gentlemen, thank you very much. I hate to be rushing things, but we have a problem in that the tax conference starts at 12 noon. There is a meeting of Senate conferees that has been going on since 10 o'clock, and I happen to be a conferee. Also, there is a vote now on the floor of the Senate. But we now have a steel panel. I want to thank Ambassador Brock and Secretary Olmer very much for their patience and their very clear testimony.

Ambassador **BROCK**. Thank you.

Senator **DANFORTH**. The next witnesses are a steel panel, Mr. Donald Trautlein, chairman of the American Iron and Steel Institute and chairman and CEO of Bethlehem Steel; David Roderick, chairman, United States Steel; James E. Chenault, president and CEO, Lone Star Steel Co.; Roger Regelbrugge, president, Georgetown Industries; Adolph Lena, chairman, Al Tech Specialty Steel Corp.

Gentlemen, it is my understanding that you have one spokesman, and that spokesman, whoever he is, can speak for all of you, and then you will all be available to answer questions.

Senator Specter is here, and I think he would like to introduce the panel.

Senator Specter?

Senator **SPECTER**. Thank you very much, Mr. Chairman; I shall be very brief.

Senator Heinz had to go to vote, but I know he would want to join in the introductions.

We have among the witnesses here today four very distinguished Pennsylvanians to testify with the industry representatives and to testify with the union representatives.

The leadoff witness is Mr. Donald Trautlein, chairman of the American Iron and Steel Institute and chairman and CEO of Bethlehem Steel Corp., a public-spirited citizen, a major American industrialist who has studied this problem with intensity and speaks not only on behalf of his company but on behalf of the Nation; and Mr. David Roderick, chairman of United States Steel Corp. and a former chairman of the American Iron and Steel Institute. He has been a leader in representing the steel industry on the actions on the trigger-price mechanism in the past and has been the driving

force behind the Fair Trade in Steel Act of 1984, just as Mr. Trautlein has been the driving force in the pending actions under 201. They provide quite a clout for Pennsylvania and for the steel industry and really symbolize the tremendous importance of the steel industry to Pennsylvania, which has been wracked by unemployment in an intensity that is not understandable unless you really go to Johnstown or Midland or Bethlehem or Coatesville to see what has happened.

If I may say just one other word, Mr. Chairman, because I have other commitments after the vote, we have Mr. Len R. Williams, president of the United Steel Workers of America from Pittsburgh, and Mr. Leon Lynch, vice president of the United Steel Workers, who are doing an outstanding job in trying to cope with the problem in making concessions where they are realistic to work on productivity and try to come to grips with some of the problems of the industry. But I think they will give you the very important message that there has to be some help from the administration and from the Congress.

Thank you very much, Mr. Chairman.

Senator DANFORTH. Thank you very much, Senator Specter, and thank you for being here today and for your contribution to the hearing.

We have now five bells on the vote. Senator Heinz has preceded me. I think what I will do now is to leave and vote, and he will hopefully precede me back and be able to start your testimony.

So we will recess for just a couple of minutes.

Senator DURENBERGER. Hold it.

Senator DANFORTH. Have you voted?

Senator DURENBERGER. Yes.

Senator DANFORTH. Senator Durenberger has filled the breach.

OK, go ahead.

STATEMENT OF DONALD H. TRAUTLEIN, CHAIRMAN, AMERICAN IRON AND STEEL INSTITUTE, CHAIRMAN AND CHIEF EXECUTIVE OFFICER OF BETHLEHEM STEEL CORP., BETHLEHEM, PA

Mr. TRAUTLEIN. Thank you, Mr. Chairman.

I am Donald H. Trautlein, chairman of the American Iron and Steel Institute and chairman of Bethlehem Steel Corp.

These hearings that you are conducting on the American steel industry are of paramount importance not only to our domestic steel industry but to the Nation as well. At stake is nothing less than our future as a major world industry and our position as the principal supplier of steel to the American economy.

With me today are David Roderick, chairman of the United States Steel Corp.; Adolph Lena, chairman of the Specialty Steel Industry in the United States and CEO of Al Tech; and James Chenault, CEO of Lone Star Steel. We were to have a fifth member of our panel, Roger Regelbrugge, CEO of Georgetown Industries, but he is unable to be with us. He has submitted a written statement.

[Mr. Regelbrugge's prepared statement follows:]

STATEMENT BY ROGER R. REGELBRUGGE, PRESIDENT AND CHIEF EXECUTIVE OFFICER,
GEORGETOWN INDUSTRIES, INC.

Good morning Mr. Chairman, and Members of the Committee. I am Roger Regelbrugge, President and Chief Executive Officer of Georgetown Industries, Inc. (formerly Korf Industries, Inc.), which operates a carbon steel wire rod mill in Georgetown, South Carolina.

Our company was founded by Willy Korf who brought radical new changes in the production of wire rod, a basic steel product, to this country beginning in the late sixties. The mill has since been continually upgraded to achieve efficient production. However, despite our advanced technology, an erosion of domestic market prices beginning in 1981, primarily caused by imports from a host of foreign sources forced a complete reorganization of our company. As a consequence of that reorganization, Mr. Korf is no longer involved with Georgetown Industries and we have had to sell our modern Texas wire rod mill as well as the Midrex direct reduction process. We are confident now of our capacity and ability to continue as a modern, efficient steel maker, but it has been at a very large cost. This industry cannot, however, rely solely on such painful restructuring which will not in the end succeed if public policy ignores the trade problem.

The electric furnace based wire rod mill we operate in South Carolina was completed in 1969. Built on a coastal site to take advantage of transportation economies, this mill was the first in the United States to continuously cast billets for subsequent rolling into wire rod. Over the years, the mill has been constantly modernized to take advantage of technology advances and today employs virtually all of the state of the art equipment and techniques for making wire rod. After completion, this mill was successful in capturing market share from imports and became an alternative source to independent domestic producers of wire products. Based on expectations of demand, a second state of the art mill was built in Beaumont, Texas, which shipped its first wire rod in 1976. Nor were we alone in such investment. A competing mill was constructed by Raritan River Steel Company which went on stream in 1980. In addition, Atlantic Steel in Atlanta, Georgia, and a number of other companies have built new capacity, based on electric furnace, continuous casting technology, to supply the domestic wire rod market.

The investments we have made, and I am sure our competitors share this philosophy, have been premised on several key assumptions. The most important assumption is that if productivity can be improved through significant investments in efficient and technologically advanced equipment, then any labor cost advantage of foreign producers can be neutralized. At present, we believe the total labor per ton produced can realistically be expected to be less than two hours in a modern, efficient wire rod mill. At current labor rates, this means that U.S. labor costs will about equal the cost of ocean freight, Customs clearance and U.S. import duties on shipments from foreign suppliers, wherever located. The second assumption is that the high cost of investment in new facilities both for the equipment and technology and the cost of capital, could be recovered in our domestic prices if there is a vigorous and effective enforcement of the United States trade laws. This assumption, however, has not been realized. Let me resort to a historical survey.

In 1974, imports accounted for approximately 50 percent of all domestic noncaptive wire rod shipments. It was that market that our company hoped to capture through technologically advanced production and, in fact, we were successful until 1977 when there was a sudden and dramatic drop in the price of imports, primarily from Europe, to about \$10 cwt, or less than half the 1974 import price. After President Carter urged the steel industry resort to the trade laws for relief from this unfair import competition, we filed antidumping cases which were subsequently withdrawn following the implementation of the Trigger Price Mechanism. Under the TPM, prices recovered and domestic mills captured an increasing share of the domestic noncaptive market for wire rod which coincided with the introduction of new sources of supply from Raritan, among others. In fact, by 1980 prices had recovered to approximately \$17 cwt (although still less than 1974 prices) and imports supplied only 23.6 percent of near record domestic consumption.

We were understandably distressed when the TPM was suspended in early 1980 only to be reinstated later on that year. Even more distressing was the resort to "legalisms" after reinstatement that led to the preclearance mechanism. While this concept perhaps had philosophic justification, it created a two tier pricing environment which inevitably led to widespread violations of the trigger prices and increasing industry frustration with the program.

Coincident with the decline in enforcement of the TPM was a rapid and steady decline in prices which became most pronounced in 1981 and continued into 1982.

This decline was accompanied by an acceleration in the percentage of domestic consumption accounted for by imports. By January of 1982 when the TPM was again suspended, prices had fallen to the \$12 cwt range, largely because of import competition, and imports were taking a larger share of the market.

We were then confronted, of course, with the problem of again resorting to trade law petitions which we have, in fact, undertaken. While we have been largely successful in winning cases, and there has been some recovery in the market, imports continue to take a significant share of the domestic consumption: in January 1984, wire rod imports were over 150,000 tons—the highest level in any month since 1974. While we will continue to pursue our cases, there are structural and theoretical problems with the current system that this Committee should bear in mind.

First, there is the problem that cases are time consuming and expensive. Moreover, because wire rod is manufactured in numerous countries, it is necessary to bring a large number of complaints in order to achieve any measure of relief. Wire rod imports are not controlled by the exporting company but rather by trading companies that operate in the United States and search out alternative foreign sources whenever a foreign supplier is forced to price fairly because of trade law relief. While we would like to feel we have found a solution in the trade laws, I sometimes fear that we are more like Sisyphus.

Second, while this Committee has emphasized the need to take trade law out of politics or politics out of trade law, we have concern that this is still a problem despite Charlie Vanik's admonition when the 1979 Act was under consideration. At that time, he forcefully stated that the purpose of Congress was to "take away these decisions [in trade cases] from the silk hat crowd in the diplomatic department."¹ However, we still have the uneasy feeling that political judgments rather than legal and factual analysis often carry the day. We saw this in our petitions involving countervailing duties from Czechoslovakia and Poland which the Commerce Department rejected on grounds that appear to have been motivated by considerations other than the merits of our cases. In fact, as our briefs have demonstrated, the subsidies we alleged from Czechoslovakia and Poland were very conventional export subsidies of the type listed in the Annex to the Countervailing Duty Code. Our allegations required no complex analysis of credit-worthiness or desired rates of return (which the Department has undertaken in many cases) but rather a simple recognition that differential treatment for exports is a subsidy and has so been recognized by this Congress since 1890 and by much of the world community.

Third, I would make a plea for consistency in U.S. trade policy and enforcement of the trade laws. Since 1977, when we first filed our cases under the antidumping law, we have seen an array of remedies proposed, withdrawn, improved, modified, and occasionally just ignored. Over an extended period of time this Helter Skelter approach to trade policy has had the unhappy (for us) effect of undermining the second leg of our assumption: namely that efficient modern production and the consequent costs incurred would be economically viable particularly where we were able through productivity to neutralize any advantage our foreign competitors may have in labor costs per hour.

In conclusion, while I have in the past opposed quotas and similar accommodations with trade, this has been premised on the belief that the trade laws would be vigorously and consistently enforced. Our experience with the administration of these laws over the last seven years leads me to the conclusion that congressionally mandated steel trade regulations is now needed.

Mr. TRAUTLEIN. In the interest of time I will give the only oral testimony, but in answer to questions, each of us will offer his view of the industry's problems from his own perspective, and each of us will have the same basic message: Simply that steel imports are the main continuing cause of the deepest crisis in our industry since the 1930's, and the situation grows steadily worse. Any solutions, to be effective, must therefore be comprehensive in nature and must be taken very soon. That is why S. 2380 and its companion H.R. 5081 offer the most effective solution.

A brief summary of the crisis in steel might be useful:

The industry's losses, as has already been indicated, in 1982 and 1983 totaled over \$6 billion.

¹ Cong. Record, July 10, 1979, at H5551-5552.

There were over 170 plant or facility closings in the last 2 years alone, affecting virtually every industrial State but particularly the Great Lakes States.

Employment, which averaged 453,000 workers in the period 1975 through 1979, slid to 243,000 in 1983—a decline of almost 50 percent.

Steel's capital needs are projected to be in excess of \$5 billion annually, merely to maintain minimum viability. Yet in the past 5 years, capital investments averaged over only \$2.3 billion and dipped to \$1.9 billion last year, to a level in 1983 65 percent below our requirements for modernization.

Between 1981 and 1983 the industry lost nearly one-third of its net worth.

To continue in this manner is tantamount to the near-term liquidation of the industry, and to permit a vital industry like steel to dissolve literally before our eyes is, I think, to invite disaster.

One major reason for today's steel trade crisis is chronic overcapacity in nearly all foreign steel-producing nations of the free world. This glut of foreign excess capacity, estimated at more than 200 million net tons, is almost twice the present capacity of the U.S. industry. How ironic it would be if the United States had to depend increasingly upon higher cost foreign producers for its supply of steel at a time when our domestic industry is still cost competitive in the U.S. market. Even now—even now—we are the only major industrial nation that cannot presently supply our own needs in a time of strong demand. In sum, we have not overbuilt, yet we suffer the direct and serious consequences of foreign overbuilding.

A second major reason for the present crisis is that foreign government import restrictions and subsidies for steel production capacity have removed the discipline of the market system in world steel trade. This has insulated other countries from the damage of imports and made the U.S. market an increasingly attractive target for foreign excess tonnage. In effect, foreign steel producers have bought increasing shares of the U.S. market with uneconomic steel prices.

The American steel industry has responded by using the trade laws. We have probably spent more time, effort and money in attempting to use existing trade laws to address our trade problem than any other U.S. industry. We have filed more than 150 trade cases since 1982 alone. But despite some successful decisions, the result has been more imports from more countries at increasingly destructive prices.

The problem is clearly too broad and pervasive to be dealt with on a case-by-case, product-by-product basis. It needs and deserves the kind of comprehensive solution provided for by the Fair Trade in Steel Act or by the presently pending 201 proceeding at the ITC.

That is why our industry—which until last year was unable to reach a consensus regarding steel quotas—now believes that a temporary period of comprehensive quotas represents the indispensable solution, whether obtained through legislation or through the 201 proceeding.

At the same time, I hasten to add that the American steel industry isn't just sitting on its hands waiting for the quota bill to be

passed. We have been engaged in massive self-help efforts despite our financial constraints, and incurring severe debt to do so. Productivity gains are our chief objective. The many positive steps our industry is taking to improve productivity have been listed in my complete written testimony which has been supplied today and which I would be happy to supplement at your request.

In brief, we have cut costs in many, many ways and have also found new ways of raising capital. But all of these self-help efforts are futile if the core problem of unfairly traded imports remains unsolved. S. 2380 provides the solution.

The bill provides for moderate import limits at the level of penetration in the 1970's, a far larger share of imports, I would add, in our market than would be tolerated by any other major steel-producing country. It provides this and the next administration with maximum flexibility for determining quota shares by country or by region. And finally, it imposes a quid pro quo on the domestic steel industry to reinvest in steel substantially all the cash flow from steel operations.

The steel industry is making every effort within its power to solve the problems facing us. Suppliers have cooperated, management has disciplined itself, and the union has made sacrifices of its own. We are making progress, but not of sufficient magnitude to offset the problem of foreign imports. It is just not within our power to compete with foreign governments. We have done what we can do. Now we need your help. It is essential that this country take the legislative steps required to bring some order to the domestic steel market. This committee's endorsement of S. 2380 would be a substantial help in assuring the survival of the Nation's most basic industry—its steel industry.

Thank you.

Senator DURENBERGER. Thank you very much.

[Mr. Trautlein's prepared statement follows, as well as Mr. Chenault's, Mr. Roderick's, and Dr. Lena's:]

Statement of
Donald H. Trautlein
Chairman, Bethlehem Steel Corporation
and

Chairman, American Iron and Steel Institute

Mr. Chairman:

This hearing on the current state of the U.S. steel industry, and on steel trade issues is of paramount importance to the domestic steel industry. At stake is nothing less than our future as a major world industry, and our position as the principal supplier of steel to the American economy.

We are here today to urge enactment of S. 2380, the Fair Trade in Steel Act, which has wide support in the House, and the Senate is now beginning to consider. This bill is the only effective way to return some equity to the conduct of trade in steel, which has become a gross caricature of a functioning market ---- as millions of tons of steel routinely and flagrantly enter the U.S. at prices below their costs of production.

Mr. Chairman, we have been told by a succession of Administrations that the way to obtain fair trade in steel is to bring unfair trade cases against importers of dumped and subsidized steel products. We have filed literally hundreds of cases for almost a decade, and we continue to do so. But the result has been, at best, the temporary correction of an abuse from one source only to confront a similar pattern from another.

The steel industry is still in a state of crisis. In 1982-1983, the industry was severely injured by dumped and subsidized imports.

The American steel industry operated at 48% of capacity in 1982, and 55% in 1983, the lowest levels since the depression years of the 1930s. Domestic steel shipments amounted to 59.8 million tons in 1982 and 67.5 in 1983, the lowest levels since 1949. The combination of low levels of

operations and destructively low import prices over the past two years have had disastrous consequences for the industry's profitability and cash flow. Pre-tax losses in steel operations were more than \$8 billion in the years 1982 and 1983 (including losses associated with the closure of facilities). These heavy financial losses over the past two years have reduced investment to a point where the long-run competitiveness of the industry is being severely weakened.

Unemployment in the industry is still at a depression level -- 96,000 employees were on layoff or short work week at the end of 1983 -- equivalent to almost one-third of the steel workforce.

Massive government involvement in foreign steel industries has distorted the operation of the market mechanism in steel trade. Private producers in the U.S. cannot compete with inefficient, yet subsidized foreign producers, operating from protected home markets and selling at export prices significantly lower than their costs. This problem is especially severe in steel, where government subsidies have generated more than 200 million net tons of excess capacity in the Western world economy outside of the United States. Excessive government involvement and excess capacity now exists in many developing countries -- not just in the EC and Japan.

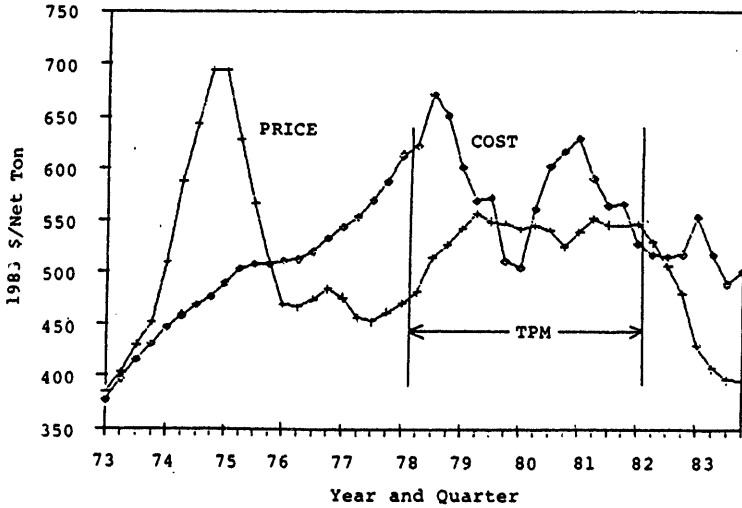
This foreign government involvement, the direct cause of increased steel imports, has cost the American industry dearly, Mr. Chairman. In a May 3, 1984 study submitted to the International Trade Commission, Data Resources, Inc. indicates that had the import share of the U.S. market remained at the level obtaining in 1964-1976 (i.e., a little under 13.4%), instead of the 18.2% actually experienced in 1977-1983, imports would have averaged 4.7 million tons less than they actually did, shipments would have been 4.7 million tons higher, domestic prices would have

averaged \$35 per ton more, and cash flow would have been \$3.9 billion higher annually, measured in constant 1983 dollars.

Our industry has made maximum efforts to reduce costs but this has not provided sufficient cash flow for modernization. Our capital expenditures over the past two years have been running at a replacement rate of about 50 years for steel industry production facilities, when the rate should be well below 25 years.

Thus despite our best efforts, the steel industry's modernization will continue to fall below the level required until an effective trade policy for steel is put in place. That is worth doing, Mr. Chairman, because the American steel industry is cost competitive in its home market. Currently, the costs of production of the U.S. industry average \$480 per net ton of steel shipped. In contrast, average landed costs in the U.S. market of Japanese producers (the most efficient major foreign producers, upon whose costs of production the TPM was based) are approximately \$520 per net ton (source, WSD). Notwithstanding this, (and using Japan as an example) selling prices in our market are well below costs of production. This is displayed in the chart below and is also true for most of the foreign sources of imports entering our market.

GRAPH OF REAL IMPORT PRICES AND FULL JAPANESE COSTS
FOR CARBON STEEL
1973-1983



Source: Analysis of Injury to the Domestic Steel Industry Caused by Imports. Report to International Trade Commission of Marshall Bartlett Inc., May 3, 1984.

In spite of aging equipment and a lower percentage of continuous casting than in Japan and Europe, American steel producers are more efficient in the use of many inputs than are many of their foreign competitors. Although unit labor costs are unsatisfactory, when compared to those of Japanese and Korean producers, for example, and they must be improved, U.S. carbon steel labor productivity is higher than in these two countries. The strong raw-materials position of U.S.

producers, together with the basic strengths of the American economy (e.g., highly developed capital markets, access to advanced technology, and large home market), still provide American steelmakers with significant long-run advantages. Moreover, the U.S. potential for significant further cost reduction is higher than for the other major industries compared.

The present steel crisis is too large to fit into the category of cyclical fluctuation. The severity of this situation is causing sharp changes in the industry. Changes in government policy are urgently needed. An inadequate response will transform the present crisis into a much deeper, more permanent contraction than the level implied by the industry's actual competitive condition -- at great cost to the industry, its workers, and to the national economy.

The longer-term competitive prospects of the American steel industry depend upon our Government's response to the flood of subsidized and dumped imports entering the U.S. market. Government action must occur to reestablish the conditions under which private domestic producers can compete with semi-public or fully nationalized foreign competitors. The steel import problem is an example of the overriding problem facing U.S. trade policy; whether the United States can preserve the private character of one of its major industries in a world system in which intervention by foreign governments has become the norm.

PRESENT POSITION OF THE INDUSTRYStructure and Concentration

The steel industry consists of 92 firms engaged in production of raw steel and finished steel products. In 1983, integrated producers accounted for 78.0% of raw steel production and non-integrated producers, 22.0%. U.S. mini-mills in 1983 had approximately 18.2 million net tons of capacity, and 12.7 million net tons of raw steel output, accounting for approximately 15% of U.S. production last year. In 1983, the top 3 steel companies accounted for 39.2% of total output and the top 8 firms accounted for 72.0%. Estimated capacity in January 1984 was 135.3 million net tons, down from 150.6 million net tons in January 1983, and 160 million net tons in 1977. The U.S. shutdown of capacity in the year 1983 was equivalent to the loss of an industry equal to the size of the Canadian or British steel industries.

Production and Shipments

Production in 1983 was 84,615,000 net tons, or 56.2 percent of capability. This compared with 74,577,000 tons, or 48.4 percent in 1982. The percentage of production coming from basic oxygen furnaces rose to 61.5 percent in 1983, compared with 60.7 percent in 1982; electric furnaces produced 31.5 percent last year, compared with 31.1 percent in 1982; and open-hearth furnace production declined to 7.0 percent, from 8.2 percent in 1982.

The percentage of raw steel produced by continuous casting was 32.1 percent in 1983, against 29.0 percent in 1982.

Shipments in 1983 totalled 67,584,000 net tons compared with 61,567,000 tons in 1982. This level of shipments, while a modest improvement over the 33 year low of 1982, was still at a depression level, in part due to the continued high level of imports, which took 20.5% of the U.S. market in 1983.

Employment

While employment levels in the American steel industry recovered slightly during 1983 from the bottom of the two-year recession, steel industry unemployment was still far higher than in the nation as a whole.

Average 1982 employment in the steel industry was 242,700 persons (including both hourly and salaried employees), compared with 289,400 in 1983. These figures compared with an average of 453,000 persons employed in 1975-79, indicating that employment in 1983 fell 46 percent below that base period.

Financial Condition of the Industry

The total cash flow of the steel companies has not been adequate to meet capital spending requirements. During the 1970s, capital expenditures exceeded internally generated funds by over \$1.5 billion because of low profitability, and tax depreciation policies which did not cover inflation in replacement costs.

To compensate for the deficit of internally generated funds, steel companies increased borrowings. This has resulted in increased debt ratios. The high debt levels and lower profitability have resulted in reduced debt ratings which limit the industry's financial capacity for additional increases in debt and further reduces profitability, due to increased financial costs on new debt issues. The six largest steel companies reduced dividends over 70% during the past two years. These reductions, combined with low ratios of market price to book value and limited expectations for substantial improvements in industry profitability and cash flow, have restrained the industry from raising any significant additional equity capital at reasonable costs.

During 1979-1983, "Steel Segment"* uses of funds (net cash for long term investment in plant and equipment, and Steel Segment dividends) far exceeded net cash provided from operations. Even without Steel Segment dividends, net cash for long term investment in plant and equipment exceeded internally generated net cash flow from steel operations, by about \$1.3 billion. These data affirm that the steel industry has not used cash flow from steel operations for non-steel investment purposes.

Net losses from "Steel Segment" operations totalled \$5 billion for 1982 and 1983, through the third quarter. The fourth quarter 1983 plant shut-downs and operating losses caused total net losses to increase to more than \$6 billion in 1982-83.

Capital expenditures for the Steel Segment during the period 1980 through September 1983 averaged only \$2.3 billion per year, for 86% of the industry -- equivalent to \$2.7 billion for the total industry. This is alarmingly below the level necessary to maintain and modernize existing plant and equipment, which we estimate to be about \$5.5 billion annually, based upon an annual replacement rate of 4.4% of facilities.

As a result of inadequate generation of cash internally, long term debt for the Steel Segment, including that due within one year, rose from 43.9% of equity, at the end of 1979, to 80.9% of equity by the third quarter of 1983. From 1981 to 1983, shareholder equity in the "Steel Segment" of steel companies declined approximately \$5 billion.

Due to its heavy losses, the steel industry had an Investment Tax Credit carryover of \$1.2 billion in 1983. Moreover, the industry Net Operating Loss (NOL) carryover rose from \$1.6 billion at the end of 1982 to \$5 billion at the end of 1983.

*The financial data in this statement are preliminary and derived from a Price Waterhouse & Co. financial steel industry survey still underway. This survey will provide balance sheet, income statement, and cash flow statement for the Steel Segment as well as for total corporate operations in each participating company. The 33 participating companies accounted for approximately 86% of U.S. raw steel production in 1983.

These data affirm the deteriorating financial condition of domestic steel companies. Balance sheets of individual steel companies must be repaired quickly to avert further potential shut-downs or the financial collapse of some companies in the industry.

Industry Self Help Measures

As indicated in the industry's position paper issued in February 1983, significant operating improvements are under way in the steel industry. Average blast furnace output in the American steel industry has increased by over 50% since 1971.

Continuous casting capacity will double in the next five years; approximately 16 continuous casting machines (16 million tons total capacity) will be installed during 1982-84. Other significant improvements are being made in metallurgy, computerization, and electric-furnace operations, where the U.S. industry is the world leader. Major steel consuming manufacturers with world-wide steel consuming operations have recently asserted that the quality of American steel is second to none.

Non-union employment costs have been curtailed substantially. American steel companies during 1982-83 not only substantially reduced administrative work forces in line with actual and projected economic conditions, but made a large number of changes in compensation and benefit programs for both management and other non-union salaried employees. Overhead has been reduced by approximately 25%.

Stringent energy conservation measures have been adopted by the industry. Energy conservation efforts in the steel industry since 1972 have resulted in a 25 percent reduction in the Btus required to produce a ton of finished steel product. More improvement is in progress.

Diversification efforts have been intensified. A significant portion of the steel industry has diversified into a variety of non-steel business -- to improve profit stability. This has been accomplished primarily by external financing and hence has not taken internally generated funds away from investment in steel facilities.

Incremental technology initiatives are gaining momentum in the industry. They include major efforts in the following areas: recycling and resource recovery from waste materials; process control and sensor development; rapid-in-process analysis of liquid metal; direct measurement of temperature distribution within a solid or solidifying body of hot steel; automatic detection of pipe and gross porosity in hot and cold strip.

Despite these important initiatives, it is apparent the best and fastest way to improve the technological position of the American steel industry is to increase cash flow and therefore the capability to invest at a much higher level in the latest existing technology. This does not preclude being poised to exploit new technology such as strip casting when it becomes available. What is needed is sufficient investment capital to install continuous casters, process controls, and other major equipment items, to increase product quality and reduce costs. As several other major world steel industries are ahead of us in regard to investment in new equipment, we must catch up, and there is reason to do so. Our potential for reducing costs is now greater than theirs.

COMPETITIVE STATUS OF THE INDUSTRY

Mr. Chairman, government steel policy cannot ignore an essential question: How competitive is the American industry in its own market, and how can it be made more competitive?

Comparative costs can change rapidly. However, present cost relationships indicate it is incorrect to contend the U.S. industry can no longer compete in its home market.

Current Data Show U.S. Industry is Competitive

The latest data (2nd quarter 1984) from the World Steel Dynamics carbon steel model show that even with current misaligned exchange rates the U.S. steel industry is now cost competitive in its own market. This is shown in Table 1.

TABLE 1
COSTS PER NET TON SHIPPED*
2nd Quarter 1984
(at Actual Operating Rates)

	<u>U.S.</u>	<u>Japan</u>	<u>West Germany</u>	<u>France</u>	<u>U.K.</u>
Labor Costs.....	\$137.61	\$ 95.98	\$124.28	\$126.74	\$ 90.33
Raw Materials Costs...	301.69	255.33	242.62	221.18	255.33
Financial Costs.....	38.76	96.35	49.73	75.19	51.67
Total.....	\$478.06	\$447.66	\$416.63	\$423.11	\$397.33
Dec. 1983 Entry Costs (duty, freight, handling) Into U.S. Market.....		\$ 74.61	\$ 70.76	\$ 70.76	\$ 70.76
Landed Costs in U.S., before Profit.....	\$478.06	\$522.27	\$487.39	\$493.87	\$468.09

*Source: Table 5, World Steel Dynamics, Steel Strategist #9, February 1984--
Paine Webber Mitchell Hutchins, Inc.

Mr. Chairman, I reiterate these cost data are not domestic steel industry data, but instead, are from the Peter Marcus Paine Webber model, generally acknowledged to be the best and most accurate public model available for comparative information on the major world steel producers.

To illustrate the nature of our trade problem, table 2 lists the average value of steel imports entering the U.S. These data show that steel import values continue to be well under costs of production in most of the countries from which they originate.

TABLE 2

<u>Average Value of Imports**</u>	<u>Dollars per net ton</u>
Year, 1983	\$374.48
First Quarter 1984	\$362.77

There is now little doubt that imports are entering the United States at prices well under their costs of production. This has been occurring for nearly two decades. Moreover, these data on foreign costs of production embody foreign subsidies for materials and labor costs, grants which offset financial costs, and subsidized interest rates. If these subsidies were included, as they should be, foreign costs of production would be far higher than those listed above.

** Source: U.S. Bureau of the Census -- FOB Value

Comparative Steel Costs are Distorted by Misaligned Exchange Rates

In addition, assessments of the underlying competitiveness of the U.S. steel industry which ignore exchange rates are inherently distorted. This is illustrated in Table 3, which shows how costs in the 2nd quarter of 1984 (at actual operating rates) would be altered if exchange rates had maintained the values which prevailed in 1978-79. This table shows the phenomenal extent to which exchange rate fluctuations have altered comparative steel costs -- especially in regard to West Germany, France and the U.K. When measured against the Morgan Guarantee real effective exchange rate series, the shifts of exchange rates in the 1980s are an aberration, differing sharply from long-standing patterns and distorting underlying competitive relationships.

TABLE 3
SECOND QUARTER 1984 PRE-TAX COST PER NET TON
(At Actual Operating Rates)

	<u>At 2nd Quarter 1984 Exchange Rates</u>	<u>At 1978-79 Exchange Rates Average</u>	<u>Percent Distortion</u>
U.S.	478.06	478.06	
Japan	447.66	454.05	1.4
West Germany	416.63	481.54	15.6
France	423.11	645.11	52.5
U.K.	397.33	489.52	23.2

Source: WSD, Steel Strategist #9

OTHER INTERNATIONAL COMPARISONS OF EFFICIENCY

The most basic level on which industrial competitiveness can be evaluated is in terms of the efficiency with which inputs are used. Three of the major inputs are labor, energy and capital. Latest data (Table 4) show that the U.S. steel industry ranks with Japanese producers in terms of labor productivity at actual operating rates for carbon steel production by integrated producers. Given the inadequate investment of the U.S. industry, its carbon steel labor productivity represents a solid performance in comparison with the results achieved by foreign industries in newer plants built with government support.

Table 4

LABOR PRODUCTIVITY

(Manhours Per Net Ton Shipped at Actual Operating Rates)

	<u>U.S.</u>	<u>Japan</u>	<u>West Germany</u>	<u>France</u>	<u>U.K.</u>
1976	8.79	10.11	11.12	14.89	19.17
1977	8.95	9.98	12.37	14.26	21.26
1978	8.12	9.55	11.67	12.62	22.56
1979	8.29	8.55	9.85	11.35	18.98
1980	8.31	8.30	9.98	10.14	37.35*
1981	8.07	8.49	9.95	10.24	13.90
1982	7.84	8.07	11.08	10.83	13.35
1983 3Q Avg	6.69	7.82	10.92	11.03	10.61
1983 3Q	6.48	7.28	11.42	11.62	11.31
Annual Rate of Improvement	+1.9%	+2.2%	+2.8%	+3.2%	+3.7%

Source: WSD

* Strike Year

The U.S. advantage would be far less if each industry were able to operate at a high level of capacity. Certainly Japan, which is generally considered the world's most efficient steel industry, would have the best labor productivity at high operating rates. Since 1975, low operating rates have been a serious burden for the Japanese steel industry. Yet potential efficiency is economically meaningless unless demand is adequate to sustain the potential level of performance. If, over a long period, market demand is lower than projections - as has been the case in the world steel industry since 1975, potential efficiency is transformed from a competitive strength into a liability. Persistent excess capacity represents a managerial error, regardless of the potential efficiency of the facilities which are idled. Given the duration of the present crisis in the world steel industry and the persistent under-utilization of capacity, the use of a "standard" operating rate, rather than an actual rate (usually 90%), to describe efficiency is meaningless.

Energy Efficiency

Energy efficiency in terms of Btus per ton shipped, is set forth in Table 5:

Table 5
ENERGY EFFICIENCY

(millions of Btus per net ton shipped)

	U.S.	Japan	West Germany	France	UK
1973	36.9	31.3	35.4	41.9	37.5
1981	35.4	27.9	36.0	36.2	40.4
1983	24.8*	27.4	29.7	30.6	37.7

Source: WSD

* AISI data for 1983 show 24.73 million Btus per ton of steel shipped for all grades. WSD data refer to carbon steel only.

Here the U.S. industry ranks somewhat behind its European competitors and substantially behind Japanese producers. Table 10 describes overall energy usage, regardless of type (coal, electricity, oil, etc.). As the data indicate, improvements in overall fuel efficiency are somewhat difficult to come by; and the principal effect of the energy crisis of 1973 has been a shift in the mix of energy inputs (from petroleum to coal and electricity) rather than a major reduction in total energy usage. The U.S. performance in energy conservation would substantially improve at higher levels of investment, as higher yields, derived from a higher rate of continuous casting, reduce Btus per ton of steel shipped.

Efficiency of Capital Utilization

In the 1960s and 1970s, U.S. industry was substantially ahead of all of its major competitors, with respect to return on total capital employed. It is still far ahead of its European competitors, in terms of pre-tax profit per ton of steel shipped, and since 1976, only slightly behind Japanese producers. The efficiency of capital usage is difficult to measure in physical terms. One measure of capital efficiency is operating rate, or utilization of existing capacity. In this regard, the performance of the U.S. industry since the mid-1970s has on average exceeded that of its major competitors. This is shown in Table 6.

Table 6
CAPACITY UTILIZATION
(Production as % of reported capability)

	<u>U.S.</u>	<u>Japan</u>	<u>West Germany</u>	<u>France</u>	<u>U.K.</u>
1976	80.6	77.1	62.4	75.0	78.9
1977	78.6	68.4	57.3	66.5	71.2
1978	86.6	64.2	60.7	69.7	71.4
1979	95.1	67.4	66.7	71.9	74.6
1980	77.8	65.4	65.1	73.6	39.9
1981	85.7	60.3	62.5	72.0	61.5
1982	54.5*	62.4	54.4	63.2	58.8
1983 3Q Avg	65.4*	61.4	56.3	60.7	72.0
1983 3Q	66.91*	65.8	55.9	57.16	72.21
76-83 Average	78.0	65.8	60.7	69.1	69.8*

Source: WSD

* AISI data, which cover all production not just carbon as in WSD, show that capacity utilization was 48.4% in 1982, approximately 54.5% for 9 months of 1983, and 69.4% in January, 1984.

* strike year of 1980 is excluded from average

Yield

A final measure of physical efficiency is yield (Table 7.)

Table 7
PERCENTAGE YIELD
(shipments/raw steel production, at actual operating rates)

	<u>U.S.</u>	<u>Japan</u>	<u>W. Germany</u>	<u>France</u>	<u>UK</u>
1975	71	74	74	72	72
1976	72	78	75	72	72
1977	72	80	75	72	72
1978	72	82	75	73	72
1979	72	83	75	73	73
1980	73	84	75	74	73
1981	73	85	75	74	73
1982	73	86	76	75	73
1983	76*	86	76	75	75

Source: World Steel Dynamics, Core Reports J and O

*Preliminary

Yields are an important measure of efficiency. According to this measure, the U.S. industry is generally less efficient than Japanese producers. There are several reasons for this. One major reason has to do with differences in product mix, since complex, higher value products inherently entail lower yields. Since the U.S. product mix is more sophisticated than that of its foreign competitors, U.S. yields will necessarily lag behind. More significant, however, is the fact that U.S. yields have been suppressed because of the inadequacy of the industry's cash flow since the late 1960s. This retarded the industry's investment in continuous casting, a technology which greatly improves yields and which became commercially viable on a large scale during the 1970s. Foreign competitors have moved more rapidly to continuous casting, although in many cases (particularly in Europe) internal cash flow has been even lower than in the U.S. In the E.C., governments have provided more than \$30 billion to their steel industries over the past 10 years. The comparisons of output by the continuous casting method are contained in Table 8.

Table 8

CONTINUOUS CASTING
PERCENTAGE OF 1983 SHIPMENTS

United States	29.7
Japan	81.4
West Germany	69.6
France	63.3
United Kingdom	46.4

Source: WSD

It is remarkable that through a combination of other efficiencies, U.S. yield is as high as it is, with such a low percentage of continuous casting in the industry. The potential for further reductions in costs, (including energy costs) through a higher casting rate, is, therefore, much higher in the U.S. industry than among its major competitors.

Summary

What do these data tell us about the overall competitiveness of the U.S. steel industry in terms of efficiency? They show that the U.S. steel industry is still relatively competitive, although behind Japan in some respects. If the U.S. is compared only with its European competitors, where the distortions caused by subsidies and trade barriers have been most apparent, the U.S. industry is highly competitive, in two of these three basic measurements of efficiency.

Certainly there is no justification for the view that average practice in the U.S. is inferior to average practice in Europe. Nonetheless, the trends in these data are disturbing. Should they continue, the relative balance of competitiveness will eventually be altered, to the disadvantage of the U.S. industry. Thus, these data also show the necessity of timely and aggressive action now to expand the present level of industry competitiveness.

Labor Costs

Currently, American steelworkers are among the most highly compensated industrial workers in the world. Average employment costs in the steel industry were over \$22 at the end of 1983. Many of our steelworkers have been laid off as a result of the steel industry crisis, and the industry will probably never return to the levels of employment prevailing five years ago.

International Labor Cost Comparisons

We have already demonstrated the current high level of U.S. productivity in the production of carbon steel. But substantial advantages in labor productivity can be offset by high employment costs. Employment costs in the American steel industry have had exactly this effect: the U.S. advantage in labor productivity at actual operating rates is offset by high hourly employment costs.

Trends in Employment Costs

The U.S. disadvantage is starkest in terms of hourly employment costs (Table 9). Roughly parallel trends in the growth of employment costs increase the absolute disadvantage for the U. S. steel industry.

Table 9
HOURLY EMPLOYMENT COSTS
(In Dollars, at Actual Operating Costs)

	<u>U.S.</u>	<u>Japan</u>	<u>West Germany</u>	<u>France</u>	<u>U.K.</u>
1973	7.89	4.04	5.63	4.71	2.94
1974	9.29	5.00	6.59	5.29	3.61
1975	10.83	5.54	7.61	7.23	4.56
1976	12.18	5.81	8.04	7.64	4.44
1977	13.44	7.00	9.38	8.48	4.81
1978	14.73	9.44	11.55	10.56	5.93
1979	16.39	9.73	13.55	12.91	6.68
1980	19.06	10.24	14.92	15.38	9.96
1981	20.78	11.55	13.18	12.65	9.56
1982	24.67	10.89	13.27	12.14	9.14
1983 3Q Avg	24.07	11.89	12.91	13.22	8.0
1983 3Q	23.19	11.74	12.22	12.53	7.86

Source: WSD

Steel Employment Costs and the Manufacturing Average

The premium paid to U.S. steelworkers versus the manufacturing average has been widening. Steelworkers all over the world are relatively high-paid workers. This is due to the fact that the steel industry tends to be highly unionized, the work is skilled, and often hot and hazardous. Yet the premium paid to steelworkers in the U.S. during the 1970s increased dramatically (from 133% in 1970 to 175% in 1981), so that it now far exceeds the premium paid in other countries. The divergence between employment costs in the steel industry and the manufacturing average shows more clearly than absolute employment costs the vulnerable position of steelmaking in the U.S.

Industries whose employment costs far exceed the manufacturing average will suffer a competitive disadvantage versus their international rivals. This is now the situation facing the U.S. steel industry. During the 1960s, the premium in U.S. steel employment costs actually decreased and was only marginally above the European average. This relationship broke down in the 1970s. Although the steel premium in Japan approaches that in the U.S., this is misleading. The Japanese data exclude lower-paid contract workers, who make up between 40 and 50% of the steel labor force. Inclusion of this component would likely lower the actual Japanese steel premium to near the European level -- leaving the U.S. in an isolated and highly vulnerable position. Thus, even as the productivity advantage of the U.S. steel industry eroded in the 1960s and 1970s, its employment cost disadvantage increased.

Unit Labor Costs

Unit labor costs are shown on Table 10. These combine productivity and hourly employment cost data to describe unit labor costs for the U.S. steel industry and its chief competitors.

Table 10
UNIT LABOR COSTS
(Dollars Per Ton Shipped at Actual Operating Rates)

	<u>U.S.</u>	<u>Japan</u>	<u>West Germany</u>	<u>France</u>	<u>U.K.</u>
1976	107.03	98.7	93.67	124.93	85.4
1977	120.41	69.79	118.31	122.39	103.4
1978	119.81	89.99	137.77	134.36	129.88
1979	136.17	83.31	134.4	128.04	125.67
1980	158.86	85.17	149.29	156.83	410.79 *
1981	168.0	98.09	131.63	129.86	131.33
1982	194.64	87.99	147.04	132.53	122.42
1983 3Q Avg	161.78	93.0	140.16	126.57	85.20
1983 3Q	150.76	85.5	140.58	136.05	90.78
Annual Rate of Increase	6.4%	7.3%	6.2%	3.5%	-0.2%

* Strike year
Source: WSD

The U.S. industry must, and is now beginning to, reverse the trend resulting in the gradual elimination of its productivity advantage, combined with rapidly increasing employment costs. The continued viability of steel production in the United States and the future of steelworker jobs are now dependent on containing recent trends in employment costs. They are also dependent upon revisions in work rules and operating practices which would boost the industry's rate of productivity growth. Labor and management both share the responsibility for this distortion and each must play a significant role in its reversal.

The steel labor contract, which went into effect in March 1983, represents a step towards eliminating the labor-cost disadvantage of American steel producers. It reduces wages by \$1.25/hr., although this reduction will be restored through the life of the contract. The contract also reduces COLA benefits, vacation and paid holiday allowances. For their part, steel firms are committed to investing these savings in existing plants and to extending supplemental unemployment benefits to laid-off steelworkers.

This agreement is an important first step, an indication that both labor and management are committed to strengthening the competitive standing of their industry.

CAUSES OF THE AMERICAN STEEL TRADE PROBLEM

The major causes of America's steel trade problem are the existence of substantial excess capacity abroad, the increase of foreign government control, subsidization and targeting of steel, and generally ineffective U.S. Trade Law enforcement. All of these had a direct effect on the flow of imports into the U.S. market.

Profit Record of Steel Producers

After the boom years of 1973-74, the world steel industry underwent a severe downturn. In part, this reflected overall weakness in the economies of industrialized countries, where growth has been sluggish since 1974, accentuated by the overhang of excess steel capacity on declining demand. The best indicator of the severity of the impact on steel is the profit record of steel producers.* Table 11 presents some data on the post-1974 profitability of major steel firms in the principal steel producing regions of the world (Europe, Japan, and the U.S.). This table clearly shows what has occurred in the world steel industry during this period. European producers amassed losses approximating 15 billion dollars from 1975 to 1980. While Japanese and North American producers earned profits in that period, margins have generally been thin. When steel segment operations alone are considered, West German, Japanese, and U.S. producers incurred operating losses in several of these years.

* Calculated from data provided by World Steel Dynamics, the only public model based upon statistical data on steel issued by steel industries and their governments. Developing country data is not generally available.

TABLE 11

CONSOLIDATED RETURN ON SALES: NET INCOME/SALES (%)
(major producers)

	1975	1976	1977	1978	1979	1980	1981	1982
U.S.	4.3	3.3	0.4	2.5	2.1	3.0	3.9	-6.3
Japan	0.6	0.9	0.6	1.8	3.3	2.9	1.9	1.5
W. Germany	1.4	1.1	0.1	0.3	0.4	0.6		
France	-15.9	-10.7	-23.5	-14.0	-10.1	-11.5		
UK	-10.8	-3.1	-14.1	-9.4	-17.6	-22.6		
Italy	-4.0	-5.9	-17.6	-13.4	-8.3	-20.4		
Belgium	-7.9	-2.6	-13.9	-10.2	-2.5	-9.4		
Canada	6.0	4.5	4.9	6.2	7.1	7.4		

Source: World Steel Dynamics, "Financial Analysis of International Steelmakers."

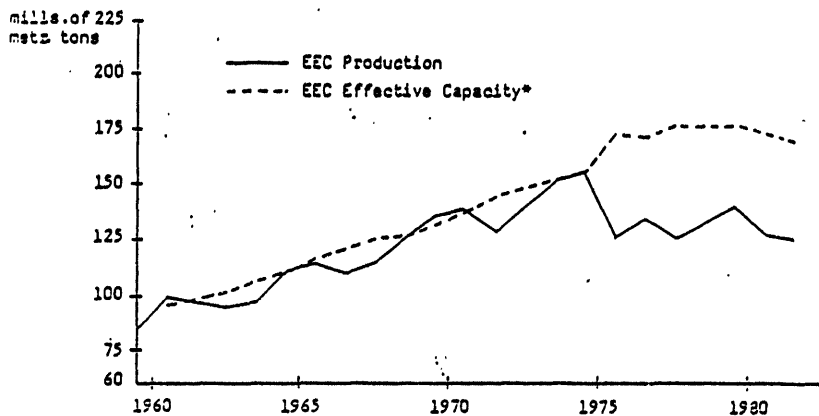
Massive and persistent losses show that the present problems of the world steel industry are structural rather than cyclical. These problems have arisen largely from foreign government actions, yet they have resulted in increased foreign government involvement. Rather than accept the losses in employment and foreign earnings which would result from the bankruptcy or reorganization of steel firms, many governments -- especially in Europe and in developing countries -- have increased their subsidies for steel industries. This has intensified the underlying problems resulting in the politicization of international steel trade and the near breakdown of the market mechanism. There are many causes of this, but the principal cause is the development of excess capacity worldwide, which began in the late 1960s.

European Capacity and Production

The historical trends in output and capacity in the European Community are described in Figure 1. This provides clear evidence of the extent to which capacity expansions accentuated the effects of weak demand for European steel. While European capacity and production maintained a fairly close relationship during the 1960s, they began to diverge sharply after 1975. Since that time, even peak years (such as 1979) have coincided with dangerously low operating rates.

Figure 1

EUROPEAN CAPACITY AND PRODUCTION, 1960-1982



* assumed to be 87% of gross, rated capacity.

Source: WSD, Steel Strategist #6 (August, 1982)

The construction of excess capacity was not limited to Europe. Table 2 provides some evidence on the rate of capacity increases in several national steel industries, relating this to the increase in domestic demand.

TABLE 12
CAPACITY VS. CONSUMPTION

	Crude Steel Capacity (million of m. tons)			Apparent Steel Consumption (million of m. tons crude steel equivalent)		
	avg., 1969-70	avg., 1979-80	annual rate of growth (%)	annual rate of growth (%)	avg., 1969-70	avg., 1979-80
Belg-Lux.	19.9	26.8	3.0	-1.6	4.56	3.89
France	25.2	32.3	2.5	-0.6	23.0	21.69
Germany	49.7	68.7	3.3	-0.5	40.98	39.08
Italy	19.5	37.2	6.7	3.0	20.21	27.25
UK*	29.1	28.7	-0.2	-2.1	24.98	20.65
Japan	81.0	156.9	6.8	2.4	67.15	84.90
U.S.	140.5	140.1	...	-0.1	132.95	131.14

*Calculation made for 1978-79 to eliminate effects of 1980 strike.

Sources: U.N. statistics for capacity, OECD statistics for apparent consumption.

This table shows that during the 1970s the major European countries and Japan had growth in capacity exceeding the growth in consumption, but that the United States did not. In almost all other countries, substantial investments were made to increase capacity which domestic markets could not absorb. As a result, many industries, were, in effect, forced to rely on export markets to boost or maintain operating rates.

It now appears that overaggressive expansion on the part of the Japanese steel industry was a serious strategic mistake. The prosperity and efficiency of the Japanese industry has been based on rapid expansion ahead of the market, providing significant economies of scale. Economies of scale quickly turn into diseconomies, however, when operating rates fall. As world steel demand has remained weaker than the forecasts projected in the early 1970s, excess capacity in the Japanese steel industry has continued to be a persistent problem. That industry is now facing cash-flow constraints, relatively high financial costs, and significant physical inefficiencies due to the logistical problems of running large facilities at much lower rates than those for which they were designed.

Overexpansion has led to even more difficult problems in Europe. It is doubtful that firms run by private managers would have pursued the kind of capacity expansion described in Table 12. In Europe, the availability of government funding (either directly or through loan guarantees) and political pressure for expansion were the key elements leading to the boom in steel capacity between 1965 and 1975. Yet, the politicization of investment decisions during that period has been a major cause of Europe's present crisis of excess steel capacity.

In the advanced developing countries, overexpansion of the steel sector has led to a vicious cycle of growing foreign debt, industry losses, government subsidies and unfair trade. Despite falling demand worldwide, the developing world has added some 50 million tons of new capacity since 1975. Since steel industries in the developing world (especially integrated plants) are for the most part government-owned and protected, this has accentuated the

world overcapacity problem. It has done so by intensifying competitive pressures in export markets in general, and in particular in the U.S. market. Thus, U.S. steel imports from countries outside the EC, Canada and Japan, which had averaged 3.5 percent of apparent supply in the period 1979-81, rose to 5.3 percent in 1982 and to 7.6 percent in 1983 (including 8.5 percent in the second half of 1983 and nearly 10 percent so far in 1984).

Agreements to Allocate Markets

The drive to export has been linked to a related but contradictory response to the crisis of excess capacity: the effort to restrict imports. The most public examples of strict import restrictions are in Europe. Since the onset of the European steel crisis in 1975, the EEC has sought to coordinate an extensive program of market controls, regulating prices and allocating markets. Viscount Davignon of Belgium, who controls the administration of this EEC program, justified it in the following terms:

The steel industry is a key factor in our independence; Europe cannot therefore allow responsibility for its steel supplies to pass outside the Community for the sake of the international division of labor.*

By the spring of 1978, agreements had been concluded with all major exporters to the European market, stringently limiting imports into the EEC. These limitations have been regularly renewed and are still in effect. Tied to the drive to boost exports, this led to an increase in Europe's positive steel trade balance by the end of the 1970s, a point which also applies to Japan (see Table 13).³ In effect, these agreements left much of the world steel market subject to a cartel-like arrangement.

* A.F. Lowenfeld. Public Controls on International Trade (New York, 1979) p. 285.

TABLE 13
 Steel Trade Balance: U.S., Japan, and EEC -- 1971-81
 (Millions of net tons)

	<u>U.S.</u>	<u>Japan</u>	<u>EEC (9)</u>
1971	-15.48	25.42	16.57
1972	-14.81	22.90	16.18
1973	-11.10	27.07	19.73
1974	-10.14	35.19	29.36
1975	-9.06	31.68	22.87
1976	-11.63	39.44	13.60
1977	-17.30	36.50	18.43
1978	-18.71	33.54	25.97
1979	-14.70	32.11	23.37
1980	-11.39	31.38	19.96
1981	-16.99	29.60	26.72

Note: Positive number represents trade surplus.

Source: AISI for U.S., IISI for Japan and EEC (OECD for 1981)

The extensive network of European quotas is described in Table 14.

It is ironic that European steel exporters have criticized as "protectionist" the legal action against subsidized and dumped imports taken by the U.S. steel industry, while at the same time maintaining strict control over imports into their own market. The Japanese, who have a competitive cost advantage against European producers, shipped only about 300,000 net tons into the EEC during 1983. Japanese shipments to the U.S. market in 1983 were 14 times greater.

TABLE 14
EEC Imports, Quotas, and Import Penetration

Monthly Averages	1979	1980	1981	1982 Jan-June	1982 annual 1981-82	% of EEC apparent consumption 1981	% of EEC apparent consumption Jan-June 1982
EEC apparent consumption (1000 tons)	6,344.2	6,052.7	5,886.4	6,156.6			
Imports from (tons):							
Greece	511,498	442,818	323,827	465,349	7,512,153†	5.67	7.42
of which: Hungary	23,251	21,043	18,866	22,243	371,328	2.37	2.36
Czechoslovakia	51,583	44,882	41,848	54,233	687,758	0.71	0.88
Rumania	27,879	22,812	18,117	26,007	394,353	0.36	0.42
Bulgaria	41,218	21,262	13,823	23,693	282,919*	0.24	0.28
Poland	26,053	27,228	22,540	29,297	432,618**	0.56	0.47
Austria	86,446	77,283	78,763	84,150	1,017,200	1.30	1.27
Finland	28,998	19,842	26,438	23,778	389,000	0.43	0.37
Norway	14,455	12,864	16,422	14,819	168,000	0.26	0.24
Sweden	49,840	42,229	36,862	49,438	679,000	0.88	0.80
Spain	52,696	78,963	87,822	104,068	780,000	0.98	1.21
Japan	41,084	36,858	6,372	10,214	1,220,000	0.11	0.17
South Korea	6,226	23,416	62	9,042	229,000	0.09	0.19
Australia	10,686	13,282	2,248	4,888	467,350	0.64	0.68
Imports from non- EEC countries:							
Total	120,141	170,264	97,979	217,793		1.86	3.34
Total	671,668	612,988	491,526	677,542		7.23	11.22

† Valued Britain by iron quota of 253,400 tons. ** Plus 102,860 tons of iron. *** Plus 23,000 tons of iron.

Source: Metal Bulletin, November 10, 1982

In Japan, there have been similar (if less public) restrictions on steel imports, especially from low cost producers in Korea and Taiwan. Recently a published article appeared in the Japan Metal Bulletin, stating that the Japanese Steel Importers Association (formed in November 1983) had in January "voluntarily agreed" to cut back the amount of steel imports to a level not exceeding 3 percent of the total market.

In developing countries, import restrictions have been even more severe. Argentina, for example, requires import licenses for all flat rolled steel products, and such licenses are almost impossible to get. Many other developing countries rely either on high tariffs or licenses to limit steel imports. In Brazil, the most extreme example of protectionism is the so-called "Law of Similars." It means that anything that is made in Brazil cannot be imported without permission, regardless of the sufficiency of domestic production.

Subsidization and Nationalization

As world steel industry problems intensified, private firms gave way to government control. In late 1978, major steel producers were effectively nationalized in France and Belgium. According to private European steel producers, fully 70% of all the steel companies in Europe are dependent on the state; about half of the EEC's total production is now under direct government control.

The employment effects of steel mill rationalization in certain regions of Belgium and France caused national political concerns. Governments intervened to protect domestic steel producers, representing a camouflaged form of unemployment insurance. Rather than face political unrest, European governments have subsidized continued production in inefficient steel plants. Such practices, however have entailed enormous costs.

Total European subsidies, actual and projected, have been estimated at an incredible 80 billion marks for the period 1975-1985 - over \$30 billion even at present exchange rates. Government funds have been devoted not just to covering operating losses; they have also been applied to modernization and investment - all under the guise of "restructuring." Table 15, below, excerpted from Agence Europe, documents the extensive amount of state aid provided by European governments to their steel industries. The total estimate is approximately \$34 billion.

TABLE 15 State Aid for Restructuring
(millions of ECUs)

Country	Aid Notified	Approved	Approved Conditionally	Declared Incompatible
Belgium	4.304	1.721	2.196	414
Cockerill-Sambre	3.648	1.582	2.096	
Denmark	31	31		
F.R. Germany	4.314	700	3.814	
Arbed Saarstahl	1.048	664	361	
Hoesch	1.014	92	992	
Kloeckner-Nachuette	387	31	356	
Krupp	514	3	516	
Paine-Salzgitter	223		223	
Thyssen	693		693	
Greece	6			6
France				
Sedilor and Usinor	7.813	3.301	2.112	
Ireland	231	96		135
Italy	10.270	1.661	3.609	
Finsider	6.851	495	5.156	
Luxembourg	340	144	196	
Netherlands				
Hoogovens	314	94	220	
United Kingdom				
British Steel Corp.	5.763	3.069	2.674	
Total	33.638	13.190	19.891	155

6-I&SM, FEBRUARY 1984

The restructuring of the European steel industry has as its publicly announced goal the reduction of capacity to redress the balance between potential supply and demand. Recognition of this need has come fairly late in Europe - after other responses had failed to resolve the crisis. Recently, however, restructuring has been the key word for European planners. Continued government subsidies are now justified as necessary components of restructuring. European producers now justify increased subsidies by a rather peculiar logic: the old subsidies were bad, and future subsidies must be avoided, but present subsidies are necessary. The subsidies now being granted are allegedly designed to "restructure" the European steel industry so that future subsidies are not needed.

With the exception of Britain, however, many European countries are now subsidizing the replacement of inefficient facilities with new ones - with insufficient reduction in capacity. "Restructuring" subsidies will not adjust European production along lines suggested by competitive relationships (which would entail far greater capacity reductions than are occurring), but instead they will ensure that the capacity reductions occur elsewhere - presumably where steel operations and investment are not state-supported.

Unprecedented government involvement, allegedly designed to restructure European steel production on a profitable basis, has instead distorted the market mechanism and propped up inefficient producers for political reasons. The principal victims of such programs - besides European taxpayers - have been the relatively efficient private firms, which are being pushed into bankruptcy by competition from state-supported industries willing and able to sell steel at prices well below their costs of production.

While government involvement in Japan is more subtle, MITI and other agencies are deeply involved in a restructuring program. In general, the Japanese steel industry is reducing large increments of capacity and shifting to a maintenance mode, where investment is designed to raise the efficiency of existing facilities rather than to expand capacity. While Japanese subsidies do not seem to be widespread at this time, the government has controlled raw materials prices (including oil) and management of the adjustment process. As a result, buying and selling cartels have developed in both Europe and Japan; these cartels have even reached some agreements on dividing up other markets.

In countries such as Brazil, Korea and Taiwan - countries which already have significant excess capacity - there are continuing efforts to expand capacity based on policies of import substitution and export promotion. Government ownership, control and subsidization of steel is a basic fact of economic life in these countries. In Brazil, Mexico and South Korea government ownership ranges between 68 and 75 percent, and these percentages are all expected to increase in coming years as new government projects come on line. Meanwhile, increasing government subsidies in such countries continue to distort trade and injure U.S. producers. Equally alarming is the fact that our major foreign competitors in Europe and Japan are continuing to provide subsidized financing for their exports of steelmaking equipment to the developing world, yet these same countries severely limit their imports of steel from the plants they help fund.

The Struggle Over Where Retrenchment Will Occur

Until excess capacity abroad is reduced, our steel trade crisis will persist. Government involvement has generally kept the market from determining where capacity reductions should occur. It is the least efficient facilities which should be retired - yet many of these plants are receiving subsidies in Europe and elsewhere. Should these plants survive and more efficient private plants be closed, the net loss to the world economy in terms of efficiency will be substantial. More significant is the fact that jobs and income will be lost in regions which have resisted playing the subsidies game. This is the key factor in the present steel trade problem.

In some ways the U.S. steel industry was better able to cope with foreign excess capacity than its international counterparts - at least until the catastrophic downturn of 1982-83. This provides some evidence of the advantages of a private, market-based industry. The U.S. industry has not expanded its capacity, even though it cannot supply all of its home market in a year of strong demand. Yet in many ways the U.S. steel industry has suffered most from the over-expansion of world steel capacity. Our trade laws have not prevented the U.S. market from being seriously injured by surging imports of unfairly traded steel. The U.S. steel market is the most open major steel market in the world, and U.S. sales are the chief "spoils" in the intense struggle for exports among countries with substantial excess capacity. Most significantly, U.S. producers are dependent on private capital markets for funds. Inefficient operations are sustained abroad via government supports, but no such props exist for U.S. firms, regardless of relative efficiency.

As we have noted, the market mechanism in steel has been more or less dismantled outside the United States. As a result, the price information which the market provides is misleading in regard to where capital should be invested, or where retrenchment should occur. Furthermore, the distorting effects of government intervention have been intensified by recent trends in exchange rates.

The messages given by market prices for steel from many foreign sources do not reflect underlying competitiveness of these sources. The surge of imported steel since 1980 stems largely from intervention

by foreign governments and from the disastrous effects of an overvalued dollar. If we look behind these factors, it is demonstrable the underlying competitive standing of the American steel industry is still relatively strong. There is clearly no basis for arguing that immutable factors support further massive contraction in the U.S. industry, or that government policies designed to assist the industry cannot reverse its current decline.

Mr. Chairman, there has been no definitive response from a succession of Administrations to the trade distortions we have outlined in this statement. Accordingly, we now urge the Congress to begin the process of returning some equity to the trade in steel by enacting H.R. 5081, the Fair Trade in Steel Act. This legislation would limit steel imports for five years to the average level which occurred in the 1970s, while we further modernize, a level higher today than that allowed by any other advanced industrial country (including the EC as one trading unit). This would be a moderate response of the U.S., Mr. Chairman, to the outrageous conditions we have described affecting world trade in steel.

STATEMENT OF JAMES E. CHENAULT, JR., PRESIDENT AND CHIEF EXECUTIVE OFFICER OF
LONE STAR STEEL Co.

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I AM JAMES E. CHENAULT, JR., PRESIDENT AND CHIEF EXECUTIVE OFFICER OF LONE STAR STEEL COMPANY. I AM PLEASED TO BE A MEMBER OF THIS PANEL AND TO APPEAR BEFORE YOU THIS MORNING TO DISCUSS THE EFFECTS OF SUBSIDIZED AND/OR DUMPED FOREIGN STEEL ON THE PIPE AND TUBE SEGMENT OF U. S. STEEL INDUSTRY.

LET ME BEGIN BY GIVING YOU A BRIEF PICTURE OF MY COMPANY AND ITS OPERATIONS. LONE STAR IS RATHER UNIQUE IN THE STEEL INDUSTRY. OUR OPERATIONS ARE ENTIRELY SPECIALIZED IN THE PRODUCTION OF STEEL PIPES AND TUBES, PRIMARILY CASING AND TUBING FOR USE IN OIL AND GAS WELLS -- OFTEN REFERRED TO AS OIL COUNTRY TUBULAR GOODS, OR SIMPLY OCTG.

DESPITE OUR RELATIVELY SMALL SIZE COMPARED TO SOME OF THE OTHER COMPANIES REPRESENTED ON THIS PANEL, LONE STAR HAS BEEN CONSISTENTLY AMONG THE TOP THREE DOMESTIC PRODUCERS OF OCTG. WE OPERATE AN EFFICIENT, FULLY-INTEGRATED PLANT LOCATED IN NORTHEAST TEXAS, AND ARE SITUATED IN CLOSE PROXIMITY TO OUR MARKETS.

OUR PRODUCTS ARE SOUGHT THROUGHOUT THE WORLD FOR SPECIALIZED APPLICATIONS. SINCE 1975, WE HAVE REINVESTED OVER \$500 MILLION DOLLARS TO UPDATE AND IMPROVE OUR MILL FACILITIES. WE HAD PLANS FOR FURTHER EXPANSION WHICH WERE CANCELLED PRIMARILY BECAUSE OF CONTINUED HIGH LEVELS OF IMPORTS.

IN SHORT, WE HAVE DONE EVERYTHING WE CAN TO MAKE OURSELVES EFFICIENT AND COMPETITIVE IN WORLD MARKETS. YET EACH YEAR, WE FIND OURSELVES MORE AND MORE CROWDED OUT OF OUR TRADITIONAL MARKETS BY WHAT WE CONSIDER TO BE SUBSIDIZED OR DUMPED FOREIGN STEEL SELLING AT PRICES UP TO 50% BELOW OUR PRICES.

LET ME CITE A FEW STATISTICS WHICH UNDERLINE THE SERIOUSNESS OF THE PROBLEMS IN THE OCTG MARKETS, WHICH REPRESENT THE LION'S SHARE OF OUR BUSINESS. IN 1979, IMPORTS ACCOUNTED FOR APPROXIMATELY 20% OF THE U. S. OCTG MARKET. BY 1981, AT THE HEIGHT OF THE DRILLING BOOM, IMPORTS HAD RISEN TO 41%, AND THEIR SHARE OF THE MARKET CONTINUED TO INCREASE IN 1982 AND 1983 WHILE USAGE AND DOMESTIC SHIPMENTS DROPPED PRECIPITOUSLY. THE DRILLING BOOM WAS OVER.

THIS CONTINUED INCREASE IN IMPORTS CAUSED AN INVENTORY BUILDUP UNPRECEDENTED IN THE HISTORY OF THE OCTG INDUSTRY AND WAS ACCOMPANIED BY WHAT WE CONSIDER TO BE PREDATORY PRICING PRACTICES. DURING THE FIRST QUARTER, 1984, THE LATEST PERIOD FOR WHICH WE HAVE STATISTICS, IMPORTS OF OCTG HAVE TAKEN 59% OF THE U. S. MARKET.

HOW HAS THIS FLOOD OF IMPORTS AFFECTED THE U. S. INDUSTRY? IN OUR OWN CASE, IT WAS THE REASON WE FOUND IT NECESSARY TO CLOSE OUR MILL IN AUGUST, 1982, AND LAY OFF OVER 4,000 OF OUR EMPLOYEES. WE HAVE EXPERIENCED MUCH LOWER DRILLING ACTIVITY THAN WE SAW IN 1982, BUT HAVE NEVER FACED THE ONSLAUGHT OF TARGETED IMPORTS AS WE HAVE BEEN AND CONTINUE TO EXPERIENCE.

LONE STAR IS ONE OF THE LARGEST SINGLE EMPLOYERS IN EAST TEXAS. OUR CLOSING HAS HAD A DEVASTATING EFFECT ON THE LOCAL ECONOMY. WE SUFFERED A LOSS OF \$100 MILLION DOLLARS IN 1983. OUR LOCAL PURCHASES DECLINED BY \$235 MILLION DOLLARS. OUR EMPLOYMENT COSTS DROPPED \$85 MILLION DOLLARS. I HAVE SEEN THE HUMAN SIDE OF THE PROBLEM -- THE DESPAIR AND THE BROKEN HOMES

OF MEN AND WOMEN WHO HAVE BEEN WITH US FOR 15-20 YEARS AND NOW STAND IN LINE TO BUY WITH FOOD STAMPS. ALTHOUGH A RESURGENCE OF DRILLING ACTIVITY HAS ALLOWED US TO MOVE GRADUALLY TO 40-50% OF CAPACITY, THOSE SLIGHT GAINS COULD EASILY BE WIPED AWAY BY CONTINUED IMPORTS AS IN FEBRUARY.

HOW CAN AN EFFECTIVE, COMPETITIVE PRODUCER SUCH AS LONE STAR SURVIVE WHEN THE SHIPMENTS FROM OVERSEAS PRODUCERS HAD NO REAL RELATIONSHIP TO DEMAND AND THE PRICES LITTLE RELATIONSHIP TO THE COST OF PRODUCTION? HOW CAN WE WHO MUST PRODUCE AND SELL PROFITABLY TO SURVIVE COMPETE AGAINST COMPANIES AND COUNTRIES WHOSE PRIME OBJECTIVE IS TO PRESERVE THEIR OWN EMPLOYMENT AND EXPORT, ALONG WITH THEIR DUMPED AND SUBSIDIZED PRODUCTS, THEIR UNEMPLOYMENT.

WE HERE IN THE UNITED STATES, THE LEADING INDUSTRIAL NATION OF THE FREE WORLD, HAVE MANY RESPONSIBILITIES. SOME OF THOSE ARE TO OUR TRADING PARTNERS. BUT SHOULD THOSE RESPONSIBILITIES TRANSCEND OUR RESPONSIBILITIES TO OUR OWN DOMESTIC INDUSTRIES.

THE CONTINUED DELUGE OF IMPORTS DURING TIMES OF DECREASED MARKET DEMAND HAVE PRECLUDED OPERATING RATES OF DOMESTIC PRODUCERS SUFFICIENT TO GENERATE CAPITAL TO FURTHER MODERNIZE OR REPLACE OLD PRODUCTION FACILITIES.

WE HAVE A SERIOUS PROBLEM IN THIS RESPECT.

MR. CHAIRMAN, WE CONTINUED TO OPERATE AT A LOSS DURING THE FIRST QUARTER OF 1984.

CLEARLY, OUR CURRENT INTERNATIONAL TRADE LAWS AND POLICIES ARE NOT ADEQUATE TO ADDRESS THIS PROBLEM -- AND IN SOME CASES HAVE ACTUALLY BEEN COUNTER-PRODUCTIVE. AN EXAMPLE IS THE PIPE AND TUBE ARRANGEMENT WHICH WAS CONCLUDED TOGETHER WITH THE NON-TUBULAR PRODUCT U.S.-E.C. ARRANGEMENT IN LATE 1982. THESE ARRANGEMENTS WERE TO REMEDY THE INJURY BEING CAUSED BY SUBSIDIZED STEEL FROM THE E.C. IN THE CASE OF PIPE AND TUBE, IMPORTS WERE TO BE LIMITED TO THEIR 1979-81 AVERAGE. A SPECIFIC ENFORCEMENT MECHANISM WAS ESTABLISHED FOR CARBON STEEL PRODUCTS OTHER THAN

PIPE AND TUBE. THIS PROCEDURE HAS, TO A LARGE EXTENT, SUCCESSFULLY REDUCED THE IMPORTS OF STEEL OTHER THAN PIPE AND TUBE.

BUT THIS SUCCESS HAS BEEN OUR MISFORTUNE. TONNAGE OF THIS STEEL HAS BEEN DIVERTED TO PIPE AND TUBES WHERE THERE WAS NO SPECIFIC ENFORCEMENT PROCEDURE. SINCE 1982, E.C. SHIPMENTS IN OUR PRODUCT LINE OF OCTG HAVE MORE THAN DOUBLED THEIR 1979-81 AVERAGE SHARE WHILE WE HAVE PLEADED WITH COMMERCE DEPARTMENT TO ENFORCE THE ARRANGEMENT.

FINALLY, IN APRIL, 1984, AFTER MORE THAN A YEAR AND A HALF OF ASSURANCES THAT "NEXT MONTH" YOU WILL SEE IMPORTS DROP -- COMMERCE OFFICIALLY REQUESTED "CONSULTATIONS" WITH THE E.C. TO DETERMINE WHAT CAN BE DONE TO OBTAIN COMPLIANCE BY THEM. TO DATE, WE HAVE NOT BEEN ADVISED OF ANY POSITIVE RESULTS OF THE CONSULTATIONS. WE WOULD HOPE FOR IMMEDIATE RESPONSE, OTHERWISE, THE ARRANGEMENT MAY BECOME HISTORY, AND WE WILL HAVE BEEN BURIED BY THE DELUGE DIVERTED BY OUR GOVERNMENT. AND THE E.C. REPRESENTS ONLY A PART OF THE PROBLEM.

MR. CHAIRMAN, I WOULD LIKE TO CONCLUDE ON ONE FINAL POINT, I HAVE SPENT MY ENTIRE WORKING LIFE IN THE STEEL INDUSTRY -- THE FIRST 30 YEARS AS A PRODUCER AND SUPPLIER OF EQUIPMENT AND TUBULARS TO THE OIL AND GAS INDUSTRY ON A WORLDWIDE BASIS. LATER, I WAS RESPONSIBLE FOR RESOURCE DEVELOPMENT FOR U. S. STEEL, AND SINCE 1980, AS PRESIDENT AND CHIEF EXECUTIVE OFFICER OF LONE STAR STEEL. I HAVE SEEN TREMENDOUS CHANGES IN THE STEEL INDUSTRY. I RECALL WHEN STEEL WAS REGARDED AS THE BACKBONE OF THE AMERICAN ECONOMY. TODAY I SEE AN INDUSTRY FACING UNPRECEDENTED WORLD ATTACK. SINCE 1975, OUR TOTAL WORK FORCE HAS DRASTICALLY DECLINED. QUITE LIKELY IT WILL DECLINE STILL FURTHER UNTIL WE ARE ABLE TO COME TO GRIPS WITH THE IMPORT CHALLENGE.

SPEAKING FOR LONE STAR AND, I BELIEVE, FOR THE REST OF THE INDUSTRY, I AM READY TO FACE THIS CHALLENGE. WE HAVE THE TECHNOLOGY; OUR WORK FORCE HAS THE DRIVE AND DETERMINATION. AT LONE STAR, WE HAVE ALREADY INVESTED HUNDREDS OF MILLIONS OF DOLLARS TO MODERNIZE.

WHAT WE SEEK IS THE ABILITY TO ACCEPT THIS CHALLENGE ON A FAIR AND EQUAL FOOTING WITH OUR FOREIGN COMPETITORS. WE CAN COMPETE AGAINST OTHER COMPANIES -- WE CANNOT COMPETE AGAINST GOVERNMENTS. EITHER WE ACT NOW, MR. CHAIRMAN, TO ADDRESS THESE PROBLEMS, OR WE CONDEMN THE AMERICAN TAXPAYER TO FOREVER BEAR THE COST OF THE FOREIGN EXPORT OF THEIR UNEMPLOYMENT TO OUR SHORES.

THE CURRENT SITUATION IN STEEL REQUIRES AN EXTRAORDINARY SOLUTION. THERE ARE HUNDREDS OF SEPARATE STEEL MILL PRODUCTS (FOR EXAMPLE, THERE ARE 393 TSUSA LINES FOR STEEL MILL PRODUCTS). THERE ARE 1,930 STEEL PRODUCERS IN 96 COUNTRIES. OVER-CAPACITY EXISTS IN ALMOST EVERY PRODUCT LINE. IN OCTG, FOR INSTANCE, CAPACITY IN THE UNITED STATES WILL BE ABOUT 200% OF EXPECTED DEMAND THROUGH 1990. THIS RATIO OF CAPACITY TO DEMAND INCREASES TO 300% WHEN WORLDWIDE CAPACITY AND DEMAND ARE CONSIDERED. IN MANY COUNTRIES, THE ESTABLISHMENT OF A STEEL INDUSTRY IS A NATIONAL POLITICAL PRIORITY.

WHAT THIS ALL MEANS IS THAT AS SOON AS TRADE VIOLATIONS ARE ESTABLISHED AGAINST MILLS IN ONE COUNTRY ON ONE PRODUCT, THESE MILLS WILL SWITCH TO ANOTHER STEEL PRODUCT. OTHER MILLS IN OTHER COUNTRIES THEN PICK UP THE MARKET FOR THE FIRST PRODUCT. FAIR TRADE HAS NO SIGNIFICANCE IN THESE CIRCUMSTANCES. THE RESULTING TRADE CASES NOT ONLY WILL BE FOREVER CHASING THE RABBIT, BUT WILL EVENTUALLY OVERWHELM OUR TRADE LEGAL SYSTEM BY THEIR VOLUME.

THE SOLUTION MUST BE SOON AND EFFECTIVE. CONGRESS CAN PROVIDE THIS SOLUTION. THE SATISFACTORY RESULTS WILL BE AN EFFECTIVE, MODERN, COMPETITIVE, AND PROFITABLE DOMESTIC STEEL INDUSTRY, PROVIDING DIGNIFIED AND MEANINGFUL JOBS FOR HUNDREDS OF THOUSANDS OF AMERICANS.

MR. CHAIRMAN, THIS CONCLUDES MY PREPARED REMARKS. I WOULD BE PLEASED TO ANSWER ANY QUESTIONS THAT YOU OR OTHER MEMBERS OF THE COMMITTEE MIGHT HAVE.

FOR THE RECORD, I WISH TO SUBMIT TO YOU A COPY OF THESE REMARKS, TO WHICH I HAVE ATTACHED CERTAIN STATISTICAL DATA.

OCTG STATISTICS

<u>PERIOD</u>	<u>DOMESTIC SHIPMENTS</u>	<u>IMPORTS</u>	<u>EXPORTS</u>	<u>NET DOMESTIC SHIPMENTS PLUS IMPORTS*</u>	<u>Ratio Of Imports To -</u>	
					<u>DOMESTIC SHIPMENTS</u>	<u>APPARENT CONSUMPTION</u>
	<u>Net Tons</u>				<u>Percent</u>	
1979	2,457,634	550,228	284,621	2,723,241	22.39	20.20
1980	3,611,651	1,250,304	133,610	4,728,345	34.62	26.44
1981	4,241,107	2,852,669	127,584	6,966,192	67.26	40.95
1982	1,759,351	2,516,541	153,448	4,122,444	143.04	61.04
1983	677,425	661,090	60,834	1,277,681	97.59	51.74
1Q84	264,950	360,065	11,677	613,338	135.90	58.71

*Col. 1 + Col. 2 - Col. 3

Source: Domestic Shipments - AISI 10
 Exports - AISI Exports 1
 Imports - AISI Imports 2

Note: All volumes are in short tons.

STATEMENT OF DAVID M. RODERICK, CHAIRMAN, UNITED STATES STEEL CORP.

Mr. Chairman, thank you for your invitation to appear before your committee today. It affords us in the American steel industry the opportunity to argue our case for the Fair Trade in Steel Act before one of the logical legislative committees charged with the specific overview of our nation's international trade policies.

Our interest in some kind of temporary relief from unfairly traded steel imports does not arise merely out of a sense of indignation over the injustice of past trade practices, nor is it an academic one, offering an exercise in making plain the arcane differences between free and fair trade.

Our interest is a real and substantial one that springs out of our efforts to remain a viable and important part of the American economy. The Fair Trade in Steel Act is not just one more piece of legislation that would be of some benefit to a particular group. Rather, it is an urgent appeal for help from our government to assist a particular and very important basic industry in its fight for survival. And that battle is not between U. S. steelmakers and foreign industrial competitors, but more correctly, between us and foreign governments.

The issue that surfaces most clearly is their artificially produced advantage in this economic struggle. Foreign steelmakers have the edge because they have relatively easy

access to capital without regard to possibility of a return on investment or a penalty for failure. And while they can build and operate and modernize with this capital edge, our domestic steelmakers experience capital starvation.

Artificial downward pressure on prices, inadequate cash flow, unfavorable tax laws and decreasing market demand have left little or no cash for modernization -- certainly none at all out of profits, since the domestic steel industry has lost over \$6 billion in the last two years.

This capital shortfall can be documented historically and specifically.

During the period 1969 to 1978, capital expenditures by American steel companies (including the nonsteel segment) averaged \$2.2 billion per year. In the preceding ten years, 1959 to 1968, capital expenditures averaged \$1.5 billion per year. While capital expenditures increased in current dollars during the most recent ten-year period, capital expenditures in constant dollars declined. In 1978 dollars, total capital expenditures averaged \$2.9 billion per year, during 1969-1978, as compared with \$3.2 billion per year, during 1959-1968. Capital expenditures (excluding environmental requirements) by the steel segment during this period averaged \$2.6 and \$2.1 billion (Table 1).

TABLE 1

The American Steel Industry Was Unable
To Make Adequate Capital Investments
During the Last 20 Years

	<u>1978 DOLLARS</u>			
	Historical Dollars Total (Billions)	Total (Billions)	Excluding Nonsteel and Environmental (Billions)	Per Annual Net Ton of Shipments \$/N.T.
1959-1968	\$1.5	\$3.2	\$2.6	\$33
1969-1978	2.2	2.9	2.1	25
1979-1982	3.6	2.7	1.4	20

Source: American Iron and Steel Institute

Based on capital costs of \$1,000 per net ton (1978 dollars) of annual shipments, during the 1960's, the facility replacement rate was 3.3 percent per year -- equivalent to a replacement cycle of 30 years. During the 1970's, the facility replacement rate was 2.5 percent -- a replacement cycle of 40 years. It moved to 50 years in the period 1979-1982 (Table 2).

TABLE 2

As a Result of Inadequate Capital Investment
The Replacement Cycle of Steel Facilities
Has Been Too Low

	Annual Capital Expenditures (78\$) Per Ton of Shipments	Capital Cost in '78 Dollars Per Ton of Annual Shipments	Replace- ment Rate Per Year	Replace- ment Cycle
1959-1968	\$33	\$1,000	3.3%	30 Yrs.
1969-1978	25	1,000	2.5	40
1979-1982	20	1,000	2.0	50

Source: American Iron and Steel Institute

The very low replacement rates for steel facilities over the past 20 years left the American steel industry with an average age of equipment of 17.5 years in 1979 (the latest data available). This is shown in Table 3. The principal reasons for the low replacement cycle have been inadequate profits combined with inadequate depreciation, causing overtaxation of the industry. In addition, considerable capacity was closed down in recent years since funds were not available to modernize these facilities.

TABLE 3

Many Steel Facilities Are Now Quite Old
Because Capital Availability
Has Been Inadequate

	Average Age of Capacity (Years)*	Age Distribution %		
		30+	25+	20+
Coke Ovens	17.3	14.2%	25.6%	46.9%
Open Hearth Furnaces	33.2	43.0	78.5	100.0
Basic Oxygen Furnaces	11.0	0.0	0.0	2.3
Electric Furnaces	14.3	6.1	13.8	25.3
Plate Mills	25.6	40.8	45.1	53.6
Wire Rod Mills	13.7	12.6	17.3	17.9
Hot Strip Mills	19.0	11.6	16.1	31.5
Cold Strip Mills	21.2	14.7	29.2	54.1
Galvanizing Lines	18.8	4.4	8.9	40.1
Aggregate	17.5	12.5	20.4	33.3

* As of January 1, 1979

Source: The World Steel Industry Data Handbook Vol. 1, the U.S.; and American Iron and Steel Institute.

Table 3 also shows that 12.5 percent of equipment capacity in 1979 was over 30 years of age, 20.4 percent over 25 years of age, and 33.3 percent over 20 years.

Since 1979, many older plants and facilities have been permanently closed. Nonetheless, American steel facilities, in terms of average age, are still too old in comparison with the facilities of our major foreign competitors. A period of accelerated modernization of steel facilities is a critical necessity.

FACTORS AFFECTING CAPITAL AVAILABILITYMarket Factors

The major factors which accentuate the steel industry's capital formation problems in the 1980's include both market and financial considerations. The primary market consideration is the ownership of and subsidies to foreign steel companies by their governments. The extent of foreign government involvement in steel has been well documented.

Tax Considerations

The federal income tax laws applicable to the steel industry have served to exacerbate and even create the capital formation problems of the industry.

Overlong Depreciation in Sixties and Seventies

Prior to 1981, the depreciation periods for capital cost recovery for basic steelmaking in the federal income tax rules were over-long and failed to take into consideration the effects of inflation and economic obsolescence. As a consequence, steel companies were over-taxed and paid to the federal government amounts that otherwise could have been used for equipment modernization. In addition, the investment incentives of investment credits were dependent on certain levels of taxable income, for full usage. As earnings declined in the latter half of the Seventies, unused investment tax credits became a growing problem to the industry and the credits earned by investments became of less value.

During the Seventies, a special compounding penalty upon steel industry capital formation was the introduction of the add-on minimum tax on corporations; this penalty is still present today. Under the formula for the minimum tax, the tax base for the minimum tax is reduced by a corporation's regular tax liability. As a result, investment incentives in the tax code that reduce tax liability, such as capital cost recovery deductions and investment credits, can cause increased minimum tax when the overall earnings of a corporation are low. Thus, this period of lower earnings made it difficult to use investment incentives, and the investment incentives that were being used by steel companies were subject to a special "minimum tax" not placed on the usage of such incentives by more profitable corporations.

Economic Recovery Tax Act of 1981

American steel companies vigorously supported the Economic Recovery Tax Act of 1981 (ERTA), particularly the ACRS incentive system, in the belief that it would aid savings and investment and benefit the industrial competitiveness of the country's industries generally. Indeed, the ACRS recovery periods cured the problem which existed prior to 1981 of over-long depreciable lives. However, without the safe harbor leasing provisions, steel companies in 1981 would have been unable to use most of the investment incentives (ACRS deductions and investment credits) provided in the tax law for new property placed-in-service, because taxable profits from existing assets were

insufficient to absorb the incentives generated by new assets. For steel companies, safe harbor leasing provided an estimated \$1 billion in cash that could be used for reinvestment during the 1981-1983 period.

Tax Equity and Fiscal Responsibility Act of 1982

Unfortunately, the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) negated the assistance that the 1981 ERTA legislation gave to steel industry capital formation. Most critically, TEFRA repealed safe harbor leasing and thus eliminated the steel companies' principal avenue to achieve some current access to the investment incentives of ACRS deductions and investment credits. (Presently it appears that Congress is going to defer until 1988 the finance leasing provisions, which are due to become effective in 1984; this would further severely restrict the possibility of tax benefit transfer leases involving limited use property or fixed price purchase options.) In addition, TEFRA cancelled, for business equipment, the planned speed-up in ERTA to the 200 percent declining method in 1986 and required a choice of a reduced investment credit or a basis reduction of 1/2 of the full credit taken.

The Industry Cannot Use Tax Investment Incentives

Unfortunate as the general reductions in investment incentives by TEFRA are, the most critically adverse tax law

effect on investment incentives for the steel industry after TEFRA remains the inability, because of insufficient taxable income from prior investments, to have current access to the tax law investment incentives (ACRS deductions and investment credits) that do exist and are available to companies in other industries. The ACRS incentives, of course, are a part of the tax losses that the steel industry has been suffering.

The unavailability of the ACRS deduction and investment credit incentives adversely impacts the steel industry's capital investment program to a major degree. The unavailability has two similar but distinct effects.

First, the inability to use the incentives directly restricts the funds which can be made available to finance new investment. The steel industry cannot build facilities for which it does not have money. Financing constraints are extremely severe for most steel companies today, a condition accentuated by the steel industry recession. To illustrate the magnitude of the problem, a survey of 26 steel companies comprising 78.5 percent of domestic raw steel capacity (95.3 percent capacity of integrated producers) showed the following aggregates at the end of 1983:

TABLE 5

Domestic Steel Industry
At the End of the Last
Taxable Year Ending in
1983

Unused investment tax credit carryforwards	\$1.2 Billion
Net operating loss carryforwards, including unused ACRS deductions	\$5.0 Billion

Without corrective tax legislation affecting the steel industry, the balance of unused loss carryforwards will not be utilized soon. As a consequence, the investment credit carryforward from previous investments will continue to be unusable and, further, the investment credits and ACRS deduction earned by new equipment investments will also be usable, perhaps for the rest of the decade. This situation is at the very crux of the tax system's penalties upon steel companies' capital formation, since the ability to use the unused credits, ACRS deductions, and other NOL amounts currently would provide an important source of needed funds for equipment modernization.

Capability and Shipments -- The domestic industry currently has a raw steel capability of 135.3 million tons per year. With an estimated average yield to finished products of 74 percent, this is equivalent to a finished product capability of 100 million tons per year. For the remainder of the 1980's, it is assumed

that the finished product capability will remain at 100 million tons; however, with yields expected to improve to 80 percent (primarily because of installation of additional continuous casters), raw steel capability is projected to decline to 125 million tons by the end of 1989.

Domestic steel industry shipments are projected as follows:

TABLE 6

Domestic Industry Shipments

(Million Tons)

<u>Imports</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>Avg.</u>
At 20%	78	86	77	72	84	90	81.2
At 15%	81	91	82	77	89	96	86.0

Uses of Cash

1. Capital Expenditures -- Based on replacing 4.4 percent of the facilities per year and environmental requirements of \$400 million per year, the average annual capital expenditure required is \$5.5 billion. The assumed discounted cash flow rate of return from the expenditure for modernization and replacement facilities (i.e. excluding environmental requirements) is projected at 11 percent.
2. Working Capital -- Working capital requirements are expected to increase or decrease with the changing volume at a rate of approximately \$75 million per one million ton change.
3. Dividends -- Dividend payments are projected to be at (a) \$200 million per year (estimated 1983 level) plus 5 percent on new stock, or (b) 35 percent of net profit, whichever is greater.

4. Effects of Non-Operating Units -- A continuing cash outflow averaging \$128 million per year is projected during this period from shutdown liabilities.
5. Six Year Average Cash Uses -- For the six year period, total cash uses are projected to average \$6.4 billion per year with imports at 20 percent, and \$6.6 billion per year with imports at 15 percent.

SOURCES OF CASH

1. From Operations -- Profits before taxes are anticipated for all years in both scenarios, except for the low shipment year of 1987 in the 20 percent import scenario. The profit projections are based on 1983 experience adjusted to reflect the substantial cost-price relation improvements anticipated in 1984, effect of changing volume levels, and new facilities.
2. Income Tax Payments -- These have been projected at the following incidental amounts, under the assumption that some smaller non-integrated individual companies will be paying taxes despite the massive aggregate of steel companies' unused investment tax credits and net operating losses.

TABLE 7

<u>Imports</u>	<u>Income Tax Payments</u> <u>(Million \$'s)</u>					
	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
At 20%	\$50	\$ 75	\$50	\$50	\$ 75	\$100
At 15%	50	100	75	50	100	150

3. Net New Debt -- Long Term Debt is projected to be at 86 percent of equity for 1984, remain at 83 percent for 1985-86-87, and decline to 75.5 percent in 1988 and to 67 percent in 1989, as a result of the improved profits.
4. Asset Sales, New Stock, and Off Balance Sheet Net Financing -- Cash from these sources is projected to average \$495 million per year.

5. Six Year Average Cash Sources -- For the six year period, total cash sources are projected to average \$4.5 billion per year with imports at 20 percent and \$5.5 billion per year with imports at 15 percent.

Capital Formation During the 1980's

In summary, the steel segment of the domestic industry did not have sufficient funds in the first four years of the 1980's to maintain its facilities. In addition, massive shortfalls are projected for 1984 through 1989. In the later period, the annual shortfall would be reduced to \$1.1 billion per year if imports are limited to 15 percent of the market, vs. \$1.9 billion if imports take 20 percent.

These projected shortfalls, calculated on the replacement of only 4.4 percent of steel facilities per year, undoubtedly understate the real shortfall reflecting modernization needs. Because of many years of capital shortages, resulting in inadequate modernization, a catchup capital investment is required for the rest of this decade to bring American steel companies to full competitive parity.

The capital formation needs of the steel industry should reflect not only the normal replacement needs but also a special requirement for substantial equipment modernization. This modernization is imperative if steel companies are to survive and compete effectively in the world market of the future.

The magnitude of the potential capital formation shortfall for the 1984-1989 period has been conservatively calculated at

\$1.9 billion per year of \$11.3 billion for the entire period, assuming imports are at 20 percent of domestic consumption. If imports are 15 percent of domestic consumption, the calculated shortfall is \$1.1 billion per year.

This \$1.1 billion shortfall would be further reduced if appropriate changes in the Federal tax laws were to be made. For example, American steel companies at the end of 1983 collectively had an "asset" or a "receivable from the federal government" (from investment tax credits and net operating losses, including unused ACRS deductions) which they cannot use currently in their efforts to obtain capital to modernize their facilities. This amount is estimated at \$3.5 billion, and if it were made available over six years, would further reduce the \$1.1 billion shortfall by about \$600 million per year, to a net shortfall of \$500 million per year.

The cash flow of domestic steel companies is also negatively impacted by the inability to use (because of the lack of taxable income) investment tax credits and depreciation deductions which will flow from the future capital investments which should be made over the period 1984 through 1988. Domestic steel companies estimate that if safe harbor leasing were extended for a six-year period through 1989, the cash benefit to the industry would be approximately \$3 billion, or \$500 million per year. This would eliminate the remaining cash shortfall and put the industry approximately in balance in terms of net cash generation necessary to meet requirements of annual facility investments of \$5.5 billion.

Corrective legislation to help steel companies to begin to overcome this capital shortfall must be designed to provide capital increments in amounts that are meaningful in relation to the dimensions of the capital formation problem. And action must be prompt if steel companies are to maintain a competitive presence in the marketplace.

The most critical tax law penalty on steel companies, demonstrated in earlier discussion, arises from the fact that the tax laws are so designed that steel companies cannot, on a current basis, utilize the investment incentives and deductions that are generally available to industries with current profits.

These capital formation issues are complex. And the discussion of them has lengthened this testimony considerably. Nonetheless, to generalize and shorten such a discussion would present a clouded picture.

The specific matter of concern today is the trade issue, but it is not a problem to be understood in a vacuum, hence the need to explore the capital formation issue in full.

We have attempted to remedy those fiscal illnesses within our power to do so and to enlist the aid of those who can help where we are virtually powerless to act on our own behalf.

As this testimony mentioned earlier, Mr. Chairman, it is the unfair trade practices of foreign steelmakers which provide the greatest danger to our vitality because they have the clear advantage of either outright state ownership or the lavish patronage of their home governments -- either and both providing capital without the inherent mechanisms of the marketplace. In

other words, they enjoy capital without the pain of formation or the necessity of recovery -- no small advantage in a world steel marketplace characterized by present low product demand and severe production overcapacity!

The domestic steel industry in the U.S.A. has tried to address the trade issues and solve them -- amicably with our government when possible, and with litigation when cooperation failed.

There have been numerous efforts, approaching the issue from a variety of vantage points and using differing methods. All have been relatively ineffective -- obviously so, since the problem persists and grows in magnitude of order and jeopardy.

Let me cite my company's efforts to correct and contain the trade problem.

U. S. Steel's efforts to remedy unfair practices in steel trade date back to the 1960's. Throughout the sixties and seventies, and into the eighties, U. S. Steel chose to address the trade problem through the existing unfair trade statutes, particularly the antidumping and countervailing duty statutes. To our dismay and frustration, however, these efforts have not stopped the flood of dumped and subsidized steel into the U.S.

Events over the past seven years illustrate the failure of the unfair trade petition route. In 1977, U. S. Steel filed an antidumping petition against the six major Japanese steel producers. The U. S. government settled that investigation on the basis of the Trigger Price Mechanism (TPM) -- a monitoring device intended to identify dumping of steel products. The TPM

became effective in 1978, but within a year proved to be a disappointment. Accordingly, U. S. Steel began to prepare more petitions. In March 1980, we filed a truckload of antidumping petitions against the major steel producers of the European Economic Community (EEC). Once again, our government settled the investigations -- this time on the basis of a revised TPM.

The revised TPM, although an improvement over the original, also fell short of solving the unfair trade problem. Indeed, it was flouted by several foreign steel exporters. U. S. Steel and others responded in January 1982 by filing antidumping and countervailing duty petitions against 11 nations. The ensuing investigations, which were the most massive in history, resulted in an arrangement between the U.S. and the EEC whereby the latter agreed to restrain its steel exports to the U.S.

Although the EC Arrangement and similar voluntary restraints by the Japanese have mitigated the harm caused by imports from Europe and Japan, imports from other sources have increased to such an extent that the injury to the domestic steel industry has continued unabated. At least 25 domestic producers and trade associations, including U. S. Steel, have filed antidumping and countervailing duty petitions since January 1982 against these third-source countries. (See attachment.)

Literally hundreds of cases have been filed over the last decade-and-a-half.

It is well known that this route is complex, expensive, difficult and time-consuming, both in the preparation of cases,

which may take months, and also in the litigation process which takes an inordinate length of time from trial to decision.

The trade litigation avenue is an imperfect method -- devised for use in a different time and different circumstances. The global steel problems render it ineffective. We use it because it has been the only way we have gotten relief at all. The present problems in world steel trade are not satisfactorily addressed by litigation-type statutes.

In most instances, the cases we have filed have been decided in our favor, with technically affirmative findings. Yet, in the first quarter of 1984, a record tonnage of steel was imported into the United States. It has become clear that the existing statutes are simply inadequate for the massive trade problem we face. The only solution is temporary quantitative relief as envisioned in S. 2380.

You are not unfamiliar with our problems and their consequences. They are not limited to the stockholders and management of our several companies. They also directly affect our employees -- a shrinking work force because of these very problems. They spill over, spreading misfortune in community after community with a ripple effect to other industries.

And as this trade issue has affected us in the steel industry, so it may be a presaging of what's to come for other industries down the road.

In this instance, we ask for the temporary relief of trade quotas so that we may have the time to modernize and strengthen ourselves. It is not out of altruism altogether that I add the observation that unless our trade laws are stringently made and stringently enforced, we will not be the last to appear at hearings such as these with equally compelling arguments of adversity and injury.

STATUS OF AD/CVD PROCEEDINGS*

Country: Argentina

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
CVD (11/10/83)	USS	CR Sheet	Affirmative (6.03%)	---	Affirmative (2.34% - 6.42%)	---	Argentina not a signatory of GATT CVD Code; therefore, injury not required.
AD (2/10/84)	USS	CR Sheet	7/19/84	Affirmative	10/2/84	11/16/84	
AD (11/23/83)	Atlantic Steel Co., Continental Steel Co., Georgetown Steel Corp., North Star Steel Co., Texas, Raritan River Steel Co.	Wire Rod	Affirmative (176.1%)	Affirmative	7/23/84	9/6/84	

* EXPLANATION:

AD Antidumping
CVD Countervailing Duty

STATUS OF AD/CVD PROCEEDINGS

Country: Australia

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
AD (2/10/84)	USS	Gal. Sheet	7/19/84	Affirmative	10/2/84	11/16/84	
CVD (2/10/84)	USS	Gal. Sheet	Negative	Affirmative	7/17/84	9/6/84	

STATUS OF AD/CVD PROCEEDINGS

Country: Brazil

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
CVD (1/11/82)	USS Bethlehem (Republic (J&L (National (Inland (Cyclops	Plate (cut length only)			Affirmative (11.75%)	Affirmative	Final investigation suspended by DOC based upon Brazilian export tax; DOC considering revocation of suspen- sion agreement. Annual review currently being conducted by DOC.
CVD (5/18/82)	USS	Small Diameter (16" and under) welded pipe	Affirmative (12.95%)	Affirmative	Suspended (12/27/82)	Suspended	Final investigation suspended by DOC based upon Brazilian export tax; revocation not under consideration by DOC. Annual review currently being conducted by DOC.
CVD (2/8/82)	Atlantic Georgetown Keystone Korf Ind. Penn-Dixie Raritan River	Wire Rod	Affirmative (14.90%)	Affirmative	Suspended (9/2/82)	Suspended	Final investigation suspended by DOC based upon Brazilian export tax; DOC considering revocation of suspen- sion agreement. Subsidy margin increased to 15.5% in Feb. 1983.

Country: Brazil -2-

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
AD (9/30/82)	Atlantic Georgetown Keystone Korf Ind. Penn-Dixie Raritan River	Wire Rod			Affirmative	Affirmative	The wire rod investigation was limited to price discrimination, i.e., it did not include an investigation of sales below cost in the Brazilian home market. Immediately following DOC's final decision, the Brazilians petitioned DOC for an expedited annual review. The Brazilian request was based primarily on the alleged effects of the Feb. 1983 maxi-devaluation. DOC granted the Brazilian petition and on 4/10/84 announced the following revised margins: Belgo-Mineira 0.00% Cosipa 7.43 All Other 7.43
					Cosipa 49.61%		
					Belgo-Mineira 76.49		
					All Other 63.51		
AD (1/31/83)	Bethlehem	Plate			Affirmative	Affirmative	DOC investigation included both price discrimination and sales below cost. Immediately following DOC's final determination, the Brazilians petitioned for an expedited review. Their request was granted and the review is scheduled for completion by 7/2/84.
		(1) cut length			Cosipa 100.04%		
				Usiminas 65.58			
				All Other 66.81			
		(2) coil			Cosipa 89.46%		
					CSM 52.57		
					Usiminas 50.55		
					All Other 57.42		

Country: Brazil -3-

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
CVD (11/10/83)	USS	HR Sheet CR Sheet Plate (coil)	Affirmative	Affirmative	Affirmative	6/8/84 Cosipa 36.48% Usiminas 17.49 CSN 62.18	The Brazilians argued that an offset should be permitted equal to the Brazilian export tax. DOC did not grant this request but indicated it would reconsider the issue during the first annual review.
AD (11/10/83)	USS	HR Sheet CR Sheet	Negative re: CR sheet. Re: HR Sheet, DOC found the following margins: Cosipa 8.07% CSN 0.14 Usiminas 1.44 All Other 6.50	Affirmative	7/2/84	8/16/84 (if final DOC decision is affirmative)	DOC apparently relied solely on unverified questionnaire responses of Brazilians. USS has appealed to the Court of International Trade.
AD (3/27/84)	Berg Steel Pipe	Large Diameter (over 16") welded pipe	8/28/84	Affirmative	11/12/84	12/27/84	

STATUS OF AD/CVD PROCEEDINGS

Country: Finland

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
AD (2/10/84)	USS	Plate (cut length)	7/19/84	Affirmative	10/2/84	11/16/84	

STATUS OF AD/CVD PROCEEDINGS

Country: Mexico

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
AD (11/23/83)	Atlantic, Continental, Georgetown, North Star- Texas, Raritan River	Wire Rod	Negative	Affirmative	7/15/84	8/29/84	
CVD (11/10/83)	USS	Structurals, Plate, HR Sheet, CR Sheet, Gal. Sheet, Welded Std. Pipe	Affirmative (4.98%)	---		---	Petition withdrawn 4/18/84 after announcement by Mexican government of export restraints
CVD (3/13/84)	Labor- Management Committee for Fair Foreign Competition	Bars and Bar- Size Shapes	6/6/84	---	8/20/84	---	Mexico not a signatory of GATT CVD Code; therefore, injury not required.

STATUS OF AD/CVD PROCEEDINGS

Country: South Africa

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
CVD (11/19/81)	American Spring Wire Bethlehem Florida Wire and Cable Shinko Wire America	PC Stand	Affirmative		Affirmative (27.1%)		Investigation suspended 5/21/82. Latest review completed 4/23/84. Suspension agreement remains in effect. South Africa not a signatory of GATT CVD code; therefore, injury not required.
CVD (6/14/82)	Comm. of Domestic Wire Rope and Specialty Cable Manufacturers	Wire Rope	Affirmative (21.75%)		Suspended		Investigation suspended 12/1/82. Latest review completed 4/13/84. Suspension agreement remains in effect.
AD (2/10/84)	USS	Plate Structurals HR Sheet CR Sheet Gal. Sheet	7/19/84	Affirmative	10/2/84	11/16/84	On 5/4/84, the Government of South Africa unilaterally announced a revised system of quantitative restrictions on steel exports to the U.S. In the judgment of USS, such restrictions will mitigate the injury to the domestic steel industry. Accordingly, on 5/8/84, USS withdrew its AD petition.
CVD (10/6/82)	Comm. on Pipe and Tube Imports	Pipe and Tube	Affirmative		Affirmative (21.64% to 26.77%, plus dollar equivalent of 9.99 rands/MT)		Investigation suspended 6/1/83.

Country: South Africa -2-

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
CVD (11/17/82)	Bethlehem Florida Wire and Cable Indiana Steel and Wire	Galvanized Wire Strand	Affirmative (23%)		Suspended		Investigation suspended 4/29/83. Preliminary results of adminis- trative review announced 4/13/84 - exporter has complied with agreement.
CVD (8/18/82)	Industrial Siderurgica, Inc.	Rebars	Affirmative		Affirmative		Administrative review of CVD order completed 4/13/84. Subsidy amount is 0%.
CVD (2/2/82)	Atlantic Georgetown- Texas Key-Tone Korf Ind. Penn-Bixie Raritan River	Wire Rod	Affirmative		Affirmative (Products exported after 4/1/82: 0%. Products exported before 4/1/82: 7.0%.)		CVD order issued 9/27/82.
CVD (1/11/82)	USS Republic J&L Inland National Cyclops	Plate HR Sheet CR Sheet Structurals Gal. Sheet HR Carbon Bars CR Alloy Bars	Affirmative		Affirmative (Products exported after 4/1/82: 0%. Products exported before 4/1/82: 6.7% - 15.1%.)		CVD order issued 9/7/82. USS and others appealed to Court of International Trade. The Court reversed and remanded for further investigation by DOC. On 5/4/84, the Government of South Africa unilaterally announced a revised system of quantitative restrictions on steel exports to the U.S. In the judgment of USS, such restrictions will mitigate the injury to the domestic steel industry. Accordingly, on 5/8/84, USS withdrew its CVD petition. (Note: the effect of withdrawal following a final deter- mination by DOC is not entirely clear at the present time.)

STATUS OF AD/CVD PROCEEDINGS

Country: South Korea

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			DOC	ITC	DOC	ITC	
AD (4/21/83)	Committee on Pipe and Tube Imports	Small Dia- meter Circular Welded Pipe and Tube	Affirmative	Affirmative	Affirmative (0.76% - 1.52%)	Affirmative	AD order issued 5/7/84
AD (10/31/83)	Gilmore	Plate (cut length)	Affirmative (5.1%)	Affirmative	5/25/84	8/9/84	
AD (7/14/83)	Committee on Pipe and Tube Imports	Rectangular Pipe and Tube	Affirmative	Affirmative	Affirmative (1.47%)	Affirmative	AD order issued 5/11/84
CVD (5/7/82)	USS	Plate, HR Sheet, CR Sheet, Gal. Sheet	Affirmative	Affirmative	Affirmative (0% - 1.88%)	Affirmative (Negative with respect to CR Sheet)	CVD order issued 2/18/83. USS appealed CR sheet ruling. Matter still pending before Court of International Trade

STATUS OF AD/CVD PROCEEDINGS

Country: Spain

Action (Date Filed)	Petitioner	Products Covered	Preliminary Decisions		Final Decisions		Comments
			RDC	ITC	RDC	ITC	
AD (11/23/83)	Atlantic Steel Co., Continental Steel Co., Georgetown Steel Corp., North Star Steel Co.- Texas, Raritan River Steel Co.	Wire Rod	Affirmative (12.3%)	Affirmative	7/16/84	8/30/84	
CVD (11/23/83)	Atlantic Steel Co., Continental Steel Co., Georgetown Steel Corp., North Star Steel Co.- Texas, Raritan River Steel Co.	Wire Rod	Affirmative	Affirmative	Affirmative (16.03%- 29.94%)	6/22/84	
AD (2/10/84)	USS	Plate, Structurals, CR Sheet, Gal. Sheet	7/19/84	Affirmative	10/2/84	11/16/84	
CVD (1/11/82)	USS, Republic, Inland, J&L, National, Cyclops	Plate, Structurals, CR Sheet, Gal. Sheet, HR Carbon Bar, CR Carbon Bar	Affirmative	Affirmative	Affirmative (1.56% - 38.25%)	Affirmative	CVD order issued 1/3/83

TESTIMONY OF DR. ADOLPH J. LENA
ON BEHALF OF
THE SPECIALTY STEEL INDUSTRY OF THE UNITED STATES
AND THE
AMERICAN IRON AND STEEL INSTITUTE
BEFORE THE SUBCOMMITTEE ON INTERNATIONAL TRADE
COMMITTEE ON FINANCE
UNITED STATES SENATE

JUNE 8, 1984

Counsel:

Thomas F. Shannon
David A. Hartquist
COLLIER, SHANNON, RILL & SCOTT
1055 Thomas Jefferson Street, N.W.
Washington, D.C. 20007

Mr. Chairman and Members of the Subcommittee: I am Dr. Adolph J. Lena, Chairman of the Advisory Committee of the Specialty Steel Industry of the United States and Chairman of the Board and Chief Executive Officer of AL Tech Specialty Steel Corporation, Dunkirk, New York. AL Tech is also a member of the American Iron and Steel Institute. I appreciate the opportunity to appear before you today to describe the current status of the Specialty Steel Industry's efforts to deal with the import problem. Today I will give you a summary of the efforts of the domestic specialty steel industry over many years to deal with the import problem.

DESCRIPTION OF THE SPECIALTY STEEL INDUSTRY

The Specialty Steel Industry of the United States is a nonprofit corporation and trade association representing 17 domestic producers of tool and stainless steel. The names and locations of the firms represented in the Specialty Steel Industry of the United States are contained in Exhibit A to my written testimony. The 17 producers account for about 90 percent of the U.S. production of specialty steel products.

The specialty steel industry is separate and distinct from the carbon steel industry. Specialty steels include stainless and tool steels, which account for approximately 1.5 percent of the tonnage and 10 percent of the dollar value of domestic shipments of steel. Our high technology products are frequently produced in custom-ordered quantities for use in goods that demand special durability, hardness or resistance to heat, corrosion, and abrasion. Because of these unique properties, specialty steels require special processing

equipment and expensive alloying ingredients, and generally utilize from 7 to 15 times more man hours per ton than ordinary carbon steel. President Reagan noted in his November 16, 1982 decision on our section 301 case, that, "the Specialty Steel Industry is an efficient, technologically up-to-date and export-oriented branch of the steel industry. Its output is used in a wide range of demanding applications critical to an industrial economy"

EFFORTS TO DEAL WITH THE IMPORT PROBLEM

My industry has devoted substantial time and resources in recent years to deal with the problem of specialty steel imports. Those efforts began over 10 years ago when we initiated and won antidumping cases involving French stainless steel wire rod products and Swedish stainless steel plate products. In 1975, we filed a section 201 case before the U.S. International Trade Commission (ITC). Following an affirmative ITC decision, President Ford imposed quantitative restraints on specialty steel imports. In 1977, President Carter reviewed the specialty steel import restraint program. The ITC held hearings and recommended a continuation of the program. On January 18, 1978, President Carter decided to continue the import restraint program. In 1979, the ITC held hearings on my industry's request to extend the import limitation program. The ITC voted 2-2 to continue the import limitation but President Carter decided to phase it out. All import restraints were ended as of February 14, 1980.

Following the expiration of the import limitation program, we requested inclusion of all specialty steel products in the trigger price mechanism (TPM). Although the Commerce Department did not

include specialty steel in the TPM, the Department established a "surge mechanism" program early in 1981. This program proved totally ineffective, and late in 1981 we filed a case under section 301 of the Trade Act of 1974, as amended, with the United States Trade Representative (USTR). Following the initiation of that proceeding, we filed 7 additional antidumping and countervailing duty cases with the Department of Commerce and the ITC. With one exception, we have had affirmative decisions from both the Commerce Department and the ITC.

In November, 1982, the President issued a written decision in the section 301 case we filed the year before. In his decision, the President directed the USTR to request the ITC to conduct an expedited investigation under section 201 of the Trade Act of 1974. In addition, the President directed the initiation of multilateral and bilateral discussions aimed at the elimination of all trade distortive practices in the specialty steel sector. He did this in recognition of the trade distorting practices on both the importing and exporting side of our business. In other words, the President recognized that much of our problem is rooted in unfair trade practices such as dumping and foreign government subsidization. By the same token, he also recognized that we are an export-oriented branch of the steel industry and that foreign government barriers to our exports prevent us from taking full advantage of our competitiveness internationally.

As you know, we won our 201 case which was initiated by the President. Last July, an import relief program was implemented. That program provided for quantitative restraints on stainless steel bar,

stainless steel rod and alloy tool steel. It also provided for increased tariffs on the flat-rolled products, stainless steel sheet, strip and plate. The President's program is designed to be in effect for four years, with the import restraint levels growing each year and the added tariffs being reduced each year.

Obviously, we have had extensive experience with the trade laws. Probably more than any other industry, we have attempted to deal with the import problem by using the procedures available to us. Attached as Exhibit B to my testimony is a chronology of the Specialty Steel Industry's efforts to deal with the import problem since we filed antidumping cases in 1973. In the last couple of years, we have filed 8 antidumping and countervailing duty actions, the section 201 case, and supported the section 201 case initiated by the President. In addition, we are participating in review of outstanding dumping orders under section 751(a) of the Tariff Act of 1930. Furthermore, we have several appeals pending at the U.S. Court of International Trade, contesting administrative agency decisions under the anti-dumping and countervailing duty laws.

MONITORING OF THE SECTION 201 IMPORT RELIEF PROGRAM

Under the President's section 201 decision last year, an annual review of the 201 import relief program is required. The first annual review is now underway.

You will probably not be surprised to learn that within a few months after the program went into effect, foreign governments began to call for its termination. This is particularly true of the Europeans, who have raised the issue twice in recent OECD Steel Committee meetings.

Mr. Chairman, with all my years of coming to Washington, I understand this posturing. Yet, I cannot help but be upset by the ridiculous request by the Europeans to terminate this program prematurely. We have proven them guilty of dumping. We have proven them guilty of subsidization. We have proven that we have been seriously injured under the tests of U.S. and international law. We have always said that we are modern, efficient producers, and the President has agreed. Yet, foreign producers and their governments do not even have the decency to permit us to recover from the serious injury they have caused. The latest import statistics show a huge surge in imports of stainless sheet and strip products, covered by tariffs rather than quantitative restrictions. Also, there is a very high level of imports of products exempted from the 201 program.

Let me suggest that they first get their own houses in order. End the subsidies. Reduce overcapacity. Stop dumping. Compete with us on a fair basis. Only then will their requests have merit.

Termination of the earlier 201 import relief program, which was in effect from June 1976 to February 1980, resulted in tremendous surges of imports to unprecedented levels from 1981 through 1983. Termination of the current relief program, without correction of the basic problems I have described, will simply expose us once again to the severe injury we have suffered.

We in the specialty steel industry believe the U.S. government has a responsibility to us to ensure that we will not be subject to the continued unfair conditions that have resulted in serious injury to us. I say the U.S. government has a responsibility because our

trading problems are caused by foreign governments. We have never objected to fair competition from private foreign producers who operate under the rules of free enterprise. We certainly do object to foreign competitors who survive year after year of losses only because of government handouts.

Let me also emphasize, Mr. Chairman, that at the same time we have the responsibility to continue to maintain our international competitiveness. We are doing that. We are making major commitments to capital investment and research and development. But, in order to carry out these programs, we need the full period of import relief provided by the President's decision.

In our section 201 case, we stressed the need for five years of import relief. The President granted four years, and even this is under attack by foreign governments. We were also disappointed that the President imposed tariffs rather than quantitative restrictions on flat-rolled products, which constitute by far the majority of the sales of the products covered. We believe many countries are simply offsetting these tariffs with additional subsidies. Furthermore, the scope of our section 201 case did not cover all specialty steel products. Stainless steel pipe and tubing and stainless steel wire, both product lines suffering from very high levels of imports, were not covered. The quota bill does cover these products. Therefore, we strongly support the Fair Trade in Steel Act, which will provide us the certainty needed to carry out vital capital investment plans which many of our companies have underway.

Believe me, after this program expires, we do not want to have to come back again with another 201 case. In order to avoid that, our

government should take the following actions during the pendency of the current 201 import relief program:

1. Work aggressively for the reduction of excess production capacity worldwide.
2. Seek the elimination of foreign government subsidies.
3. Effectively enforce the U.S. international trade laws, including the initiation of antidumping and countervailing duty cases by the government itself.
4. Work for the elimination of tariff and non-tariff barriers to our exports.
5. Enact the Fair Trade in Steel Act.

In closing, Mr. Chairman, let me express my appreciation for the support you and members of your Committee have provided to the specialty steel industry. Thank you.

EXHIBIT A**NAMES AND LOCATIONS OF THE FIRMS REPRESENTED IN THE
SPECIALTY STEEL INDUSTRY OF THE UNITED STATES**

The Specialty Steel Industry of the United States is a nonprofit corporation and trade association representing 17 domestic producers of tool and stainless steel. These producers account for about 90 percent of U.S. production of specialty steel products. The names and addresses of these producers are as follows:

Allegheny Ludlum Steel Corporation
2000 Oliver Building
Pittsburgh, PA 15222

Eastern Stainless Division
Eastmet Corporation
P.O. Box 1975
Baltimore, MD 21203

Al Tech Specialty Steel Corporation
P.O. Box 152
Dunkirk, NY 14048

Guterl Special Steel Corporation
P.O. Box 509
Lockport, NY 14094

Armco Inc.
P.O. Box 1697
Baltimore, MD 21203

Jessop Steel Company
Washington, PA 15301

Braeburn Alloy Steel Division
Continental Copper & Steel Ind., Inc.
Lower Burrell, PA 15068

Jones & Laughlin Steel Inc.
3 Gateway Center
Pittsburgh, PA 15263

Carpenter Technology Corporation
P.O. Box 662
Reading, PA 19603

Joslyn Stainless Steels
P.O. Box 630
Fort Wayne, IN 46801

Columbia Tool Steel Company
Lincoln Highway & State Street
Chicago, IL 60411

Latrobe Steel Company
Latrobe, PA 15650

Crucible Specialty Metals Division
Colt Industries, Inc.
P.O. Box 977
Syracuse, NY 13201

Republic Steel Corporation
410 Oberlin Avenue, S.W.
Massillon, OH 44646

Cyclops Corporation
Cyclops Building
650 Washington Road
Pittsburgh, PA 15228

Teledyne Vasco
P.O. Box 151
Latrobe, PA 15650

Washington Steel Corporation
Washington, PA 15301

EXHIBIT B**SPECIALTY STEEL INDUSTRY OF THE UNITED STATES**

Suite 308 / 1055 Thomas Jefferson Street, NW / Washington, D C 20007 (202) 342-8450

CHRONOLOGY OF SPECIALTY STEEL IMPORT ACTIONS

- 1973: Filed and won antidumping cases against French stainless steel wire rods and Swedish stainless steel plates.
- 1975:
- July 16 American specialty steel producers and the United Steelworkers of America filed a petition under the "escape-clause" provisions of the 1974 Trade Act seeking relief from a flood of steel imports, which threatened the future of the American specialty steel industry and the security of specialty steelworkers' jobs.
- October 28-31 Public hearings held by the U.S. International Trade Commission.
- 1976:
- January 16 International Trade Commission determined imports have been a "substantial cause of serious injury" to the domestic specialty steel industry; the Commission recommended quantitative limitations.
- June 14 Import limitations on certain specialty steels (tool steels; stainless steel sheet, strip, plate, bar and wire rod) went into effect. Ford Administration negotiated an agreement with Japan and set quantitative limitations on other foreign nations which declined to negotiate. Import limitations for each year -- beginning June 14 -- set as follows:
- | | | | |
|------|---|---------|------|
| 1976 | - | 147,000 | tons |
| 1977 | - | 151,500 | " |
| 1978 | - | 155,900 | " |
- 1977:
- May 24 President Carter announced plans to review the specialty steel import-restraint program.

1977: (continued)

September 7 International Trade Commission held public hearings; subsequently, recommended extension of restraints.

1978:

January 18 President Carter issued decision to maintain restraints on specialty steel imports for duration of initial three-year period.

November 30 Specialty steel industry and United Steelworkers of America jointly filed for three-year extension of existing import restraints.

1979:

March 6 International Trade Commission held public hearings and, subsequently, recorded a tie (2-2) vote on whether to extend import restraints.

June 12 President Carter directed that specialty steel limitations be phased out over eight-month period; all import restraints to be lifted beginning February 14, 1980.

1980:

February 13 Specialty steel import limitations expired.

February 15 USWA and Specialty Steel Industry of the United States requested Administration to include all specialty steels in Trigger Price Mechanism (TPM).

March 21 Administration suspended TPMs for all steel products prior to any action to cover specialty steels.

July 31 USWA and Specialty Steel Industry of the United States urged President to take action to restrain imports, noting that specialty steel imports increased 29% in the first five months of 1980 vs. 1979 - with some key products up more sharply.

September 30 USWA and Specialty Steel Industry requested President Carter to include specialty steels in Trigger Price Mechanism (TPM) -- which the Administration was to restore for carbon steels October 21, 1980.

November 10 Department of Commerce sent report about specialty steels to President Carter.

1981:

- January 8 Department of Commerce established "surge mechanism" to restore dumping and other unfair import practices affecting specialty steels.
- December 2 USWA and Specialty Steel Industry stated that the "surge mechanism" has proved ineffective and filed "Section 301" case with Office of the United States Trade Representative. The action cites massive government subsidies to foreign specialty steel producers in Austria, Belgium, Brazil, France, Italy, Sweden, and the United Kingdom.

1982:

- January 12 USWA and Specialty Steel Industry filed with USTR additional information about subsidies - setting this date (1/12/82) as official date of "Section 301" case.
- February 17 Countervailing-duty petition filed with Commerce Department by eight specialty steel producers covering stainless bar and rod products from Spain.
- March 1 USTR accepted "Section 301" petition to curb unfair specialty steel imports from Austria, France, Italy, Sweden, and the United Kingdom. Petitions against Belgium was not accepted; but, USTR expressed interest in further subsidy information for review. Petition against Brazil was not accepted because this nation has agreed to discontinue its export subsidies.
- April 12 Specialty Steel Industry of the United States filed new evidence of Belgian-government subsidization and requested USTR to undertake an investigation under "Section 301".
- April 14 USTR held public hearings regarding "Section 301" petition against Austria, France, Italy, Sweden, and the United Kingdom.
- April 23 Antidumping petition filed with Commerce Department by eleven specialty steel producers and United Steelworkers of America covering stainless steel sheet and strip products from West Germany.
- May 5 Specialty Steel Industry called upon Congress to enact legislation requiring quantitative limitations on specialty steel imports for five years.

1982: (continued)

- May 10 Antidumping petition filed with Commerce Department by eleven specialty steel producers and USWA covering stainless steel sheet and strip products from France.
- May 13 USWA and Specialty Steel Industry sent letter to President Reagan requesting personal meeting with him regarding specialty steel crisis.
- June 3 ITC issued unanimous preliminary finding that the domestic workers and industry have been injured by imports of stainless steel sheet and strip products from West Germany (antidumping case) and stainless bar and rod products from Spain (countervailing duty case).
- June 16 Seven specialty steel companies filed countervailing duty case with Commerce Department covering stainless bar and rod from Brazil.
- June 17 USWA and Industry sent second letter requesting meeting with President Reagan.
- June 18 ITC issued unanimous preliminary finding that five French companies are injuring American industry and workers with imports of stainless sheet and strip products (antidumping case).
- June 23 USWA and Industry filed petition with USTR under Section 301 charging Belgium with subsidizing specialty steel for U.S. market.
- July 30 USWA and Industry filed two trade cases covering tool steel with Commerce Department: a countervailing duty case against Brazil and an antidumping case against West Germany.
- July 31 ITC issued unanimous finding that domestic workers and industry have been injured by imports of subsidized Brazilian stainless bar and rod.
- August 6 Industry, shocked and disappointed, rejected proposed settlement of trade issues with EEC negotiated by Commerce Department.
- August 9 USTR accepts "Section 301" petition charging Belgium with subsidizing specialty steel for U.S. market.
- September 13 ITC issued unanimous findings that U.S. workers and industry have been injured by imports of tool steel from Brazil (countervailing duty case) and West Germany (antidumping case).

1982: (continued)

- October 7 Industry filed countervailing duty case with Commerce Department covering stainless flat rolled steel from the United Kingdom.
- November 15 Commerce found Spain subsidizing stainless bar and rod shipments to the United States.
- November 16 Responding to the industry/union 301 petition, President Reagan directed (1) an expedited 201 investigation with respect to stainless plate, rod, bar, sheet, and strip and tool steel; (2) multilateral and/or bilateral discussions aimed at eliminating trade distortional practices; and (3) monitoring of imports of specialty steels subject to the 201 investigation.
- November 22 ITC issue preliminary unanimous finding that flat rolled products from United Kingdom are injuring American industry and workers (anti-dumping case).
- November 30 Commerce Department preliminarily found West German steel companies dumping stainless sheet and strip in the U.S.
- December 6 Commerce Department preliminarily found French steel companies dumping stainless sheet and strip in the U.S.
- December 13 Appeal noticed with U.S. Court of International Trade by industry contesting Commerce Department affirmative determination on Spanish bar with regard to Olara.
- December 15 ITC issued final injury determination on imported Spanish bar and rod products (countervailing duty): unanimous finding of injury regarding rod, negative finding of injury regarding bar.
- December 29 Commerce Department preliminarily found Brazil subsidizing tool steel shipments to the U.S.

1983:

- January 3 Commerce Department issued countervailing duty order on Spanish rod.
- January 10 Commerce Department preliminarily found West German steel companies dumping tool steel in the U.S.

1983: (continued)

- January 18 Appeal noticed with U.S. Court of International Trade by industry concerning ITC negative determination on Spanish bar.
- January 27 Commerce Department suspends investigation of subsidized Brazilian stainless bar and rod under terms of suspension agreement with the Government of Brazil.
- February 7 ITC suspended investigation of subsidized stainless bar and rod from Brazil.
- February 9-10 ITC held public hearing on section 201 investigation concerning stainless steel and alloy tool steel to determine question of injury.
- February 10 Commerce Department preliminarily found that imports of flat rolled products from United Kingdom were being subsidized.
- February 22 Industry filed requests to continue investigations into subsidized Brazilian stainless bar and rod with the Commerce Department and the ITC.
- March 14 Commerce Department suspended investigation of subsidized Brazilian tool steel under terms of suspension agreement with the Government of Brazil.
- March 14 ITC suspended its investigation into Brazilian tool steel exports to the U.S.
- March 22 Industry filed requests to continue investigations into subsidized Brazilian tool steel exports to the U.S. with the Commerce Department and the ITC.
- March 24 ITC issued affirmative injury determination in the section 201 investigation.
- April 5 ITC held public hearing to determine remedy recommendations regarding the section 201 investigation.
- April 20 Commerce Department issued final affirmative determination that exports to the U.S. from the United Kingdom of stainless steel sheet, strip and plate were being subsidized (19.31 percent margin).
- April 25 Commerce Department issued a final affirmative determination that exports of stainless steel sheet and strip from France were being dumped in the U.S. (margins of 2.9 - 6.1 percent on sheet; 3.9 - 14.8 percent on strip).

1983: (continued)

- April 27 ITC announced remedy findings and recommendations in the section 201 investigation. Two of the three commissioners recommended 3-year quantitative restrictions beginning January 1, 1983, based on a 10-year representative period (1972-82), for stainless steel sheet and strip, stainless steel plate, stainless steel bar, stainless steel wire rod, and alloy tool steel. Exempted articles were: razor blade steel, band saw steel, chipper knife steel, certain very specialized stainless steel sheet (first 6,000 short tons only).
- May 2 Commerce Department issued final affirmative determination that exports of West German stainless steel sheet and strip to the U.S. were being dumped (margins of 6.5 - 7.8 percent on sheet; 1.5 - 4.7 percent on strip).
- May 6 ITC findings and recommendations in the section 201 case forwarded to the President.
- May 9 Commerce Department issued final affirmative decision that Brazilian bar and rod shipments to the U.S. were being subsidized (15.44 percent margin; 16.26 percent export tax).
- May 27 Commerce Department issued final affirmative determinations on two tool steel investigations: the West German dumping case (margins of 0.93 - 18.41 percent; 7.06 percent average), and the Brazilian countervailing duty case (18.7 percent margin; 19.83 percent export tax).
- June 2 ITC voted on three investigations resulting in the following final injury determinations: French sheet and strip (dumping--unanimous affirmative determination), West German sheet and strip (dumping--unanimous affirmative determination), and United Kingdom sheet, strip and plate (countervailing duty--unanimous affirmative determination on plate, negative determination on sheet and strip).
- June 14 ITC voted on final injury determination on Brazilian bar and rod countervailing duty investigation--the result was an unanimous affirmative determination.
- June 22 Commerce Department issued antidumping order for West German sheet and strip.

1983: (continued)

- June 23 Commerce Department issued antidumping order for French sheet and strip, and countervailing duty order for U.K. plate.
- July 1 ITC voted on the two tool steel cases resulting in the following final injury determinations: West German tool steel (dumping--unanimous affirmative determination), and Brazil (countervailing duty--unanimous affirmative determination).
- Because of the suspension agreements arrived at between the Government of Brazil and the U.S., final countervailing duty orders were not issued regarding exports to the U.S. of Brazilian bar and rod and tool steel, despite the affirmative Commerce and ITC determinations.
- July 5 President announced findings and recommendations in the section 201 case. It included a 4-year program of digressive tariffs for flat rolled products (sheet and strip, and plate) and 4-year global quotas on bar, rod, and alloy tool steel.
- July 19 President announced the actual levels of tariff increases and quotas relative to the section 201 investigation effective for all articles covered by the determination entered into the U.S. or withdrawn from warehouse on or after July 23, 1983, and before the close of July 19, 1987.
- July 25 Commerce Department issued antidumping order for West German tool steel.
- August 10 Appeal filed with U.S. Court of International Trade by industry contesting Commerce Department's affirmative determination on U.K. sheet, strip and plate with regard to margins.
- August 11 Appeal filed with U.S. Court of International Trade by industry contesting ITC's negative determination on U.K. sheet and strip and margins on U.K. plate.
- August 23 Appeal noticed with U.S. Court of International Trade by industry contesting Commerce Department's affirmative determination on West German tool steel with regard to margins. Case pending before CIT.

1984:

- January 13 Industry filed antidumping case with Commerce Department and ITC covering stainless sheet and strip from Spain.
- February 17 ITC determined that there was a reasonable indication of material injury to the U.S. industry from dumped imports of Spanish stainless sheet and strip.
- February 28 Industry appeals on Spanish bar consolidated by Court of International Trade. Order effecting consolidation suspended the ITC appeal pending resolution of the Commerce appeal.
- March 8 U.S. Court of International Trade decision to dismiss U.K. sheet and strip part of complaint and leave intact part of U.K. plate appeal.

Senator DURENBERGER. For purposes of getting some reaction from each of the witnesses, and until either of our international trade experts get back, let me give you the example of a little company called China Steel Corp. It operates a recently constructed integrated steel operation in Goshung on Taiwan.

The facility occupies 360 acres, has its own port, rail, and highway connections. Raw materials, ore and coal, are imported entirely from Australia, landed at the port in ore carriers built by China Shipbuilding Corp., which is located on several hundred acres of land directly adjacent to the steel plant.

The plant includes blast furnaces, continuous casters, and five processing mills for buyers in sheet. It is being built in three phases. Initial capacity was a little over 1 million tons per year; the second phase brought capacity to 3 million, and the final phase will begin construction soon to bring total capacity to 8 million tons annually, which I figure is just a little under reserve, Mr. Chenault, and right about where Ibbing Tack is. And those two, between them, produced only about 9 million tons of ore last year. I am interpolating my ore and my steel.

But it is not really possible for a lot of Americans to understand what something like that means. I probably could have picked some other example to talk to you about, and it would be better if I used Brazil as I did earlier, because they understand that on the iron range.

But the reality here is that this is a very unique kind of facility. We don't see this sort of thing in the United States. In addition to the port, the rail facilities, the furnaces, and the mills, and the chief customer right next door so you don't have any of that \$5 rail like we have for ore in Minnesota; for example, the facility includes dormitories for the workers, condos for workers with families, medical facilities, and a recreation complex.

The plant was built with Government capital—50 percent of the taxable investment was made with the tax dollars of the Government of Taiwan; the other 50 percent was borrowed from international banks. There is no private equity ownership.

The Government of Taiwan currently is requesting that the U.S. Government approve sales of two squadrons of F-16's for Taiwan's

air force. I could go on and on and on with some of these sorts of things. We obviously have a continuing military commitment to Taiwan to make sure that it doesn't become a Hong Kong sometime in the future. And I wouldn't doubt that that has an impact on the cost of money to China Steel Corporation.

I don't want to add to that the high-tech nature of the plant and what that means in terms of output per man hour or person hour, and some of the other labor cost advantages that Taiwan has, but if I may, let me ask each of you in some way to react to that example and tell us in the broader sense, if you will, what significance that has for U.S. steel competitiveness.

Mr. TRAUTLEIN. Well, I think that is just one in a series that you could recite of countries throughout the world that have overbuilt their steel industries based on the needs of their own countries. They have built it either with government money or with government subsidies, and they turn around and then look to see where they are going to use the steel, and of course there is only one free market in the world and they have to bring it in here. I so indicated in my testimony. The cumulative effect of literally tens of countries having done this is putting tremendous pressure on steel in this country.

Mr. RODERICK. I would agree with that, Don. I think it is just simply that much of this capacity is actually created for, initially, domestic consumption within that country.

I have yet to see any Third World country—even though they start out with that objective of limiting their steel industry to their own immediate consumption requirement, they find that it is so easy once they start that they keep building it and building it. And the minute their own economy softens into a cyclical mode, the only place that they can bring that tonnage, they pour it into the United States because we do not have trade laws—and not just this administration but past administrations that are able or willing to react realistically as they find a dumped outlet for that overcapacity.

So I think that China Steel, Pohang in Korea—we could go through them. You mentioned Brazil; they are the classic example both in iron ore and in steel, overcapacity, can't finance their loans anymore or can't service their loans, therefore have to dump abroad in order to generate cash.

Senator DURENBERGER. But even in the meantime, while we are waiting for the excess of domestic needs to cause the dumping, we are in effect facing the subsidization of products made in Taiwan on the U.S. market somewhere else; is that not a fact?

Mr. RODERICK. That is right.

Senator DANFORTH. Jim.

Mr. CHENAULT. It is interesting that you had started on this note, as in the case of pipe and tube, particularly oil country goods, I don't think there is a country shipping pipe into this market that has a significant home market. The very reason that they built pipe and tube mills was clearly for export. The last set of numbers we have looked at indicates that free world capacity is on the order of 300 percent surplus to needs. In our own country it is 200 percent of our domestic needs.

The destructive nature of their pricing is well-known; I don't think anyone argues about the effect and the depth of dumped and illegally imported pipe into this market.

We see the Koreans, for instance, move from insignificant market penetration to 10 percent in April 1984, where the total European Community shipments in April 1984 were 16 percent of the market.

Earlier testimony indicates you are apparently not injured with 24, 25, 26 percent import levels. But for the first 4 months of this year OTGC imports accounted for just under 66 percent; the exact number is 65.5 percent of the market.

So Mr. Chairman, I guess we are approaching your shoe record. It would appear this import level has moved from 20 percent in 1979 to 65½ percent for the first 4 months of this year.

Senator DURENBERGER. This is for what product, sir?

Mr. CHENAULT. Oil country tubular goods. It is the pipe used in completing—drilling and completing—oil and gas wells.

Senator DURENBERGER. United States Steel is importing it, isn't it?

Mr. RODERICK. No.

Mr. CHENAULT. No.

Senator DURENBERGER. Who is importing it?

Mr. CHENAULT. It is being imported by trading companies, brokers, various distributors, various elements of the distribution cycle. In some cases the foreign mills are importing it into their own stocks, putting it on the ground, particularly in the gulf coast region.

Senator DANFORTH. My first question is a question that I did not compose that comes from the testimony of Mr. F. Kenneth Iverson, president and chief executive officer, NUCOR Corp., before a subcommittee of the House of Representatives last summer. And this is what Mr. Iverson said:

NUCOR Corp., is a manufacturer of steel and steel products. Over the last 13 years we have constructed seven steel minimills on four sites. In 1982 we produced 1,100,000 tons of steel. We are the 10th largest steel company in the United States and have an annual capacity close to 2 million tons. We obviously are a medium sized producer.

What does set us apart from the rest of the steel industry? One, all of our mills use the latest steel technology; 100 percent of our steel is continuously cast.

Two, for more than 10 years the price of the steel products we produce FOB our mills has been equal to or less than the dockside price of these products from foreign suppliers.

Three, we have continually maintained our work force. We have not closed a single operation nor laid off a single employee for lack of work.

Four, we operate profitably. Since constructing our first steel mill in 1970, the company has never had a lost quarter. In 1982 we had a 10-percent return on stockholders' equity. For the last five years our return on stockholders' equity has averaged more than 20 percent.

If we can meet foreign steel competition and operate profitably, then what is wrong with the major portion of our steel industry?

And I would simply ask the same question.

Mr. TRAUTLEIN. Well, I will start to answer that.

First of all, I admire what NUCOR's performance has been, but it is much like it is in the new countries, because they are starting from flat, from zero, and building small mills at the bottom line of the product range, and area mills, and they are being successful in

doing it. I think that's a fine strategy. I think they have been successful at it.

But you are talking about a portion of the steel industry and a portion of the steel products. Were they to be in what you might call the heavier products, the flat rolled products, and that sort of thing, their investments would have to be much greater, just as ours are.

And we are also faced, of course, with modernizing facilities that we already have. To build a modern steel plant today of any size, say 5 million tons, would, I would imagine, cost you in the range of something like \$1,200 to \$1,300 a ton, and maybe in the range of \$7 billion.

So we are talking about a portion of our industry; we are talking about a fairly limited number of products. And I think they have been very successful. I would agree with that.

Senator DANFORTH. But you don't think that could be replicated by the rest of the industry?

Mr. TRAUTLEIN. No, sir; it cannot be.

Dr. LENA. Could I comment further on Don's comment?

One—and I would correct Mr. Iverson's statement in the sense when he described himself as a medium-sized steel company. In the sense of the overall steel industry, he is a small-scale company.

What they cover, the minimills, is a very bottom end of product quality in a restrictive range. And these are generally in bar-type products and reinforcing-type products. So the investment is very small. They support no R&D of any type; so they use the best technology with a minimum of investment to make a very narrow product line that serves only a relatively small percentage of the total steel needs of this country.

They can't manufacture sheet that goes into automobiles, appliances, and so on.

So I think you have to put the perspective of minimills in the right place—namely, a very small market, a very small investment, generally serving a region where transportation costs then become a factor relative to foreign competition.

Senator DANFORTH. All right.

Mr. TRAUTLEIN. Let me just add to that.

Supposing you have a product that is selling at \$250 a ton and another one that is selling at \$500 a ton. And the freight on both of them to come overseas is let's say \$25. You can see marginally why you would do the \$500 a ton product and not the \$250.

Dr. LENA. I would like to add one further comment, Senator. These mills use scrap as a raw material. Now, if all steel could be made from scrap, then the question would be where does all the scrap come from? Sooner or later you have to start back with iron ore to generate the iron necessary to produce the total scope of steel.

And these firms are profitable, and very profitable when scrap prices are low. When scrap prices go up, then they have a real problem. And fortunately for them, with the recession of the last 2 years, scrap prices have been very, very low.

Senator DANFORTH. Senator Heinz.

Senator HEINZ. Mr. Chairman, thank you.

I really just have one basic question that relates to the testimony of Lionel Olmer and Bill Brock.

What we have heard today is, in sum, this: We should let the market work. We should not enact any legislation, or take a 201 action, regardless of what the ITC does, if it results in quotas or tariffs, says the administration, it doesn't seem like a very good idea. Let the market work.

Then they say in the second half of their testimony, "Yes, there is dumping and subsidizing, and the market, by definition, is not working."

The answer, they say to that is, "Use the antidumping and countervailing duty laws which were rewritten and available in 1979."

You have all had 5 years under the 1979 Trade Act. My question is: Is that act working sufficiently well so that we can simply, as the administration says, place our faith in it, just sit back and wait?

Mr. TRAUTLEIN. No, it isn't working, and it can't work in the case of steel because you have too many countries that are coming in here with too many products. And to go after them on this case-by-case, product-by-product, company-by-company basis—you are dealing with a moving target. And you saw exactly what happened when we cut back the Europeans. What happened is that tonnage and more just shifted to another group of countries.

Another perfect example of what happens is the plate case against the Brazilians that was completed last summer. What happened was, the Brazilians stopped shipping plates and started to ship hot-rolled and cold-rolled sheets, and the Mexicans and the Spaniards and the South Africans picked up the plates. So we had a glorious victory; we shut down one ton and got two in return. Using the antidumping laws and the countervailing duty laws is giving us some really Pyrrhic victories.

So I don't think where you have a comprehensive problem you can have any other relief but a comprehensive relief. It is not like the automotive problem.

I can tell you, if we shut down these next 10 countries there is another group out there—whether it is Taiwan steel or whether it is Nigeria or whether it is the Philippines or whether it is India. And there is another group of products. And the problem is not going to be solved, cannot be solved, by individual trade cases.

We are seeing what has happened for 4 months in a row. The first time ever that we have had 4 months in a row with total imports of over 2 million tons. Rather than taking 20 percent of our market as they did in 1982 and 1983, they are now taking 25 or 26.

So if the case-by-case method is working so well, why are imports continuing to increase—both relatively and actually?

Senator HEINZ. Well, you say, and I quite honestly happen to agree with you, but you say that the laws won't work sufficiently well. The administration says they do and will. Now, could you explain in a little bit more detail why the laws on the books just can't do the job?

You did say in a general way that there are just too many countries and too many products; but could you flesh that out a little bit for us?

Mr. TRAUTLEIN. I'll let Mr. Lena take crack at that.

Senator DANFORTH. Adolph?

Dr. LENA. Well, first we have to recognize that the law, even when petitions are filed, is not timely. The injury requirement that exists requires you to be seriously injured before anybody, the ITC or otherwise, will come to the conclusion that you are injured at all. So there is no timeliness to the laws.

Second, the Government itself doesn't self-initiate in order to enforce the law, which is unlike almost any other law I can conceive of.

Senator DANFORTH. You are talking CVD's and——

Dr. LENA. We are talking CBD's and antidumping.

Senator DANFORTH. The Government can self-initiate, but they don't.

Dr. LENA. They can, but they don't. You know, if I rob a bank it doesn't take somebody to file a petition to come after me. [Laughter.]

But the Government doesn't initiate. So it is dependent on the industry developing the information to file a petition and going to the cost.

And then there is a period of time that extends out anywhere from 6 months to a year, depending on the trade action, before any resolution is made.

And then we find that once we win a case we have won the battle and then we lose the war. And let me define what I mean by that. That is with respect, then, to the remedy that is applied. In the first place, it is not retroactive to the day that you were first injured; it can only be retroactive to a maximum of 90 days. So there is no incentive on any foreign producer to really adhere to the law, because he knows that even if he loses he is not going to be penalized.

But beyond that, let me give you some examples of what happens:

There was a case on carbon steel rod against Brazil, where Brazil was found to be dumping to the extent of some 42 percent. And shortly thereafter, Brazil devalued the cruzeiro, which wiped out the dumping margin. As a result, there is no dumping margin.

The specialty steel industry in 1972 had a dumping case against France which we won, and the law requires that verification be made every year on entries to be sure that the law is adhered to. There was never any verification in any year in the last 10 years until this year, when we took it to the International Court and it was upheld, and the Commerce Department had to then make an evaluation. And what they found was dumping margins still of some 7 percent. This has been going on for 10 years.

Now, several things come up every time in all of these hearings, and one is that Japan doesn't dump, and they are not guilty of unfair trade practices. Well, the fact is that Japan hasn't accelerated their imports during this period, so they haven't received that attention; but there have been dumping cases against Japan, one by Lukins Steel on clad carbon steel plate where Japan was found to be dumping. Another one was B&W that cost them some \$700,000 over a period of time on pipe and tube. It was found that the Japanese were dumping on seamless stainless pipe and tube, and the dumping margin was some 19 percent. And after 2 or 3

years of action trying to get this, the Japanese then, which they have the right to do under the law, asked for an accelerated 90-day review. And the review was granted. And they said they are going to raise their price 19 percent, so the dumping margin was wiped out.

We had cases against Brazil, and Brazil was found to be dumping, and the margin was established. The Commerce Department entered into suspension agreements with Brazil where the Brazilian Government collects an export tax rather than the U.S. Government collecting a tariff. And all that is doing is putting money from one pocket to the other, and it is totally ineffective.

The Commerce Department has since found out it is ineffective and says they are not going to do that any more. But the point is, the laws aren't responsive, that they are very difficult even if the Commerce Department's intent is noble and to enforce them. And then subsequently, once you win one you gain nothing from it. And that has been our history.

Senator HEINZ. How much does one antidumping or countervailing duty case against one product in one country cost?

Dr. LENA. \$150,000-\$200,000. In excess of \$100,000.

Mr. TRAUTLEIN. A lot of money.

Dr. LENA. A lot of money. And if I take the specialty steel industry, and we are only a small part of the industry, there are 16 nations exporting to this country. There are seven product lines. Each nation has an average of four producers. And if you figure out how many cases it would take to really use the trade law, to enforce it, you come up with something like 150 cases at \$100,000 each; that's \$15 million. This industry doesn't have it.

So what did we do in this last series? We filed a 301 case which led then to a Presidential 201 case. But in the meantime we have selected individual cases—either dumping or countervailing duty—that demonstrate that our problem was unfair trade. And we were successful, as you know, Senator, in doing that.

Now, a 201 case comes along, and the ITC finds that we are severely injured. It makes the recommendations that quotas be established on all the products.

We had a hell of a time getting the administration to give us any relief. We ended up getting quotas on certain products where the import penetration was not the 26 percent but was 40, 50, and 60 percent in those individual product lines, and tariffs on the bulk of the product, in spite of the ITC determination of injury.

What happened? Once the import relief program was put in the Europeans threatened retaliation and demanded compensation, which they received, limiting imports of three other industries not related to our industry at all.

Now, we had demonstrated that the problem was unfair trade practices against those, but because of a technicality with the GATT—because of a technicality with the GATT—they got compensation retaliation.

Senator HEINZ. It sounds like we should either significantly reform, speed up, enhance the effectiveness of our unfair trade laws—antidumping and countervailing duties—or, so that the Commerce Department and the USTR and the administration don't continue to hide behind them, repeal them.

Thank you, Mr. Chairman.

Senator DANFORTH. Senator Symms?

Senator SYMMS. No questions right now, Mr. Chairman.

Senator DANFORTH. I have just one final question for Mr. Trautlein.

Mr. Trautlein, your company has filed the 201 petition, an approach which would appear to be more consistent with our GATT obligations than legislative quotas. But you also support the quota bill. Isn't there an inconsistency there?

Mr. TRAUTLEIN. No, sir. I also support individual dumping and countervailing duty cases, and I also support the Trade Reform Action Coalition, and if there is another altar out there I will be lighting a candle at it.

We have a problem. You know, when your house is burning you aren't going to really worry which fire department gets there first. So I support every action, and we are going to take every action until we get a comprehensive solution to this problem.

Thank you.

Senator DANFORTH. Thank you. Well, we will note you signed on to any possible remedy. [Laughter.]

Senator Bentsen has two questions which he would like to ask you for the record, and if we could submit those to you and if you could provide written answers, that would be very helpful. We would appreciate it.

[Senator Bentsen's questions to Mr. Chenault and his responses thereto follow:]

Response of James E. Chenault, President and Chief Executive Officer of Lone Star Steel Company to Questions Posed by the Honorable Lloyd M. Bentsen, United States Senator

1. HAVE EUROPEAN PRODUCERS BEEN ABLE TO DIVERT PRODUCTION FROM PRODUCTS COVERED BY THE BASIC U.S.-E.C. STEEL AGREEMENT TO PIPE AND TUBE PRODUCTS?

Senator, the evidence is extremely clear that steel pipe and tube manufacturers have diverted production from carbon steel products covered by the basic U.S./E.C. steel agreement to the pipe and tube sector. The reason for this is very simple. The basic U.S./E.C. steel agreement, entered into in October 1982, established specific limits on EC exports to the United States of a wide range of basic carbon steel products other than pipe and tube products. This agreement provides for specific enforcement of the export limits. At the time the carbon steel arrangement was negotiated, there was concern among U.S. pipe and tube manufacturers, including Lone Star Steel, that the export restrictions of the carbon steel arrangement would encourage EC manufacturers to divert production to the pipe and tube sector. Unprotected by a similar agreement our industry would serve as a safety valve for EC steel exporters affected by the carbon steel arrangement. In order to prevent such a diversion to the pipe and tube sector, the U.S. and the E.C. entered into a second, ancillary agreement (known as the pipe and tube arrangement) designed to prevent both diversion of EC exports to the pipe

and tube sector and distortion of the pattern of trade within that sector. Unfortunately, the pipe and tube arrangement has a serious flaw which has prevented it from serving its intended purpose. The arrangement provides no mechanism by which the United States can enforce the obligations agreed to by the EC in the arrangement. The results, Senator, have been predictable--and for the U.S. pipe and tube manufacturers, they have been devastating. While the EC has complied closely with the terms of the basic carbon steel arrangement, it has continuously violated the terms of the pipe and tube arrangement since it went into effect. The pipe and tube arrangement was intended to limit EC exports of pipes and tubes to the EC's average share of the U.S. market during the period 1979 through 1981. For pipe and tube products overall, this would mean that the EC should be limited to 5.9 percent of the U.S. market. For oil country tubular goods ("OCTG"), which Lone Star Steel manufactures, the EC's market share under the arrangement should be limited to 8.76 percent of the U.S. market. Trade statistics prepared by the Department of Commerce have consistently shown that the EC has violated both of these limits throughout the course of the pipe and tube arrangement. For pipes and tubes overall, the EC has occupied over 8 percent of the U.S. market. For OCTG, the EC has essentially doubled the market share it should be entitled to under the arrangement, occupying an average of around 20 percent of the U.S. market.

These statistics clearly demonstrate the diversion of EC export activity from basic carbon steel products to the pipe

and tube sector, particularly in the market for OCTG. We know that you are acutely aware of the tremendous costs in terms of unemployment and economic losses which have resulted from this situation. Lone Star Steel and its employees are grateful for your efforts to make the arrangement enforceable.

2. TO WHAT DEGREE DID LONE STAR STEEL RELY ON THE U.S.-E.C. PIPE AND TUBE AGREEMENT OF OCTOBER 1982 IN ATTEMPTING TO PROTECT ITSELF FROM DUMPED AND/OR SUBSIDIZED EC EXPORTS OF OIL COUNTRY TUBULAR GOODS?

Senator, our company has relied exclusively on the pipe and tube arrangement to protect against unfairly traded EC exports of OCTG. As you know, the pipe and tube arrangement is a bilateral trade agreement which specifies obligations for both the U.S. and the European Community. As we have discussed, the EC promised to limit its shipments of pipes and tubes to the 1979-1981 average U.S. market share held by EC mills. In exchange for this promise, U.S. pipe and tube firms agreed to drop pending unfair trade cases against the EC and to refrain from filing such cases in the future. We have upheld our end of the bargain so far, and have avoided resorting to filing trade cases. As you also know, we have repeatedly urged the Department of Commerce to seek the EC's compliance with its promises.

For many months, we were assured by the Department that things were looking up, and that the EC's exports would soon drop to the arrangement's levels. After a year and a half of optimism on the part of the Department and massive losses and

unemployment at Lone Star Steel and other U.S. pipe and tube mills, the Department initiated "consultations" with the EC to which I referred in my prepared testimony. So far little progress has been visible.

Because it appears to us that the Department is virtually powerless to enforce the pipe and tube arrangement, we at Lone Star Steel are particularly grateful for your legislative effort to put some teeth into the arrangement. We recognize the Department's belief that many of the problems facing the steel industry today could theoretically be resolved by bringing actions under existing U.S. trade laws. However, pipe and tube producers, including Lone Star Steel, are in a unique position with respect to EC exports to the U.S. We have expressly agreed, in an agreement negotiated on our behalf by the Commerce Department, to avoid filing trade cases. I believe that in light of these facts, it is especially clear that U.S. trade laws cannot solve all of the industry's problems stemming from unfairly traded imports.

In conclusion Senator, we are continuing to rely on the pipe and tube arrangement, at least until it is clear that it cannot be enforced. We are encouraged by the legislation you have introduced which would give the Department the authority we believe it needs to effectively bring about EC compliance with the arrangement. With the enactment of your legislation, we think the Department of Commerce could emerge from its consultations with a meaningful commitment by the EC. In the absence of such action, and based on our experience over the past year and a half, we are somewhat skeptical as to what can be achieved by the Department.

Senator DANFORTH. Gentlemen, thank you very much for being here, and thank you for your patience for waiting so long to testify.

Mr. TRAUTLEIN. Thank you, Senator.

Senator DANFORTH. The next panel is Lynn Williams, president of the United Steel Workers, and Leon Lynch, vice president of the United Steelworkers.

Mr. Williams, it is my understanding that you are the spokesman for this panel.

**STATEMENT OF LYNN R. WILLIAMS, PRESIDENT, UNITED
STEELWORKERS OF AMERICA, PITTSBURGH, PA**

Mr. WILLIAMS. Thank you, Senator, members of the committee.

Mr. Lynch will have some very brief remarks when I am finished with my summary of our testimony, and of course the total testimony is available and is being filed with you.

I am Lynn Williams, president of the United Steelworkers of America. I welcome the opportunity to testify on behalf of S. 2380, the Fair Trade in Steel Act of 1984.

From the perspective of hundreds of thousands of steelworkers and others employed in support industries, no pending legislative proposal is more urgent than this bill. The reasons for this sense of urgency should not be a mystery.

Steel imports are surging across our shores today at all-time record market-share levels. For steelworkers and their communities, the consequences have been tragic.

Let me begin with the statistics. In 1977, just 7 years ago, the total blue-collar and white-collar employment in our industry stood at slightly more than 452,000 workers. By the end of 1983, the total number of jobs had plummeted to 243,000. In other words, nearly 210,000 steelworkers, or 46 percent of the total unemployed, have lost their jobs since 1977. That is a staggering loss by any standard.

Lest anyone think that prosperity has arrived, let me assure you that 1984 shows little improvement. Imports have gobbled up 40 percent of the increase in tonnage. The result is that domestic steel companies have not shared meaningfully in the cyclical upturn, and employment is still mired at close to its all-time low levels of 1983.

For many there is no return, since their mills are shut down. Some 150 steel producing units have been permanently closed in the past 2 years alone. As a result, steelmaking capacity has been cut back from 160 million tons in 1977 to 135.3 million tons at the outset of 1984. In fact, from January 1983 to January 1984, estimated steel producing capacity in this country dropped because of plant closings by as much as 15 million tons, or 10 percent, in just 1 year.

No one disputes the fact that the steel industry is currently in the state of crisis. Instead, the argument is made that imports are not to blame. The facts, however, prove overwhelmingly that, though new technology, slack demand, and certain other factors may account for some of the problem, imports are clearly the main villain in the decline of the domestic steel industry.

As you are aware, under section 221 of the Trade Act of 1974, workers are eligible for trade adjustment assistance if the Secre-

tary of Labor finds that imports contributed importantly to their separation. The Department of Labor tells us that the number of steelworkers certified for trade adjustment assistance during the period January 1, 1977, to March 1984 is approximately 148,000. To that number add 5,000 more who as employees of the United States Steel plants, which have already been certified, will become eligible when their plants close on June 1 of this year.

Next I want to confront squarely the matter of labor costs and efficiency. By far the most significant development on this score is a 41-month agreement with the major integrated producers in early 1983 under which, for the first time, the parties substantially reduced wage and benefit costs. Except possibly for the 1979 Chrysler-UAW agreement, no other agreement in a basic industry imposed as deep a cut as the 10.9 percent wage reduction in steel. Apart from negotiated reductions, hourly employment costs dropped dramatically during 1983 for other reasons:

At the beginning of the year, labor costs were \$26.12 per hour worked. However, termination of benefits coupled with the negotiated changes yielded an employment cost figure for production workers in January 1984 of \$21.08 per hour—\$5 or 20 percent less than it was a year earlier.

Our union and many companies have taken other measures to increase output per hour and reduce the cost of making a ton of steel. First, you may be familiar with the labor management participation teams established experimentally in 1980 and expanded in 1983. Employee involvement in production and other matters, once viewed as management's exclusive domain, has achieved remarkable results in the form of improved quality and greater efficiency.

Second, at many locations our local unions and plant management have entered into agreements reducing crew sizes and modifying work rules. Though not yet quantified on an industry-wide basis, we anticipate that all these efforts will improve output-per-man-hour in the 10 to 15 percent range.

To sum it up, we are doing our part.

Some opponents of import relief argue that high labor costs are more to blame for the industry's plight than imports. That argument doesn't square with the facts. According to World Steel Dynamics, labor costs as a percentage of domestic selling price have remained stable at approximately 35 percent since 1977. Moreover, the rate of increase in these costs is paltry compared to that of other steelmaking costs.

Thus, from 1976 through 1983, labor costs per tons shipped rose by 47 percent—\$50.35—and the comparable figures for energy are 233.7 percent—\$50.43—for financial, 97 percent—\$25.64; and for iron, 81.9 percent—\$34.91.

Apart from their stability in relation to other factors, labor costs per tons shipped in actual terms are dropping significantly. In 1980 they were \$158.38 per ton. Due partially to distortion, they shot up to \$193.41 in 1982; but then they fell back to \$157.41 in 1983.

Senator DANFORTH. Mr. Williams, we have your text of your comments, and they will be inserted in the record as though read. Because we are running so late, I wonder if you could just sort of

wind up your testimony or give us in a nutshell what else you would like to add.

Mr. WILLIAMS. Well, let me try to do that very quickly.

You have the evidence there in terms of our reduction in cost-per-ton of steel, the fact that we are doing that more efficiently than anybody else in the world at the moment.

We have comments here about the low wages and so on paid in the Third World countries. We make the point, of course, that if one destroys the incomes provided by good jobs in America, one does fundamental and permanent damage to the entire society and to its economy.

In conclusion, let me express the hope that you not allow the welter of data before you to obscure the human dimension of the problem. Statistics won't measure the despair I have seen registered on the faces of the unemployed in steel centers in Illinois, Indiana, Alabama, New York, and all across Ohio and Pennsylvania. These facts could tell you perhaps more graphically than balance sheet numbers and market share percentages that the domestic steel industry and its workers are in desperate need of import relief.

I would appreciate it if Vice President Lynch could take a moment to just comment about the study of these matters which we want to file with you.

Senator DANFORTH. How about half a moment?

Mr. WILLIAMS. Half a moment? Good.

[Mr. Williams' prepared testimony follows:]

TESTIMONY OF LYNN R. WILLIAMS, PRESIDENT, UNITED STEELWORKERS OF AMERICA,
AFL-CIO,

Mr. Chairman:

I am Lynn Williams, President of the United Steelworkers of America. I welcome the opportunity to testify on behalf of S. 2380, the Fair Trade in Steel Act of 1984. From the perspective of hundreds of thousands of steelworkers, and probably three times their number employed in support industries, no legislative proposal now pending in Congress is more urgent than this bill.

The reasons for this sense of urgency should not be a mystery. Steel imports are surging across our shores today at all-time record market share levels. In turn, growing import pressure in recent years has forced domestic steelmakers to cut back drastically on raw steel capacity. For steelworkers and their communities, the consequences have been nothing short of tragic.

Let me begin with the statistics. In 1977, just seven years ago, total blue collar and white collar employment in our industry, according to AISI data, stood at slightly more than 452,000 workers. By the end of 1983, the total number of jobs had plummeted to 243,000. In other words, nearly 210,000 steelworkers, or 46% of the total then employed, have lost their jobs since 1977. That is a staggering loss by any standard.

Lest anyone think that prosperity has arrived, let me assure you that 1984 shows no significant improvement. To be sure, steel consumption is up somewhat. But that means little since foreign competitors, by dropping their prices to distress levels, are gobbling up a disproportionate share of the market. Thus, apparent steel consumption in the first two months of 1984

increased by a total of 5 million tons over the comparable period in 1983. But imports captured 40% of the increase. The result is that domestic steel companies have not shared meaningfully in the cyclical upturn and employment is still mired at close to its all-time low levels of 1983. Steelworkers are not being recalled and, unless some relief is afforded from the surge of imports, no end to their suffering is in sight.

The current recession in the steel industry is the most severe since the Great Depression. Though precise data on layoff duration is unavailable, we do know that some 100,000 steelworkers have been on layoff so long they have exhausted state unemployment compensation and contractual supplemental unemployment benefits, both designed to cushion the shocks of cyclical unemployment.

For many, there is no return since their mills are shut down. Some 150 steel-producing units, counting blast furnaces and finishing mills, have been permanently closed in the past two years alone. As a result, steelmaking capacity, according to AISI, has been cut back from 160 million tons in 1977 to 135.3 million tons at the outset of 1984. In fact, from January of 1983 to January of 1984, estimated steel-producing capacity in this country dropped because of plant closings by as much as 15 million tons, or 10% in just one year.

No one disputes the fact that the steel industry is currently in a state of crisis. Instead, the argument is made that imports are not to blame or are only a small part of the blame. The real culprit we are told by one exporting country is

something called "steel intensity." Another cites "secular decline in demand." Still a third indicts labor costs as the villain. There seem to be as many theories of causation as there are nations opposing import relief.

The facts, however, prove overwhelmingly that though new technology, slack demand and certain other factors may account for some of the problem, imports are clearly the largest single cause in the decline of the domestic steel industry. And it is there that we must obtain relief.

I will not take your time by reviewing the mountain of evidence being placed before the Committee on the causation question. However, I do want to call your attention to the determinations issued over the years by the Department of Labor.

As you are aware, under Section 221 of the Trade Act of 1974, workers are eligible for trade adjustment assistance if the Secretary of Labor finds that imports "contributed importantly" to their separation. We asked the Department of Labor to tell us how many steelworkers (SIC 3312, 3315, 3441 and 3496) had been certified for trade adjustment assistance any time during the period January 1, 1977 to March, 1984. The answer is approximately 148,000. (See Exhibit A attached hereto.) To that number we should add perhaps 5,000 more who, as employees of U.S. Steel plants which have already been certified, will become eligible when their plants close and they are laid off on June 1st of this year. To be sure, some who were certified may have been recalled. Nevertheless, no single

cause other than imports is responsible for the layoff, cumulatively, of 153,000 steelworkers.

Next, I want to confront squarely the matter of labor costs and efficiency.

Of course, the most significant development on this subject is that in early 1983, the Union concluded a 41-month agreement with the major integrated producers under which, for the first time, the parties substantially reduced wage and benefit costs. Except possibly for the 1979 Chrysler-UAW agreement, no other agreement in a basic industry imposed as deep a cut as the 10.9% wage reduction in steel. The essential provisions are:

- o Wage rates reduced by \$1.31/hour, 10.9% on average. (Restored in roughly equal increments on February 1 in 1984, 1985 and 1986.)
- o Sunday premium pay reduced from 1-1/2 time to 1-1/4. (Restored on February 1, 1986.)
- o Cost-of-living clause fully suspended for the first 17 months of the agreement. During the next year, it is not triggered until the CPI rises by 4%, and in the final year after the CPI rises by 1.5%.
- o The agreement also eliminated one holiday and all vacation bonuses and it did away with the Extended Vacation program, a unique steel benefit providing an average of 1.3 weeks of additional vacation per employee per year.

After subtracting a 50 cent per hour increase in SUB contributions, and excluding the effects of COLA, the net reduction in employment costs was \$2.20 per hour, or slightly less than 10%.

Apart from negotiated reductions, hourly employment costs dropped dramatically during 1983 for other reasons. At the beginning of the year, according to AISI reports, it was \$26.12 per hour worked. As any knowledgeable observer can confirm, however, that was an artificially inflated figure. The distortion resulted from the fact that insurance and other benefits continued for laid off employees. Accordingly, this component of employment costs remained fixed and was spread over a lot fewer hours. Once the year went by, the layoffs had endured so long that insurance continuation and other benefit rights were exhausted. Termination of benefits, coupled with the negotiated changes, yielded an employment cost figure for production workers in January, 1984 of \$21.08 per hour, \$5 or 20% less than it was a year earlier.

Our Union and many companies have taken other measures to increase output per hour and reduce the cost of making a ton of steel. First, you may be familiar with the Labor-Management Participation Teams established experimentally in 1980 and expanded in 1983. Employee involvement in production and other matters once viewed as management's exclusive domain has achieved remarkable results in the form of improved quality, more efficient use of energy, material and personnel, and less waste and down time. Second, at many locations our local unions

and plant management have entered into agreements reducing crew sizes and modifying work rules to the mutual advantage of the parties. The results, though dramatic in specific cases, admittedly have not been recorded as yet on an industry-wide basis. Nevertheless, our experts anticipate that these cooperative efforts will improve output per man hour in the range of 10% to 15%. To sum it up, we are doing our part.

As I have indicated, some opponents of import relief argue that high labor costs are more to blame for the industry's plight than imports. That argument is factually wrong and conceptually flawed as we recently demonstrated in pre-hearing and post-hearing submissions filed with the International Trade Commission. (The relevant portions are attached hereto as Exhibits B and C.) Rather than retrace all that ground here, I will simply review some of the salient points.

As revealed by data published in World Steel Dynamics, labor costs, as a percentage of domestic selling price, has remained stable at approximately 35% since 1977. The same source discloses that the rate of increase in labor costs since 1976 is paltry compared to that of other steelmaking costs. Thus, from 1976 through 1983, labor costs per ton shipped rose by 47% (\$50.35) and the comparable figures for energy are 233.7% (\$52.43), for financial 97% (\$25.64) and for iron 81.9% (\$34.91). If we extended the period of comparison to the first half of 1984, the rise in labor costs since 1976 is only 29% (\$31.10). Nothing here that would warrant the growing influx of imports on labor cost grounds.

Apart from their stability in relation to other factors, labor costs per ton shipped, in actual terms, are dropping significantly. In 1980, they were \$158.38 per ton. Due partially to the distortion earlier described, they shot up to \$193.41 in 1981, but then fell back to \$157.41 in 1983. Today, they are lower still, having fallen to \$138 per ton. Yet, at the same time domestic costs are dropping, foreign competitors are seizing an increasing share of our market.

How do U.S. labor costs per ton shipped compare with those of our major competitors among the industrial nations? The results are surprising. Over the period 1976 to 1983, dollar increases for Japan and West Germany are within \$6 per ton of the U.S., and, what's more, their rate of increase surpassed ours. At the end of the period, French labor costs, historically closest to those of the United States, were still within \$10.54 per ton of ours. Only the United Kingdom gained an advantage in this period. Of course, part of the current difference in unit labor costs is a function of exchange rate fluctuations rather than wage increases. Indeed, had the dollar not appreciated from its 1978-79 levels against the other currencies in question, Japan would have lost 12% and the United Kingdom 37% of the cost advantage they enjoy over us, while the German and French steel industries would now be looking at significantly higher labor costs than ours.

Let's now consider the Third World problem. I am not going to pretend that steel labor costs in the United States are as low as those, for example, in Korea, Brazil, Taiwan or

South Africa. Neither am I going to apologize for that fact. Through collective bargaining, a process favored by national policy since the 1930's, we have managed to lift the standard of living for steelworkers. At present, some of them, after years in the mill, earn enough to meet the intermediate family budget, as adjusted, set by the Labor Department for a family of four (\$26,568). The earnings of others, however, remain in the low category (\$16,334). Thus, the most highly paid of our members have reached the point where they can afford a car, a modest home and an education for their children. The lowest paid barely make it.

Workers in Third World nations suffer living standards far lower than our own. They toil under oppressive regimes in which free trade unions are either heavily restricted or outlawed altogether. Surely, it is not national policy to drive down the wages and living standards of U.S. workers so that they will match those of the worst paid steelworkers anywhere in the world. I know that was not the objective of the Congress which passed the Trade Reform Act of 1974. Quite the opposite, that statute lists downward wages in the domestic industry as one of the indicia of threatened serious injury.

On the matter of efficiency, I think it time to set the record straight. Contrary to popularly held myths, the American steelworker is the most productive in the world. Again, World Steel Dynamics is our source. In 1983, it took 6.59 total man-hours to produce a ton of steel here. That is significantly less than it took in France (10.92 hours), West

Germany (10.76 hours), the United Kingdom (10.75 hours), and even Japan (7.72 hours). Put another way, these figures mean that a U.S. steelworker produces 65% more steel per hour than his French counterpart, 63% more than his West German and British counterparts, and 17% more than his Japanese counterpart. In 1984, we are doing even better. Man-hours are down to 5.80 per ton and we have pulled away to a 25% man-hour advantage over our nearest rival, the Japanese. So much for the notion that our competitors in industrial nations are more efficient than domestic steel producers.

Ten years ago, Congress passed the Trade Reform Act. It is instructive to consider the steel quota bill in light of goals which the 1974 legislation was designed to achieve. For example, in 1974, Congress hoped to stem a trade deficit which then had grown to \$12 billion. Compared with the current deficit, running at the staggering rate of \$120 billion a year, \$12 billion is small potatoes indeed. Imports of steel contribute importantly to that deficit. Addressing another matter of relevance today, this Committee explained one of the reasons underlying the 1974 Act as follows:

"The Committee, however, believes that the United States can no longer afford to stand by and expose its markets, while other nations shelter their economies--often in violation of international agreements--with variable levies, export subsidies, import equalization fees, border taxes, cartels, discriminatory government procurement practices, import quotas, and a host of other practices"

(Sen. Rep. No. 93-1398; 1974 U.S. Code Cong. and Adm. News 7186, 7200)

Notwithstanding that warning ten years ago, many today still insist that the U.S. market remain fully exposed, while our foreign competitors continue to operate behind barriers which limit the flow of foreign steel into their domestic markets. Every single one of our major steel competitors across the sea enjoys some form of protection.

Third is the balancing of consumer and employment interests. The debate on trade issues ought not begin and end with price comparisons and the supposed benefit to the consumer from lower-priced foreign products. The point often overlooked is that in calculating the price we as a nation pay even for those few steel imports that are fairly traded, one must determine all the costs of import-related steel unemployment. And that unemployment includes mineworkers, refractory makers, mill equipment manufacturers, steelhaulers and others who number between two and three for every laid off steelworker. In this negative column are lost wages and tax revenues, as well as higher welfare and social costs. If all such costs are counted, the tide of steel imports streaming across our shores represents no bargain for the American people.

This Committee put it far more eloquently ten years ago. Thus, in determining import relief, you said employment should be considered paramount:

"With regard to the effect of relief on consumers, the Committee feels that the goals of the Employment Act of 1946 should be paramount. Unemployed persons are not happy

////

consumers. The Executive should not confuse the effect on consumers with the effect on importers or foreign producers; they are not the same. If the choice is between (1) allowing an industry to collapse and thereby creating greater unemployment, larger Federal or state unemployment compensation payments, reduced tax revenues, and all the others costs to the economy associated with high unemployment, or (2) temporarily protecting that industry from excessive imports at some marginal costs to the consumer, then the committee feels that the President should adopt the latter course and protect the industry and the jobs associated with that industry."

(Sen. Rep. No. 93-1398; 1974 U.S. Code Cong. and Adm. News 7186, 7268-69)

It must be clear to all that the steel industry is mortally injured and much of what remains today will perish tomorrow absent a comprehensive global response by government to thwart unfair imports. Moreover, it is absolutely essential that all product lines be included in such a response.

An example of the vulnerability which results when a product line is left uncovered is provided by pipe and tubing and the EC Arrangement. Pipe and tubing was not included in the quantitative limitations under that Arrangement. As a consequence, imports of this product increased dramatically after the Arrangement, causing serious injury to this sector of the industry, and the shutdown of plants. In 1983, EC's market share for pipe and tubing products was 8.1%, or an average of 39,600 tons per month. In the first quarter of 1984, however, EC's share climbed up to 13.7% which now amounts to 96,200 tons a month, or well over a million tons a year.

The practice of product shifting is one reason our union and Bethlehem Steel have urged the International Trade Commission to determine that steel is a "single industry" comprising all product lines. Excluding any particular product line simply makes it the target for additional injury.

The Fair Trade in Steel Act is the necessary legislative response. It is global in application and sufficiently broad in its product line coverage. At the same time, its remedial provisions are carefully tailored. Thus, though it establishes a comprehensive framework of import limits, those restrictions are set at the actual import penetration levels which existed not very long ago in the late 70's and early 80's. In addition, there is built-in flexibility to allow the administration to meet emergencies and policy imperatives. From our standpoint, the chief advantage is the statutory obligation that the industry use substantially all the cash flow from steel operations for reinvestment and modernization of those operations, otherwise, the quotas are removed. Indeed, without a strong link to investment and modernization, the Union would not support steel import quotas.

In conclusion, let me express the hope that you do not allow the welter of data before you to obscure the human dimension to the problem. Statistics won't measure the despair I've seen registered on the faces of unemployed in steel centers in Illinois, Indiana, Alabama, New York and all across

Ohio and Pennsylvania. These faces could tell you, perhaps more graphically than balance sheet numbers and market share percentages, that the domestic steel industry and its workers are in desperate need of import relief.

Thank you.

U.S. Department of Labor

Employment and Training Administration
603 D Street, N.W.
Washington, D.C. 20004



May 7, 1984

MEMORANDUM FOR JOHN POWDERLY

From: William F. Delaney *Delaney*
Subj: Tabulation of Certified Steelworkers

As per your request I am enclosing a computer tabulation of worker certifications in SIC 33 from 1 January 1977 to April 30, 1984.

EXHIBIT A

Number of People Certified to Trade Adjustment Assistance
by Calendar Year:

January - December	1977	63,530
January - December	1978	37,158
January - December	1979	1,301
January - December	1980	1,506
January - December	1981	873
January - December	1982	2,442
January - December	1983	37,175
January -	1984	4,817

KG660RP1
DATE = 05/03/84

U. S. DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF TRADE ADJUSTMENT ASSISTANCE

PAGE 1

SUMMARY OF SELECTED SIC CODES FOR 01-12/77

SIC CODE	SIC DESCRIPTION	CERTIFICATIONS		PARTIAL CERTIFICATIONS		DENIALS	
		PETITIONS	EST WORKERS	PETITIONS	EST WORKERS	PETITIONS	EST WORKERS
3312	BLST FURN STL MILL	45	59,719	3	3,474	108	35,502
3313	ELECTRMETLBRG PROD	3	337			6	158
	TOTAL FOR 01-12/77	48	60,056	3	3,474	112	35,652

63,530

212

KG660RP1

DATE = 05/03/84

U. S. DEPARTMENT OF LABOR

PAGE 1

EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF TRADE ADJUSTMENT ASSISTANCE

SUMMARY OF SELECTED SIC CODES FOR 01-12/78

SIC CODE	SIC DESCRIPTION	CERTIFICATIONS		PARTIAL CERTIFICATIONS		DENIALS	
		PETITIONS	EST WORKERS	PETITIONS	EST WORKERS	PETITIONS	EST WORKERS
3312	BLST FURN STL MILL	43	24,916	12	9,576	147	26,405
3313	ELECTRMETLURG PROD	3	729	4	933	2	175
3315	MFG WIRE RLTD PROD	9	346	1	658	5	940
TOTAL FOR 01-12/78		55	25,991	17	11,167	154	27,520

27,158

213

KG660RP1

DATE = 05/03/84

U. S. DEPARTMENT OF LABOR

PAGE 1

EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF TRADE ADJUSTMENT ASSISTANCE

SUMMARY OF SELECTED SIC CODES FOR 01-12/79

SIC CODE	SIC DESCRIPTION	CERTIFICATIONS		PARTIAL CERTIFICATIONS		DENIALS	
		PETITIONS	EST WORKERS	PETITIONS	EST WORKERS	PETITIONS	EST WORKERS
3312	BLST FURN STL MILL	7	1,166	2	135	22	2,163
3315	MFG HIRE RLTD PROD					1	30
	TOTAL FOR 01-12/79	7	1,166	2	135	23	2,193

1301

214

KG660RP1

DATE = 05/03/84

U. S. DEPARTMENT OF LABOR

PAGE 1

EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF TRADE ADJUSTMENT ASSISTANCE

SUMMARY OF SELECTED SIC CODES FOR 01-12/80

SIC CODE	SIC DESCRIPTION	CERTIFICATIONS		PARTIAL CERTIFICATIONS		DENIALS	
		PETITIONS	EST WORKERS	PETITIONS	EST WORKERS	PETITIONS	EST WORKERS
3312	BLST FURN STL MILL	1	80	3	1,311	117	22,774
3313	ELECTRMETLURG PROD					2	325
3315	MFG WIRE RLTD PROD	2	115			4	131
	TOTAL FOR 01-12/80	3	195	3	1,311	123	23,230

1506

215

KG660RP1

DATE = 05/03/84

U. S. DEPARTMENT OF LABOR

PAGE 1

EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF TRADE ADJUSTMENT ASSISTANCE

SUMMARY OF SELECTED SIC CODES FOR 01-12/81

SIC CODE	SIC DESCRIPTION	CERTIFICATIONS		PARTIAL CERTIFICATIONS		DENIALS	
		PETITIONS	EST WORKERS	PETITIONS	EST WORKERS	PETITIONS	EST WORKERS
3312	BLST FURN STL MILL	1	67	1	353	141	39,878
3313	ELECTRMETLURG PROD	2	290			5	690
3315	MFG WIRE RLTD PROD			1	163	7	467
	TOTAL FOR 01-12/81	3	357	2	516	153	41,035

215

216

KG660RP1

DATE = 05/03/84

U. S. DEPARTMENT OF LABOR

PAGE 1

EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF TRADE ADJUSTMENT ASSISTANCE

SUMMARY OF SELECTED SIC CODES FOR 01-12/82

SIC CODE	SIC DESCRIPTION	CERTIFICATIONS		PARTIAL CERTIFICATIONS		DENIALS	
		PETITIONS	EST WORKERS	PETITIONS	EST WORKERS	PETITIONS	EST WORKERS
3312	BLST FURN STL MILL	5	675	3	1,566	29	9,537
3313	ELECTRMETLURG PROD	1	181				
3315	MFG WIRE RLTD PROD	1	20			7	303
	TOTAL FOR 01-12/82	7	876	3	1,566	36	9,840

g h i j

III

KG660RP1

DATE = 05/03/84

U. S. DEPARTMENT OF LABOR

PAGE 1

EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF TRADE ADJUSTMENT ASSISTANCE

SUMMARY OF SELECTED SIC CODES FOR 01-12/83

SIC CODE	SIC DESCRIPTION	CERTIFICATIONS		PARTIAL CERTIFICATIONS		DENIALS		
		PETITIONS	EST WORKERS	PETITIONS	EST WORKERS	PETITIONS	EST	WORKERS
3312	BLST FURN STL MILL	59	8,991	47	27,471	56		18,020
3313	ELECTRMETLURD PROD	3	315	1	76	7		936
3315	MFG HIRE RLTD PROD	7	322			4		370
TOTAL FOR 01-12/83		69	9,628	48	27,547	67		19,326

37,175

218

11

KG660RP1

DATE = 05/03/84

U. S. DEPARTMENT OF LABOR

PAGE 1

EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF TRADE ADJUSTMENT ASSISTANCE

SUMMARY OF SELECTED SIC CODES FOR 01-03/84

SIC CODE	SIC DESCRIPTION	CERTIFICATIONS		PARTIAL CERTIFICATIONS		DENIALS	
		PETITIONS	EST WORKERS	PETITIONS	EST WORKERS	PETITIONS	EST WORKERS
3312	BLST FURN STL MILL	14	4,556			21	938
3315	MFG HIRE RLTD PROD	3	261				
	TOTAL FOR 01-03/84	17	4,817			21	938

4,817

219

**THE COST OF U.S. LABOR CANNOT BE CONSIDERED A
CAUSE OF SERIOUS INJURY**

**Prepared In Support Of
The Section 201 Petition By The
Domestic Steel Industry For
Temporary Import Relief**

By

**United Steelworkers of America, AFL-CIO/CLC
5 Gateway Center
Pittsburgh, Pennsylvania 15222**

May 9, 1984

EXHIBIT B

THE COST OF U.S. LABOR CANNOT BE CONSIDERED A
CAUSE OF SERIOUS INJURY

Opponents of import relief may attempt to argue that "high" U.S. labor costs are more to blame than imports as a cause of the industry's serious injury. This argument is conceptually flawed. It is unsupported by the facts with respect to competition from industrialized nations, and it ignores the sacrifices steelworkers are making now to help stabilize their industry.

The conceptual problem occurs because to the extent increases in low-priced imports have been made possible in part by lower labor costs overseas, the domestic industry's petition for temporary import relief under Section 201 is not less meritorious. The function of Section 201 is to provide a temporary period of import relief to permit adjustment to change in relative competitiveness which can be expected to occur over time in an international economy not subject to trade distortions.

Unfortunately, as the Commission is aware by virtue of the many affirmative anti-dumping and countervailing duty determinations involving steel products which it has made in the last several years, factor prices are not permitted to operate freely. Thus patterns of trade are prevented from being established through the proper functioning of competitive markets. A narrow focus on one factor of production, in this case labor, without broadly taking into account the broader range of factors explaining actual trade flows would be folly.

Indeed, if U.S. labor costs have a bearing on the level of U.S. steel imports, why do foreign governments subsidize and foreign companies dump steel in the U.S. market? This question alone casts doubt on the usefulness of labor costs in explaining current serious injury from imports.

Notwithstanding these conceptual points, the facts demonstrate that the behavior of U.S. labor costs in the steel industry cannot be linked to the injurious increase in imports. For example, labor costs have not gotten out of line in relation to U.S. producers' selling prices. Table 1 shows U.S. steel industry labor costs as a percent of total sales for the period 1973 through 1982, as published in World Steel Dynamics (by Paine Webber Mitchell Hutchins, Inc.) These percentages moved within a very narrow range, and remained almost flat at about 35 percent in the period since 1977. Although comparable information is not available for 1983, the prevalence of various forms of employment cost reductions in 1983 implies that the current percentages probably do not vary significantly from the historical experience. Therefore, in consideration of historical cost-price relationships within the domestic steel industry, the cost of labor has been remarkable stable.*

* Because of reduced steel demand, combined with an influx of imported steel dumped in the American market in 1983, domestic producers heavily discounted selling prices during the 1983. This abnormality may affect the 1983 ratio of labor cost to selling prices in that year.

Table 2 places the cost of U.S. labor in steelmaking in international perspective for the purpose of examining whether some dramatic change in the relative scale of U.S. and foreign real wages can be linked to the growth in injurious imports since 1977. In fact, the reverse is true. Between 1977 and 1983, the rate of increase in real U.S. hourly compensation was among the lowest of any country, and trailed far behind the increase shown for Brazil and Korea. Hence, in comparison to our international competitors, differences in the rate by which real wage gains have been made by U.S. steelworkers cannot be linked to the increase in injurious imports.

When the cost of U.S. labor is measured per ton of steel shipped, rather than per hour, the argument that labor cost is a significant cause of injury becomes even less supportable.

World Steel Dynamics estimates employment costs for the U.S. carbon steel industry and for its major competitors among the industrial nations -- the steel industries of Japan, West Germany, France, and the United Kingdom.

Table 3 sets out the estimates published by WSD for hours per net ton shipped, costs per hour, and employment costs per ton in the U.S. Since WSD's methodology of estimation is consistent for each country, it is the best available source to compare employment costs.

As expected, the figures in Table 3 reflect modest improvements in productivity from 1976 through 1982 (in spite of the low level of steel operations in 1982). A sharp increase in productivity occurred in 1983, for reasons discussed later. Labor costs rose, primarily because of the effect of inflation on wage rates through 1981. In 1982 they rose sharply, as fringe benefits for laid-off workers were piled onto the normal costs for active employees' wages and benefits. This problem continued in 1983, but costs per hour were nevertheless reduced by the substantial reduction in wages and benefits agreed to in March 1983. On the basis of tons shipped, employment costs increased from \$107 per ton shipped in 1976 to \$157 in 1983, or 47%.

World Steel Dynamics has reported on other costs of steelmaking, such as iron ore, energy, and financial costs. Table 4 compares the increases in these costs to the labor cost increase over the same period. These other three cost factors together rose from a total of \$91.49 per ton shipped in 1976 to \$204.47 in 1983, an increase of 123.5 percent. Energy costs alone rose an astounding 233.7 percent. Thus it appears that while cost increases generally may have created problems for U.S. steel producers, the increase in labor cost was less significant, and less drastic, than several other costs.

Table 5 compares labor time per ton of steel shipped for the U.S., Japan, West Germany, France and the United Kingdom, as reported by WSD. The figures show that the United States industry continues to produce steel with less labor time per ton than any of these competitors. WSD estimates that labor time in the U.S. industry in 1983 produced 17 percent more steel than the Japanese, 63 percent more than the Germans, 66 percent more than the French, and 63 percent more than the British.

Table 6 shows WSD's estimate of unit labor costs for the steel industries of the five countries for 1976-1983 and the first half of 1984. It shows that the percentage increase for Japan and Germany exceeded that in the United States, and that the dollar increase for those two countries was either comparable to or above the U.S. increase. The French comparison is less favorable, but French labor costs per ton were only \$10.35 below the U.S. figure in 1983. Only the British gained a significant advantage in this comparison.

Part of the differences in unit labor cost derives from currency exchange rate fluctuations, rather than U.S. wage increases. For 1983, the cost figures are converted in Table 6 to show what they would be at 1978-1979 exchange rates. About 15 percent of the Japanese advantage is attributable to ~~appreciation of~~ the dollar against the yen, and 40 percent of the British advantage to the present dollar-pound relationship. The German and French steel industries'

would now have significantly higher unit labor costs per ton of steel than the U.S., but for the present distortion of exchange rates.

Unquestionably, steel-exporting nations such as Brazil, Korea, Taiwan, and Poland enjoy greater labor cost advantages against the United States industry. However, the governments of these nations prohibit free trade union activity as a matter of government policy, just as they subsidize construction of steel capacity in excess of domestic or world market needs as a matter of government policy. Both forms of government intervention act to prevent the operation of market forces normally at work in a democratic society. It is fruitless to compare labor costs with such countries for the same reason it is fruitless to compare capital costs with them.

In considering the issue of whether labor cost increases have contributed to the serious injury suffered by the industry during the period 1977 thru 1983, the Commission should compare the increase in labor costs in that period to increases in labor costs of other industries in the United States. According to World Steel Dynamics, unit labor costs in steel cost rose from \$120.28 in 1977 to \$157.41 in 1983, an increase of 31 percent. By comparison, the Bureau of Labor Statistics, in its publication Employment and Earnings for March 1984 reports the following increases in unit labor costs from 1977 thru 1983:

Durable Goods Manufacturing.	48%
All Manufacturing.	47%
Non-farm Business Sector	58%
Business Sector.	57%

The increase in unit labor costs in steel over this period were in fact less than increases registered in other sectors of the economy.

Finally, the ITC must consider, when reviewing the issue of labor costs, the very real sacrifices which steelworkers are making in an effort to stabilize their industry.

Recognizing the severe impact of increasing market penetration by steel imports and reduced demand from steel-consuming domestic industries, the United Steelworkers of America and the major integrated producers negotiated a new 41-month labor agreement effective March 1, 1983, five months before expiration of the prior contract.

For the first time in the 47-year history of steel industry labor negotiations, the parties agreed to reduce wage and benefit costs, by very substantial amounts. Except for the Chrysler-UAW agreement of 1979, no other agreements between major basic industries and unions have imposed reductions approaching the 10.9% wage rate cuts of the 1983 agreement in steel.

Earnings reductions under the agreement are as follows:

- o Wage rates -- reduced \$1.31 (10.9% average).
- o Restoration of 40¢ on 2/1/84, 40¢ on 2/1/85, and 45¢ on 2/1/86.

- o Incentive Pay -- reduced average of 11.3%, to be restored with wage restorations.
- o Premium Pay -- Reduced from 1½ times for work on Sundays to 1¼ times. Restoration to 1½ times on 2/1/86.
- o Cost-of-Living Adjustments -- cancelled for the first 17 months, through July, 1984. For the 12 months 8/1/84 through 7/31/85, COLA will only begin after 4% inflation of the CPI of March, 1984. In the final 12 months through July 1986, COLA will begin after 1.5% inflation of the March, 1985, CPI.

In addition to pay reductions, the 1983 steel agreement revised benefit plans as follows:

- o Holidays -- reduced from 11 to 10 per year.
- o Regular Vacations -- reduced by one week during the first year of the agreement only.
- o Vacation Bonuses -- this benefit eliminated effective 1/1/84.
- o Extended Vacations -- this benefit, the equivalent of 1.3 weeks per year average added vacation, is also eliminated, effective 1/1/84.
- o Supplemental Unemployment Compensation -- company contributions for SUB increased from 17.5¢ per hour to 67.5¢ per hour for 35 months, then reduced to 42.5¢ per hour for final 6 months of agreement.

The average reduction in hourly employment cost resulting from the various wage and benefit cuts was \$2.70 immediately, excluding COLA effects. Of this amount, 50% was diverted to SUB contributions, leaving net savings averaging \$2.20 per hour worked, slightly less than 10% of total employment costs.

In addition to the negotiated savings of \$2.20 per hour, total employment costs in the steel industry have dropped dramatically from 1983 to 1984 for other reasons. In 1983,

large numbers of employees were laid off who nonetheless were entitled to continued insurance coverage, pension funding, and vacation pay. By January 1984, most of these costs had been eliminated because the benefit periods for many of these employees had expired.

As a result of the combination of negotiated reductions in wages and benefits, plus the reductions of fringe benefit costs for the unemployed, the average employment cost of AISI reporting companies declined more than \$5.00 per hour from January 1983 to January 1984. The specific figures were \$26.12 in January 1983 and \$21.08 in January 1984.

Total employment costs over the life of the agreement are unpredictable due to fluctuating costs of unemployment benefits. Some variation will also depend upon the rate of inflation between March 1984 and March 1986, and the resulting effect on cost of living adjustments. However, under the contract provisions, wage rates and stipulated pension and insurance benefits will be identical in July, 1986 to those in effect in August 1982. Cost of living adjustments will raise the wages by some amount. However, the combined costs of vacation, holidays, and SUB contributions will be lower by approximately 40% per hour.

It is also important to note that, under the agreement, the steel companies must reinvest the negotiated employment cost savings in their steel-making operations.

Prior to the reductions, earnings in the basic steel industry exceeded those in most other heavy manufacturing industries, according to BLS reports:

Average Hourly Earnings

	<u>Jan. 1983</u>	<u>Jan. 1984</u>
Steel (SIC 3312)	\$14.37	\$13.22
Auto (SIC 3711)	13.07	13.81
Aluminum Smelting (SIC 3334)	14.16	13.92
Can Manufacturing (3411)	12.35	12.88
Coal Mining (SIC 11, 12)	13.27	14.35
Petroleum Refining (SIC 291)	14.03	14.38

In addition to the direct reductions in hourly costs negotiated nationally, the Union and many companies have taken actions to improve output per hour worked. These have taken two principal forms.

First, there has been significant expansion of the labor-management participation teams experimentally established under the 1980 agreement. These teams have achieved substantial quality improvements in a growing number of steel plants by involving hourly and salaried personnel in joint studies of production problems. These programs have resulted in reduction of waste, re-work, and downtime.

Second, innovative labor negotiations have been conducted at the local level. Some local unions and management

have agreed to reductions in crew sizes in exchange for more liberal early retirement policies. Various work rule changes have also led to increased production efficiency.

Both of these developments are continuing, with results that, while dramatic in specific cases, have not been measured on an industry wide basis as yet. However, it would not be unrealistic to expect a 10 percent to 15 percent improvement in output per man-hour worked as a consequence of these joint actions of labor and management.

Indeed, these efforts are already achieving considerable success. According to a study recently reproduced in the Congressional Record, output of steel per man-hour in the United States rose by a gigantic 23 percent between 1982 and 1983.^{1/}

The wage reductions and increased productivity in 1983 have had very little impact on reducing imports in 1983 and 1984. As noted earlier, foreign steel producers have continued to export massive amounts of steel to the United States. If import relief is granted, as asked for in this case, the United Steelworkers of America and the industry will continue to work together to build the most modern and efficient steel industry in the world. Steps are already in place to assure that this will happen.

1/ April 9, 1984 at H2492.

Table 1

LABOR COST AS A PERCENT OF TOTAL SALES
IN THE U.S. STEEL INDUSTRY

<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
35.5	32.1	36.0	36.0	35.6	35.0	-35.2	36.1	34.6	36.1

Source: Paine Webber Mitchell Hutchins, Inc., World Steel Dynamics, November 1982, and The Steel Strategist, No.9, February 1984.

Table 2

GLOBAL STEEL INDUSTRY LABOR COST COMPARISON:
HOURLY COMPENSATION

(deflated by national CPI; 1975 = 100)

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
U.S.	100.0	103.7	106.7	109.2	109.6	111.4	110.0	123.9	114.6
Japan	100.0	97.3	99.2	102.1	101.8	102.6	106.6	107.1	108.7
West Germany	100.0	105.4	108.5	112.9	117.0	120.2	117.9	120.2	119.4
France	100.0	106.1	112.6	110.1	111.6	110.2	112.3	121.4	125.3
United Kingdom	100.0	102.1	97.6	107.3	109.1	104.9	110.1	111.9	120.4
Canada	100.0	108.1	114.2	118.3	118.0	115.3	117.8	124.9	125.1
Italy	100.0	98.5	101.1	105.7	105.2	99.1	102.7	105.1	108.6
Belgium	100.0	104.4	112.1	115.4	120.7	124.9	123.6	117.5	120.1
Netherlands	100.0	102.0	101.9	102.9	108.3	110.6	105.0	107.1	108.1
Brazil	100.0	105.6	110.2	115.5	117.3	123.4	133.8	150.0	135.8
Mexico	100.0	105.4	112.4	113.5	115.7	115.2	116.9	114.1	—
Korea	100.0	116.8	145.0	173.0	181.6	162.9	163.0	171.1	191.6

Source: U.S. Department of Labor, *Hourly Compensation Costs for Production Workers in Iron and Steel Manufacturing, 20 Countries, 1975-1983*, and International Monetary Fund, *International Financial Statistics*.

Table 3

PRODUCTIVITY AND EMPLOYMENT COST IN CARBON STEEL
PRODUCING FACILITIES OF THE UNITED STATES

<u>Year</u>	<u>Hours Per Net Ton Shipped</u>	<u>Cost Per Hour</u>	<u>Employment Cost Per Ton</u>
1976	8.79	\$12.18	\$107.06
1977	8.95	\$13.44	\$120.28
1978	8.12	\$14.73	\$119.60
1979	8.29	\$16.39	\$135.87
1980	8.31	\$19.06	\$158.38
1981	8.07	\$20.78	\$167.69
1982	7.84	\$24.67	\$193.41
1983	6.59	\$23.85	\$157.41

Source: Paine Webber Mitchell Hutchins, Inc., World Steel Dynamics.

Table 4

COMPARISON OF CERTAIN FACTOR COSTS PER TON
OF STEEL SHIPPED IN THE UNITED STATES

<u>Year</u>	<u>Labor</u>	<u>Energy (excl. Coke)</u>	<u>Financial</u>	<u>Iron</u>
1976	\$107.06	\$22.43	\$26.44	\$42.62
1977	\$120.28	\$27.42	\$28.16	\$46.20
1978	\$119.60	\$30.84	\$28.75	\$48.53
1979	\$135.87	\$37.87	\$28.87	\$54.48
1980	\$158.38	\$48.76	\$36.01	\$63.50
1981	\$167.69	\$57.55	\$35.99	\$69.86
1982	\$193.41	\$74.93	\$59.01	\$79.50
1983	\$157.41	\$74.86 ^{1/}	\$52.08 ^{1/}	\$77.53 ^{1/}
% Increase	47.0%	\$233.7%	\$97.0%	\$81.9%
\$ Increase	\$50.35	\$52.43	\$25.64	\$34.91

^{1/} 1983 figures for first three quarters only.

Source: Paine Webber Mitchell Hutchins, Inc., World Steel Dynamics.

Table 5

LABOR PRODUCTIVITY IN STEEL, MAJOR INDUSTRIAL NATIONS

(hours per net ton shipped)

<u>Year</u>	<u>U.S.</u>	<u>Japan</u>	<u>W. Germany</u>	<u>France</u>	<u>U.K.</u>
1976	8.79	10.11	11.12	14.89	19.17
1977	8.95	9.98	12.57	14.26	21.26
1978	8.12	9.55	11.67	12.62	21.56
1979	8.29	8.55	9.85	11.35	18.58
1980	8.31	8.30	9.98	10.14	37.35 ^{1/}
1981	8.07	8.49	9.95	10.24	13.50
1982	7.84	8.07	11.08	10.83	13.35
1983	6.59	7.72	10.76	10.92	10.75
1984 ^{2/}	5.80	7.26	9.34	10.12	11.16
7-year Improvement (1976-1983)	25.0%	23.6%	3.2%	26.7%	43.9%

^{1/} Strike year.^{2/} Projected figures for first half 1984, based on the first quarter.Source: Paine Webber Mitchell Hutchins, Inc., World Steel Dynamics.

Table 6

COMPARATIVE LABOR COSTS PER TON SHIPPED

(current dollar)

<u>Year</u>	<u>U.S.</u>	<u>Japan</u>	<u>W. Germany</u>	<u>France</u>	<u>U.K.</u>
1976	\$107.06	\$58.70	\$ 93.67	\$114.93	\$ 85.40
1977	\$120.28	\$69.79	\$118.31	\$122.39	\$103.40
1978	\$119.60	\$89.99	\$137.77	\$134.86	\$129.88
1979	\$135.87	\$83.31	\$134.40	\$148.04	\$125.67
1980	\$158.38	\$85.17	\$149.29	\$156.83	\$410.79 ^{1/}
1981	\$167.69	\$38.09	\$131.63	\$129.86	\$131.33
1982	\$193.41	\$87.99	\$147.04	\$132.53	\$122.42
1983	\$157.17	\$92.41	\$137.08	\$140.98	\$ 85.79
1984 ^{2/}	\$138.16	\$94.88	\$123.66	\$127.81	\$ 92.18
% Increase 1976-1984	29%	62%	32%	11%	8%
\$ Increase 1976-1984	\$31.10	\$36.18	\$29.99	\$12.88	\$6.78
<hr/>					
1983 costs adjusted to reflect 1978-1979 exchange rates	\$157.17	\$102.19	\$182.22	\$245.10	\$114.21

^{1/} Strike year.^{2/} Projected figures for first half 1984, based on the first quarter.Source: Paine Webber Mitchell Hutchins, Inc., World Steel Dynamics.



ECONOMIC CONSULTING SERVICES INC.

**POSTHEARING SUBMISSION TO THE
INTERNATIONAL TRADE COMMISSION
PREPARED IN SUPPORT OF THE SECTION 201
PETITION BY THE UNITED STEELWORKERS OF
AMERICA AND BETHLEHEM STEEL CORPORATION
ON BEHALF OF THE
DOMESTIC STEEL INDUSTRY FOR
TEMPORARY IMPORT RELIEF**

BY

**Stanley Nehmer, President
Mark Love, Vice President**

**Economic Consulting Services Inc.
1320 Nineteenth Street, N.W.
Washington, D.C. 20036**

May 18, 1984

EXHIBIT C

1320 NINETEENTH STREET, N. W., WASHINGTON, D. C. 20036 (202) 466-7720

Trends in Domestic Prices, Import Prices and
Import Penetration, 1980-1983 1/

	<u>Decline in Domestic Prices</u>	<u>Decline in Import Prices</u>	<u>Import Penetration</u>	
	(----- -----In percent-----)	(----- -----In percent-----)	<u>1980</u>	<u>1983</u>
Plates	-22.6	-35.2	20.9	27.7
Structural Products	-28.7	-30.4	26.7	30.2
Pipes and Tube	-9.8	-31.8	30.4	49.2
Bar Products	-22.7	-27.4	10.9	13.8
Sheet and Strip	-10.0	-21.4	11.5	15.9
Wire Products	-20.2	-23.5	28.3	39.7
Semi-Finished Products	-16.5	-42.9	8.3	48.6

As these data show, both real import prices and real domestic prices have fallen dramatically in recent years, with import prices falling by a greater magnitude consistently across all product groups. At the same time, import penetration has increased markedly, also consistently across product lines.

E. ICF's Wage Argument Is Unfounded

ICF argues that an "excessive wage premium" paid to steelworkers during the 1980-1983 period was a cause of serious injury. This calculation is based upon the dollars of wages purportedly paid in excess above those for all manufacturing. (See ICF at 15.) The issue of labor costs, as one among many production costs that may rise, is not

1/ Testimony of Stanley Nehmer before the U.S. International Trade Commission in Investigation No. TA-201-51, May 9, 1984 at 22.

germane to the issue of whether imports have increased and caused serious import injury. Indeed, reversal of divergences in costs between domestic producers and foreign producers is precisely the goal of temporary import relief provided under Section 201. In any event, a closer examination of this argument reveals that both its premise and conclusion are unfounded.

First, the notion of an excess wage premium is based solely upon the assumption that there is an absolute relationship between steel industry wages and overall manufacturing wages to which each country should conform. This assumption is not valid, since the composition of the manufacturing sectors as well as the labor markets of individual countries vary greatly. Thus, there is no norm that can be presumed to exist to which all countries should conform. Moreover, the ratio of steel industry wages to all manufacturing wages tells us nothing about the international competitiveness of a given country's steel industry.

These points are demonstrated by the relationship of steel industry labor compensation to all manufacturing labor compensation in various major steel producing countries. The tabulation below shows the percent by which total hourly compensation in the steel industry exceeds total hourly compensation in all manufacturing in various developed steel-producing countries.

PERCENT BY WHICH TOTAL HOURLY COMPENSATION IN THE
STEEL INDUSTRY EXCEEDS TOTAL HOURLY COMPENSATION
IN ALL MANUFACTURING

	<u>Japan</u>	<u>United States</u>	<u>France</u>	<u>Germany</u>	<u>United Kingdom</u>
1975	72.7	61.3	27.8	13.0	19.7
1977	69.8	62.2	29.8	11.3	20.8
1979	68.4	67.0	21.4	12.4	22.8
1981	76.0	73.9	18.9	10.1	20.5
1983	71.8	76.5	21.1	8.2	22.2

Source: Bureau of Labor Statistics data.

This tabulation, based on data provided in Table 1, shows us that the "wage premium" paid to Japanese steel workers above the wages of their counterparts in other Japanese industries has been as great or greater than the "wage premium" paid to U.S. steelworkers. Yet Japan has continually been touted as the most efficient steel producer in the world for many years.

With respect to France, Germany, and the United Kingdom, we find a lower "wage premium" that has remained stable or declined since 1975. Yet these countries are acknowledged to be less efficient than the Japanese industry and the EC in general is less efficient than the U.S. industry. In fact, the EC has remained as significant a factor in the world steel industry as it is by virtue of massive

subsidization. Ironically, these data suggest that the higher the "wage premium" paid to steel workers in a given country, the more efficient and competitive that country will be.

Actually, these data tell us more about the trends in wages in non-steel industries in these countries than they tell about the international competitiveness of the U.S. steel industry with respect to labor costs. As shown in Table 2 attached, one finds that real hourly compensation in the U.S. steel industry actually grow more slowly between 1975 and 1983 than real hourly compensation in Germany, France, and the United Kingdom, and have grown only marginally faster than in Japan. This indicates that increases in hourly compensation in the U.S. industry, whether absolutely and relative to all manufacturing industries, do not account for the serious import injury. Rather, these data, in combination with the data shown on page 19, simply tell us that hourly compensation in all manufacturing in Germany, France, and the United Kingdom have increased much faster than hourly compensation in all U.S. manufacturing.

There is a final point that also counters the notion of an "excess wage premium" for U.S. steelworkers. In economic theory, when all markets are properly operating, increases in labor compensation should be based on increases in productivity. Thus, an increase in real labor compensation of 3 percent should be matched by an increase in productivity of 3 percent. Such labor cost increases cannot be

viewed as "excessive", "inflationary", or the function of distortions in the labor market.

However, as shown in Table 3, real hourly compensation to steel workers has, in fact, not increased as fast as productivity. Between 1976 and 1983, tons shipped per hour increased by 33.3 percent, while real hourly compensation rose by only 8.1 percent. This relative decline in total hourly compensation received by steelworkers is, as expected, reflected in the 11.3 percent decline in real labor cost per ton registered over this period. The fact that real labor compensation received by steelworkers actually fell relative to increasing productivity contradicts the existence of an excess wage premium.

As this analysis demonstrates, the relationship between hourly compensation in the steel industry and hourly compensation in all manufacturing is meaningless and irrelevant to the issue of labor costs and their impact on the international competitiveness of the U.S. industry.

Just as the "wage premium" argument is not meaningful, even data on the absolute level of hourly compensation is not of great use in explaining international competitiveness. The tabulation below shows the 1983 dollar equivalent value of hourly compensation paid in the iron and steel industries of major steel-producing countries.

<u>Country</u>	<u>Iron and Steel Industry Hourly Compensation</u> (in U.S. dollars)
Canada	15.32
Germany	11.25
Japan	10.72
France	9.28
Italy	9.10
United Kingdom	7.93

Source: Bureau of Labor Statistics data.

As the data show, the hourly compensation paid in France, Italy, and the United Kingdom is below hourly compensation paid in Japan. By this measure, one would assume that these countries would be competitive with Japan, which is certainly not the case. The data would also suggest that Canada would be quite uncompetitive with all other countries, having hourly compensation well above all other countries, and 43 percent above Japan. Yet import penetration in Canada was only 11.5 percent in 1983,^{1/} or far below the 20.5 percent import penetration of the U.S market in 1982. Moreover, Canada is a significant exporter of steel. Between 1981 and 1982, Canada increased its exports to all countries other than the United States from 859,000 metric tons to 2.1 million metric tons. The primary export markets accounting for the increase were Western Europe and Asia.^{2/} In 1983, Canada was a major net exporter, with 3.0 million tons of exports being more than double the 1.4 million tons imported in that year.^{3/}

^{1/} Based on International Iron and Steel Institute data, March 1984.

^{2/} Metric tons of crude steel equivalent based on United Kingdom Iron and Steel Statistics Bureau data.

^{3/} Based on American Iron and Steel Institute data.

Excluding trade with the United States, Canada exported 0.6 million tons to the rest of the world against imports of 1.0 million tons, despite the plethora of trade barriers maintained by many countries to which Canada would otherwise export. Thus, even absolute compensation levels do not explain the pattern of world trade in steel.

The truest measurement of relative labor costs and the impact of labor costs on the international competitiveness of the U.S. industry is unit labor costs, or labor cost per ton of steel. This is the only valid measurement, since it combines both actual compensation levels with the critical factor of labor productivity. As shown in Table 2, the labor productivity of the U.S. industry is considerably higher than other major foreign producers and even exceeded labor productivity in Japan by 25 percent in the first half of 1984.

As shown in Table 4, the labor cost per ton shipped in the United States was actually below or close to the labor cost per ton in Germany, France, and the United Kingdom until 1980. In 1981 and 1982, U.S. unit labor costs exceeded unit labor costs in those three countries, largely due to the appreciation of the dollar and due to an unusual increase in U.S. labor costs related to the extensive layoffs of U.S. workers. Notwithstanding the continued strong dollar in 1983 and 1984, U.S. unit labor costs fell sharply in both years in relation to Japan, Germany, and

France. It should be noted that despite this dramatic reduction in unit labor cost, import penetration of the U.S. market rose from 18 percent in the first quarter of 1983 to over 25 percent in the first quarter of 1984.

Finally, even the calculation by ICF of the cumulative excess wage premium paid in the 1980-1983 period (\$4.9 billion) pales in comparison with the loss in revenues to the domestic industry due to import price suppression. As demonstrated by Marshall Bartlett's analysis, the industry lost \$8.2 billion due to price injury from imports in 1982 and 1983 alone, far outweighing even ICF's exaggerated claims of losses due to the excess wage premium over the 1980-1983 period.

F. The Issue of Minimills

Both in their analysis of the overall industry and with respect to certain products, such as wire rod, ICF attempts to separate mini-mills and integrated producers, arguing that integrated producers have lost production to mini-mills. This is treated either as a cause of injury or as evidence that the domestic industry is healthy.

This distinction is artificial and cannot be used to create a new "cause" of injury. Both mini-mills and integrated producers are part of the domestic industry and both use the electric-arc furnace production technology.

Mini-mills, which are normally defined as scrap-based, electric-arc furnace steelmaking facilities serving regional

Table 1

COMPARISON OF TOTAL HOURLY COMPENSATION IN ALL MANUFACTURING
WITH IRON AND STEEL MANUFACTURING IN SELECTED DEVELOPED
STEEL-PRODUCING COUNTRIES, 1975-1983

		Total Hourly Compensation in All Manufacturing (-----in national currency-----)	Total Hourly Compensation in Iron and Steel	Percent by Which Compensation in Iron and Steel is Greater Than in All Manufacturing (in percent)
Japan:	1975	904	1,561	72.7
	1977	1,078	1,830	69.8
	1979	1,199	2,019	68.4
	1981	1,361	2,395	76.0
	1983	1,481	2,544	71.8
U.S.:	1975	6.35	10.24	61.3
	1977	7.59	12.31	62.2
	1979	9.07	15.15	67.0
	1981	10.95	19.04	73.9
	1983	12.31	21.73	76.5
France:	1975	19.62	25.08	27.8
	1977	26.09	33.87	29.8
	1979	33.39	40.54	21.4
	1981	44.10	52.42	18.9
	1983	58.40	70.73	21.1
W. Germany:	1975	15.20	17.48	15.0
	1977	18.11	20.16	11.3
	1979	20.69	23.25	12.4
	1981	23.75	26.16	10.1
	1983	26.55	28.74	8.2
U.K.:	1975	1.47	1.76	19.7
	1977	1.92	2.32	20.8
	1979	2.59	3.18	22.8
	1981	3.52	4.24	20.5
	1983	4.28	5.23	22.2

Source: Hourly Compensation Costs for Production Workers in Iron and Steel Manufacturing and Manufacturing, 1975-1983, Bureau of Labor Statistics, U.S. Department of Labor, January 1984, unpublished data.

Table 2

GLOBAL STEEL INDUSTRY LABOR COST COMPARISON:
HOURLY COMPENSATION

(deflated by national CPI; 1975 = 100)

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
U.S.	100.0	103.7	106.7	109.2	109.6	111.4	110.0	123.9	114.6
Japan	100.0	97.3	99.2	102.1	101.8	102.6	106.6	107.0	108.6
West Germany	100.0	103.5	106.7	110.9	115.1	119.8	115.9	118.2	117.3
France	100.0	106.1	112.6	110.1	111.6	110.2	112.3	121.4	125.3
United Kingdom	100.0	102.0	97.6	107.3	109.0	104.9	110.1	111.9	120.4
Canada	100.0	108.1	114.2	118.3	118.0	115.3	117.8	124.9	124.7
Italy	100.0	98.5	101.0	105.7	105.2	99.0	102.7	105.0	108.6
Belgium	100.0	104.4	112.1	115.4	120.7	124.9	123.6	117.5	120.1
Netherlands	100.0	102.0	101.9	102.9	108.3	110.6	105.0	107.1	108.1
Brazil	100.0	105.6	110.2	115.5	117.3	123.4	133.9	150.1	135.8
Mexico	100.0	105.4	112.4	113.5	115.7	115.2	116.9	114.1	--
Korea	100.0	116.8	145.0	173.0	181.5	162.9	163.0	171.0	191.6

Source: U.S. Department of Labor, Hourly Compensation Costs for Production Workers in Iron and Steel Manufacturing, 20 Countries, 1975-1983, and International Monetary Fund, International Financial Statistics.

Table 3

PRODUCTIVITY AND LABOR COSTS IN THE U.S. BASIC
STEEL INDUSTRY, 1976-1983

	Tons Shipped Per Hour (in tons)	Real Pay For Hours Worked 2/ (-----)	Real Average Hourly Earnings 3/ (-----)	Real Total Employment Cost Per Hour 4/ (-----)	Real Total Cost Per Ton 5/ (-----)
in dollars					
1976	0.114	\$7.56	\$7.43	\$11.10	\$102.35
1977	0.112	\$7.91	\$7.69	\$11.57	\$108.26
1978	0.123	\$8.23	\$8.00	\$11.80	\$ 99.92
1979	0.121	\$8.17	\$7.98	\$11.80	\$100.87
1980	0.120	\$7.91	\$7.73	\$12.05	\$103.11
1981	0.124	\$7.94	\$7.75	\$11.92	\$100.05
1982	0.128	\$7.84	\$7.79	\$13.26	\$113.04
1983	0.152	\$7.36	\$7.24	\$12.00	\$ 90.78
Percent change					
1976-					
1983	+33.3	-2.6	-2.6	+8.1	-11.3

- 1/ Paine Webber Mitchell Hutchins, Inc., World Steel Dynamics.
- 2/ AISI data, deflated by the consumer price index as reported in International Financial Statistics, International Monetary Fund.
- 3/ Bureau of Labor Statistics data, deflated by consumer price index as reported in International Financial Statistics, International Monetary Fund.
- 4/ AISI data, deflated by consumer price index as reported in International Financial Statistics, International Monetary Fund.
- 5/ Paine Webber Mitchell Hutchins, Inc., World Steel Dynamics, deflated by producer price index as reported in International Financial Statistics, International Monetary Fund.

Table 4

COMPARATIVE LABOR COSTS PER TON SHIPPED

(current dollar)

<u>Year</u>	<u>.U.S.</u>	<u>Japan</u>	<u>W. Germany</u>	<u>France</u>	<u>U.K.</u>
1976	\$107.06	.\$58.70	\$ 93.67	\$114.93	\$ 85.40
1977	\$120.28	\$69.79	\$118.31	\$122.39	\$103.40
1978	\$119.60	\$89.99	\$137.77	\$134.86	\$129.88
1979	\$135.87	\$83.31	\$134.40	\$148.04	\$125.67
1980	\$158.38	\$85.17	\$149.29	\$156.83	\$410.79 ^{1/}
1981	\$167.69	\$38.09	\$131.63	\$129.86	\$131.33
1982	\$193.41	\$87.99	\$147.04	\$132.53	\$122.42
1983	\$157.17	\$92.41	\$137.08	\$140.98	\$ 85.79
1984 ^{2/}	\$138.16	\$94.88	\$123.66	\$127.81	\$ 92.18
% Increase 1976-1984	29%	62%	32%	11%	8%
\$ Increase 1976-1984	\$31.10	\$36.18	\$29.99	\$12.88	\$6.78
<hr/>					
1983 costs adjusted to reflect 1978-1979 exchange rates	\$157.17	\$102.19	\$182.22	\$245.10	\$114.21

^{1/} Strike year.^{2/} Projected figures for first half 1984, based on the first quarter.Source: Paine Webber Mitchell Hutchins, Inc., World Steel Dynamics.

**STATEMENT OF LEON LYNCH, VICE PRESIDENT, UNITED STEEL
WORKERS, PITTSBURGH, PA**

Mr. LYNCH. Thank you, Mr. Chairman and members of the committee.

My added responsibilities encompass taking care of the displaced workers—not only our members but other displaced workers that lived in steel communities across this country. I can tell you, you would never imagine the kind of devastation that has taken place after these plants closed down and after some decreased operations occurred.

Human devastation and loss of homes, and loss of health care costs, loss of a mind—people suffer mental stress, physical stress. They find themselves even to the point of committing suicide. Twenty percent of them contemplate suicide.

S. 2380 and its companion bill H.R. 5081 are just necessary in our judgment to stop this kind of devastation that is taking place in the lives of steelworkers and in the communities and in the families of people who live in those communities.

[Mr. Lynch's prepared testimony follows:]

TESTIMONY OF LEON LYNCH, INTERNATIONAL VICE PRESIDENT (HUMAN AFFAIRS)
UNITED STEELWORKERS OF AMERICA, AFL-CIO

Mr. Chairman and members of the Committee on Finance, I am Leon Lynch. In my capacity as the International Vice President for Human Affairs of the United Steelworkers of America, I have the responsibility for dealing first-hand with the crisis facing steelworkers, their families, and their communities. Crisis is not too strong a word to describe what has happened and what is continuing to happen to steelworkers.

As President Lynn Williams told you, over 200,000 steelworker union members have lost their jobs in the last ten years, most in the last seven years. Countless other steel salaried workers have also lost their jobs. What we have seen is that hard-working people with 15, 20, 25, and more years of service are not just on temporary layoff, but have been permanently displaced. Close to 100,000 basic steelworkers are experiencing layoff, or at least long-term layoff, for the first time in their lives. Many of those on layoff may never be allowed to return to their former jobs. Thousands of others are working short work weeks.

To fully understand the gravity of the current situation for our members, one needs to look behind the unemployment numbers to learn what is actually happening in the lives of workers and their families. A study done in mid-1983 reveals the sad facts. Its subjects are the laid-off members of our Local Union 1256 in Duquesne, Pennsylvania, but the findings are in all respects typical of other groups of laid-off steelworkers.

For that reason I am including excerpts from the study as Exhibit A to my testimony. It is the doctoral dissertation of Ray M. Milke at the University of Pittsburgh.

Before describing some of the principal findings, let me establish the setting. Local 1256 members worked at Duquesne Works of U. S. Steel, producing steel to be used at the company's National Tube Works in nearby McKeesport, Pennsylvania, for the production of welded and seamless pipe. For several generations National Tube was the leading pipe producer in the United States, and for the last decade depended on Duquesne for its steel stock.

Our members in both plants were accustomed to the ups and downs of the steel pipe business, as well as the layoffs and recalls that accompanied them. They knew that the combination of improved technology and gradually increasing imports were reducing the total number jobs.

In 1982 and '83 a severe recession occurred in the pipe market, similar to an earlier one in 1975-76. In fact, only about 15.6 million tons of steel pipe were bought in the U. S. in 1982-83, a million tons less than in 1975-76.

In 1982-83 only about 8.2 million tons were made in the U. S. -- 6.2 million tons less than in 1975-76. Imports took 22% of the U. S. steel pipe market in the 1970's recession, but 52% in the 1980's steel pipe recession.

We have analyzed the 1980's recession to ascertain the steel pipe tonnage facts. We found that of the 6,250,000 fewer

tons of steel pipe produced domestically in the 1980's recession:

1,006,000 were lost by reduced domestic market,
 839,000 were lost by reduced export sales, and
 4,804,000 were lost to increased imports.

There is no doubt the principal cause of injury to Duquesne employees, and others in the steel pipe industry is imported steel pipe!

NOW THE MILKE STUDY

Over 6,700 of our members were actively working at the Duquesne and National Works at the end of 1981. 4,100 of their jobs were wiped out in 1982 and 500 more in 1983.

Dr. Milke's study covered 440 of those workers laid off from Duquesne early in 1982. Most had been laid off in excess of 16 months at the time of the survey.

Only 38 (9%) had been able to find full-time jobs. 83 (19%) had secured part-time work. 101 (83% of the 121 who found any work) described their earnings as "decreased significantly;" while another 17 (14%) described their earnings as "decreased moderately."

98 (22.3%) of the spouses of workers surveyed had some sort of job. Another 39 (9%) had other unspecified sources of additional income.

Unemployment compensation had run out for 195 (44%) of the workers surveyed and was scheduled to run out within three months for 113 (26%) more.

Company paid health insurance continues for six months to two years under our Collective Bargaining Agreement, but had ended for 287 (65%) of the families. 89 (20%) of these were covered either by the spouse's policy or by other outside health insurance.

256 (58%) workers had children living at home and 243 (55%) were home-owners. At the time of the survey only 62 (14%) had changed residences since being laid off because they did not meet payments for mortgages, utilities, taxes or rent.

Dr. Milke concluded that the vast majority of these steelworkers (80%) are experiencing psychologically-related distress. Thus, 198 (45%) of the workers experienced mental depressions at least once a week and another 109 (25%) were depressed at least once a month. 20 (5%) had seriously considered suicide.

I hope this outline of the study's highlights sufficiently touches your curiosity to cause you to read the entire study carefully. As you do, keep in mind that there will be no steel job recovery for these workers. At the end of 1983 U. S. Steel announced the permanent closure of pipe-making operations at National Tube Works and the closure of the related steel production at Duquesne.

Steelworkers have difficulty finding other jobs for two reasons.

First, the economics of their communities are frequently built around the steel industry -- the mill, the supporting or steel-consuming industries related to the mill, or the service industries for steel employees. When the mill lays off or closes there are no jobs in these related industries in their communities.

Second, the steel mills offer workers the opportunity to earn a decent standard of living. Therefore other employers assume that steelworkers will accept recall, and are inclined against hiring them.

One of the injuries suffered by steelworkers families in this 1980's Depression is actual hunger. I know that all too well. Our Union has been involved in establishing food bank systems for steelworkers and others laid off in the community. More than 200 such food banks operated in Allegheny County, Pennsylvania, alone.

The devastation suffered by the families of unemployed steelworkers is matched by the economic destruction which is ruining their communities.

A recent series of articles in the PITTSBURGH PRESS describes this condition in Western Pennsylvania. I am also attaching them as Exhibit B to this testimony and urge you to read them thoughtfully.

What we are experiencing in steel is the export of unemployment -- from Brazil, Korea, Europe, Japan and elsewhere to the United States. It follows that if you act to limit the

importation of steel you are, in reality, limiting the import of unemployment. We need that relief. The economic harm to American workers and their families, the grave psychological shock and damage they experience as they lose their dignity and sense of self-worth, and the suffering of their communities, are all factors which must be included in your consideration of this bill.

A SURVEY OF UNEMPLOYED STEELWORKERS
IN THE MON VALLEY

By

Ray M. Milke

B.A. Pennsylvania State University, 1971

M.Ed. Duquesne University, 1972

C.A.G.S. Duquesne University, 1974

Submitted to the Graduate Faculty in the School
of Education in partial fulfillment of
the requirements for the degree of
Doctor of Philosophy

University of Pittsburgh

1984

EXHIBIT "A"

A SURVEY OF UNEMPLOYED STEELWORKERS
IN THE MON VALLEY

Ray M. Milke, Ph.D.

University of Pittsburgh, 1984

This study examined the perceptions of a group of unemployed steelworkers regarding the stress of unemployment. Specifically, the study investigated how unemployed steelworkers perceived the relationship between unemployment and self-reports of: (a) the presence of various physical ailments, (b) the presence of various psychological ailments, (c) the impact of unemployment on the family, (d) coping mechanisms and support systems utilized during the period of unemployment, and (e) options that might affect a change in vocational status.

A sample of 1,096 unemployed steelworkers from U.S.W.A. Local 1256 in Duquesne, Pennsylvania was surveyed by mail with the nine page Steelworker's Questionnaire. The total response rate was 42.9%. The results indicated that there was a significant difference in the perceptions of the general state of physical and psychological health before and after becoming unemployed, with health being reported as less satisfactory after unemployment. Personal depression was experienced by 75% of the respondents. Alcohol consumption increased for nearly one third. Many reported that they found it difficult to complete tasks which required concentration and energy, were frequently

irritable, and had diminished feelings of self-satisfaction since becoming unemployed. The family was indicated most frequently as being the major and preferred support system during unemployment, followed by the social networks of close friends and the local union. Various coping mechanisms as well as options that might affect personal/vocational rehabilitation were inventoried. It was recommended that a combined effort by labor, industry and government should be initiated to meet the varied needs of the unemployed.

CHAPTER I. INTRODUCTION

From the grass roots unemployed worker to the labor unions that represent individual members, to governmental bodies, local, state, and federal, the plight of the unemployed/displaced worker in contemporary America has been the focal point of much attention, concern, and discussion. According to recent estimates (U.S. Bureau of Labor Statistics, July, 1983), the nation's unemployment rate is 10.2%, while Pennsylvania's unemployment rate is slightly above the national average at 12.9%. Although unemployment has affected a wide cross section of the American labor force, the workers from the basic steel industry have been particularly hard hit with a higher than average unemployment rate. Pennsylvania's Allegheny County is exemplary of this fact. Within Allegheny County and along the banks of the Monongahela, Youghiogheny, Allegheny, and Ohio Rivers are some of the world's largest basic steel manufacturing industries. As a result of the state of the economy, unemployment within the entire County is at 14.2% (U.S. Bureau of Labor Statistics, July, 1983). This figure represents only a modest increase over both state and national levels. However, upon closer examination of the communities that provide the labor force for basic steel manufacturing the rate of unemployment is

still on the increase. For example, the community of McKeesport, Pennsylvania, which is along the banks of both the Youghiogheny and Monongahela Rivers and whose major industry is steel manufacturing, has an unemployment rate of 21.3% (Pennsylvania Economy, June, 1983). This unemployment rate is also representative of other communities along the rivers in the Mon Valley Area.

The high unemployment rates are presumably due to an economy which is in transition from basic manufacturing, such as basic steel production, to high technology industries, such as, robotics and computer technology. In addition, foreign-based manufacturing industries have become a major competitive force in the basic steel industry. The impact has had a devastating effect on the men and women who have lost their jobs, sources of income, and work-related identity, including status, prestige, and a primary source of self-esteem. This devastating effect was echoed by Dumont (1977) when he asserted, "For people in this society the loss of work represents not only financial insecurity but a bio-psychosocial assault of such magnitude that it must be counted as one of the great public health menaces of all time" (p. 9).

During recent months, media coverage has featured shallow profiles, usually in cameo, of selected unemployed workers. Most expository highlight economic issues, such as unemployment benefits and extensions in time of coverage,

of the individuals studied or read about their problem and another 15% worked harder. Increased alcohol and drug consumption reached 6%. Alcohol and drugs were more likely to be used when people perceived that a problem was within themselves. In addition, it was determined that self-esteem was related to how people rated their overall mental and physical well-being.

In conclusion, there are a variety of potential mediators to the stress of life change events, and, in particular, to unemployment. Utilization of buffers, coping mechanisms or social support systems, will be contingent, therefore, upon an individual's perception of the stress-related event and its impact on his/her physical or psychological well-being.

E. Summary

Stress is a rather ubiquitous phenomenon that has the potential to directly or indirectly affect an individual's physical and/or psychological well-being. There are certain experiences in life that seem to precipitate stress-related reactions, and there appears to be a broad cultural, if not universal, consensus that these experiences called life change events are perceived as variably stressful (Antonovsky, 1979; Holmes & Rahe, 1967). Although several attempts have been made to categorize these life change events (Dohrenwend, et al, 1978; Holmes & Rahe, 1967), there is no unanimity among writers as to which events are most stressful in a

hierarchical order. Despite the lack of unanimity in the serial order of magnitude, it has been emphasized by Perkins (1982) that there still exists a significant relationship between stress as assessed by life change events and a variety of adverse physical and psychological reactions. In fact, it was stated by one author that physical and psychological problems caused by stress have become the number one health problem in the past 10 years, replacing the infectious diseases as the most common problem of the postindustrial period (Appelbaum, 1981).

Unemployment is a life change event that has been found to precipitate rather profound levels of stress on individuals and, further, has a ripple effect on family, friends, and community (Figueria-McDonough, 1978; Group for the Advancement of Psychiatry, 1982; Liem & Rayman, 1982; Reigle, 1982). Although 80% of the literature on physical and psychological reactions to unemployment was written during or shortly after the Great Depression (Borrero, 1980), the work initiated on a large scale basis by Brenner (1973) has been credited as being a catalyst for centering attention on this area of work (Liem & Rayman, 1982). His findings, in part, demonstrated that as unemployment increased so did the incidence of suicides, homicides, state hospital admissions, state prison admissions, cirrhosis of the liver mortality, cardiovascular-renal disease mortality, and total mortality. Although Brenner's work was criticized for

methodological and design limitations, (Dooley & Catalano, 1979; Liem & Liem, 1978; Marshall & Funch, 1979), his work has been generally supported (Hagen, 1983).

Having laid the foundation for the relationship between physical and psychological stress-induced reactions and unemployment, this review then focused on specific physical and psychological manifestations, ranging in nature from increased coronary artery disease, bronchial asthma, rheumatoid arthritis, ulcerative colitis, neurodermatitis, hypertension, peptic ulcers, etc., on the physical side, to depression, suicidal ideation, frustration, self-blame, anxiety, hopelessness, diminished self-esteem on the psychological side. Also, various stages or phases related to stress and reactions to unemployment were reviewed (Borrero, 1980; Kubler-Ross, 1969; Parkes, 1964; Selye, 1956, 1974, 1976, 1981; Zawadski & Larzarsfeld, 1935). However, it seems clear in light of the research findings available that physical and psychological reactions to the stress of unemployment and their various stages or phases are not homogeneous experiences. The literature was not consistent with regard to either content or prevalence of specific responses.

Finally, subsequent sections reviewing the literature on (a) the impact of unemployment on the family and (b) mediators to the stress of unemployment revealed, at times, incomplete or conflicting data. It was,

therefore, necessary to seek out related literature dealing with stress and life change events in order to more comprehensively secure information relevant to this study. In this regard, a study conducted for the Department of Mental Health of the State of California (In Pursuit of Wellness, 1979) was reviewed. This study surveyed the perceptions of over 1,000 randomly selected California residents, men and women over the age of 18, pertaining to their attitudes and beliefs regarding mental and physical health. Investigated were selected stress-related physical and psychological reactions, as well as selected coping mechanisms and support systems used to buffer the impact of stress. Many of the questions used in the California study elicited the kind of information that had a direct bearing upon this study.

In conclusion, in light of the findings reviewed, it seems clear that life change events can produce varied amounts of stress which have been operationally expressed in both physical and psychological symptomatology. Unemployment is a life change event which has been known to be correlated with various stress-related physical and psychological reactions. In light of the depressed and at times catastrophic economic climate prevalent in our society at present for which no immediate end was in sight, it was the position of this writer that a systematic investigation of the phenomenon of unemployment and how the stress of this life change event affects the physical

and psychological health of a group of individual cases of unemployed workers was a worthy undertaking. It was hoped that the information obtained from this study would help serve as a basis for discussion for all who are concerned about the plight of the unemployed worker. It was further hoped that such discussion would stimulate action from individuals or groups of individuals who might be in positions to help the unemployed worker cope with the varied problems associated with job loss.

CHAPTER III. STATEMENT OF THE PROBLEM

Although the literature rendered, at times, rich and varied information, the research reviewed reflected fundamental inconsistencies in findings. Further, certain areas reflected a paucity of content or were devoid of content, altogether. For example, with few exceptions, such as, Kasl, et al. (1975), who studied the closing of two plants comprised of machine operators, assembly line workers, clerks, and tool and die makers, no studies reviewed had particularly focused on a representative sample of unemployed steelworkers in order to examine a wide range of selected physical and psychological sequelae, both personal and familial, that might be associated with the stress of unemployment. Moreover, the investigator did not find a study which specifically surveyed a wide range of selective coping mechanisms and support systems used by unemployed steelworkers to buffer the stress of unemployment or surveyed their perceptions regarding options that might affect a change in vocational status. Additionally, as a professional who lives and works in the community under study, this investigator, through his clinical practice, had become aware of the apparent stress of these persons. Discussions with union leaders, food bank coordinators, personnel from support groups such as the Mon Valley

Unemployed Committee, government officials, and unemployed steelworkers, themselves, lent credence to this investigator's personal observations and experiences with this population. For example, according to a recent survey of unemployed steelworkers conducted by the Mon Valley Unemployed Committee (May, 1983) at various unemployment offices and food banks in the Mon Valley area, approximately 70% of the people whose unemployment claims were to expire by the end of July, 1983, would be ineligible for a new claim. The number of unemployed seeking provisions at the food bank had markedly increased. Some individuals who had no food were seeking welfare, but did so with deep humiliation and embarrassment. They had become angry, resentful, and distrusting. For many, medical benefits had run out months previously. Of real concern was the type of situation or reaction which might occur once this large group of people had no source of income left.

Finally, although large sums of money were being funneled into such efforts as vocational retraining and job placement, little was really known about the varied physical or psychological health needs of the unemployed steelworker which the impact of unemployment might have spawned that could interfere with these efforts and/or preclude successful personal/vocational rehabilitation.

A. Purpose of the Study

The purpose of this study was to examine the perceptions of unemployed steelworkers regarding the stress

of unemployment and the coping mechanisms which they had utilized to deal with their unemployed status. Specifically, the study investigated their perceptions of: (a) the presence of various physical ailments, (b) the presence of various psychological ailments, (c) the impact of unemployment on the family, (d) coping mechanisms and support systems utilized during the period of unemployment, and (e) options that might affect a change in their vocational status.

B. Research Questions

Research Question 1: From a list of selected life change events, which are perceived as the most stressful by unemployed steelworkers?

A review of the research indicated rather divergent viewpoints, for example, the research of Holmes and Rahe (1967) and Kiev and Kohn (1979) show markedly different hierarchical rankings.

Research Question 2: How do unemployed steelworkers describe the general state of their physical health?

Research Question 3: What is the reported frequency of selected physical ailments of unemployed steelworkers?

Although the literature on unemployment highlighted numerable physical reactions to the stress of unemployment, with few exceptions, such as Kasl, et al. (1975) none

inventoried the frequency of selected physical reactions for a representative sample of unemployed steelworkers.

Research Question 4: How do unemployed steelworkers describe the general state of their psychological and emotional health?

Research Question 5: What is the reported frequency of selected psychological ailments of unemployed steelworkers?

Although the literature on unemployment highlighted numerous psychological reactions to the stress of unemployment, with few exceptions, (Kasl, et al., 1975), none had investigated the frequency of selected psychological reactions for a representative sample of unemployed steelworkers.

Research Question 6: How do unemployed steelworkers perceive the level of support they have received from family, friends, organizations and community?

Research Question 7: What is the reported frequency of selected coping mechanisms and support systems utilized by unemployed steelworkers during the period of their unemployment?

Throughout the literature there was a general agreement that support is useful to help buffer the impact of unemployment (Cobb, 1976; Gore, 1978). However, delineation of specific coping mechanisms and support

systems with reported frequency of use was not available.

Research Question 8: Do the variables of age, race, and marital status have a differential effect on the frequency or type of physical or psychological reactions of unemployed steelworkers?

It was observed in the literature that unemployment has been and is higher among minority groups and that black Americans are more vulnerable to discouragement which leads to physical and psychological distress (Bowman et al., 1982). Other data pertaining to these variables showed conflicting findings.

Research Question 9: Do the variables of age, race, and marital status have a differential effect on the frequency or type of coping mechanisms or support systems utilized by unemployed steelworkers during the period of their unemployment?

The literature was devoid of substantive work in this area, with the exception of the California study, In Pursuit of Wellness (1979).

Research Question 10: What are the reactions of unemployed steelworkers to selected options that might affect a change in vocational status?

This topic was not addressed in the literature to

any significant degree.

C. Definition of Terms

Independent Variable

Unemployment. Unemployment refers to the status of individuals who were previously employed, but at the time of the study were no longer working.

Dependent Variables

Coping Mechanisms. Coping mechanisms are specific physical or psychological actions employed by individuals (or groups of individuals, such as families) to buffer the impact of stress. Coping mechanisms were measured by the frequency of responses to appropriate questionnaire items.

Physical Ailments. Physical ailments are physiological phenomena or symptomatology that are experienced as bodily disorders. Physical ailments were measured by the frequency of responses to appropriate questionnaire items.

Psychological Ailments. Psychological ailments are emotional phenomena or symptomatology that are experienced as mental disorders. Psychological ailments were measured by the frequency of responses to appropriate questionnaire items.

General Terms

Life Change Event. A Life Change Event was defined as a discrete happening or experience in a person's life that requires some degree of readjustment in one's life

circumstances, for example, unemployment.

Mediators of Stress. In the context of this study, mediators of stress refer to coping mechanisms, social networks, and the total support system used by individuals to buffer the impact of stress.

Social Network. The concept of social networks refers to social components that make up support systems, such as friends, neighbors, and work compeers. Also included in this concept were individuals who had experienced similar problems to the individuals under study. Social networks are used as part of coping strategies to buffer stress.

Stress. Stress was defined as the body's physical and/or psychological reactions - both conscious and unconscious - to any environmental conditions that are perceived as noxious with which one cannot easily cope.

Support Systems. Support systems refer to the total of all social networks, including family, religious and fraternal organizations, and all other community and professional resources that help cushion the impact of stress and increase coping ability.

CHAPTER IV. METHODS

A. Sample

The participants represented the entire population of unemployed steelworkers from union Local 1256 of Duquesne, Pennsylvania, who were registered with the area food bank at the time of this study. Local 1256 is an affiliate of the parent union, the United Steelworkers of America, which represents approximately 1,400,000 members in over 5,300 affiliated local unions. Local 1256 was chartered on May 2, 1942, which, coincidentally, was the same date that the United Steelworkers of America, CIO (Congress of Industrial Organizations) was formed in Cleveland, Ohio. This local represents both production and maintenance personnel from the United States Steel Corporation's Duquesne Works, which is a steelmill located along the banks of the Monongahela River in the suburbs of Pittsburgh, Pennsylvania. Membership in Local 1256 is approximately 2,700 men and women of whom over 1,300 (48%) are currently unemployed. Most of these workers had been without a job in excess of 16 months. Because of the nature of layoff procedures, the majority of steelworkers became unemployed at approximately the same time.

Since Local 1256 did not have a comprehensive list of their unemployed members, the union president

referred this investigator to the local area food bank coordinator who did maintain such a list. There were, however, approximately 200 unemployed steelworkers who were not registered with the food bank and, therefore, were not included in this study. According to the food bank coordinator, there was no evidence to suggest that this group was significantly different than the sample included in the survey.

Additionally, there was also a group of steelworkers who did not respond to the survey. However, there was no evidence to suggest that this group of nonrespondents was significantly different than those who did respond to the survey. The entire sample of unemployed steelworkers were homogeneous in that they had a similar length of seniority (compared to those steelworkers who were still working) and became unemployed at approximately the same time. Nevertheless, one could speculate on issues such as: only those who were (a) interested, (b) motivated, and/or (c) concerned about their unemployment status participated in the survey.

B. Instrumentation

As a result of the information obtained from (1) the review of literature, (2) meetings with various union leaders, (3) discussions with government officials, and (4) conversations with unemployed steelworkers and personnel from support groups, it became apparent that more broadly based, yet detailed information was needed to help more

CHAPTER VI. DISCUSSION

The purpose of this study was to examine the perceptions of unemployed steelworkers regarding the stress of unemployment and the coping mechanism which they have utilized to deal with their unemployed status. The results of the study will be discussed in terms of the 10 research questions that were raised in Chapter III.

An analysis of the demographic variables indicated that the sample of respondents in this survey were predominately young (between the ages of 20 and 35), white, married males. This information must be kept in mind when analyzing the responses for the entire sample under study.

The first research question pertained to life change events that were perceived as major stressful problems in the lives of unemployed steelworkers. Despite the noted lack of consensus in the review of literature regarding the correlation of stress and the status of being unemployed, for the sample of unemployed steelworkers in this study "being unemployed" was the major stressful problem in their lives. This was indicated by a large proportion (80%) of the respondents. Closely related in second place were "financial worries" followed in third place by "changing jobs". It appears that the three major

stressful problems contemporarily experienced by the participants of this study are all related to their unemployed status. Psychological difficulties as manifested in marital problems, problems with children, and emotional illness ranked fourth, fifth, and sixth, respectively. These rankings of life change events do not follow the patterns reported in the literature by either Holmes and Rahe (1967) or Kiev and Kohn (1978). What seems to be apparent is that at a given point in time a personal hierarchy of stress is contingent upon the subjective perception of both the nature of the stressor and the potential of that stressor to inflict harm. This view seems to be consistent with that of Pearlin, et al. (1981).

Research Question 2 pertained to the perception of steelworkers as to the general state of their physical health. In order to provide a basis for comparison of responses, the participants were asked to describe the general state of their physical health both before and after becoming unemployed. While 97% of the workers perceived their physical health to be either "excellent" or "good" prior to becoming unemployed, only 75% felt this way after becoming unemployed. Within the category "excellent" physical health, alone, 54% downgraded their status. In fact, while only 4% viewed their physical health to be "fair" or "poor" prior to becoming unemployed, the number increased to 25% after becoming unemployed.

A subsample of approximately 9% of the respondents were identified as having returned to full-time work. Table 4 indicated that a chi-square test between the perceptions of physical health before and after becoming unemployed for this subsample failed to demonstrate any significant statistical difference, $\chi^2(1, n = 80) = 2.23$, n.s. A vast majority of unemployed workers in this study had been out of work approximately 16 - 18 months at the time the survey was conducted. For those in the subsample who had been recalled to work, their time of unemployment was less than the rest of the sample. Two factors account for the marked difference in perception of physical health before and after unemployment for these two groups. First, it can be hypothesized that perceptions of diminished physical health abate after being recalled to work. Secondly, it can be hypothesized that perceptions of diminished physical health are, in part, a function of the length of time of unemployment. This latter viewpoint seems to be consistent with the "lag phenomena" reported by Brenner (1973, 1976, 1979).

The third research question dealt with the reported frequency of selected physical ailments that were experienced within one month of the time of this study. Of the physical ailments listed in Table 5 under "medical conditions", singularly elevated was the response for having back trouble (20%). Considering the physical demands of the steelworker's job, one

might question whether this ailment is rather indigenous to the occupation itself. None of the other "medical conditions" surpassed a 4% rate of prevalence. However, "non-specific medical conditions" showed a 20 - 25% rate of prevalence for stomach aches and headaches with a nearly identical rate for anxiety and insomnia, categorized under "psychological states". Frequent depression and irritability were reported by 42% and 37% of the respondents, respectively. If a trend can be gleaned from these results, it is characterized by the increased reporting of ailments away from purely physical medical conditions toward more non-specific medical (psychophysiological) conditions, psychological states, and dependencies.

Research Question 4 was concerned with the perception of psychological and emotional health. As with the physical health rating, in order to provide a basis for comparison of responses, the participants were asked to describe the general state of their psychological and emotional health both before and after becoming unemployed. While 98% of the workers perceived their psychological health to be either "excellent" or "good" prior to becoming unemployed, only 52% felt this way after becoming unemployed. Within the category of "excellent" psychological health, alone, 85% downgraded their status. Notably, while only 2% viewed their psychological health to be "fair" or "poor" prior to becoming unemployed, the

number increased to 49% after becoming unemployed.

The previously described subsample of unemployed workers who returned to full-time employment was used to compare their perceptions of psychological health both before and after becoming unemployed. Table 7 revealed a statistically significant difference in these perceptions, $\chi^2(1, n = 76) = 16.37, p < .001$. This finding was consistent with the hypothesized trend that psychological ailments are experienced more frequently than physical ones. Further, even after returning to work, psychological health continues to be perceived as being significantly different than it was prior to being unemployed.

The fifth research question addressed the reported frequency of selected psychological ailments. It has been previously noted that many physical ailments could be viewed from a psychological perspective as well. Several of the ailments that fall in this category were listed in Table 5 and have already been discussed. In terms of occurrence, both frequent depression (42%) and frequent irritability (37%) were those experienced most often within a one month time period of this study. Perhaps more revealing was the fact that three-fourths of all the respondents had experienced depression since becoming unemployed, 45% at least once per week. Thirty-eight percent were described as being in the "moderate" to "severe" range of depression with 5% reporting that they

had seriously considered suicide within 30 days of this survey. These findings are supportive of those of Borrero (1980), Figueira-McDonough (1978), Manuso (1977), and Oliver and Pomicter (1981) that depression is a major factor in the experience of unemployed workers and are in contrast to those of Kasl (1982), Kasl and Cobb (1982), and Kasl, et al. (1975).

Suicide can be viewed as an extreme expression of profound depression. The correlation of increased suicides with increased unemployment rates in Australia, Canada, France, Germany, Japan, Sweden, Italy, Great Britain as well as in the United States has already been established (Boor, 1980; Brenner, 1973, 1976, 1977, 1979; Bunn, 1979; Dumont, 1977; Rushing, 1968; Vigderhous and Fishman, 1978). Within the context of this study, 5% ($n=20$) of the unemployed steelworkers revealed that they had "seriously considered suicide" within one month of the time this survey was conducted. Although there was information pertaining to at least one case of suicide, there was insufficient statistical data on the actual incidence of suicide for steelworkers to warrant definitive conclusions. However, the fact that so many steelworkers had seriously contemplated suicide warrants deep concern and seems to amplify their perceptions of their unemployed status.

One's psychological state or emotional well-being can be reflective of or determined by how an individual

feels about himself/herself. Seventy-two percent of all the respondents indicated that their feelings about themselves had changed and this was directly attributed to their unemployed status. Nearly all of the workers (97%) either felt less satisfied with themselves or had feelings of satisfaction that were continually changing. Similar findings were revealed pertaining to respondents' feelings of satisfaction as the head of his/her household or family. Seventy-nine percent experienced either being less satisfied or having feelings that were constantly changing. Such a large percentage of individuals experiencing a reduction in personal satisfaction and self-worth or ambivalent or constantly vacillating feelings would seem to make the reported frequency of personal depression more understandable. This fundamental alteration or erosion of self-worth (self-esteem) is consistent with the findings of Catalano and Dooley (1977), Cohn (1978), Dumont (1977), Group for the Advancement of Psychiatry (1982), Lawlis (1971), and Tausky and Piedmont (1967). It is considered to be the most consistently reported finding in the research on unemployment resulting from the combined effect of self-blame for being out of work and financial insecurity (Kasl, 1974). However, only 11% of the steelworkers in the present study felt even partly to blame for their being unemployed.

As was indicated in the review of literature, some theorists contend that depression is a form of

displaced aggression (Borrero, 1980; Morris, 1982). With such a high degree of ambivalent or constantly changing feelings being reported by unemployed steelworkers, it could be hypothesized that the range of such feelings could vacillate between the manifestation of depression (with diminished feelings of self-worth) and aggression. An examination of these data seems to support this hypothesis. Since becoming unemployed, 66% of the workers indicated that they lose their temper more often when things do not go their way. Further, within the context of the family, the number of arguments with spouses had increased either moderately or significantly for 58%. The frequency with which an individual feels compelled to discipline his/her children has also been viewed as a form of displaced aggression (Briar, 1980; Dumont, 1977; Margolis & Farran, 1981). Thirty-one percent described that the number of times they had to discipline their children increased either moderately or significantly, since becoming unemployed.

Alcohol consumption can be viewed from a psychological as well as a physical perspective. For those who drink alcoholic beverages, 35% described their consumption as increasing either moderately or significantly since becoming unemployed, while 18% felt that their consumption decreased. This trend of increased alcohol consumption during unemployment is consistent with other reported findings (Brenner, 1973, 1979; Liem and Rayman, 1982).

Research Question 6 examined the support systems that workers perceived as giving them the most support during their period of unemployment. To summarize the results, among a variety of support systems, the "family" of the worker was indicated by an overriding majority of respondents (78%) followed by "friends" (59%) and the "local U.S.W.A. union" (33%). Lowest among the list was "business/industry" (2%), "fraternal organizations" (2%), and lastly the "national U.S.W.A. union" (1%). The locus of support seemed to emanate from both "family" (spouse or partner, children, or other relatives) and "social networks" (close friends, neighbors, others with similar problems) with whom the worker is or has been interpersonally involved on a somewhat sustained basis. Research data have indicated that the consequences of job loss have been experienced as less severe when individuals perceived their family and friends as being supportive during the ordeal of unemployment (Cobb & Kasl, 1977; Kasl, 1982; Kasl, et al., 1975).

A rather curious dichotomy existed when the data on support systems were compared within the union hierarchy, that is, between the "local" U.S.W.A. (Local 1256) and the "national" U.S.W.A. While 1 out of every 3 workers felt that the local union was among the three most supportive systems during their unemployment, less than 1 in 100 felt that the national union was supportive. No other support system received fewer votes.

Research Question 7 was designed to elicit the frequency of various coping mechanisms and support systems utilized by steelworkers. To ease the stress of unemployment "social networks" and "family" again headed the list of preferred support systems and coping strategies. Within these systems nearly one-half (49%) chose to confide in their spouse or partner, 43% chose to confide in a close friend and 32% elected to confide in a relative. In addition to seeking out spouse or partner, close friends, and relatives in that order of preference, the common denominator to all three methods of coping involved confiding. As has been indicated previously, support is not provided by the entire range of social relations, but only those relations where there are the qualities of trust and intimacy (Pearlin, et al., 1981). This perception of trust and intimacy apparently is conducive to risk confiding in someone else about one's self. Indeed, because of the magnitude of the prevalence of this strategy for this population it would appear that confiding in someone might be both a necessary and/or essential component in the repertoire of coping mechanisms. However, comparatively few individuals (less than 6%) confided in professionals (physicians, ministers or religious counselors, therapists, or social agencies). As a result, it is not surprising that many workers - nearly one out of every three - elected to cope by withdrawing in some way from other people through sleeping, watching television, praying,

or just keeping to themselves.

The eighth and ninth research questions investigated the variables of age, race, and marital status as to their differential effect on physical or psychological reactions and coping mechanisms or support systems, respectively. From the questions reviewed, the variable of age was a factor in 10 significant interactions. This was twice the number for the variable of race, which accounted for 5 significant interactions, and over three times the number for marital status which accounted for 3 significant interactions.

Age was a factor in how younger workers (< 36) and older workers (≥ 36) perceived their physical health before unemployment. Younger workers were more prone to report the condition of their physical health as "excellent", while older workers were more prone to report their health as "good". It can be hypothesized that this interaction could be attributable to the aging process alone and that younger people would, naturally, be in relatively better physical health than older people. However, after becoming unemployed for 16 - 18 months, there were no significant differences in the way younger and older people perceived their physical health. The most dramatic change, however, occurred in the younger group of unemployed workers. These results seem to support the findings of Brair (1980) and Catalano and Dooley (1970) and are in contrast to the findings of Brenner (1977),

Dumont (1977), and Liem and Rayman (1982).

How a worker felt about the way his/her time was occupied since becoming unemployed was also related to age. Compared to being "satisfied" or "undecided", both younger and older workers reported more frequently that they were "dissatisfied" with the way they occupied their time. However, older workers seemed to be more clearly either "dissatisfied" or "satisfied", that is, one or the other. Younger workers, on the other hand, were "dissatisfied" more than twice as often as "undecided", but reported being "undecided" 25% of the time. Older workers seem to be more sure of their feelings pertaining to this question.

Whether a respondent was either a younger worker or an older worker seemed to be associated with the response to the question, "Has becoming unemployed changed the way you feel about yourself?" Even though both age groups indicated that their feelings about themselves had changed, the relative magnitude between the groups was significant. Older workers were nearly equally divided on the question, but nearly two times as many younger workers reported a change in personal feelings compared to those who did not.

Age was also related to the reported experience of personal depression. In fact, the age variable was significantly involved with all three areas of depression that were examined: (a) incidence, (b) frequency, and

(c) severity. While both age groups reported experiencing personal depression, younger workers reported experiencing depression with a greater relative frequency (79%) than older workers (65%). The reported incidence of depression for younger workers was 1.8 times higher than for their older counterpart.

Experiencing depression "once a week" was reported by both younger and older workers more frequently than either of the other time periods examined (Table 13). Moreover, a relatively larger percentage of younger workers (36%) reported experiencing depression once a month compared to their older counterparts (19%). A somewhat similar finding occurred in regard to age and the reported degree of depression. Each age group reported experiencing mild depression more frequently than either of the other two degrees of depression investigated (Table 15). But, a relatively larger percentage of younger workers (41%) more frequently indicated that they experience moderate depression than did their older co-workers (26%).

Younger workers consistently reported a relatively higher incidence, frequency, and degree of depression than older workers. These results support the findings of Boor (1980) and Markush and Favero (1974) and are in contrast to the findings of Brenner (1977), Briar, et al. (1980), Dumont (1977) and Liem and Rayman (1982).

Age was a factor in the response to the question as to whether a worker loses his/her temper more often

since becoming unemployed. Even though both age groups indicated that they did lose their temper more often since they became unemployed, the relative difference was, again, greater for the younger group of workers (70%) than for older workers (58%). This relative difference was also found in the results of the question pertaining to the number of arguments an individual had with his/her spouse. While the relative number of arguments increased for 43% of workers ≥ 36 , this relative number increased to 62% for those < 36 .

Alcohol consumption and age were also related. Alcohol consumption tended to remain about the same for over one third of the respondents < 36 . The remaining two thirds of this group were equally split between increased and decreased alcohol consumption. Nearly one half of the ≥ 36 group decreased their alcohol intake. While alcohol consumption increased for 17% of those ≥ 36 , this increase reached 31% for those < 36 . After becoming unemployed, younger workers' drinking habits tended to remain the way they were before they were unemployed, while older workers tended to change their habits and reduce their drinking. Although there were reported increases in the amount of alcohol consumed by both groups, the relative rate of increase was greater (+14%) for younger workers.

Lastly, age was related to how workers perceived the level of support received from family, friends,

organizations, and community since becoming unemployed. Whereas 43% of older workers were equally divided between whether the level of support was either "good" or "poor", younger workers were more prone to respond that level of support was "good" (54%). Only 28% of them indicated that help from these support systems were "poor".

In summary, age was found to be a statistically significant factor in 10 of the areas investigated: (a) physical health before unemployment, (b) level of satisfaction for the way an individual occupied his/her time, (c) feelings about one's self, (d) incidence of depression, (e) frequency of depression, (f) severity of depression, (g) temper, (h) number of arguments with spouse, (i) alcohol consumption, and (j) level of support received from family, friends, organizations, and community.

Race was found to be a statistically significant factor in five of the areas investigated: (a) physical health after becoming unemployed, (b) psychological health after becoming unemployed, (c) frequency of depression, (d) alcohol consumption, and (e) social contacts with relatives.

Although no significant differences were found between race and the questions pertaining to physical or psychological health before unemployment, the factor of race became significantly related to these questions after unemployment. On each of the questions addressing the overall state of physical and psychological health since

becoming unemployed, non-whites reported the state of their health as less satisfactory than did whites. More specifically, both whites and non-whites reported experiencing depression "once a week" more frequently than either of the other two time periods examined (Table 14). However, the relative magnitude of difference was pronounced. While whites reported a 50% rate of prevalence for experiencing depression at least once a week, non-whites reported a 79% rate of prevalence. Additionally, related to the question of alcohol consumption, while whites tended to remain the same in their drinking habits, non-whites tended to change their drinking habits and increase their alcohol consumption. Forty-five percent of the non-white group increased their intake compared to 25% of the white group.

Finally, race was related to the question pertaining to social contacts with relatives. After becoming unemployed, nearly half of the white group kept their contacts with relatives at about the same level it was before becoming unemployed, while about half of the non-white group decreased their contacts with relatives.

In general, these findings support the conclusion by Bowman, et al. (1982) and Feldman (1973) that both perceptions and reactions to unemployment differ when one accounts for the factor of race.

Lastly, marital status was found to be a statistically significant factor in two of the areas investigated:

(a) level of self-satisfaction as head of a household or family, and (b) alcohol consumption.

With reference to the question pertaining to an individual's level of personal satisfaction as the head of his/her household or family, 66% of the married individuals indicated that they were less satisfied with themselves. However, 61% of the single people reported that they had feelings that were constantly changing. It could be hypothesized that many single persons had not yet assumed the role, head of household or family. As a result, a bonafide feeling associated with this role may not have been fully realized. Therefore, the marked elevation in constantly changing feelings might have been attributable, in part, to a lack of full personal identity with this topic.

With regard to alcohol, married and single workers displayed markedly different patterns of consumption. For example, while married workers most frequently indicated that their level of alcohol consumption "remained about the same" as before becoming unemployed, single workers most frequently indicated that it "increased moderately or significantly". Forty-three percent of the married group indicated that their drinking remained the same compared to only 27% of the single group. Moreover, while only 20% of the married group reported an increase in drinking, 40% of the single group reported an increase. Overall, the two groups' drinking patterns were reversed

(Table 19).

The tenth research question examined reactions to selected options that might affect a change in vocational status. Reviewing the various reasons that influenced individuals to become steelworkers can provide some basis for understanding these reactions. Money, job security, and benefit package ranked first, second, and third, respectively, as reasons that influenced individuals to become steelworkers. Any successful job change, retraining program, or effort to relocate to find work would, necessarily, take into account these factors. However, embedded in fourth place was the influence of the family because either father or close relative was a steelworker. This was indicated by 43% of the respondents. The fact that so many of the steelworkers followed the path of other family members (nuclear or extended) might be reflective of their rootedness to family and vocation, as well as to their community. These variables may influence a worker's perception of options for vocational change. Indeed, a change in residence was already reported by 8% of the workers as currently being a major stressful problem in their lives. Further, nearly one in four (23%) reported that changing jobs was a major stressful problem. The underlying theme for these responses was the perception that change, from what had been experienced as usual, customary, and stable, was now being viewed as stressful.

The direction of change in vocational status

(seeking similar work elsewhere, seeking another line of work without acquiring specific skill training, or pursuing retraining/reeducation for a new vocation) may be influenced by additional factors. One in four (27%) did not have money to go on to school. For many, this condition still exists, especially since the T.R.A. monies have been halted. Further, more than one in five (22%) had no desire to go to school. Nineteen percent of the respondents became steelworkers because they needed the first job they could get, while 15% indicated it was the only job available. The factors of money, desire, necessity and opportunity were all integral in making previous vocational choices. Combined with the other reasons that were previously delineated, these factors may well influence reactions to options that might affect a change in vocational status for these unemployed steelworkers.

One of every two respondents (51%) indicated that they would be willing to relocate to another part of the country to find work. The rest of the respondents were either not willing to relocate or were, at the time, undecided. Although only 38% felt that training for another job was the way to solve the problem of unemployment, a strong majority, represented by 80% of the respondents, indicated they would be willing to learn a new trade at this point in their lives. Having an opportunity to do it over again, one third of the men and

women in this study indicated that they would not seek work in the steel industry.

CHAPTER VII. IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSIONS

A. Implications

An analysis of the demographic characteristics of the sample of steelworkers under study revealed a rather skewed distribution for each of the variables of age, race, sex, and marital status. The composition of the group of workers who responded to the Steelworker's Questionnaire (Table 1) were primarily young (between the ages of 20-35) white, married males. Even though the variables of age, race and marital status were each subdivided into categories for analysis of interaction effects, the overall composition of the sample must be kept in mind when drawing implications or conclusions from the data. Further, whether the composition of this sample of unemployed steelworkers was comparable to or representative of other samples of unemployed steelworkers needs to be determined. Also, the same would be true concerning the representativeness of the responses to the Steelworker's Questionnaire. Until this representativeness can be established, caution and restraint should be exercised in generalizing from these data.

The major stressful life change events indicated by unemployed workers (being unemployed, financial worries, and changing jobs) were markedly different than those

observed in other studies (Holmes & Rahe, 1967; Kiev & Kohn, 1979). These findings support the contention of Dohrenwend, et al. (1978) that there is no unanimity among researchers as to which life change events are most representative, meaningful, or stressful in a person's life. This sample of unemployed steelworkers reported a series of stressful life change events based on their own experience at a given point in time. In many respects, reality lies in one's perception of what is real. It is the reality of their own experience which needs to be understood by any and all who are in a position to help the plight of these workers.

Since becoming unemployed, the reported incidence of change in physical and psychological health for both an overall appraisal and for specific ailments was pronounced. Interestingly, with the exception of back trouble which reached a frequency of 20%, none of the "medical conditions" listed in Table 5 achieved more than a 4% rate of prevalence. The fact that one in five steelworkers reported back trouble has already been viewed from the perspective that such a high rate of incidence might be indigenous to the nature of the work. However, compared to the findings of the previously cited study conducted in California (In Pursuit of Wellness, 1979) that was a survey of over 1,000 randomly selected residents, this sample of steelworkers reported 4% less problems with back trouble. Keeping this in perspective,

the reported frequency for all the ailments listed under "medical conditions" was relatively insignificant. This phenomenon is somewhat similar to the lag phenomena described by Brenner (1973, 1976, 1979), in that a rise in physical ailments, such as cardiovascular disease, have a time lag of two to three years. Recall that at the time of this survey, workers had been unemployed for approximately 16 - 18 months. These findings are, however, in opposition to those of Kasi and Cobb (1979) who noted in their work that for diverse indicators of health, including psychophysiological symptoms, no significant differences which were attributable to unemployment status could be detected.

Borrero (1980) felt that the most serious emotional stress experienced by the unemployed was depression. The results of this study are consistent with this view. Of all the questions on the Steelworker's Questionnaire, no other received such a high percentage of affirmative responses as did the question pertaining to the incidence of personal depression. Seventy-five percent of those responding indicated that they had experienced personal depression since becoming unemployed. Other researchers (Figueira-McDonough, 1978; Manuso, 1977; Oliver & Pomicter, 1981) have also reported a greater incidence of depression associated with unemployment. Conversely, Kasi (1982), Kasi and Cobb (1982), and Kasi, et al. (1975) reported that the factor of depression showed no significant change

over time which could be linked to unemployment. Nevertheless for the group of steelworkers in this study, the factor of depression was not only significant in terms of rate of prevalence, it was also a significant factor in terms of reported frequency and severity.

The variables of age, race, and marital status were implicated as major factors in the response patterns of steelworkers. Salient were the responses to depression (prevalence, frequency, and severity) and consumption of alcohol. If a respondent was young (< 36), he/she was more likely to report both a greater prevalence and frequency of depression than his/her older counterpart. Non-whites reported a greater relative frequency of depression than whites. Therefore, young, non-white workers were more prone to report both a greater prevalence and frequency of depression than their young, white peers. With respect to alcohol consumption, if a respondent were married, white, and under the age of 36, (a) for most, drinking tendencies remained approximately the same, and (b) as a group had the lowest rate of increased alcohol consumption. However, if a respondent was single and non-white, his/her drinking tendencies significantly increased. Lastly, if a respondent was ≥ 36 , the reported tendency was for drinking to decrease. The overall implication of these findings, in addition to other findings reported in this text, is that younger unemployed workers who are single are more prone to indicate a greater

relative frequency of varied physical and psychological ailments since becoming unemployed than any other paired group. This elevated reported frequency might imply that since becoming unemployed this young and single group was more vulnerable to the kinds of ailments investigated in this survey. If a third variable, that of being non-white, is combined with the younger (< 36) and single group, then a newly formed group, albeit considerably smaller emerges. This young, single, non-white group of workers was found to be the most vulnerable of all multiple group combinations.

Brenner (1977), Dumont (1977), and Liem and Rayman (1982) hypothesized that middle-aged men and women would be especially sensitive to unemployment, manifesting more intense stress reactions, greater concerns about health, and increased mid-life depression than their younger-aged counterparts. For the present sample of steelworkers none of these hypotheses proved to be valid. Even in terms of extreme depression coupled with suicidal ideation, four times as many younger workers (8%) reported that they had seriously contemplated committing suicide within a one month time period of this survey than older workers (2%). This is a somewhat similar finding to that reported by Boor (1980).

Of the many physical and/or psychological ailments examined in this survey, few, if any, occur solely in isolation, that is, without having an impact upon others

who are either in close physical or psychological proximity to the unemployed worker. By way of a ripple effect, the problems associated with unemployment can pervasively spread from the unemployed worker himself/herself to spouse and children. Personal problems frequently become family-level problems (Moen, 1980). With personal income for 96% of those responding being reported as moderately or significantly decreased, a total family level readjustment to a more modest life style seems evident. Personal as well as family security might become diminished as unemployment compensation and health insurance ran out for many. In addition, at the time of this survey, 72% of the workers had not found any work - part-time or full-time - outside the steel industry. Of those who reported that they had other sources of income, 72% indicated that their spouse was working. Therefore, a change in the status of roles, and possibly prestige, and authority might ensue. These changes might cause disruption or conflict in traditional family dynamics. These implications were also hypothesized by Moen (1980).

Moen (1979) asserted that unemployment could precipitate marital disruption in the form of desertion, separation or divorce, and Peterson's (1974) work amplified this assertion when he found that 75% of the men in his study who remained unemployed for nine months or longer faced divorce proceedings. By comparison, separation or divorce was a minor factor in this study as only 9%

were either divorced or separated. These findings are consonant with those of Borrero (1980) and Brinkerhoff and White (1978).

Turning to level of support received from family, friends, organizations and community, although more than half of the respondents felt that the support received was "good" or "excellent", nearly one third felt it was "fair" or "poor". The remaining respondents were "undecided". The question arises as to why so many people (nearly 50%) felt that the level of support received was neither good nor excellent? A further analysis of the data revealed that nearly twice as many single people indicated that support was "good" compared to "poor", whereas married individuals were equally divided on the question. The answer to the proposed question is not readily available from the data obtained. It is, however, an observed phenomenon which needs further investigation.

Nevertheless, the family was indicated more frequently than any other support system as the one which provided the most support during unemployment (Table 10). This was followed, in decreasing order of reported frequency, by friends, the local union, and church group. Pearlin, et al. (1981) have hypothesized that support is not provided by the entire range of social relations, but only those relations where there are the qualities of trust and intimacy. If this hypothesis is true, then this sample of steelworkers has established its own hierarchy of

trusting and intimate support systems.

The three coping mechanisms most frequently reported (Table 11) all included the element of confiding, whether it be with spouse, partner, relative or close friend. The concept of confiding was discussed previously as potentially a necessary and/or essential component to the repertoire of successful coping strategies. Confiding in someone presupposes the elements of trust and intimacy described under support systems. It, then, is not surprising that the top three coping mechanisms are associated with the top two support systems. Nevertheless, even though a large percentage of people turned to family and friends for support, nearly one third of the workers reported a decrease in social contacts with family and more than 40% reported a decrease in social contact with friends. With the exception that non-whites tended to decrease their social contacts with relatives, while whites tended to remain about the same, the finding of decreased social contact with family and friends remained constant throughout the variables of age and marital status. This increase in personal and social withdrawal and isolation, may have the potential to exacerbate such feelings as depression and alienation.

Table 22 depicts a composite of reasons why a person chose to become a steelworker in the first place. These hierarchical rankings provide a basis for understanding significant influencing factors pertinent to

the decision-making process for subsequent occupational/vocational choices.

Nearly one half of the workers were either undecided or unwilling to relocate to another part of the country to find work at the time of this survey. This is a curious finding in-so-far as only 8% indicated that a change in residence was a major stressful problem in their lives. On the other hand, these responses might not be related to stress at all. Rather, they might be reflective of the workers' firm commitment to family, friends, and community to maintain the status quo in the tradition and spirit of their forefathers.

When posed the question, "Is training for another job the way to solve your problem of unemployment?", 60% responded either "No" or "Undecided". Yet, when asked if they would be willing to learn a new trade at this point in their life, more than 80% responded, "Yes". Because of this response pattern the question arises, "If a worker does not feel that training for another job is the way to solve his/her problem of unemployment or is undecided about the issue, why engage in learning a new trade?" To fully answer this question, the level of personal and collective motivation would need to be explored. Personal motivation for any job retraining effort would have to be ascertained on a individual basis. Collectively, however, certain hypotheses can be entertained. First, it seems plausible that intuitively many

workers felt that job retraining was not the best way to solve their unemployment problem, but that rationally a vast majority felt that it was. Secondly, it is possible for many workers to engage in job retraining as a sort of stop-gap vocational/economic measure, while still holding on to the notion that eventually they will be called back to their old job. Thirdly, for more than one third of the workers, job retraining was indicated as the way to solve their problem of unemployment, and, further, they would be willing to learn a new trade at this point in their lives. These distinctions in personal motivation should be carefully examined by each worker, himself/herself, and by individuals responsible for training programs before a firm, perhaps long-term commitment to vocational retraining is initiated.

B. Recommendations

As a result of the findings of this study, and in order to help those who will be dealing with the unemployed and/or engaging in future research on unemployment, the following recommendations are offered:

1. A long-term follow-up study of the workers included in the present survey should be initiated in order to help monitor any changes in the status of their physical or psychological health and coping mechanisms or support systems that might occur over time. The results of the present study can be used as a basis for comparison.

2. There is a need for longitudinal research (similar to that reported by Kasl, et al., 1975) to examine a group of workers, who know that their jobs will be terminated in the future, during both their period of employment and subsequent unemployment. Data obtained from pre and post job termination periods could aid in the understanding of the development of workers' personal reactions to unemployment.

3. The current study examined primarily blue collar workers and their perceptions of the impact of unemployment. Future research studies should be designed to investigate the impact of unemployment on white collar workers and clerical personnel as well.

4. Individual-level problems experienced by the unemployed worker frequently infiltrate the family domain and become family-level problems. There is a need to study how unemployment affects family dynamics, in general, and spouses and children, in particular.

5. In terms of doing multivariate analysis, it is recommended that researchers focus only on critical factors and keep the variables under study to a minimum. This has the advantage of reducing the number of statistical problems that might result from the numerous calculations involved. The questionnaire used in this survey contained 50 questions with over 260 response options per questionnaire. In this study, virtually tens of thousands of pieces of information were analyzed.

6. Individuals who will be involved in health care, education, or retraining programs should become aware of the varied effects unemployment can have on the worker, especially psychological ones. A clear understanding of and a sensitivity to these effects from both an individual and group perspective can provide a basis for relevant, effective personal and vocational rehabilitation.

7. In this study 6% or less of the respondents reported that they utilized professional services, such as mental health specialists, to help cope with their problems. There is a need to make innovative, comprehensive professional services, specifically tailored to meet the needs of the unemployed, more available, visible, and accessible. Additional emphasis should be placed on expanding comprehensive support services to the family as a whole, as well as to spouses and children, individually. Professionals should be instrumental in the development of self-help groups and other programs such as those dealing with stress management.

8. Nearly one third of the respondents in this survey indicated that the local union was a major support system during their period of unemployment. Because so many workers tend to relate to this support system, by expanding its responsibilities the local union could be in a particularly strong position to be even more responsive to the needs of its unemployed members. Union

officials are encouraged to take a more active role in exploring ways in which additional services could be implemented or coordinated on behalf of those who are unemployed.

9. Services providing relevant, factual, updated information pertaining to retraining programs, job development, and relocation should be expanded. Such information is vital to decision-making for successful personal/vocational rehabilitation.

10. Leaders from labor, industry, and government should convene to conjointly establish, fund, and support programs that will meet the very complex and pervasive problems of those faced with unemployment. Such a concerted effort is both necessary and essential if these problems are to be adequately addressed.

C. Conclusions

According to Liem and Rayman (1982) collective, diverse literature representing behavioral, medical, and social sciences, do not portray job loss as a source of dramatic and overwhelming stress for everyone. Indeed, some feel that reactions to job loss are, at best, selective, interactive, and by no means homogeneous (Hepworth, 1980; Kasl & Cobb, 1982). The review of literature in the present study examined various divergent findings relevant to these and related topics. Summarily, in contradistinction to the above viewpoints, there does seem to be a general consensus in the literature that

unemployment is associated with elevated levels of stress which have the potential to precipitate varied physical and psychological reactions. For 80% of the unemployed steelworkers surveyed in this study, being unemployed was the major stressful problem in their lives. In fact, the three primary stressors that were reported all pertained to their unemployed status. In a manner similar to other groups surveyed in the past, these unemployed steelworkers established their own hierarchy of stress-related life change events which could serve in the future as a basis for comparison with other research findings.

Since becoming unemployed, more workers reported being overweight by more than 20 pounds, smoking and drinking more than they should, frequently experiencing insomnia, anxiousness, irritability and depression than they reported other specific or non-specific medical conditions. For this sample of steelworkers, who had been out of work for 16 - 18 months at the time of this survey, psychologically-related ailments were more prevalent than physically-related ailments. If, as Brenner (1973) has suggested, there is a two to three year time lag for certain physical ailments to emerge, then a shift in magnitude from psychologically-related ailments to more physically-related ones can be anticipated. This, however, needs to be demonstrated. At the present time, however, it seems clear that a vast majority of these steelworkers are experiencing significant psychologically-related

distress.

By virtue of close association or proximity, through a ripple effect, individual problems frequently turn into family-level problems. This was evident in the current study. Marital problems and problems with children ranked fourth and fifth, respectively, on the list of current major stressful experiences. Additionally, arguments with a spouse increased for more than half of the workers. Nevertheless, despite the prevalence of family-level friction, 91% of the married families remained intact, that is, did not become either divorced or separated. This might be reflective of the unemployed worker and his/her family's deeply rooted commitment to preserve the family unit. Further, implied is a tenacity to survive together in the face of personal and/or economic crisis. Even after 16 - 18 months of unemployment, the family was chosen by an overwhelming majority of workers as their major support system.

Steelworkers did not seem to be united as to how their personal or vocational needs could best be met. No set of responses achieved greater than a 10% rate of concordance. Moreover, considering the present state of both the political and economic climate, many of the suggestions offered seem unlikely to be implemented. For example, the most frequently reported suggestion was to stop foreign imports or stop foreign trade on steel, automobile, and electronic equipment. Considering the

current administration's foreign trade policy with limited trade restrictions, it seem improbable that this suggestion will be adopted. The second most frequently reported suggestion - to provide more training programs - was put into motion by monies provided through the Trade Act of 1974. However, the flow of such funds for job retraining programs has been halted. Many indicated that they simply wanted their old jobs back. But, U.S. Steel Corporation's most recent plans, to make additional sweeping reductions in both steel-making and jobs nationwide, and, more specifically, at the Duquesne plant, make this recommendation unrealistic as well.

Even though 70% of the workers have exhausted their unemployment benefits and are no longer included on government unemployments lists, their plight of being out of work goes on. The factors of stress, physical and psychological ailments, changing family roles, social readjustments, change in economic status, and vocational retraining and/or job placement all need to be directly addressed.

Borrero (1980) stressed the importance of obtaining quantifiable data with respect to the impact of unemployment. The present study offers such quantification. It must be remembered, however, that these statistically derived data represent the effects of unemployment from the perceptions and experiences of people. Health care providers, educators, vocational trainers, family,

friends, organizations, and all who endeavor to assist the unemployed must recognize and become sensitive to these effects on those individuals with whom they may become involved. The reality of the worker's own experience of the impact of unemployment needs to be clearly comprehended by the service provider and policy maker in order that a basis for relevant, effective, personal and vocational rehabilitation might exist.

Finally, the findings of this study need to be put in perspective. From a background of gainful employment and relative economic prosperity, individuals in this study suddenly became faced with the harsh realities of being unemployed, including a significant decline in their economic status. After 16 - 18 months of unemployment, the large majority of these men and women are either frustrated, bitter, angry, resentful, bewildered, humiliated, or desperate. Additionally, a subgroup of young, single, non-white workers was identified as being especially vulnerable to the stress of unemployment. Further, the stress of unemployment has infiltrated the family domain, the workers' primary support system. In this regard, the questions arise: "To whom do families under stress turn for support?", and "What happens to all involved if the family support system breaks down?" To make matters worse, many workers feel victimized, alienated and abandoned due to their perception that nobody really cares what happens to them. The belief that there is nowhere to

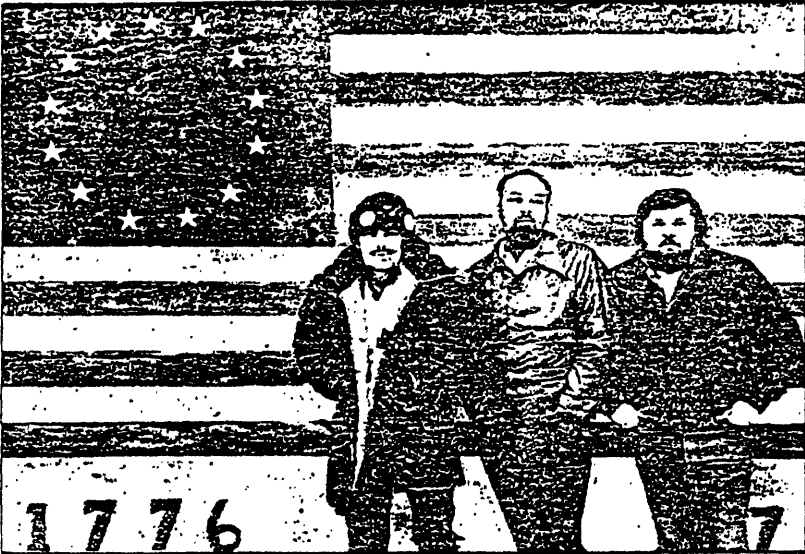
turn is pervasive. Even the workers' own suggestions as to how their personal and vocational needs could best be met seem unrealistic. Conditions are presently even worse than they were when this survey was initiated, and, with more permanent layoffs and plant closings imminent, the situation can only deteriorate further. As a result, a potentially volatile set of social conditions exists. A similar - though not exact - set of circumstances was observed in the Watts district of Los Angeles and the Huff district of Cleveland during the turbulent years of the sixties. This investigator recognizes, however, that in drawing this parallel the socio-political climate of the sixties had a significant influence upon and was partially responsible for the ensuing civil disruption and violent acts which followed. Moreover, this same set of socio-political parameters was not present in the world of the formerly employed, property-owning, primarily white group of individuals surveyed in this study. But, one cannot help but wonder what might occur with another group of individuals in our society who are experiencing personal and social stress, while believing that their problems are not being heard and that underlying issues are not being addressed. As one unemployed steelworker in this survey wrote, "If you think that the racial problems of the 1960's were bad, wait until the working people of the 1980's say 'Enough is enough!'"

The purpose of this study was to survey, analyze,

and report various conditions that exist, factually and accurately. It is the investigator's belief that policy-makers from governmental bodies, labor unions, business and industry, health-related services, educational and vocational facilities, and other organizations and/or support systems who deal with the unemployed, need to give serious and deliberate consideration to the findings of this survey, which have been specifically directed at the perceptions of the unemployed steelworkers of the Mon Valley.

Pittsburgh Press

• WEDNESDAY, APRIL 4, 1984



Charles Fox for The Pittsburgh Press

Recovery? Not for jobless workers, left to right, Art Liebowitz, Leroy Walker and Carroll Liller

Towns face life after steel

(This is the first of a three-part series on the lingering recession in the Pittsburgh region.)

For the jobless families of the Pittsburgh region and their troubled towns, the national economic recovery looks increasingly like a lavish dinner party glimpsed through a frost-rimmed back porch window.

When national unemployment was 6 percent in January, it was 16 percent in Johnstown.

While Washington, D.C., worries about overheating the economy, the Mon Valley starts April with the loss of 3,720 more steel jobs.

Shopping on smaller salaries, facing chronic unemployment, the Pittsburgh region and its workers have good reason to feel isolated. They are.

Lingering in pockets throughout the nation's industrial belt, recession has wrought deep changes in families and towns now building a

Hard times

Searching for recovery

future out of hard choices.

Leroy Walker quit looking for work after his wife took the children and left him. She couldn't handle it when the finance company took away their West Mifflin home.

"I'm so disgusted. Would you still look for a job if after every day for months you looked and there just wasn't anything," he asks. Walker has lived on welfare since his unemployment checks ran out a year ago.

A 10-year employee of Mesta Machine Co. in West Homestead, Walker never had a clue he was about to lose his job to a company shutdown. Orders seemed to come in as usual.

"I don't see why they had to do that to us," says Walker. "They knocked us down."

From Johnstown's struggle for a new economy to the C. & D. workers' run of their own steel plant in West Virginia, the search for recovery, sometimes has meant lowering expectations.

It's a search many towns probably will

undertake alone, say analysts who see little chance for the national programs that might have responded to such distress in the past.

While national recovery will bring some relief, decline may dog industrial states for another decade, says Benjamin Stevens, a regional economist in Amherst, Mass.

"The whole industrial region is going through the loss of higher-wage jobs suffered by New England 20 to 30 years ago. But in that case the change came over a number of years. I'm concerned the sudden upheaval we've seen is much harder to deal with."

"I think states like Pennsylvania and Michigan will have to go it on their own. I wouldn't count on the southern or southwestern regions of the nation to support a major federal program to rescue them," said Stevens.

Recession struck unevenly. In Pennsylvania the recession pulled Beaver County's unemployment rates as high as 24.8 while the state's overall rate hung at 14.9.

Recession struck towns where factory jobs already were declining. Since 1981 the four-county area around Pittsburgh lost 38 percent of its manufacturing jobs and saw its

Continued on page A4

(These articles were prepared by Press staff reporters Tom Looy, Janet Williams and Tim Duggan and special assignments editor Matthew Kennedy.)

EXHIBIT "B"

Page 2--The Pittsburgh Press/April 4, 1984

In mill towns: Is there life after steel?

Continued from page A1
Service jobs expand by 17 percent. Wages paid in service jobs, however, amount to about half those paid by manufacturing.

The long-term changes underlying the recession in the Pittsburgh area are echoed across the industrial belt running along the Great Lakes, say U.S. Commerce Department analysts.

Since 1920 income in different regions has been moving toward a national average. That trend has accelerated decline for the historically high-income regions including Pennsylvania, while younger regions such as the Southwest have been steadily raising personal incomes, those analysts say.

With newer facilities in growing Southern and western regions, the North's aging factories were more vulnerable to recession, said Dale Garmack, associate director of statistics for the Commerce Department.

Northern factory towns will see record unemployment improve as the national economy pushes ahead. But they will have a much longer road back to pre-recession health, he said.

"The more you're associated with the Ohio Valley steel and coal complex, the worse off you are in this change, and the more diversified you are away from that heavy industrial concentration, the better off you will be," said Garmack.

ENTLED IN the Coenegaugh River valley, Johnstown is one of the towns built by coal and steel now struggling for new footing.

Unemployment has dropped from 21.4 percent in January 1983 to 16 percent in January this year — still double the national rate.

Defying the silent steel facilities along the river, Johnstown's streets bustle with shoppers. The city's leaders have ambitious plans for a downtown renaissance including a park linking several businesses and banks.

Mayor Herbert Pfluh Jr. believes Johnstown is "coming out of it. But for the guy who's unemployed, we're not coming out fast enough."

Pfluh is making good use of inspirational skills honed as a high school basketball and football coach. "But a pep talk is a lot different than giving someone false hope."

"I tell them the truth — the mills are not going to be like they were in the byedays. They are going to be more technical. The few guys left in the mills will be different."

Johnstown is going to be different. It is not going to wash away, fade away or collapse. It'll be here. The sprawling U.S. Steel plant on the southeast side of town will not be.

Only five minutes from downtown, the plant employs only a few workers who spend their time closing up the 101-year-old mill.

The plant was among those U.S. Steel targeted for shutdown if workers did not agree to a third round of union contract concessions. They did



Hard times Searching for recovery

not, and the plant was on the April 1983 cutback list which ended 18,436 U.S. Steel jobs nationwide.

Life in Johnstown revolved around the U.S. Steel and Bethlehem mills and their boom-and-bust cycles, said Tina McCune, 33, owner of a coffee shop and newsstand across from U.S. Steel's plant.

Four years ago the crowd of regulars at McCune's News made it hard to move inside the shop. "It was like a carnival in here," she said.

McCune's News cut its menu because of the disappearing work force across the street, but the owner won't be following U.S. Steel. From plant closings to devastating floods, Ms. McCune has seen Johnstown bounce back.

"Half the battle is convincing ourselves that we can win it. Perhaps we won't realize as much of our aspirations as we had hoped... but we will survive."

SURVIVING the shift from manufacturing will not come without a price for heavy industrial areas like Johnstown, Youngstown, Ohio, or the steel towns around Pittsburgh.

Primary metals industries remain the largest single payroll in the four-county Pittsburgh area economy.

That primary metals payroll dropped from \$227 million in the third quarter of 1981 to \$327 million by the third quarter of 1982 and again to \$356 million by the third quarter of last year.

"We usually lag about a year behind the national recovery, but it would be hard to consider us recovered," said Frank Giarratani, a regional economist at the University of Pittsburgh.

"We've got about 10 percent unemployment rate in this area, and

those are hard times."

Many of the jobs lost during the recession will never return, he said.

The Pittsburgh four-county area alone lost nearly 17,400 factory jobs in the 1974-76 recession, with the national recovery reducing the net loss to 11,000 by 1979, according to figures compiled by state labor analysts.

By contrast, the Pittsburgh area lost 42,000 factory jobs between 1979 and 1982, 3 1/2 times the jobs lost from 1974 to 1976 downturn, those analysts reported.

The losses continued in 1983, dropping from 194,800 manufacturing jobs in 1982 to 184,900 manufacturing jobs last year.

The immediate reasons behind recession's lingering influence on industrial towns include older equipment, foreign entry into once-safe markets, low demand for capital goods and the high dollar value of American goods overseas, Giarratani said.

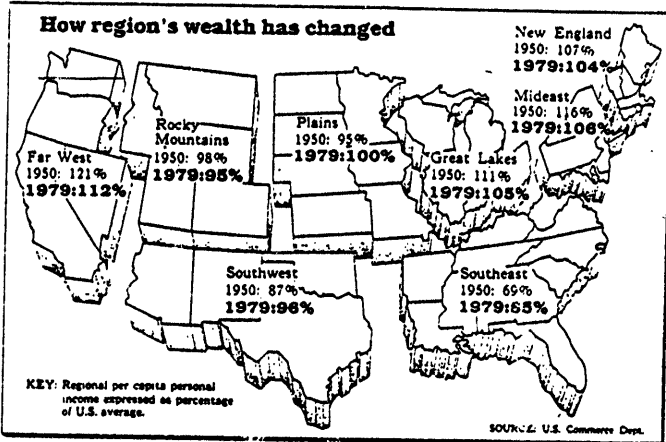
Deeper trends, however, suggest manufacturing, particularly steel, is drifting out of the northern states to follow domestic markets that have moved west and south with the nation's population growth, he said.

Such trends suggest that transition, not preservation, is the central issue for the recession-scarred industrial towns, Giarratani said. The ability to cope with change will be a necessity in the future.

INDUSTRIAL towns like those around Pittsburgh already are adjusting to changes ranging from the slide of the blue-collar middle class to increases in the number of wives and other family members at second-income workers.

When government safety nets frayed away, some of the unemployed strung their own replace-

Page 3--The Pittsburgh Press/April 4, 1984



ments in church cellar food banks and fire hall job clubs.

Dale Worton, who has been laid off 13 months, started an unemployed men's support group because, "I need help myself. The problems other people might discuss probably are also my problems. And I got bunches of them. It helps me to talk about my problems, too."

Mill towns and their people are surviving, but their quality of life and income are dropping, widening the gap between those with niches in the new economy and those caught in the collapse of the old.

Recession and its aftermath are breaking up the middle class of well-paid workers that put communities here among some of the best paid in the nation, says James V. Cunningham, a University of Pittsburgh professor of social work.

The fall from affluence has wrenched spirits as harshly as family budgets. For Susan, a young mother of two, her husband's layoff a year and half ago triggered an emotional disorder vented through frightening seizures.

At St. Matthew's Episcopal Church in Homestead, Susan shares her despair with other women at a "Mother's Day Out" support group. She asked that her real name not be used in this article.

Susan's seizures started about the time her husband was laid off from U.S. Steel Corp.'s Homestead works. "There was so much pressure. We had to take money from our parents. It bothers me. It's not fair to them."

Pressures increased for Susan when the Board of Public Assistance rejected her husband's application for welfare because their \$1,000 car exceeded guidelines.

"It's so degrading to go down to welfare. I always had everything I ever wanted."

To qualify for food stamps, Susan and her husband switched their children's savings accounts into her father's name. "We're down to \$1,200 in our savings account. We use coupons all we can. I don't know what we're going to do when our savings is up."



Dan Croyle, who has 18 years in the mill, now works only when Bethlehem Steel Corp. in Johnstown has enough orders to run two shifts.

Learning to play the welfare game and coping with her seizures, Susan's life in the middle class is a memory. "We used to bowl. We used to do all kinds of things. Now if we go to Chuck E. Cheese's we eat before we go."

The tension and stress flowing from unemployment may have affected human costs that some industrial towns will be paying for the rest of the decade and longer, according to researchers like New Jersey psychologist Janet Cahill.

"Those kind of problems don't evaporate with an economic recovery," she said.

Family stress turns into alcoholism, drug addiction, child and wife

Continued on next page

New technologies raise hope

Continued from preceding page.

abuse, said Dr. Ruth Kane of St. Francis General Hospital, one of several hospitals in Western Pennsylvania that have started counseling families damaged by hard times.

"There was one little boy who felt so ignored and left out by his family that he pulled his hair out to get noticed. His father had been home for months. Nobody bothered to explain why to the little boy," said Dr. Kane.

AS PEOPLE cope with the emotional scars of recession, some factory towns face the aftermath with declining population, dependence on manufacturing and shrinking buying power, according to a review of finances in Allegheny County's 130 municipalities conducted by The Press in 1982.

The Press Community Data System then identified 44 towns as candidates for financial stress, some with high manufacturing employment and others facing a stall in the rapid suburban growth of the 1960s and 1970s.

A CDS update on those 44 towns shows, among other indications, that their problems are largely unchanged. Per capita real estate values for 14 of the 44 fell behind inflation from 1981 to 1982.

Towns caught with dropping revenues may find it hard to cut back essentials like roads and sewer systems, warned Roger S. Ahlbrandt Jr., assistant provost at the University of Pittsburgh.

The recession increased the interest in cooperation, but political resistance to consolidation of troubled towns remains, Ahlbrandt said.

"But there may be no way for some towns to avoid it in the long run. We've already seen some towns skirt serious financial trouble, and in the next five years we're going to experience that in spades," he said.

Ahlbrandt co-directs the Western Pennsylvania Advanced Technology Center, a consortium of academic centers, corporations and state government aimed at fostering new employment in high-technology companies.

Financed through the state's Benjamin Franklin Partnership Fund, the center hopes to set up as many as 6,000 jobs in new industries over the rest of the decade.

On Tuesday voters will decide on a separate \$190 million state borrowing plan to fund other job-creation efforts such as low-cost space for new businesses and public works improvements.

High-tech jobs will never replace all the high-wage factory jobs lost to recession, Ahlbrandt said. Retraining must be a priority for the low-skilled unemployed. The new job growth may return to industries already expanding here before the recession.

Even the ailing steel industry will provide some future jobs, although new facilities will never match the employment of the past, said Norman Robertson, Mellon Bank's chief econ-

omist.

"If we allow ourselves to believe we're headed for the scrap heap, we may end up there," said Robertson, who is optimistic about the Pittsburgh area's ability to make the transition.

The recession signaled to leadership in communities like Pittsburgh that gradual industrial change of the past required concentrated attention, says Richard Cyert, president of Carnegie-Mellon University.

"I think it triggered a fresh sense of urgency and brought into focus the fact that we have to remake the foundation of Pittsburgh's economy," said Cyert, whose university is working to spin off new local industries from its research in computer intelligence and robotics.

Shaken by recession and perhaps more alert to the economic drift of the past three decades, America's factory towns will not remake their economies in a single season, analysts warn.

New England, now a showcase of recession-proof research companies, took 30 years to recover from the decline of its textile trade, says regional economist Giarratani.

"Of course, we've got an advantage because we were at one time a wealthy region. We have our communities, our people and our institutions to fall back on, and if our political clout has lessened, it hasn't disappeared," Giarratani said.

"In the history of the United States, we've yet to see a region slip backwards. We're in the process of becoming something new, something different than what we were in the past."

Tomorrow: The Faces of Change

Uncertainty tempers workers' confidence in retraining

From Johnstown to Pittsburgh, unemployed steelworkers are abandoning hopes that the mills where they labored will ever warm the sky with orange-red glows again.

Prospects for return to glory days of only four years ago disappear for the unemployed when the state estimates that 52,300 people in the four-county area will never work the jobs they once did.

With this prediction in mind, about 5,000 dislocated workers here are polishing their millwright skills and secretarial know-how in state-funded classes at the Community College of Allegheny County.

The federal government believes the salvation for other displaced workers is retraining under the Job Training Partnership Act.

Participants and JTPA coordinators already are expressing concern over the program's ability to deliver on federal promises. They worry about getting fewer dollars to train a labor force that no one can easily identify or describe.

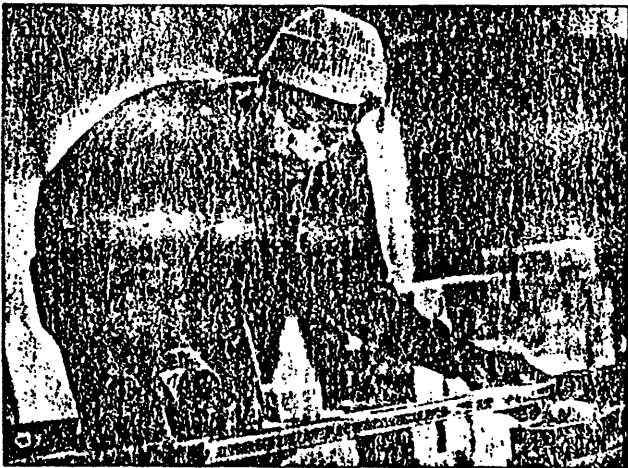
Training, however, does not ease the frustration and fear that has plagued them for months. Sometimes the anxiety intensifies because training still does not guarantee a job.

Bob Stern, 35, a former supervisor at Crucible Steel in Millland, Beaver County, believes there is a future. "But I don't know if there are any jobs in Pittsburgh."

Stern is one of 20 men in a state-funded retraining program in a technician class at Community College of Allegheny County.

Facing graduation this week, Stern said training may not get him anywhere. "I may have to take a job doing something else. You can be retained 100 times and if you don't get a job, there's no success."

While JTPA dollars flutter in from Washington, many people — from workers like Stern to Melanie Smith, director of personnel for Pittsburgh — are asking, "Re-



Bob Redger/The Pittsburgh Press

A jobless Mark Thomas learns new skills at Bidwell Inc., North Side

training for what?"

Mr. Smith said JTPA depends on the private sector to predict where the jobs will be. "But companies are not going to tell other companies that they are going to start a new robotics division or new electrical division. Even if they do, companies change their plans."

The retraining effort is a mess, says James V. Cunningham, professor of social work at the University of Pittsburgh who is critical of the American system.

"We try to handle big problems in a fragmented way," he said, referring to the shift in responsibility from the federal govern-

ment to communities.

Cunningham called the U.S. method inhumane when compared to Sweden's retraining system, in which workers automatically enter programs with stipends and no worries about losing their homes.

The U.S. solution to economic displacement is JTPA, which began Oct. 1, replacing Comprehensive Employment and Training Act programs in Pittsburgh and across the nation.

Since that time, about 700 people have passed through Pittsburgh's training system, with 200 of them completing the programs. About 75 got jobs and 50 have pursued higher education, leaving

75 with no work.

As of last month, \$1.9 million was put toward retraining 2,021 dislocated workers in the four-county area, many of whom are taking classes ranging from electromechanical drafting to word processing.

Officials criticized former U.S. CETA for its lack of program review and control of money spent for actual training. The program was plagued with scandal in many cities, including Allegheny County's Manpower CETA program.

While referred to by one training official as the "son of CETA," JTPA appears to have more stringent restrictions, the most string-

ent being prohibition of public employment.

Due to other changes, grants from the federal government are much smaller under JTPA.

Reviewing a list of state allocations, George Scarpino, director of the city's JTPA program, like Thermo Print's 1994 jump gain of \$11.2 million for training disadvantaged adults and youths.

"There was a time when Pittsburgh would get that much for one program."

The training act contains three key parts, or titles. Title IIA for the economically disadvantaged, including adults and youths; Title IIB for summer youth programs; and Title IIC for dislocated workers.

Under Title IIC, Pennsylvania received \$1.18 million for dislocated workers in fiscal year 1983. For this fiscal year, the state got \$4.28 million. For fiscal year 1985, the state will get \$10.6 million.

Using a complicated formula involving unemployment rates and population, the federal government divided \$1.88 billion in Title IIA (adults and youths) among the 50 states and territories for this fiscal year which ends June 30.

The top recipients were California, \$201 million; New York, \$132 million; Michigan, \$149 million; Ohio, \$103 million; and Illinois, \$90 million, all ahead of Pennsylvania's \$76 million.

When drafting JTPA, politicians did away with many CETA perks including stipends. CETA participants received minimum wage pay while JTPA gives students a \$2-a-day allowance.

Mr. Scarpino said the lack of stipends tends to keep people out of JTPA because they cannot afford 6 to 9 months of schooling without any financial support, especially if their unemployment benefits are gone.

Many people, like Phyllis Karzewski, seek out JTPA programs when their benefits are close to

running out. Ms. Karzewski, 34, however, was chosen for on-the-job training which does have a salary.

Through JTPA's on-the-job training, she is learning the mechanics of printing at Thermo Print on the North Side. Programs like Thermo Print's get 50 percent wage contributions through JTPA funding.

Repeat Friday, whose business is slightly more than a year old, said he could not have hired Mr. Karzewski without JTPA aid.

"It allows us (Thermo Print) to expand and get some depth faster than if I wasn't getting help from JTPA. ... It gives me a chance to get my cashflow caught up."

While JTPA emphasizes helping business people like Friday, it also requires that 70 percent of funding be spent on training people. The remaining 30 percent splits between costs for services or stipends and program administration.

The law sets strict performance standards for continued funding. Gov. Dick Thornburgh set 58 percent as the standard for the number of adults who must get jobs after training. His office has mandated \$5,900 as the cost per person who gets a job after training.

"If you don't meet those performance standards, you lose your money," said Mr. Smith. "I have no problem with the concept; I have a problem with them not looking at Pittsburgh and taking its special problems into consideration."

Those special problems can be blamed on the lack of accurate labor market analysis. Mr. Scarpino and Mr. Smith said they wonder about retraining workers when jobs are so scarce in the Pittsburgh area.

With the depressed local employment market, said Mr. Smith, "We applaud every time we hear that somebody got a job."

Communities, jobless strain under smaller budgets

(This is the second article in a three-part series on the lingering recession in the Pittsburgh region.)

After Bill Doyle paid his mortgage, made his car and loan payments and bought groceries last month, he had \$70 remaining to pay \$150 in utility bills.

"You say what you can," says the lanky former steelworker, shrugging not out of indifference, but because he has learned to live with missing payments since losing his job at U.S. Steel's Homestead Works 3½ years ago.

Doyle and his wife, Kathy, worried about hanging onto their small, red brick home on Cheswick Avenue

in Harmar and about keeping up the payments on their 1981 Dodge Aries K-car when he first lost his job.

But worrying only brightened the tension in the normally easygoing Doyle family. It wasn't until he got another job that he fell back in control, even though his income was cut in half and many bills go unpaid.

The Doyles aren't alone in their struggle to rebound from one of the worst recessions to sweep the nation's industrial heartland since the Great Depression. In this four-county region alone, the recession, claimed close to 90,000 factory jobs between 1978 and 1983.

As other parts of the country



Hard times

Searching for recovery

bounce back from the economic slump, industrial cities like Pittsburgh languish with high unemploy-

ment. The national rate is 8 percent, but in Allegheny County, 11 percent, or 68,000 people, are still jobless.

The recession has cost the unemployed like Doyle and their home towns more than jobs so far, recovery has meant survival on smaller budgets and smaller paychecks.

Doyle has a new job, but is paid less than half the \$25,000 he made in the mill. Now his family goes to the doctor only in emergencies, new clothes are rare and excursions to the roller rink or Keneswood Park are budgeted cautiously.

"It's been really tough," said Doyle, as he rubbed his ruddy beard pondering the layoff that turned his

life around. "Our families have helped us out. Our church gave us food. The Lion's Club gave us a complete Thanksgiving dinner."

The towns that once thrived in the shadows of smoke-belching steel mills and sister industries face a similar dilemma — they still must pave roads, collect garbage and police their streets with less money than five years ago.

To keep Clairton's finances under control, "we have to play close to the belly," said Mayor Daniel Pastore. "We don't even buy a safety pin without a purchase order."

U.S. Steel's Clairton Works once generated 60 percent of the city's

(These articles were prepared by Press staff reporters Tom Lory, Janet Williams and Tim Dunham, and special assignments editor Matthew Kennedy.)

tax revenues. Now the coke plant pays only about 20 percent of the budget, forcing sparse cutbacks.

Even with heavy cuts, Clairton has had a deficit in four of the five past years. In late 1982 and early 1983, employees worked for nearly three months without paychecks.

Continued on page A12

Smaller budgets strain towns, jobless

Continued from page A1
 "We're never going to come out of it," Pastore said. "When you've got a steel town, you never know what the companies are going to do. But that's the only thing we can depend on, the steel mill."

While Clairton scrambles, the Clairton School District was declared to be in fiscal distress by the State Department of Education in February, and its finances were taken over by a three-member board of control.

PLANT CLOSINGS have jarred the economies of Youngstown, Johnstown, and Ambridge, but if any town shows the pain of a mill shut down, it's Midland, a small Beaver County borough on the Ohio River north of Pittsburgh.

Few residents were spared the financial consequences when New York-based Colt Industries closed the Crucible Steel mill in October 1982. Three years ago, the mill employed 4,700 people churning out specialty steel products from blazing red furnaces.

And Midland prospered.

In 1981, the factory's final year, the borough collected close to \$1.1 million in wage taxes and funded a \$1.2 million budget. Last year, after losing 70 percent of its tax base, wage tax receipts dropped to \$188,000.

"We lost everything and now we're starting over from scratch," said Rudy Frensch, borough tax collector. "We're looking back now and saying it was just a bad dream."

To save money, the borough started charging for services like garbage collection. Midland trimmed its payroll from 35 to 18 employees, and the remaining workers took 20 percent pay cuts.

Town leaders also looked to unusual sources for money. When borough Secretary Edward Cilli heard that a Saudi Arabian sheik living in Florida was donating money to troubled towns, he solicited help. The result was a \$35,000 gift from Mohammed Al-Fassi in 1982.

Today, the borough is slowly recovering from Crucible's closing. Midland is financially solvent with a budget 25 percent lesser than its 1981 spending plan.

And residents are hoping that Crucible's new owner, J&L Steel, may employ as many as 1,000 people as parts of the plant are put back into production. There are now 350 people working there.

But the other 3,700 people who worked at Crucible have joined the ranks of the Pittsburgh area's permanently displaced employees.

That permanent job loss has led some critics to question whether the federal unemployment rates in areas like Pittsburgh accurately reflect the anguish among its workers.

Long-term unemployed and workers who become discouraged and quit looking for new jobs are phenomena uncounted by standard unemployment statistics, said David A. Page of Regional Research Inc., who tracks employment in a group of western Pennsylvania, eastern Ohio and West Virginia counties.

As evidence, Page noted the labor force number for those counties last December presented a drop of 194,300 workers from the labor



Hard times
 Searching for recovery

"It's been really tough. Our families have helped us out. Our church gave us food. The Lion's Club gave us a complete Thanksgiving dinner."

— Bill Doyle



Bill Doyle and his wife, Kathy

force numbers in 1983. If those 194,300 were counted in the federal jobless rate for those counties, their unemployment would have risen from 12.8 percent to 16.8 percent.

While agreeing that discouraged workers are out there, other analysts suggest the decline in labor force is also due to an extra number of job seekers last year.

In 1982 large numbers of people, such as housewives or teenagers, may have entered the job market because traditional breadwinners lost jobs and the family needed another income, said Michael Acquaviva, a spokesman for the Pittsburgh office of the Pennsylvania Office of Employment Security.

When the traditional breadwinner found new employment, those extra jobseekers left the job market again, he said.

Jobless rates also mask the recession's impact on those at the bottom of the economic pyramid.

While the overall 1982 unemployment rate for the Pittsburgh area was 12.3, unemployment hit 39.3 percent among blacks in the four-county area, reaching as high as 52.9 for blacks in Beaver County.

The distress now felt by unemployed factory workers is only too well known in the black community,

said Stuart Cohen, research director for the Urban League of Pittsburgh.

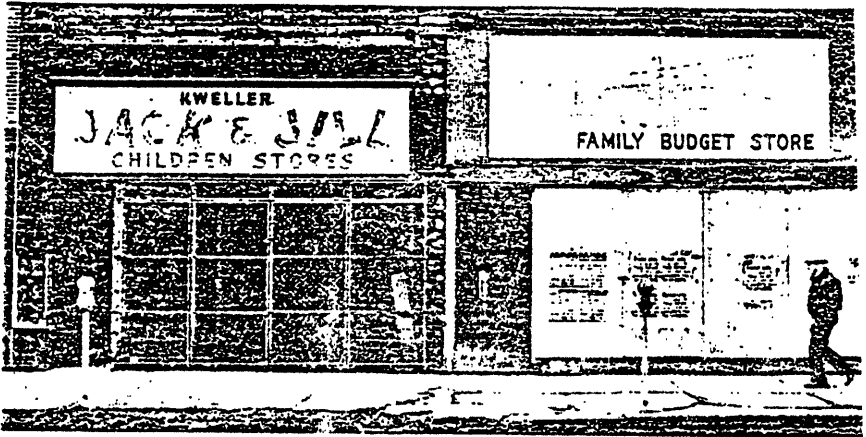
"Sometimes there's resentment that unemployment is suddenly a big issue because white workers are losing jobs, when people in the black community have suffered high unemployment for generations without that kind of concern," Cohen said. "But what both white and black communities are coming to grips with is the fact there is structural unemployment out there that will continue for some time."

BEHIND THE statistics of unemployment, some groups believe that many of the people who lost jobs in 1982 have yet to find new employment, and must now continue the search without the help of unemployment benefits.

While Doyle found a new job, some of his former co-workers from U.S. Steel's Homestead Works are still looking.

Some 63 percent of the laid-off workers at United Steelworkers Local 1397 have exhausted their benefits, according to a survey of Doyle's old local by Julie Murphy, coordinator of Allegheny County Mental Health and Mental Retardation's Turtle Creek office.

Ms. Murphy also learned that 89 percent of the workers furloughed



Empty Braddock storefronts advertise the losses faced by some factory towns

from the Edgar Thomas Works in Braddock may have exhausted their benefits.

She based the findings on a February survey of 270 workers using the USW Local 1219 food bank. Only 21 percent of those workers are collecting public assistance, she said, and the rest subsist on savings, odd jobs and loans from friends and family.

As benefits lapse and savings dwindle, many of the unemployed then face the loss of their homes. They can no longer make their monthly mortgage payments, said Frank Demas of Action-Housing, a private non-profit organization.

In Allegheny, Beaver, Westmoreland and Washington counties, as many as 15,000 people may be delinquent, said Demas' associate, Larry Swanson. He estimates that the banks may be foreclosing on 2,200 of those people.

Dovis was lucky because he was able to make his mortgage payments during the layoff. Then, just six weeks before his unemployment benefits were to expire, he landed a job installing windows in Thermal Industries in Wilkesburg.

And while this job pays less, Dovis doesn't want to go back to the mill. "This is an opportunity for me to be something else. I have a chance for advancement with a growing company," Dovis said.

Relations between workers and their supervisors were antagonistic in the mill, he said. "I socialize with my boss and I would never have done that with my old supervisor. We can sit down and reason together," he said.

George Lattner of Hampton wasn't as fortunate as Dovis in his search for new employment. His benefits expired in October, a year after he was laid off from his white-collar job as assistant to the project engineer at Shenango Inc. of Neville Island.

Lattner and his family are struggling to survive on welfare and \$220 a month in food stamps. He would rather be working. He is uncomfortable going to the welfare office and paying for his groceries with the meagre food stamps.

Even so, the food stamps aren't enough. He and his wife Magdalen depend on the Assembly of God food bank in Allison Park when they exhaust their food stamps. "If it wasn't for this food bank, we wouldn't eat, plain and simple, we wouldn't eat," Mrs. Lattner said.

Feeding 50 families each week, the Allison Park food bank is just one of scores of community food banks that have sprung up to cope with the rise in hunger among the area's newest class of poor — the unemployed.

And hunger is increasing, especially among the new poor, said Barb Murock, coordinator of Pittsburgh Hunger Action Coalition, one group providing emergency food to the needy.

"We have more people coming to us who have never gotten help before," she said. "It used to be the most common reason people came to us is because their welfare check was late. Now, they tell us they've gotten a high utility bill and can't make ends meet."

As a result, the Pittsburgh Community Food Bank, which supplies groups like the Allison Park food bank, has been steadily growing to keep pace with the demand, said general manager Roslyn Maholland.

Opening in 1981, the Pittsburgh bank supplies 247 smaller food banks in Allegheny County alone, as well as 10 satellite distribution agencies in surrounding counties.

The food distributed by the central bank has increased from 1 million pounds to 3 million pounds since 1981, and in January, more than 600,000 pounds of food was allocated to local food banks.

Ms. Murock believes the hunger problem will persist as long as the regional unemployment rate remains so high.

And the jobless rate will remain high if people like Lattner can't find work. "I have applications, noting all over the place, but nothing. There's nothing out there," he said.

There are minimum wage jobs available, but Lattner said he can't afford to take one because he'd lose his state medical assistance. Supporting a wife and three growing children, Lattner couldn't afford the

AS MANY AS 40 percent of the laid-off steelworkers in the Homestead area have no medical coverage, according to a survey of 671 jobless people conducted by the Steel Valley Unemployed Committee.

Of those responding, 11.1 percent reported they needed immediate medical care, but didn't have the resources to obtain it.

Long-term unemployment has devastating social consequences, said M. Harvey Brenner, professor of hygiene and public health at The Johns Hopkins University in Baltimore.

"Illnesses become chronic, poor nutrition and lack of care exacerbate them, build-up frustrations lead to aggression inside and outside the family, and increased mortality creates new losses," Brenner said in 1982 in testimony before the U.S. House of Representatives' subcommittee on domestic monetary policy.

For every 1 percent rise in unemployment, Philadelphia researchers found mental health hospitalizations in the city rose 2.3 percent.

"Increasingly, there is a longer wait for work and they are running through chronic stress-related disorders, high blood pressure, cardiac disease and severe mental health

Continued on page A13

Towns, jobless strain under smaller budgets

Continued from page A12
problems," said Janet Cahill, a psychologist at Glassboro State College in New Jersey who helped run the study.

In Allegheny County, calls to her Turtle Creek community mental health office have become increasingly desperate, Ms. Murphy said. Her office fielded a record 83 calls for help in January.

"If we're in an economic recovery, why am I getting calls from all these people?" she asked.

Wives of the unemployed are feeling as much pressure as their laid-off spouses because they are left coping with a depressed husband and confused children, Ms. Murphy said. "It's very difficult to keep stress under control when your kids are fighting over the milk."

Ms. Murphy has started a "Mother's Day Out" Tuesday mornings at St. Matthew's Episcopal Church in Homestead to help wives cope with the mounting despair.

The women meet in the recreation room of the church, and easily share their feelings, even though

most of the other wives and mothers are strangers.

"You can't tell your friends. They may tell somebody," one woman said, but added, pointing to a woman seated next to her, "I don't know her from a hole in the ground. Who's she gonna tell?"

Horror stories of marriage to an unemployed steelworker who can't cope with his problems are common. And they nodded as another described the pain she feels when she has to say no to her children.

"It's hard these days. All the kids want the name brand clothes. It's gotta be Jordache," one woman said. "I'm thinking about going and buying the labels and sewing them on myself."

Tears streamed down the face of a mother of three as she talked about taking her children to the mall. "I didn't have a lot of money, but I had enough to buy each of them an ice cream cone. They kept thanking me, over and over. I couldn't believe it. It was only an ice cream cone."

The room fell silent as another

woman reached out to comfort her.

Recession's permanent emotional scars will remain for generations, Ms. Murphy said. "Look at how the Depression affected our parents. It's affected me, too."

"Even if everybody would be called back tomorrow... we would not see mental health turn around. It takes time. It's not something we're going to be able to walk away from," said Charles Peters, director of Allegheny County's community mental health programs.

"Here are people willing and able to work and there are no jobs for them," said Peters. "After the 1930s we succeeded in moving workers into the middle class and now they're getting kicked out of it."

LAYOFFS HAVE shattered the expectations of stability that industrial work once promised.

"It used to be you worked for somebody for 30 years and then retired, but not any more. I'm not sure they'll be committed to me," said one laid-off U.S. Steel engineer. He didn't want to be identified be-

cause he is looking for work in the steel industry in the Pittsburgh area.

"I'll do my best when I get another job," the engineer said, "but if something better comes along, I'll go after it."

There probably won't be anything better for some of the people laid off during this recession and the towns where the mills once prospered.

Settling into a new life, Doyle has no regrets because he and his family aren't interested in Lacoste sweaters or Pierre Cardin blue jeans. "I'm happier now with less money than I was before," he said. "I see my family, I'm home on weekends, I'm under a lot less stress."

"And there's more to life than just financial security," Mrs. Doyle added.

Other jobless people can survive as he did, Doyle believes. "There are jobs out there and even though they don't pay as much, you can make it."

Tomorrow: No Jobs. No Votes. No Help.

Jobless of Mon Valley join in D.C. lobbying

WASHINGTON (UPI) — Some 600 unemployed workers from Pennsylvania, Ohio and other depressed Northeast industrial state flooded Capitol Hill yesterday to lobby their congressmen on legislation that would help the unemployed.

The centerpiece of the lobbying campaign was a day-long "People's Hearing on Jobs and Justice," where the unemployed attacked the Reagan administration for indifference to the poor and disaster areas.

Paul Ledico, spokesman for the Mon Valley Unemployed Council, a Pittsburgh-area group that helped organize the lobbying, said many jobless people were angry about repeated administrative assertions that unemployment was drastically dropping because of economic recovery.

"All we hear is recovery, recovery, recovery," Ledico said. "It recognizes there has been a partial recovery but there are many areas where there is no recovery. In some places, like Cleveland things have gotten worse."

Ledico said Congress had all but abandoned legislation important to the unemployed, such as mortgage foreclosure assistance, public job programs and surplus food distribution.

Attending the "people's hearing" in a Senate hearing room were Reps. Katy Hall, D-Ill., and John Cuyler, R-Iowa. Both blamed the Reagan administration for not doing more to alleviate unemployment in industrial regions.

Towns on lookout

for ways to cut cost

Just as recession shocked corporate leaders into a search for innovation, hard times sent municipal officials in the worst-hit manufacturing states on a search for ways to cut their service costs.

Some communities may never see finances return to former levels, said Ken Howard, executive director of the U.S. Advisory Commission on Intergovernmental Relations.

"There's no question the recession has made communities much more sensitive to finances. It's also shown the sobering reality about industries I think we often look for granted," Howard said.

In Allegheny County, the stress municipalities face is reflected in the Community Data System, a Pittsburgh Press computer study of financial reports from 44 of Allegheny County's 130 borough and township governments.

Two years ago, the Community Data System showed 44 of those communities were candidates for financial stress because of dependencies on manufacturing jobs, slow growth in their property values and other trends over the decade.

Suffering from closing businesses and idled workers, the woes of Braddock, Clairton, Homestead and McKeesport are perhaps the clearest among 44 towns. For others, the problems are more subtle.

Monroeville's thriving businesses obscure the problem of stalled property value growth while tiny Rosslyn Farms paid the most per resident in 1981 to deliver many services to its residents.

The latest Community Data System study, comparing 1981 and 1982 revenues and expenditures, showed that among the 44 towns:

- More than a third of the municipalities fell behind inflation in the local tax revenues.

- Ten of the 44 fell behind inflation when tax money and all other funds were counted.

- The per capita market value of taxable property within 14 of the 44 municipalities failed to keep pace with inflation.

- Coping with decreasing revenues, about half the towns kept increases in spending below inflation. Police costs were trimmed or fell behind

inflation in 19 out of the 41 municipalities for which figures were available.

Only three communities followed historic trends and substantially increased parts spending. Of the 10 municipalities that contributed \$1,000 or more toward the operation of libraries in 1981, three kept contributions ahead of inflation in 1982.

Declining revenues and market values that don't keep up with inflation can trigger a downward financial spiral, according to a report prepared last year by Roger S. Ahlbrandt Jr., assistant provost of the University of Pittsburgh.

An population, employment and market value of property declines, local governments raise taxes to maintain services, he said. But tax increases drive away existing businesses and keep away new ones. Resulting unemployment starts another cycle by depressing property values again.

Waiting at the bottom of the spiral is municipal bankruptcy.

In Ohio, finances of eight local governments are being supervised by state-mandated commissions set up under a law that responds to municipal financial distress.

Enacted when Cleveland defaulted on some of its bond payments in 1978 — the Ohio law requires the reorganization of a municipality's finances if the municipality meets any of six indicators of distress.

Three more towns are being studied to see if they should be placed under fiscal emergency status, said Russell Rouch, deputy state auditor.

Some towns wouldn't cope with the stress of recession, Rouch said.

"They didn't want to bite the bullet, so to speak. They gave a lot of free services, they didn't realize they'd have to start charging people for it," he said.

In Illinois, state budgeting assistance helped local governments negotiate the recession without financial breakdowns, said Rich Funderburk of the state's Department of Commerce and Community Affairs.

Local governments increased cooperation and cut staffs, Funderburk said, "but, in general, the

communities in Illinois have not really been hurt too much yet. We've stayed pretty solvent through all this."

In Pennsylvania, local governments enjoy almost unlimited independence in financial matters, and while the state has not seen a municipal bankruptcy since the 1930s, recession has sparked informal efforts to help Allegheny County's local governments avoid financial problems.

This Saturday, the Allegheny League of Municipalities plans to propose a countywide computer network to give towns access to more sophisticated management capabilities and to help coordinate services.

"I hope that we can develop programs that will allow local officials to look three to five years in the future rather than just look at (budgeting) as an isolated matter each November," said Matt Mathews, ALOM's executive director.

The proposed network would link municipal computers to machines at the regional and county level.

"We're not trying to erode the richness of our local government system," said Edward Kiely of the Chamber of Commerce of Greater Pittsburgh, one of the architects of the planned system. "This is a way of promoting their voluntary cooperation with one another for the benefit of doing things together short of actually consolidating."

In a separate project, ALOM plans to give municipal officials a monitoring system to help them determine if their communities are headed for financial trouble. Based on a study of Clairton's finances by the Pennsylvania Economy League, the forms use 25 different socioeconomic indicators as a "simplified early warning system to determine fiscal problems."

Hard times have driven state and local governments in the Northeast and Midwest to new programs and redesign of old ones to cope with the loss of factories and jobs.

Plant closing task forces in Ohio and Illinois move in after a firm announces plans to close. The task forces help workers get the benefits to which they are entitled and try to find a buyer for the business or a

new use for the site.

Ohio has trained more than 200 "economic development professionals" during the past year to teach them the best way to help businesses get government assistance.

"The program is geared more toward finding successful businessmen and helping them expand, not propping up dying businesses," said Joe Marucci, a manager with Ohio's Department of Development.

"It's an attempt to start from the ground up in terms of job creation. The Hondas and the International Harvesters are few and far between. We're shifting our emphasis from dealing with those types of (large) projects to dealing with small businesses throughout the state," he said.

In New York, recession caused many counties in New York to switch to an executive-oriented county manager form of government, said James VanDervort, a program manager in New York's Department of State.

At the same time, an increasing number of countywide authorities are taking up responsibilities — such as solid waste disposal, police protection and sewage treatment — once associated with city government in New York.

Similar changes are under way in Allegheny County. A program begun this month allows localities to use county-purchased sewer cleaning and maintenance equipment at a savings of hundreds of dollars per day.

In recent years there's been a great realization of the need to deliver services on an areawide basis. That's a big step forward," county Commissioner Tom Foerster said.

Foerster sees the sewer cleaning project as a way to demonstrate to state and federal officials that local governments can work together to cut costs.

"It really is exciting when you see eight, nine or 10 governments working together on a single project and providing a much better level of service together than they might have if they performed it by themselves."

Coping at town hall

The following chart shows the change in per capita market value of property from 1981 to 1982 and the percentage change in total revenues and in spending from 1981 to 1982 for each of the 44 municipalities.

Municipality	% change in mkt. value	% change in revenue	% change in spending
Blawnox	-0.7	11.7	21.3
Braddock	7	45.4	-3.3
Cheswick	4.7	5.4	-19.1
Churchill	-1.4	-2	6.2
Clairton	4.5	81.5	71.8
Dravosburg	8.3	-42.8	-37.3
Duquesne	10.3	10.9	22.8
East Deer Twp.	6.6	1.2	3.1
E. McKeesport	9	31.2	41.1
East Pittsburgh	3.7	0	-6.8
Elizabeth Boro	3.4	1.8	42.2
Ellsworth	0	4.7	-4.8
Homestead	0	-19.5	-31.2
Indiana Twp.	9.8	7.5	-0.9
Ingram	3.3	0.4	12.1
Leetsdale	-15.7	1.3	10.4
McKeesport	4	-7.1	-10.5
McKees Rocks	-0.2	16.1	-40.4
Monroeville	-7.8	10.7	-9.6
Mount Oliver	-4.9	13.4	-6.3
Munhall	10.6	5.9	4.2
North Braddock	0.5	-5.8	-5.9
North Versailles	-4.2	9.1	7.1
Osborne	7.4	9.3	7.8
Penn Hills Twp.	-1.9	0.4	8.8
Pleasant Hills	6	7.8	-1.2
Rankin	-2.5	10.8	7
Roslyn Farms	12.1	6.1	1.9
Scott Township	0.6	8.6	-9.4
Sewickley	3.8	2.4	1
Shaler Township	1	-26.8	25.3
South Versailles	15	12.4	19.4
Springdale Boro	4.9	-8.9	-1.9
Stowe Township	7	23.3	16.9
Swissvale	-5.4	-1	-11
Turtle Creek	3.8	0.9	-6.8
Wall Borough	18.5	54.5	53.3
West Elizabeth	-7.2	5.2	26.1
West Homestead	-5.4	-29.6	-23.1
West Mifflin	8.6	1	6.1
Whitaker	17	31.1	23.3
Wilkins Twp.	0.2	16.3	-11.5
Wilkinsburg	-2.1	-8.6	-25.4
Wilmerding	-6.7	3.2	15.3

Per capita change in market value based on change in 1982 Census of population and a 1982 population projection by the Southwestern Pennsylvania Regional Planning Commission and market value data submitted by the Pennsylvania Economic League.

All other figures are based on annual financial reports filed by the municipalities with the State Department of Community Affairs and the Allegheny County Administration.

All figures have been adjusted for inflation between 1981 and 1982 which the U. S. Bureau of Labor Statistics set at 6.1 percent in its index for urban consumers.

Senator DANFORTH. Very good. That is a half a moment, and I do appreciate it very much.

Gentlemen, thank you. As I understand it, your view is that the quota bill is necessary. And also you recognize the role labor has to play in the future of the steel industry. If we are going to have a competitive industry, we have to have labor cooperating and trying to make it the most modern industry that we can have. And we have to be able to produce a competitive product and sell it at a competitive price, and not just have government protection and run up labor costs and have steelworkers benefit and everyone else lose.

Mr. WILLIAMS. It was we, Senator, who were particularly concerned that the bill contain a strong provision requiring modernization of the industry with any of the cash flow and so on that was generated as the result of the quota protection which we consider to be absolutely essential.

Senator DANFORTH. And the union would be a participant in that modernization?

Mr. WILLIAMS. Well, we are very anxious to participate in the economic decisionmaking process and every way we can. That's why we have welcomed and proceeded with the development of labor-management participation teams, that's why we have welcomed the opportunity to participate in the Steel Advisory Committee; although, I must comment that I think, because of the intransigence of the administration in recognizing these problems, there hasn't been much progress in the Steel Advisory Committee, but we are certainly willing to participate and be involved, and we want to be.

Senator DANFORTH. Maybe this is an overstatement, but the perception is that the history of the steel industry is one of pretty fractious labor-management relations, lengthy strikes, very high wages, and so forth. But your view is that the future of the steel industry does require a union effort which is aimed at the overall health and competitiveness of the industry, and that you recognize that as far as the rest of the economy is concerned the users of steel have to have the availability of something which is priced at a level where they in turn can compete with their foreign competitors. That is to say, steel produced domestically is a component of automobiles, and automobiles have their own trade problems.

Mr. WILLIAMS. Oh, there is no question about it; but I don't think anyone expects an economy to function on the basis of price levels which are absolutely unrealistic in terms of costs, and to have price levels determined by subsidized and dumped steels or steels coming in from countries where labor costs are at \$2 an hour and things of that kind which are surely absolutely inconceivable in America, I don't think it is reasonable to expect that prices in an economy should be established in that kind of way.

I appreciate the time pressures. There is so much involved to talk about in employer-employee relations in the steel industry over the years.

In fact, we haven't had a strike since 1959. We have engaged in what was called "the experimental negotiating agreement" in one of the most sophisticated and mature kinds of collective bargaining relationships that I think have ever taken place in America. The

fact that wages and employment costs escalated in the steel industry was principally a reflection of the inflation and the fact that we negotiated protection for our members against inflation, so that their income and their standard of living would not be destroyed.

As I indicated in my testimony a moment ago, last year, in 1983, we negotiated with the industry the most significant adjustment in employment costs that has taken place across the board in any industry, and the only particular example, as I mentioned, that might have been somewhat deeper in terms of a contribution of our members was in Chrysler.

That's a quick 2 minutes, sir, and an enormous amount of labor relations work.

We have done a good many things in the steel industry. That is not to say we have not had our vigorous differences. We do have a system in our society generally that we are advocates for various parties or expected to represent their interests. And certainly our obligation is to represent the interests of our members. And sometimes that puts us in an adversarial and conflict posture with the corporation. That is our duty.

Senator DANFORTH. I understand. Our job is to try to represent the public at large. And as far as legislation is concerned, our job is to try to have a legislative policy which takes into account all of the inner workings of the country.

Mr. WILLIAMS. I quite understand that, but please be assured we don't want to destroy the industry; it's very difficult to negotiate decent agreements from dead companies.

I sometimes think we have a greater interest in preserving the industry maybe even than the industry does, because they have considerations of corporate survival and all the rest.

But our people are not mobile, and our communities cannot be moved around. And those infrastructures, once destroyed, cannot be cheaply replaced. And the middle income and decent jobs our people represent in this country aren't going to be substituted for by hamburger stands and all the rest. So we have a vital interest on behalf of all of our members in preserving this industry, and we think it is vitally important in the interest of all of America, which is the responsibility of course which you bring to your obligations and your duties.

Senator DANFORTH. Senator Heinz?

Senator HEINZ. Mr. Williams, you have given eloquent testimony about how the steel industry is being hurt among other things by subsidized imports. You have heard the administration say that we should sit back and let our trade laws work.

There is an alternative to that, particularly if they are not going to work, and that is, we should just do what other countries do and subsidize our steel industry. How do you feel about that?

Mr. WILLIAMS. Well, I think there are more realistic solutions available to us right now, and the one we are considering today, than to embark down the path of subsidization for industry. Clearly, that would be an entirely new approach.

I must say, in my own mind it is inconceivable to me that America could carry out its responsibilities either at home or abroad and not have a steel industry. And to contemplate the possibility of becoming dependent in America on imported steel would certainly

not provide cheap steel at that point. We saw what happened with energy costs.

So I would promote this kind of an answer rather than subsidization, but I think in the long run we do have to have a steel industry.

Senator HEINZ. We really have two choices before us, particularly if we reject subsidizing, which is what some people do suggest. The two choices are section 201 and the Fair Trade in Steel Act. There is a difference between those two choices.

The first, the 201, simply provides import relief. And if we get exactly the import relief in the 201 that we are asking for, that the steel industry is asking for, it would be almost identical to what is in the Fair Trade in Steel Act. The difference, however, is that the Fair Trade in Steel Act requires the steel industry to invest substantially all of its cash flow from steel back into steel operations, to be more competitive, to invest in continuous casting—in other words, so at the end of the 5-year period it is able to stand on its own two feet and fight and beat any kid on the block, whether it be the Europeans, the Japanese, or somebody else.

If you had your choice of putting the 201 in place or passing the Fair Trade in and Steel Act and making it law, which of those two would you prefer?

Mr. WILLIAMS. You appreciate there is a 201 decision coming down in a couple of days. I would prefer the legislative action, but I obviously think that action is vitally important.

Senator HEINZ. This is not a trick question.

Mr. WILLIAMS. No, I understand.

Senator HEINZ. This is not to get you on record against the ITC. I testified in favor of the Bethlehem and Steel Workers 201 petition, so I am for any relief, too.

Mr. WILLIAMS. Yes.

Senator HEINZ. But you would prefer the Fair Trade in Steel Act because—

Mr. WILLIAMS. For the reasons you mentioned.

Senator HEINZ. Because of the reinvestment requirements?

Mr. WILLIAMS. Right.

Senator HEINZ. Even if that meant that steel workers couldn't come in for very large wage settlements?

Mr. WILLIAMS. Well, I have never suggested that the Fair Trade in Steel Act or the 201 petition, or any of these actions should result in taking away the rights of collective bargaining. I believe collective bargaining is the appropriate device in our society to use to determine wages and employment costs, and so on, and I think effective collective bargaining takes into account all of the realities of the circumstances. And if one of the realities is that we are preserving a steel industry and rebuilding the industry and putting money into the industry and providing more secure employment and willing to deal with questions of security in employment and so on in a realistic way, those would all be very important elements in any collective-bargaining arrangement.

Senator HEINZ. Well, would it not be generally true that if you got the same amount of relief under the 201 as you would get under the Fair Trade in Steel Act, since the 201 does not have any requirements on the steel industry to plow back all the money into

steelmaking operations, that the United Steel Workers would be able, in all likelihood, to bargain more successfully for larger wage settlements under a 201 than you would under the more restrictive Fair Trade in Steel Act?

Mr. WILLIAMS. Well, I think one of the things we would be doing in that scenario is that we would be expressing our concern in the negotiations, as we did in 1983, that benefits the companies are receiving ought to go back into the industry.

Our members have had a terrible experience in terms of unemployment and all of these difficulties. They have a vital interest in some stability in this industry and some opportunity to move ahead with some sense of security. And I think that fact will be a presence at every collective-bargaining session we have with the industry, whatever the other arrangements may be that surround it.

Senator HEINZ. What I think I hear you saying is, "Yes, but the advantage to my steel workers is that there would be a stronger industry, there would be more employment in the industry. Under the 201, the industry could simply pay large dividends to its shareholders; it could go out and make acquisitions in other industries. But under the Fair Trade in Steel Act, while I might not be able to contest the fruits of protection of this industry so successfully versus shareholders or other acquisitions, my membership would get the advantage of having the money stay in the industry, working for the industry, and even if it might mean a little less success at the bargaining table, that is in the industry's long-term best interests for the workers." Would that be a fair restatement of what you were saying? I am not trying to put words in your mouth.

Mr. WILLIAMS. No, no. I think that is essentially accurate. I think, as you are aware, in the specialty steel industry²⁰¹ there was an arrangement to monitor investment in the industry and so on. So that's been done within the 201 arrangement as well.

Senator HEINZ. Thank you. My time has expired.

Senator DANFORTH. Senator Durenberger.

Senator DURENBERGER. Mr. Williams and Mr. Lynch, before most of you came in, in my opening statement I drew a little quote here from Cervantes to the effect that "Traveler, there is no path. Paths are made by walking." And I suggested that part of what Senator Danforth is doing here is trying to explore some new paths.

But in reviewing your full written statement I am reminded of the fact that there is some value in looking at the good in some of the paths we have already been down, for example, your statement, relative to the American commitment to the collective-bargaining process.

You can look at one of the resulting paths in dollars and cents by comparing labor costs in dollars and cents in this country with other countries and try to fix some share of the problem at that doorstep. But what that misses and what your statement which will be part of this record points out is really the distinction that you draw between the developed countries and the underdeveloped or less developed countries. And that distinction, which I think all of us have to value in a country like America, is the concept of social justice that has been built in this country. In large part, I think the collective bargaining process can take credit for that.

But that is the key distinction when we start making some of these comparisons between where the developed countries are at and where the underdeveloped countries would like to get to. The economics in the developed countries play a very vital role in raising the level of social justice in that country and reducing its cost.

It strikes me that when we sit here and deal with dollars and cents and comparisons, and so forth, we always seem to miss that element, because you can't run it into a computer and have it come out and say we have saved Americans x-number of dollars by having continuity of health care coverage for unemployed persons in your industry that doesn't exist anywhere else, or in a lot of other places. But you have done it—the employers and the employees. And you have preserved a level of health care in America that doesn't exist in a lot of other places.

I wanted to make that comment to encourage you in connection with your participation in this entire process, that you have to keep raising in the American consciousness the level of understanding that it is the basic industries in this country—the steels and everybody else—who really have brought to the concept of a developed nation the role that the economic system plays in providing for that social justice.

There just aren't often enough occasions to make that statement in this kind of a context, and I want to thank you for making it.

Mr. WILLIAMS. I thank you for saying it so clearly.

Senator DURENBERGER. Thank you.

Senator DANFORTH. Senator Symms?

Senator SYMMS. Thank you, Mr. Chairman. I appreciate the testimony of the gentlemen who are here this morning, and I thank them and the previous witnesses also. But I will reserve my questions so that we can move ahead with the hearing. If I have any questions, I can send them by letter.

Senator DANFORTH. Gentlemen, thank you very much.

The next panel: Mr. Ed McNew, vice president, Davis Walker Corp., Los Angeles, CA, on behalf of the West Coast Ad Hoc Steel Wire Producers Committee; Mr. Howard Wilkinson, vice president, Pacific Steel Corp., Long Beach, CA; and Mr. F.A. George, manager of steel commodities, Caterpillar Tractor Co., Peoria, IL.

Senator Wilson is here, and he would like to introduce two members of the panel.

Senator WILSON. Thank you very much, Mr. Chairman. I am grateful for the opportunity to introduce two representatives of the steel-using community.

I am very pleased to have the opportunity to appear before the committee in order to not only introduce them, but to endorse the statements that they will make to the committee.

They are representatives of two California steel consumers.

I must say that I am disheartened by the possibility—which I hope to be remote—that the Senate may pass the so-called Fair Trade in Steel Act. I find it extremely troublesome that the United States might see passage of a law significantly restricting the importation of a commodity as basic to our economy as steel.

I oppose steel quotas for many reasons, Mr. Chairman. They are protectionist, and therefore they run counter to the best interests of free international trade. They would cripple California indus-

tries, which simply cannot obtain adequate supplies from domestic steel companies. They ultimately would prove to be economically counterproductive and, as you will hear from these witnesses, they are anticonsumer, both for those who immediately use steel to make steel products and for those who are the ultimate purchasers at retail.

Mr. Chairman, with all due respect to the proponents of this protectionist legislation, it is the height of folly to place quotas on raw materials such as steel. Why? Because while we would be protecting the jobs of those who produce steel in U.S. mills, we would be placing at risk the jobs of those further down the production chain who work in efficient industries that consume steel.

The Japanese understand this. They have no restrictions on log imports but try to ship finished lumber for wood paneling to Japan. Good luck.

The Japanese are wrong to allow this barrier to exist, but at the very least what they are doing is logical.

By contrast with the proponents of the quota, a U.S. quota on steel imports they are proposing is totally illogical. And I contend that many, many more people work in U.S. industries that use steel than work in U.S. mills producing steel. That has always been the case; it always will be.

Therefore, steel quotas would displace far more workers than they could ever place back to work in the steel industry.

I would simply remind the chairman and the committee of the eloquent statements of Ambassador Brock earlier today when he said, speaking of the fourth segment of this industry, the metalworking producers. The concerns and problems of these producers rarely get the attention they deserve. And I commend the Chair for seeing that today they are.

This sector employs 20 times more people and accounts for almost 10 times the share of GNP than the integrated producers, and therefore their interests must be considered. Metalworking firms are typically small, without enormous political muscle, yet they are also sensitive to imports. These producers would clearly be hurt by passage of this bill, which would cause increased prices for their raw material and increased import competition as foreign producers shift from exporting steel to exporting products made of steel.

Mr. Chairman, Ambassador Brock is absolutely correct in that statement. By raising the cost of both domestic and imported steel for U.S. manufacturers who consume it, steel quotas would create a net increase in our trade deficit. This increase in the cost of production for U.S. manufacturers who consume steel increases the cost attractiveness of foreign-produced value-added products that incorporate foreign made steel.

For these reasons, I find it almost amusing to have received a letter from the chairman of the new Chrysler Corp., in support of steel quotas. Steel quotas would increase the cost advantages of foreign-produced cars, and thereby hurt domestic auto sales—that is, unless in the unlikely event that there is passage by the Senate and by the Congress of the domestic content legislation, which I think remote, and I hope so.

Mr. Chairman, the bottom line is that if we were to place a quota upon steel, we would be inviting increased imports of finished goods, hurting the price-competitiveness of our own exports and in-

creasing the prices of thousands of consumer goods from nails to radios to automobiles.

Finally, Mr. Chairman, I want to highlight the fact that the impact of steel quotas, as I have outlined, would be particularly harsh in California and all other Western States. The 1979 study of the International Trade Commission makes this very clear. The report states, and I quote:

The ability of producers in the Eastern steel-producing centers to market steel mill products in the Western States is limited, primarily because of high inland shipping rates and limited access to ports. Eastern producers accounted for 10 percent of the total consumption in the Western States during each of the last 3 years and did not exceed 13 percent during any of the past 7 years.

The Western market is also heavily dependent on imports.

That is the end of the quote.

Mr. Chairman, I think these figures make clear that steel quotas, which under this bill would apply nationwide, would destroy steel-consuming Western industries.

The two witnesses you are about to hear from the California steel industry will provide more detail and compelling evidence of the problems which even voluntary restraints have already created and make clear the devastating effects of the still more severe restrictions on steel imports threatened by the Fair Trade in Steel Act.

Both Ed McNew, the vice president for purchasing of Davis Walker Corp., and Howard Wilkinson, vice president of Pacific Steel Corp., have extensive experience in businesses that consume great quantities of steel.

Specifically, Davis Walker consumes more wire rod than any other U.S. wire producer; and Pacific Steel and its affiliated companies consume most of the flat roll steel in the West.

With this in mind, I commend to the committee the statements of Mr. McNew and Mr. Wilkinson, and I thank the Chair for this opportunity to introduce them to you.

Senator DANFORTH. Senator Wilson, thank you very much for being here and for that introduction.

[Senator Pete Wilson's prepared statement follows:]

STATEMENT OF HON. PETE WILSON, U.S. SENATOR FROM CALIFORNIA

Mr. Chairman, I am pleased to have an opportunity to appear before the committee today in order to introduce—and endorse the statements of—representatives of two California steel consumers. However, I am disheartened by the possibility—remote as it may be—that the Senate might pass the so-called Fair Trade In Steel Act.

I find it extremely troublesome that the United States might see passage of a law significantly restricting the importation of a commodity as basic to our economy as steel.

I oppose steel quotas for many reasons. They are protectionist and therefore run counter to the best interests of free international trade. They would cripple California industries which simply cannot obtain adequate supplies from domestic steel producers. They would ultimately prove to be economically counterproductive. And, they are anti-consumer.

Mr. Chairman, with all due respect to the proponents of this protectionist legislation, it is the height of folly to place quotas on raw materials such as steel. Why? Because while we would be protecting the jobs of those who produce steel inefficiently in U.S. mills, we would be placing at risk the jobs of those further down the production chain who work in efficient industries that consume steel.

The Japanese understand this. They have no restrictions on log imports. But try to ship finished lumber or wood paneling to Japan. Good luck.

The Japanese are wrong to allow this barrier to exist. But, at least what they are doing is logical.

What proponents of a U.S. quota on steel are proposing is totally illogical. I would contend that many more people work in U.S. industries that use steel products than work in U.S. mills producing steel—that has always been the case and always will be. Therefore, steel quotas would displace more workers than they could ever place back in the steel industry.

Furthermore, by raising the cost of both domestic and imported steel for U.S. manufacturers who consume it, steel quotas would create a net increase in our trade deficit. This increase in the costs of production for U.S. manufacturers who consume steel increases the cost-attractiveness of foreign-produced, value-added products that incorporate foreign-made steel.

For these reasons, I find it almost amusing to have received a letter from the chairman of "the new" Chrysler Corporation in support of steel quotas. Steel quotas would increase the cost advantages of foreign-produced cars and thereby hurt domestic car sales—that is, unless Mr. Iacocca's little protectionist bill should become law.

Mr. Chairman, the bottom line is that if we were to place a quota on steel, we would be inviting increased imports of finished goods, hurting the price-competitiveness of our exports, and increasing the prices of thousands of consumer goods, from nails, to radios, to automobiles.

Finally, Mr. Chairman, I want to highlight the fact that the impact of steel quotas—as I have outlined—would be particularly harsh on California and all other Western States. A 1979 study of the International Trade Commission makes this very clear. That report states that, "The ability of producers in the Eastern steel-producing centers to market steel mill products in the Western States is limited primarily because of high inland shipping rates and limited access to ports. Eastern producers accounted for 10 percent of the total consumption in the Western States during each of the last 3 years and did not exceed 13 percent during any of the past 7 years. The Western market is also heavily dependent on imports."

These figures make clear that steel quotas—which under this bill would apply nationwide—would destroy steel-consuming Western industries.

The two witnesses you are about to hear will provide more detailed and compelling evidence of the problems which even voluntary restraints have already created, and make clear the devastating effects of the still more severe restrictions on steel imports threatened by the Fair Trade In Steel Act.

Both Ed McNew, vice president for purchasing of Davis-Walker Corp., and Howard Wilkinson, vice president of Pacific Steel Corp., have extensive experience in businesses that consume great quantities of steel. Specifically, Davis-Walker consumes more wire rod than any other U.S. wire producer, and Pacific Steel and its affiliated companies consume most of the flat-rolled steel in the west. With this in mind, I would greatly commend to the committee the statements of both of these individuals.

Thank you.

Senator DANFORTH. Mr. McNew.

STATEMENT OF ED McNEW, VICE PRESIDENT, DAVIS-WALKER CORP., LOS ANGELES, CA, ON BEHALF OF THE WEST COAST AD HOC STEEL WIRE PRODUCERS COMMITTEE

Mr. McNew. Mr. Chairman and members of the committee, thank you very much for the opportunity to appear here today. My name is Ed McNew, and I am vice president for purchasing for the Davis-Walker Corp. I am also here today representing 10 other west coast wire drawers.

With me is Peter Suchman, counsel to our group.

Five minutes isn't much time to tell you all about the carbon steel wire industry. With that in mind, I will try to highlight certain important facts that hopefully will put our industry in its proper perspective.

It is one of the most important segments of the steel industry; however, perhaps it is the least understood. Wire and wire products are what holds things up, holds things down, holds things in, and

holds things together, and without them much of our country would fall apart. I am referring to such products as wire rope and strand, welded wire reinforcing mesh, and nails, to mention only a few.

Fact No. 2: Import penetration of wire and wire products nationally is running at approximately 23 percent, while on the west coast the penetration is 50 percent and steadily growing.

No. 3: There is a lack of capacity to support the wire and wire products market, a market that is over \$4 billion and consumes between 7 and 7½ million tons of wire and wire products annually.

However, there are only 5 million tons of domestic rod capacity which is our raw material. On the west coast there is no rod capacity to support the 450,000 tons of demand that our group requires. We must rely on imports, for two very important reasons: (1) There is no capacity, and (2) the freight costs of \$50 or more from east coast wire rod producers preclude our being able to compete with the imported wire and wire products.

Without imported wire rod, west coast independent wire drawers will be either forced out of business or driven to offshore production.

I would like to make sure that the committee understands that we do support domestic mills. As an example, our company which has five mills in the Gulf area buys almost all domestic rod and has done so for many, many years. Domestic rod mills are currently sold out; they are running at capacity and setting production and shipping records almost monthly, and we believe most of the mills are profitable.

The rod industry is very efficient. Approximately 90 percent is in the mini-mill category, utilizing electric furnaces and continuous casting technology. Only one company still uses the old methods of production.

We have already had our supply restricted for the following reasons: (1) The closing of old, antiquated plants; (2) the EC voluntary arrangement; (3) the Japanese "Gentlemen's Agreement"; (4) an extensive number of countervailing and antidumping cases; and (5) more voluntary restraints from countries like Mexico, South Africa, and Brazil.

Recently, because of the cutbacks from Mexico, Davis Walker had their supply cut by 50 percent from that country. And some of our members were recently advised by South Africa that they would have a 40-percent cut on existing orders, and that their orders would be at least 60 days late.

If we have further quotas through this legislation or other administrative action, many of us will be forced out of business or will be forced to move our production offshore. This legislation is disastrous to the wire and wire products industry and to the American consumer.

If we are going to have quotas, they should be on the finished product, not on the raw material that is already in short supply.

We have faith that this committee will not pass legislation that is not in our country's best interest.

Thank you very much.

Senator DANFORTH. Thank you, sir.

Mr. Wilkinson?

[Mr. McNew's prepared statement follows:]

WEST COAST AD HOC STEEL WIRE PRODUCERS COMMITTEE TESTIMONY BEFORE THE
SENATE COMMITTEE ON FINANCE, SUBCOMMITTEE ON INTERNATIONAL TRADE

Mr. Chairman, I would like to thank you for the opportunity to testify before this Subcommittee concerning the problems faced by the U.S. steel industry, including those segments of the industry which process and thereby consume steel mill products. My name is Ed McNew, and I am Vice President for purchasing of Davis Walker Corporation. I am here today representing the West Coast Ad Hoc Steel Wire Producers Committee, a group of 11 fabricators of wire and wire products located in the Western States. I am accompanied by Peter O. Suchman of the firm of Sharretts, Paley, Carter & Blauvelt, P.C., who is counsel to the Committee.

Several weeks ago I had the opportunity of appearing before the Subcommittee on Trade of the House Ways and Means Committee to testify on the same matter. During those hearings, Ambassador Brock and Secretary Baldrige expressed the opposition of the Administration to proposals such as H.R. 5081, the so-called "Fair Trade in Steel Act of 1984", which would legislate import quotas on all steel mill products. One reason they gave for that opposition was the devastating impact such comprehensive import restrictions would have on steel consuming industries in the U.S.—industries which use steel as a raw material for the production of finished and semi-finished products. This metal working sector of the U.S. economy employs 20 times more people and accounts for about 10 times the share of GNP as the integrated steel mill sector according to Secretary Baldrige, yet it appears that these interests are often ignored by the Congress and Executive Branch when actions to address the decline of the integrated steel mill sector are being considered.

One such steel consuming industry is the wire and wire products industry.

Ambassador Brock stated before the House Subcommittee that if quotas are legislated:

"These producers would clearly be hurt by increased prices for their raw materials and also by increased import competition as foreign producers shift from exporting steel to export products made of steel."

The ambassador might have had the independent wire drawers in mind when he made that statement. This is especially true with regard to carbon steel wire producers located west of the Rockies.

Carbon steel wire and wire products—such as a bright basic wire, galvanized, wire, barbed wire, chain link fence, baling wire, poultry and stucco netting and nails—are made by drawing carbon steel wire rod into wire. Wire rod comprises 40 to 75 percent of the selling value of the finished wire product. The wire rod industry, like most of the carbon steel industry as a whole, has been undergoing a major adjustment in the past few years, as the inefficient, and largely antiquated integrated producers lose market share to the modern non-integrated or mini-mill producers. Wire rod is one of the products which mini-mills produce most efficiently and as a result of this competition the domestic integrated producers, such as U.S. Steel and Bethlehem are fast disappearing as wire rod producers. At the end of the 1983 U.S. Steel announced the permanent closing of its remaining commercial grade wire rod facilities, leaving Bethlehem's mill at Sparrows Point, Maryland, as the only true integrated wire rod facility left in the U.S. As a result, over 90 percent of the domestic industry is now comprised of efficient mini-mill producers who are well able to hold their own in competition with foreign low-cost producers.

However, this structural shift has left the Western states with almost no wire rod capacity and a demand for about 450,000 tons of wire rod per year. Since the closing of the West Coast's integrated wire rod mills in the past few years, independent wire drawers have turned increasingly to imports from a variety of countries to assure themselves of an adequate supply of wire rods, and to keep down the cost of production so that they can remain competitive with the increasing inflow of finished wire products from off-shore wire drawers. We do buy some wire rod from domestic producers outside the region. However, the closest are located in Pueblo, Colorado, Kansas City, Missouri, and Beaumont, Texas.

There is no way that we on the West Coast can become dependent for a substantial portion of our raw materials on rod producers located at such overland distances, given transportation costs. This is why, when the ITC studied the condition of the Western U.S. steel market in 1979 it found that for the preceding six year period, wire rod produced in the U.S. but outside the Western States accounted for only 1.4 percent of Western States consumption, while imports supplied 45 percent. Furthermore, there is inadequate capacity in the U.S. for wire rod, and especially for wire rod at anything like a price which will allow us to remain competitive with

foreign wire drawers. These foreign producers of course have continued access to low-priced foreign rod. We estimate that shortfall of average demand for wire products (including fasteners) as compared to U.S. rod capacity at between 2 and 2.4 million tons. Either this shortfall enters the U.S. as wire rod to be converted into wire here, or it enters as finished wire product, also made from foreign rod, but with total value added accomplished abroad.

This problem is particularly severe in the Western States. As already noted, there is almost no rod production in the area. In addition, we estimate that the current import to consumption ratio in the Western States for wire and wire products is about 50 percent, or more than double the I/C ratio for the country as a whole. Therefore, as you can see, West Coast producers are caught in a classic squeeze between an inadequate supply of locally produced raw materials, and intense competition from low cost foreign producers in the finished product market.

The fate of the independent wire industry in the Western States is in the balance. We cannot survive if the present course of events continues. Our supply of rod has been gradually constricted by the demise of the regional rod industry, the TPM, and US/EC "arrangement", the Japanese self-restraint program, the massive number of so-called "unfair trade cases" brought against foreign rod suppliers which have resulted in unilateral declarations of export restraints, and now the threat of global rod quotas through legislative or administrative action.

If things continue in this direction, we will be forced to close or sharply curtail our operations and buy or manufacture wire outside the U.S. If this happens, the domestic wire rod industry also loses because it will not have customers left in the Western States.

We reject the imposition of quotas on wire and wire products along with wire rod as a solution to whatever problems the wire rod industry faces, although obviously if imports of rod are restrained, wire imports must also be restrained. We do not believe that a closed, bureaucratically managed market is the way for our industry to prosper, and I frankly don't understand how steel industry leaders can be so naive as to think they can get the government to limit their competition from imports, but refrain from interference in other aspects of the management of their companies. In addition, closed markets mean higher prices, which mean decreased demand, substitution of other products for wire, and an inefficient industry.

We are also wary of what has been called the "dual distribution" problem. Most wire rod producers are also producers of wire products. Over the years we independent wire drawers have gradually increased our market share at the expense of the integrated wire rod/wire producers (not to be confused with integrated steel producers). If our access for foreign rod is further restricted, we will become ever more dependent upon our competitors for our raw material—an unhealthy situation at best. The ITC recognized this problem in its 1979 study of the Western wire rod market stating:

"There have been instances in which the domestic supply of wire rods . . . has been less than adequate to meet demand. This was the result, in part, of vertically integrated U.S. producers insuring that their own requirements for primary products were met before making these products available to other consumers. Customers who normally receive their supplies from these firms were unable to obtain them from other domestic sources because, for the most part, only vertically integrated firms produce these products."

Mr. Chairman, as demand has increased for wire rod over the past year, West Coast wire producers have been unceremoniously cut-off with little notice by domestic rod producers who suddenly discovered other uses for their product. We see this as a portent of things to come as rod supply is ever more capable of meeting demand, especially in the Western States, and producers lose interest in wire drawers 1,200 to 1,700 miles away. Prices for domestic wire rod have already increased 20 percent or more since the fourth quarter of 1983 and further increases of \$20 per ton, representing another 5-8 percent that have recently been announced by most mills, effective July 1, 1984. These price increases are magnified for West Coast consumers who have to pay in addition a minimum of \$55 per ton in freight costs. Imports of rod are critical in keeping the average cost of wire rod under control so that we can compete with imported wire and wire products.

I would like to make it clear that the independent wire drawers are good customers of the domestic wire rod industry. My own company has facilities throughout the Gulf Coast and Southeast, and we supply those facilities 100 percent with domestically produced wire rod, which is competitive and available in that part of the country. This is not the case on the West Coast where imports have for many years been a significant part of the available wire rod supply, and where structural changes in the industry have made them ever more important.

We do not think the domestic wire rod industry is in need of or deserving of import quota relief. The modern mini-mill sector which dominates the industry is among the most efficient in the world and is well able to compete on an equal footing with any foreign rod mill. The integrated sector, which now accounts for only about ten percent of the industry's capacity and for less of its production, has slowly been forced out of the marketplace by its more efficient domestic competition. The long-term trend in wire rod imports has been down while mini-mills have increased their market share.

This industry has all but adjusted to technological change. If Congress or the Executive Branch were to provide the industry with quota protection now, the mini-mills would reap windfall profits, for a time, and the reentry into the market of closed, inefficient facilities would be stimulated while the elimination of still operating noncompetitive producers would be delayed. The modern, efficient independent wire producers would have to pay the cost of this protection, especially on the West Coast where wire imports can be expected to soar, or in the alternative, where wire will price itself out of market. Either way, the economy of the U.S. and the Western States suffer as inefficiency is rewarded and costs are artificially inflated.

Furthermore, additional relief ought not to be granted, outside the legal structure that has been established for providing such relief, to the inefficient segment of this industry which has failed to make itself competitive. From the late 60's to the present day, through VRA's the TPM and various gentlemen's agreements the domestic steel industry, including the wire rod producers, has been shielded from unfettered international competition. Providing the weak sisters of the industry more protection will simply encourage them to continue in their old profligate ways.

We do not understand how the interests of all of the industries using steel mill products, such as the wire industry, can be so casually ignored in the debate over the restructuring of the U.S. steel industry. We are a far larger and more vital sector of the economy and yet because we have not mobilized ourselves as efficiently as the big steel mills, our interests are continually overlooked. The same is apparently true for the Western region which as a geographically isolated, steel deficit area, is heavily dependent upon imports to steel mill products to support a whole range of manufacturing activities.

Hopefully, it is not too late for us to bring this situation to the attention of this Subcommittee and the others within the Congress and Executive Branch who will be deciding whether to impose quotas or other import restraints on wire rod and other steel products. Please do not make us close our modern and efficient plant in Los Angeles so that some antiquated mill in another part of the country can be reopened for a few more years. In the long run that scenario is not in anyone's best interest, it certainly isn't in the national interest.

STATEMENT OF HOWARD WILKINSON, VICE PRESIDENT, PACIFIC STEEL CORP., LONG BEACH, CA

Mr. WILKINSON. Mr. Chairman, my name is Howard Wilkinson. I am a vice president of Pacific Steel Corp. I wish to thank the subcommittee for giving me the opportunity of appearing before you today.

The domestic steel industry is made up of a variety of different sectors whose interests and circumstances diverge to the extent that one cannot readily talk about a simple homogeneous steel industry, but rather a series of separate industries with varying interests and diverse views.

Pacific Steel, and indeed the Western steel sector as a whole, have a perspective which is not shared by the major Eastern integrated mills.

As a steel-consuming group we were Kaiser Steel's largest single customer and bought the majority of our requirements from them. With the loss of Kaiser Steel's output, we and many others faced a very serious problem. We were unable to replace Kaiser Steel as a vendor by either domestic or foreign sources except to a limited degree. Since the closing of the Kaiser Fontana mill, prices have

increased more than 20 percent and some flat rolled products have from time to time been in short supply.

Pacific Steel is concluding an agreement to purchase from Kaiser Steel the steel mill facilities at Fontana, CA.

The closing of this facility in December 1983 reduced the steel-making capacity of the Western States by some 30 percent. It is our intention to increase that capacity in the initial year, starting in September 1984, by one-third or 700,000 tons. The Western States carbon steel market amounts to some 8 million tons per year, of which 40 to 50 percent is imported.

It is impossible for us to operate the raw steelmaking capacity at Fontana. It is possible to use purchased slabs as the raw material feedstock for the mill, as Kaiser had done for its last few years of operation.

Pacific Steel is making a major investment in the steel industry of the Western States, recreating jobs in Fontana and maintaining existing jobs in the metalworking sector of the surrounding area that would otherwise be lost.

We have determined that the only economically feasible source of slab, because of the geographical isolation of the West Coast from the Eastern and Midwestern mills, is to purchase them offshore. To impose quotas or to otherwise restrict Pacific's access to slab imports would injure the Western steel industry as a whole.

Obviously, if quotas or other import restrictions, whether legislatively or administratively imposed, are placed upon semi-finished steel mill products including slabs, the viability of Pacific Steel's venture will be seriously called into question. Furthermore, I know that the management of our related companies would be forced to consider moving their operations from the west coast out of the region, with some possibly going to Mexico and some to other less geographically isolated parts of the United States.

Even the union which represented workers at the Fontana mill has recognized the need for imported slab if the mill is to survive. Robert Petris, director of District 38 of the United Steel Workers of America, wrote in a letter to members of Locals 2869 and 3677 at Fontana that the union was willing to work out a mutually satisfactory solution to the question of slab imports "in the interest of preserving jobs at Fontana Works and restoring steelmaking at Fontana." We think that it is significant that the workers at the west coast steel mill, through their local organization, recognized that slab imports were not injurious to them, and in fact were essential to their continued employment and the survival of steelmaking at Fontana.

The imposition of import restrictions on slabs and other semifinished steel mill products makes no sense. Consumption of semifinished steel is about 80 million tons annually, with imports making up about 1 percent. The only consumers of slabs are domestic steel mills. Whatever case can be made for protecting domestic steel mills from imports of other steel products simply does not apply to slabs.

Furthermore, quotas and other import restrictions are wrong as a matter of principle. While it may seem superficially beneficial to Pacific Steel, for example, to protect the finished product market for flat rolled products, we neither want nor need that protection.

However, we know, because we are also in the manufacturing business, that if steel imports are restricted, but imports of finished products remain unrestricted, that we cannot compete. When our foreign competitors can buy low-cost steel but we cannot, we are out of business. The alternative is for us to move our manufacturing facilities offshore and use the same foreign steel our competitors do. If we are forced into this course of action, where is the benefit to the U.S. economy in steel import restrictions? There is none. Eventually even the steelworkers who may initially benefit from the restrictions lose because the U.S. manufacturing sector continues to shrink.

Of course, Congress or the President could impose quotas on all imported products containing steel. In fact, this course of action will be necessary if steel is restricted for any length of time, in order to protect a wide range of manufacturing industries. It is questionable that this is the direction in which U.S. trade policy ought to be moving.

The steel industry, like many other manufacturing industries in America today is in a state of evolution.

Senator DANFORTH. Mr. Wilkinson, your statement is going to be included in full in the record. If you could wind it up, I would appreciate it.

Mr. WILKINSON. I would like to say that the steel industry is in a state of evolution. The driving force of that evolution is and will remain competition.

Thank you, Mr. Chairman.

Senator DANFORTH. Thank you, sir.

Mr. George?

[Mr. Wilkinson's prepared statement follows:]

HOWARD WILKINSON, VICE PRESIDENT, PACIFIC STEEL CORP.

Mr. Chairman, I wish to thank the Subcommittee for giving me the opportunity of appearing before you today to address the state of the domestic steel industry and the question of whether import restrictions on steel mill products are necessary or desirable. The domestic industry is made up of a variety of different sectors whose interest and circumstances diverge to the extent that one cannot readily talk about a simply, homogeneous steel industry, but, rather, a series of separate industries, with varying interests and diverse views.

Pacific Steel and, indeed, the Western steel sector as a whole have a perspective which is not shared by the major Eastern integrated mills. Pacific Steel is part of a group of related companies operating in Southern California that consume and distribute flat-rolled carbon steel products. Among the steel products they manufacture are pipes, automobile wheel rims and wheels. Other companies related to Pacific include Tecrim Corporation, Cal-Chrome, Inc., Rich Steel Company, and Kaiser Pipe and Casing Corporation.

As a steel-consuming group we were Kaiser Steel's largest single customer and bought the majority of our requirements from them. We believe we constitute, as a group, the single largest end use consumer of flat rolled products in the Western States. With the loss of Kaiser Steel's output we and many others faced a very serious problem. We were unable to replace Kaiser Steel as a vendor by either domestic or foreign sources, except to a limited degree. Since the closing of the Kaiser Fontana mill, prices have increased by more than 20 percent and some flat rolled products have from time to time been in short supply.

Pacific Steel is in the process of concluding an agreement to purchase from Kaiser Steel the steel mill facilities at Fontana, California. The closing of this facility in December, 1983, reduced the steel-making capacity of the Western States by some 30 percent. It is our intention to increase that capacity in the initial year, starting in September, 1984, by one-third, or 700,000 tons. The Western States carbon steel

market amounts to some eight million tons per year, of which 40 to 50 percent is imported.

It is impossible to operate the raw steel-making capacity at Fontana. It is, possible to use purchased slabs as the raw material feedstock for the finishing mill, as Kaiser had done for its last few years of operation. Pacific Steel is making a major investment in the steel industry of the Western States, recreating jobs in Fontana and maintaining existing jobs in the metalworking sector of the surrounding area that would otherwise be lost.

We have determined that the only economically feasible source of slab, because of the geographical isolation of the West Coast from the Eastern and Midwestern mills, and because there is no efficient raw steel capacity in the region which can supply this facility, is to purchase them offshore. To impose quotas or to otherwise restrict Pacific's access to slab imports would injure Pacific Steel and the Western steel industry as a whole.

A recent study conducted for the Senate of the State of California by the California Senate Office of Research (dated July 1983) observed that there are no efficient integrated steel mills on the West Coast due to the oligopolistic practices of the U.S. industry. They historically supplied the area, at the price of their Eastern facilities plus freight. A practice they will return to with the protection of quota. The only existing integrated mills in the Western States, at Fontana and the U.S. Steel mill facility at Geneva, Utah were originally constructed by the U.S. Government for strategic reasons during World War II. Because of built-in inefficiencies, these mills have always had difficulty competing as integrated mills. We are confident of success at the Fontana mill if we are permitted free access to low cost slabs—wherever we find them.

Obviously if quotas, or other import restrictions, whether legislated or administratively imposed, are placed on semi-finished steel mill products, including slabs, the viability of the Pacific Steel venture will be seriously called into question. Furthermore, I know that the management of our related companies would be forced to consider moving their operations from the West Coast out of the region, with some possibly going to Mexico, and some to other less geographically isolated parts of the U.S.

Even the union which represented workers at the Fontana mill has recognized the need for imported slab, if the mill is to survive. During negotiations with a previous prospective buyer at Fontana, Robert J. Petris, Director of District 38 of the United Steelworkers of America, wrote in a letter to the members of Locals 2869 and 3677 at Fontana, that the union was willing to work out a mutually satisfactory solution to the question of slab imports "in the interest of preserving jobs at Fontana Works and restoring steelmaking at Fontana". We think that it is significant that the workers at the West Coast Steel mill, through their local organization, recognized that slab imports were not injurious to them, and in fact were essential for their continued employment and the survival of steelmaking at Fontana.

The imposition of import restrictions on slabs and other semi-finished steel mill products makes no sense. Domestic consumption of semi-finished steel mill products is about 80 million tons annually with imports making up a minuscule portion of that consumption—about 1 percent. But semi-finished products are really only raw material. The only consumers of slabs and other semi-finished products are domestic steel mills. Whatever case can be made for protecting domestic steel mills from imports of other steel products simply doesn't apply to slabs.

Furthermore, quotas and other import restrictions are wrong as a matter of principle. History has taught us, or should have taught us, that protection promotes inefficiency and a lack of competitiveness. While it may seem superficially beneficial to Pacific Steel, for example, to protect the finished product market for flat rolled products, we neither want nor need that protection. We will be able to compete head-to-head with imports and we will succeed.

However, we know, because we are also in the manufacturing business, that if steel imports are restricted but imports of finished products remain unrestricted that we cannot compete. When our foreign competitors can buy low cost steel but we cannot, we are out of business. The alternative is for us to move our manufacturing facilities offshore and use the same foreign steel our competitors do. If we are forced into this course of action, where is the benefit to the U.S. economy in steel import restrictions? There is none. Eventually even the steelworkers who may initially benefit from the restrictions lose because the U.S. manufacturing sector continues to shrink.

Of course Congress or the President could impose quotas on all imported products containing steel. In fact this course of action will be necessary if steel is restricted for any length of time, in order to protect a wide range of manufacturing industries.

It is questionable that this is the direction in which U.S. trade policy ought to be moving.

We recognize the problems that the large, integrated steel mills have been experiencing, and we do not mean to downplay them. But recognizing that this segment of the industry has difficulties is one thing, devising solutions for these problems is another. We do not agree that restricting imports will help resolve these problems.

The steel industry, like many other manufacturing industries in America today, is in a state of evolution. Public policy ought not to obstruct, but on the contrary ought to encourage that evolution into a new, and more efficient and dynamic steel producing sector. The driving force of this evolution is, and will remain competition.

Pacific Steel intends to profit by this evolution and to produce steel efficiently and competitively. Obviously, government action which closes the U.S. market to competition from abroad would be disastrous for Pacific, and for the economies of the Western States as a whole. In the long run, we doubt such action would benefit even the Eastern integrated producers, and their workers, whose only hope for a return to profitability and prosperity is for them to increase their efficiency and hold down their costs and thus be able to stand up to foreign competition.

I wish to thank the Subcommittee for the opportunity to testify on these critical and controversial issues.

**STATEMENT OF F.A. GEORGE, MANAGER OF STEEL
COMMODITIES, CATERPILLAR TRACTOR CO., PEORIA, IL**

Mr. GEORGE. Mr. Chairman and members of the subcommittee, my name is Al George. I am the steel commodities manager for Caterpillar Tractor Co., Peoria, IL.

Caterpillar is a leading manufacturer of earthmoving, construction, and materials handling machinery and equipment, and diesel and natural gas engines and turbines. We also believe the company is the second largest consumer of U.S. produced steel in the world. In each of the 3 years prior to the depressed 1982-83 period our total production contained an average of over 1 million tons of steel, worth more than one-half billion dollars.

Steel accounts for 65 percent of our machines by weight; 25 percent of the cost of production materials, and 10 percent of the total cost of goods sold. So the price and availability of steel has a significant impact on the company's overall costs, which we are trying to control in order to remain competitive.

Worldwide, more than 160 foreign manufacturers build nearly 1,000 models of earthmoving and construction machinery of the type Caterpillar manufactures. To remain competitive in this environment, we have undertaken a major corporate-wide cost reduction program. Our goal is to reduce 1986 costs to 22 percent or more below those of 1981.

But to control the cost of steel, Caterpillar must have access to both domestic and foreign sources of steel.

Over the past several years, many foreign steel mills have introduced innovative technology and production processes. These innovations have allowed foreign mills to produce higher quality products at lower cost than U.S. mills. Those technology-related savings are important to steel purchasers like Caterpillar.

Purchase cost savings are accompanied by lower manufacturing costs associated with steel product options offered by foreign producers. Because steel processing makes up over one-half of our manufacturing floor space, such reductions are highly significant.

The availability of foreign-produced steel has also fostered price competition. Until the advent of the mini-mill we had rarely seen a major U.S. steel producer with prices or product quality levels far

from industry standard; but the mini-mill, which benefits from the lower costs and higher productivity, increased competition in those limited markets it serves. Foreign steel producers, by covering a much broader product line in the U.S. marketplace, cause the domestic industry to become even more price competitive.

Beyond this immediate and identifiable impact on production costs, we are concerned that a steel import quota could trigger retaliation from countries whose producers will be locked out of the American market. In such an international tug of war, the big losers would be U.S. companies like Caterpillar that rely very heavily on exports, as well as our employees.

As one of the biggest exporters in the country, Caterpillar's dependence on export sales is virtually unique in American heavy industry. Our U.S. exports totaled \$12 billion over the last 5 years. I might add, that certainly is a significant contribution to the balance of trade.

In 1983, \$646 million of the goods we purchased from U.S. suppliers were dependent on export sales. We estimate that a total of over 48,000 Caterpillar and supplier jobs were dependent on our 1983 exports.

Based on steel industry figures, we estimate our exports have supported the employment of 2,120 U.S. steel workers. My point is that resorting to steel quotas would not only seriously threaten Caterpillar's U.S. employees but would also mean loss of jobs for U.S. steel workers.

The growth of protectionism both in the United States and abroad must be stopped. Defeat of this proposal would be a good place to begin to show our resolve.

Thank you.

[Mr. George's prepared statement follows:]

STATEMENT BY F.A. GEORGE, CATERPILLAR TRACTOR CO.

Mr. Chairman and Members of the Subcommittee: My name is Al George. I am the Steel Commodities Manager for Caterpillar Tractor Co. in Peoria, Illinois. In this capacity I have responsibility for purchasing all steel consumed in our U.S. facilities. I appreciate the opportunity to appear before you today to present my company's views on the proposal—embodied in S. 2380—for an across-the-board steel import quota.

My remarks will focus on the counterproductive impact of a steel quota, using Caterpillar as an example.

Caterpillar is a leading manufacturer of earthmoving, construction and materials handling machinery and equipment; and diesel and natural gas engines and turbines. As such, Caterpillar is one of the largest steel consumers in the United States. We believe the company is the second largest consumer of U.S.-produced steel in the world. Caterpillar purchases have constituted about 1.2 percent of all domestic steel production. And in each of the three years prior to the depressed 1982-1983 period, our total production contained an average of over one million tons of steel, worth more than one-half billion dollars.

Steel accounts for: 65 percent of our machines, by weight; 25 percent of the cost of all production materials; and 10 percent of the total cost of goods sold. So the price and availability of steel has a significant impact on the company's overall costs—which we are trying to control in order for Caterpillar to remain competitive.

Caterpillar faces formidable and greatly increased foreign competition throughout its entire product line. For example, in 1970 four of the five leading earthmoving and construction equipment manufacturers were U.S. companies. Today, our top three competitors are foreign firms. Worldwide, more than 160 foreign manufacturers build nearly 1,000 models of earthmoving and construction machinery of the type Caterpillar manufactures. Many are small, but very competitive in their home

markets. Others are aggressive, growing companies seeking to advance in the world marketplace.

Caterpillar has the highest quality products, the most modern manufacturing facilities, and unequalled product support. Yet many competitors have narrowed the gap and now offer high quality equipment at prices substantially below Caterpillar's.

To remain competitive in this environment, we've undertaken a major corporate-wide cost reduction program. Our goal is to reduce 1986 costs to 22 percent or more below those of 1981, in constant dollars adjusted for volume. To accomplish this, we've improved manufacturing efficiency, reduced employment and capital expenditures and announced the closing of six manufacturing plants.

Competition is toughest in the very important replacement parts business. Steel constitutes up to 70 percent of the cost of these goods. We are attempting to meet this challenge by reducing the cost of some parts by 40 percent or more.

A critical aspect of our extensive cost reduction effort is with suppliers. In 1983, Caterpillar purchased \$2.5 billion worth of materials, supplies and services. We have targeted this area of expenditure for major, permanent savings.

But to control the cost of steel—whether for our prime product or parts—Caterpillar must have access to both domestic and foreign sources of supply.

Over the past several years, many foreign steel mills have introduced innovative technology and production processes. These innovations have allowed foreign mills to produce higher quality products at lower costs than U.S. mills. Those technology-generated savings are important to steel purchasers like Caterpillar.

Purchase cost savings are accompanied by lower manufacturing costs associated with higher quality steel. Because steel processing takes up over half of our manufacturing floor-space, such reductions are highly significant.

For example, several years ago European steel producers developed micro-alloyed steel. When used to produce forgings, this steel—even without special heat treating—is unusually strong. So Caterpillar achieves considerable labor, manufacturing and energy cost savings—which may soon amount to as much as \$6 million a year. Unfortunately the technology necessary to apply micro-alloyed steel to large forgings is not domestically available.

Continuous cast steel is another example. High quality continuous cast bars can withstand the repeated heavy loads to which our products are subjected. Continuous cast steel costs about 30 percent less than traditional ingot cast steel. The high quality continuous cast bars Caterpillar requires have been produced in Europe and Japan for several years. But availability is limited in the U.S. Though some domestic mini-mills are seeking to develop the capability, their current products do not consistently meet our quality specifications.

The availability of foreign-produced steel also fosters price competition. Until the advent of the mini-mill, we rarely had seen a major U.S. steel producer with prices or product quality levels far from the industry standard. But the mini-mill, which benefits from lower costs and higher productivity, increases competition in those limited markets it serves. Foreign steel producers, by covering much broader product lines in the U.S. marketplace, cause the domestic industry to become even more price competitive.

Imported steel also encourages the domestic industry to modernize. Many technologically superior processes, which have given foreign suppliers a product, quality and production cost advantage, finally are being adopted by domestic mills. We believe foreign competition has provided much of the impetus for renewal of the domestic steel industry.

In short, Caterpillar—and we believe other U.S. manufacturers—are well served by an internationally competitive steel supply situation. The availability of foreign produced steel in the U.S. promotes increased domestic competition. It supports jobs at Caterpillar and with U.S. suppliers, including U.S. steelmakers. And it is clearly preferable to the alternative, which is for U.S. manufacturers to move overseas in order to have access to lower priced foreign materials.

Caterpillar is committed to being competitive in the world market with products produced at our U.S. manufacturing plants. Approximately three-fourths of our fixed assets and employees are in the United States. To preserve this massive U.S. presence, we must have continued access to competitively-priced steel.

Beyond this immediate and identifiable impact on production costs, we are concerned that a steel import quota would trigger retaliation from countries whose producers will be locked out of the American market. In such an international tug-of-war, the big losers would be U.S. companies like Caterpillar that rely heavily on exports—and their employees. Ultimately our suppliers and their employees (includ-

ing American steel companies and steelworkers), and the U.S. economy would also suffer.

As one of the largest exporters in the country, Caterpillar's dependence on export sales is virtually unique in American heavy industry. Our U.S. exports totaled \$1.6 billion last year, 38 percent of the company's sales from domestic production.

Caterpillar exports provide important benefits. The United States received a \$1.3 billion net favorable contribution to the balance of trade—in a year of an almost \$70 billion U.S. trade deficit. (While this favorable contribution was substantial, it was down more than 60 percent from the 1981 peak of \$3.3 billion.) For the years 1979–1983, the company's net favorable contribution to the balance of trade totaled more than \$12 billion.

Our export sales create U.S. jobs. The company's average 1983 U.S. employment was nearly 44,000, with 16,000 employees owing their jobs to Caterpillar exports. (In 1980 and 1981, 31,000 Caterpillar jobs were supported by export sales from the U.S.)

And Caterpillar exports have greatly benefited our more than 12,400 U.S. suppliers and their employees. In 1983, \$646 million of the goods we purchased from U.S. suppliers were dependent on export sales. We estimate that a total of 48,000 Caterpillar and supplier jobs were dependent on our 1983 exports. (Again, this was done from a peak in 1980 and 1981 of an estimated 93,000 U.S. jobs.)

Moreover, because Caterpillar is one of the largest purchasers of domestic steel and probably the largest exporter of domestically produced steel, the U.S. steel industry and its employees have benefited significantly from Caterpillar's exports. In each of the three years prior to the severely depressed 1982–1983 period, Caterpillar exported, in its products, an average of 440,000 tons of domestically produced steel, worth over \$230 million. Based on steel industry figures, we estimate our exports during each of those years supported the employment of about 2,120 U.S. steelworkers.

My point is that resorting to steel quotas would not only seriously threaten Caterpillar's U.S. employees, but could also mean the loss of jobs of U.S. steelworkers.

In the end, a cruel trick is played on any country that relies on protectionism. Protectionism does not and cannot improve a nation's overall employment and economic health. The answer to foreign competition is not to shut it out. The answer is for American goods, and America, to become more competitive.

Steel quotas cannot reverse certain fundamental—and necessary—changes taking place in our economy. The United States consumes considerably less steel today than a decade ago. Other materials, some cheaper, lighter and more energy efficient, often replace steel. The steel industry itself has developed lighter, stronger, more sophisticated steel to substitute for the heavier, bulkier product of the past. Decreased demand has led to decreased production.

To adjust, the U.S. industry must continue the major restructuring process already under way. The major integrated steel producers have made substantial progress recently to improve their competitiveness. In the past two years they have reduced total costs 18 percent and increased productivity 25 percent. Capacity reductions have lowered break even operating rates from 80 percent to 69 percent over this period.

Integrated steel producers continue to face significant investment and restructuring requirements. Plant closings, mergers, and cooperative collective bargaining agreements demonstrate a recognition of the need to modernize and cut costs.

But, Mr. Chairman, an import steel quota would be bad policy for the United States. Our country cannot afford to have companies move operations overseas because of prohibitively high operating costs here. Neither can the world's largest exporting country afford the retaliation which certainly would occur in response to the imposition of steel quotas. The growth of protectionism both in the United States and abroad must be stopped. Defeat of this legislation would be a good place to begin to show our resolve.

Thank you once again for this opportunity to appear before the subcommittee. I'd be pleased to respond to your questions.

Senator DANFORTH. Gentlemen, thank you very much.

Do you think that the three of you are representative of steel users throughout the country? Or do you believe that your position is a minority position?

Mr. GEORGE. I might speak for a fairly large portion of the metal fabricating industry, and I think we do. We are unique in that we do export a high degree, and so there is added danger in such legislation for us; but all metal fabricators would be affected by certain-

ly increased costs of steel, and I think as has been very adequately stated there is a large, large portion of employment involved in that industry.

Mr. McNEW. I wonder if I might also try to answer that question. I sit on the board of directors for the American Wire Producers Association, and the association's position is that they are against quota bills in any form. They are totally supportive of the antidumping and countervailing approach to solve these problems.

Senator DANFORTH. Why do you think the opposition has been so muted? Or maybe it hasn't. It just seems to me as though it has been muted.

Mr. WILKINSON. I think that there are a vast number of small industry organizations who haven't made the effort to make themselves heard.

In the West there is particular concern, addressed in the House bill, about fabricated steel products.

Imports of fabricated steel products are a consequence and will be a consequence of quotas on steel products. The effect of quotas will be to drive foreign manufacturers into importing manufactured goods rather than simple steel goods.

Senator DANFORTH. But it would seem to me there are just so many. I would suppose for every steel-producing company and every steel-producing job, there would have to be many companies and many jobs that are in the steel fabrication or steel products business, and that they would be in the same boat that you are in.

Mr. McNEW. I think a partial answer to that, Senator, would be the fact that there are many steel consumers who are afraid to step forward because they are afraid of offending their suppliers. I have heard that comment voiced many times.

We on the west coast have a unique situation in that we basically don't have a steel industry. Certainly in the wire rod sector, which is our raw material, there is no production of wire rods. We really don't have anybody to offend.

Senator DANFORTH. Could you explain that, Mr. McNew? You say that they are not stepping forward because they are afraid to step forward. But what do you mean by that?

Mr. McNEW. Well, I think that you have got consumers back in the Eastern part of the United States where steel is available, and in many cases it is in short supply; there are certain products that are in short supply. And I think that if a consumer were to come forward to voice his comments in objection to this bill, perhaps he might find it more difficult to get some of his steel products further downstream.

Senator DANFORTH. Why is that view held?

Mr. McNEW. Well, I think this is just a fear that would exist in the mind of the consumer that perhaps he might get cut off, or if there are allocations he might not get his fair share.

Senator DANFORTH. Do you mean if he were to take a position on this legislation there would be direct economic retaliation against him?

Mr. McNEW. It is a possibility. I say I have personally heard comments from eastern producers that they would be concerned about that type of a situation.

Senator DANFORTH. You personally have heard other people—

Mr. McNEW. Other steel consumers express a concern of this nature.

Senator DANFORTH. To say that if they came forward on this bill there would be retaliation and they would lose their supply of steel?

Mr. McNEW. The gist of the comment was that we don't want to offend our suppliers.

Senator DANFORTH. Have there been direct threats against them? Or is this just the nature of the business? Or is it guessing on their part?

Mr. McNEW. I don't believe there have been any direct threats. I think this is just a fear that exists in the minds of certain consumers, especially when you have certain products that could be in short supply.

Mr. GEORGE. I might add another comment on this, not being from the west coast but being from the Midwest.

I think the answer to your question lies partially in the fact that the consumer doesn't tend to be as highly organized and therefore probably doesn't come forward as a body to speak to the consumers' interests.

Of course, I think this is certainly one of the responsibilities that the Senate and Congress and the executive branch has in this thing—obviously.

Senator DANFORTH. Do you share Mr. McNew's thoughts that they are not coming forward because they are frightened?

Mr. GEORGE. No, I do not share that. But then, again, we are a very large consumer, and I wouldn't be able to speak for the smaller consumer.

Senator DANFORTH. Nobody threatens Caterpillar?

Mr. GEORGE. Thus far not, Senator. [Laughter].

Senator DANFORTH. You say in your testimony, Mr. George, that foreign mills produce higher quality products at lower cost than U.S. mills. Can you provide some examples where this is the case?

Mr. GEORGE. Yes, I think I can. In fact, I clipped a letter that came across my desk last week. It happens to be from a quality control manager in our Milwaukee plant. Essentially what he is saying here is that we ship him plate that comes both from Japan and some from a well-known domestic producer. And because of higher internal cleanliness in the Japanese plate, they have many fewer defects; they can burn shapes out of this plate at a much higher rate without creating defects. And he caps it by saying that he prefers that in the future we purchase only the Japanese product.

Another one I can think of right offhand is, in our Pontiac plant we machine large quantities of fuel-injection equipment, in some cases well over a million of these parts a year, and the speed with which we can cut this bar stock depends upon the hardness levels. Japanese suppliers are able to provide this material at a considerably lower hardness level than domestic producers, and that is a significant manufacturing cost savings to us.

I think there is a thread through this. Although we talk in terms of quality as seen by us, the customer; what it really gets down to is our manufacturing cost. It costs us less in some of these cases to

manufacture the product using the product options that are available to us in the foreign market.

Senator DANFORTH. Gentlemen, thank you very much. That concludes the hearing.

[Whereupon, at 12:47 p.m., the hearing was concluded.]

[The following communications were made a part of the hearing record by order of the chairman.]

STATEMENT OF
SENATOR ROBERT C. BYRD
BEFORE
SUBCOMMITTEE ON INTERNATIONAL TRADE
COMMITTEE ON FINANCE

UNITED STATES SENATE
(Hearing of June 8, 1984)

Mr. Chairman, I appreciate the opportunity to submit testimony to the Subcommittee on this issue of vital importance to my state, and to the nation. As a member of the Senate Steel Caucus and as an original cosponsor of the Fair Trade in Steel Act (S. 2380), I am deeply concerned about the state of America's steel industry.

In my own state of West Virginia, employment in primary metals and fabricated metals continued at record low levels last year. Primary metals employment held at the 14,300 job level of December 1982. Fabricated metals jobs repeated the same dismal 1982 level, holding at some 6,200 jobs. The West Virginia metals industries saw a combined drop in jobs of around 20 percent in 1982, and they have not yet recovered. Nationally, steel employment has declined some 46% in the past five years, reducing the ranks of steelworkers by about a half million jobs.

Coincident with the loss of American jobs and the decline in our steel production capacity, we have seen an unprecedented increase in the market share held by foreign steel producers. In the first quarter of 1984, more than six million tons of foreign steel entered the U.S. market, setting a new record for a three-month period. As a result, foreign producers garnered more than 24% of the United States steel market. This represents a substantial increase from the 20% of the U.S. market which

foreign steel companies held at the close of 1983, and portends even greater levels of penetration in 1984. These market shares are far beyond the historic level of about 15%.

The 1984 Annual Report of the American Iron and Steel Institute reveals that more than 37% of the foreign steel which entered this country last year came from outside the European Community, Japan, and Canada. Last year, steel imports from Argentina increased almost 69% over 1982 levels, while imports from Brazil reached almost 108%, and imports from Mexico soared to nearly 477% of 1982 levels. Of course, much of the steel from developing countries comes from government owned or subsidized steel mills. Virtually none of these countries permits fair access to United States steel products.

In fact, Ambassador William Brock, in an interview in the Spring 1984 edition of The Brookings Review said "The world has no free trade of steel that I can find." Many other nations have barriers to the entry of steel products, and many engage in an active program of government subsidies. The United States alone maintains an open market approach to foreign steel, and we are feeling the results. Many in this Administration and many in the Congress are concerned about the impact of the Fair Trade in Steel Act. They are concerned -- very properly -- that imposition of a quota on a product as basic as steel will result in a new wave of world-wide protectionism. But I believe we have to open our eyes to the reality of the world market. The United

States has no obligation to carry the banner of free trade in steel when there is no one else in the parade. Every other nation is standing on the sidelines enjoying the show and having a good laugh at our expense.

Moreover, if every other nation provides special treatment for steel, we need to ask ourselves why this is the case. Clearly, many of these countries are using steel exports to build their foreign exchange and provide employment for their people. But steel producing nations everywhere recognize the importance of steel manufacturing capacity to their industrial base. Finished steel is crucial to most major sectors of any economy. It is vital to a nation's defense production base.

If so many other nations recognize the role steel plays in their economies, can the United States afford to ignore these facts? Steel is the fourth largest industry in the United States, and accounts for over 90% of the metals we use. It is irreplaceable in countless production uses. Our entire defense industry depends upon steel more than any other commodity.

The choice we now face is simple. Congress can stand by and watch the involuntary liquidation of the steel industry. The Reagan Administration has argued for Congressional inaction by urging that market forces be allowed to operate. A market distorted by subsidies and quotas has been in operation for some time, and the effects on America's steel industry have been devastating. For this reason, few steelworkers or steel company

executives are sanguine about the possibilities that the President will take the necessary actions when he receives the International Trade Commission's report and recommendation in the steel injury case.

Alternatively, we can challenge our domestic steel producers to meet the competition by providing a period of market certainty and adjustment. The imposition of a five-year quota as contemplated by the Fair Trade in Steel Act offers this kind of challenge. By requiring that steel company profits be used to retool and modernize, we guarantee that the industry will adjust and rationalize during this period. The added certainty and predictability that the Fair Trade in Steel Act would bring to the American market will help put steelworkers back on the job, and a healthier, more profitable steel industry will help keep them working.

I believe the choice is clear. I am pleased to be an original cosponsor of this important bill, and I encourage the support of my colleagues on this vital issue.

STATEMENT OF ERIC A. HANUSHEK
DEPUTY DIRECTOR
CONGRESSIONAL BUDGET OFFICE

Mr. Chairman, I am pleased to participate in these hearings on the Fair Trade in Steel Act of 1984, H.R. 5081. At this subcommittee's request, the Congressional Budget Office is now analyzing the forces shaping the U.S. steel industry's prospects, the economic effects of restraints on imports--particularly the quota proposed in H.R. 5081 and its companion bill in the Senate, S. 2380--and the policy options that might improve the steel industry's performance. As part of this effort, CBO has estimated the effect of a quota that would limit steel imports to the United States to 15 percent of the U.S. market, as H.R. 5081 proposes to do.

In my testimony this morning, I will concentrate on the following questions concerning the proposed quota:

- o What are the causes of the domestic steel industry's current difficulties?
- o How would a 15 percent import quota affect the domestic steel industry?
- o How would such a quota affect the rest of the economy--especially the overall price level, the gross national product (GNP), and employment?
- o Would the proposed quota lead to a long-term improvement in the U.S. steel industry's performance?

The United States' steel industry has benefited from some form of trade restraint for most of the past 16 years, although the proponents of restraints have argued that each of the trade programs pursued thus far has

been inadequate. H.R. 5081 has been designed with these arguments in mind.

H.R. 5081 IN THE CONTEXT OF CURRENT MARKET CONDITIONS

The U.S. steel market is only now beginning to recover from the very depressed conditions of 1982 and 1983--in many ways, the worst years for the American steel industry since the 1930s. Recent data, though, show that domestic shipments have risen 30 percent above the level of a year ago. Accordingly, the annual rate of steel shipments has risen from 68 million tons in 1983 to about 80 million tons. This current level of output, however, would still be well below the 100 million tons shipped in 1979, the last peak year in the U.S. steel market. The severity of the industry's current problems reflect not only a cyclical downturn but also long-term trends as well.

The recent weakness in the domestic steel market was exacerbated by record levels of import penetration--more than 22 percent in 1982 and 20 percent in 1983. Through the first four months of 1984, imports have averaged more than 25 percent of apparent U.S. consumption, ¹/ and these

1. Apparent consumption equals domestic shipments minus exports plus imports.

conditions have again raised the issue of trade restraints in the steel market. The industry has continued to file countervailing duty and dumping cases against foreign producers before the International Trade Commission (ITC). These cases have led to several commitments by foreign producers to restrain their shipments to the United States--most notably, the current arrangement limiting the European Community to slightly below 6 percent of U.S. consumption. On another front, the Bethlehem Steel Corporation and the United Steelworkers of America, using Section 201 of the 1974 Trade Act, have filed a petition before the ITC requesting that imports be restricted to 15 percent of the U.S. market. Last week, the ITC ruled that imports were a source of injury in five of nine product categories, accounting for more than 70 percent of total U.S. steel consumption. The ITC will propose remedies for those products, and the President must then decide whether or not those or other measures should be imposed for the products involved. Finally, both H.R. 5081 and S. 2380 would establish a similar 15 percent quota through legislative means.

Unlike the restraints preceding it, H.R. 5081 is highly product-specific, so that foreign producers could not respond by shifting toward higher-valued products. Furthermore, it would apply to all importers, so that restraint on the part of some countries could not be offset by increased imports from others. In addition, H.R. 5081 would also provide relief to the U.S. iron-mining industry, limiting imports of iron ore to 25 percent of

domestic supply, compared with an average of almost 30 percent from 1979 to 1982. The bill would also require that virtually all the cash flow generated by steel operations be reinvested in steel. Finally, although the bill seeks to reverse the U.S. steel industry's long decline, the quota is designed to last for five years only. The Secretary of Commerce could, however, extend it for an additional three years.

FACTORS CONTRIBUTING TO THE CURRENT PREDICAMENT

In the past quarter century, the U.S. steel industry--consisting mostly of the so-called "integrated firms"--has lost the strong competitive advantage it enjoyed through the 1950s. By and large, the competitive problems of traditional American steel companies reflect adverse cost trends and a shift in comparative advantage away from the United States. The primary causes of the United States' deteriorating performance are to be found not in "unfair" foreign competition, unfavorable tax treatment, or excessive government regulation but in three more fundamental trends.

First, as a mature economy, the United States has been consuming less steel per dollar of GNP than have economies that are at earlier stages of maturity. This divergence seems to be increasing. Between 1950 and 1981, for instance, the United States' steel consumption grew at an annual rate of 1 percent. In the same period, Japan's steel consumption grew by 10 percent

a year, although demand growth has now slowed in Japan as well. The U.S. industry has had difficulty in accepting the poor overall growth prospects that prevail in its home market and in compensating for the advantages that more rapid growth gives its foreign competitors.

A second factor is that significant technological developments have led to the emergence of the so-called "minimills." Such firms hardly existed 25 years ago, yet they now account for about 18 percent of domestic steel output. Being technologically advanced, minimills are highly efficient and can compete favorably against both domestic integrated producers and foreign suppliers. The minimills' success stems largely from their reliance on production methods that do not require the massive investments that the integrated firms claim they need for competitiveness. Though minimills now make a limited range of products, they have proven quite successful at expanding the range of markets in which they compete. This trend seems unlikely to diminish.

Finally, steel production and consumption have gradually shifted away from their traditional centers in Europe and North America to developing countries. Since demand prospects are relatively strong in such countries, their steel industries are likely to grow. Not surprisingly, low employment costs combined with advanced technology and in some cases a strong resource base makes countries such as Korea, Brazil, and Mexico increas-

ingly formidable competitors. Particularly in unsophisticated high-volume products (plates, for example), developing countries are commonly the low-cost suppliers not only to the U.S. market but to Europe and Japan as well.

No government policy is likely to reverse these trends. Thus no policy can spare the U.S. industry and its labor force from the need to adapt. The American steel industry is likely to be smaller in the future, reflecting the maturity of its market. The minimill sector is likely to be much larger, and integrated firms are likely to succeed by adopting many minimill characteristics. Finally, integrated firms are likely to move gradually toward technologically sophisticated products, avoiding direct competition with lower-cost foreign producers in commodity-grade products.

Policies toward the steel industry--including quota bills--are best judged in terms of whether they could ease this transition. If not, they are likely not only to impose a substantial burden on the rest of the economy but also to hamper the eventual adjustment of the steel sector.

PROJECTED EFFECTS OF H.R. 5081 ON THE STEEL MARKET

CBO has estimated the effects of H.R. 5081 on the domestic steel market. These results, displayed in Table 1, were generated by an econo-

TABLE 1. STEEL MARKET TRENDS, ACTUAL 1983 AND PROJECTED 1985 THROUGH 1989: BASE-CASE a/ COMPARED WITH H.R. 5081, 1983-1989

	1983	Projected				
	Actual	1985	1986	1987	1988	1989
IN DOLLARS PER TON <u>b/</u>						
Average Price						
Base case	484	564	607	648	679	706
H.R. 5081	484	613	657	697	736	773

IN MILLIONS OF TONS						
U.S. Demand						
Base case	83.04	106.37	109.05	112.19	114.32	114.59
H.R. 5081	83.04	103.97	106.64	109.77	111.54	111.47

IN MILLIONS OF TONS						
U.S. Shipments <u>c/</u>						
Base case	67.18	83.64	86.42	89.65	90.25	89.29
H.R. 5081	67.18	90.42	93.30	96.54	98.12	98.11

IN PERCENTS						
Import Share						
Base case	20.5	23.2	23.1	22.9	23.9	24.9
H.R. 5081	20.5	15.0	15.0	15.0	15.0	15.0

IN THOUSANDS OF STEEL INDUSTRY JOBS						
Steel-Industry Employment						
Base case	336	425	424	424	415	399
H.R. 5081	336	452	452	452	446	433

SOURCE: Congressional Budget Office.

- a. Projected using CBO economic projections, holding the real price of inputs constant.
- b. Weighted average of import and domestic price in nominal terms (that is, not adjusted for inflation).
- c. Includes projected exports.

metric model that describes the factors that influence prices, demand, imports, exports, and so on. The details of this model will be made available to the subcommittee. This morning, I will illustrate CBO's results by discussing the estimates for 1989, since these are quite comparable with the estimates for other years.

If a quota were imposed, import prices would tend to rise significantly, because import competition would be constrained. The limit on imports would also increase the demand for domestically produced steel, causing domestic prices to rise. As a result, average steel prices in the U.S. market by 1989 would be 9 percent higher with the quota than without it--a difference of \$67 per ton in that year. Import prices would rise more, in proportion, than would domestic prices, since they start from a much lower base. CBO assumes that the imposition of H.R. 5081's highly product-specific and country-specific quota would eliminate the differential that now distinguishes domestic and import prices, though one cannot test this assumption against the historical record.

These price increases would have a dampening effect on U.S. steel consumption. CBO estimates that apparent steel consumption in 1989 would be 111.5 million tons with the quota and 114.6 million tons without it--a difference of about 3 percent. By 1989, the quota would raise domestic output significantly, from 89 million tons without the quota to 98 million

tons with it. This reflects a reduction in the 1989 import share from the projected 25 percent without the quota to the quota's limit of 15 percent. According to CBO's estimates, this increase in domestic output would raise 1989 steel employment by 34,000 workers--9 percent above the no-quota level. With or without the quota, however, the number of future jobs provided by the steel industry is projected to decline owing to slow demand growth and productivity increases. Moreover, increased steel employment would probably be offset by decreased employment in other sectors of the economy.

H.R. 5081 AND THE U.S. ECONOMY AT LARGE

Predictably, the effects of the quota on the domestic steel industry would be positive--at least in terms of output and employment. The costs of the bill, however, would show up not in the steel market but in the rest of the economy, largely through higher prices and a resulting misallocation of resources. Nonetheless, the role of the steel industry in the overall U.S. economy is small enough that the quota would not greatly affect the general price level, the GNP, or total domestic employment. With each of these factors--though the aggregate net impact of the quota might well be injurious--the effect would be too small to capture definitively in a macroeconomic model.

The effects of H.R. 5081 would show up mainly in substantial income transfers and related efficiency losses. In 1989, the quota would probably cost U.S. consumers roughly \$7.7 billion. The exact amount of these costs--as well as its distribution among domestic steel producers, foreign producers, and uncaptured efficiency losses--would depend on the extent to which the quota raises import prices. On the assumption that import prices approximate domestic prices after the quota is in place, CBO estimates the 1989 effects of the quota as follows:

- o About \$4.5 billion would be transferred from consumers to the domestic steel-producing sector;
- o Roughly \$2.1 billion would be transferred from consumers to foreign steel producers--although the government could conceivably capture this amount by selling import licenses; and
- o About \$1.1 billion would represent an efficiency loss, since U.S. resources would have to be used to produce steel that could be purchased more cheaply from abroad.

Assuming that foreign producers captured the available revenues attributable to higher import prices, the loss to the U.S. economy would amount to roughly \$3.2 billion--the sum of the transfer to foreign producers and the efficiency loss. These estimates include the costs borne by the rest of the economy.

Although the quota's aggregate price effect would be small, its most noticeable negative effects would be on output and employment in those industries that consume significant quantities of steel--automotive production, machinery, construction, and the like. This danger would be particularly pronounced for industries that face international competition. Current steel prices in the U.S. are about 20 percent above the world price, so they already represent a competitive disadvantage for many U.S. industries. Any increase in steel prices engendered by the quota would exacerbate this problem. In time, such developments, might, in fact, encourage the industries affected to follow the steel industry's example in seeking protectionist solutions to their difficulties.

Finally, H.R. 5081 could invite retaliation, which is particularly important since the bill does not conform to the terms of the General Agreement on Tariffs and Trade (GATT). The GATT permits the imposition of trade restraints only under certain conditions, and these are incorporated in U.S. trade laws. Unlike H.R. 5081, the steel 201 case on which the ITC ruled last week is an example of a GATT-sanctioned procedure. Though the likelihood and magnitude of any retaliation are matters of conjecture, retaliation by trading partners would clearly imply further offsets to any benefits that accrue to the steel industry as a result of the proposed quota.

H.R. 5081 AND THE PROSPECTS FOR IMPROVED PERFORMANCE
IN THE AMERICAN STEEL INDUSTRY

The last issue I would like to address concerns the extent to which H.R. 5081 might contribute to improved performance in the U.S. steel industry. Two provisions are particularly relevant in this regard:

- o The restrictions on iron-ore imports, and
- o The reinvestment condition.

The inclusion of controls on iron-ore imports would work against H.R. 5081's underlying goal of improving the steel industry's cost competitiveness. Several foreign countries, such as Australia and Brazil, have reserves of iron ore that are far richer than U.S. reserves. As a result, continued reliance on U.S. ore is likely to increase the U.S. steel industry's competitive problems. Domestic ore costs range from 30 percent to 50 percent above those of the most efficient foreign producers, and Brazilian ore is now competitive with U.S. ores even in the Great Lakes region. Hence, H.R. 5081's iron ore provisions run counter to the bill's main objectives.

The consequences of the reinvestment provision are more difficult to estimate. In 1980, the American Iron and Steel Institute, the Steel Tripartite Committee, and the Office of Technology Assessment separately estimated that, to restore its competitiveness, the industry would require a

minimum annual investment of between \$5.5 billion and \$6.5 billion (in 1983 dollars, as are all of the investment figures I will cite). (The figures cited here explicitly disregard nonsteel investment and spending for capacity increases.) Since the publication of those estimates, capital expenditures in the steel industry, as tabulated by the iron and steel institute, have averaged only \$2.2 billion per year.

Why do the integrated firms have such difficulty achieving the level of investment they claim they need? The problem cannot be blamed on capital markets, since U.S. minimills have had little difficulty raising investment funds. Instead, the problem involves the integrated firms' choice of investments, many of which have been very capital intensive, dispersed among numerous plants, and lacking market focus. As a result, integrated firms' investments often earn low rates of return--the underlying reason for the persistence of alleged capital shortfalls.

CBO's analysis indicates that imposition of a H.R. 5081's import quota would provide the domestic steel industry with additional profits of roughly \$1.8 billion (after taxes), which according to the bill would have to be reinvested in steel operations. However, since the steel industry has already been reinvesting more than the net cash flow from its steel operations, future investment might not rise by the full amount of potential new profits.

Even if it did, it would still fall short of the industry's estimated capital requirements for modernization.

The relevant question, however, concerns the extent to which the new investment generated by the quota would represent a socially desirable use of capital resources. At present, various factors tend to encourage steel investment--including import restraints now in force, relaxed environmental regulations, and the ability to lease unused tax benefits to profitable firms. But the rates of return on steel investment have remained low, and capital has been invested more profitably elsewhere in the economy. By themselves, the import restraints would have at best a small effect on the industry's investment decisions, since the limits would be removed after five years, and since major investments in production facilities would take from two to four years to become operational.

The case for overriding the judgments of capital markets by mandating that each steel firm's cash flow be locked into steel capital has yet to be made. Only if investment strategies were grounded in the underlying trends that shape the steel market--which I sought to describe earlier in my testimony--would the modernization goals of H.R. 5081 be achievable. Without such a focus to new investment, the passage of H.R. 5081 offers little prospect of finally resolving the steel import problem. Indeed, pressure for a perpetual import quota would be a more likely outcome.

A SURVEY OF UNEMPLOYED STEELWORKERS
IN THE MON VALLEY

Ray M. Milke, Ph.D.

University of Pittsburgh, 1984

This study examined the perceptions of a group of unemployed steelworkers regarding the stress of unemployment. Specifically, the study investigated how unemployed steelworkers perceived the relationship between unemployment and self-reports of: (a) the presence of various physical ailments, (b) the presence of various psychological ailments, (c) the impact of unemployment on the family, (d) coping mechanisms and support systems utilized during the period of unemployment, and (e) options that might affect a change in vocational status.

A sample of 1,096 unemployed steelworkers from U.S.W.A. Local 1256 in Duquesne, Pennsylvania was surveyed by mail with the nine page Steelworker's Questionnaire. The total response rate was 42.9%. The results indicated that there was a significant difference in the perceptions of the general state of physical and psychological health before and after becoming unemployed, with health being reported as less satisfactory after unemployment. Personal depression was experienced by 75% of the respondents. Alcohol consumption increased for nearly one third. Many reported that they found it difficult to complete tasks which required concentration and energy, were frequently

irritable, and had diminished feelings of self-satisfaction since becoming unemployed. The family was indicated most frequently as being the major and preferred support system during unemployment, followed by the social networks of close friends and the local union. Various coping mechanisms as well as options that might affect personal/vocational rehabilitation were inventoried. It was recommended that a combined effort by labor, industry and government should be initiated to meet the varied needs of the unemployed.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude and appreciation to my wife, Barbara, and to my sons, Ray and Rick, for their love, support, encouragement, patience and understanding throughout the many years of my academic and professional development. Without them, this work might not have been completed.

A very special and sincere thanks is extended to Dr. Lynda Katz-Garris, Chairperson of my dissertation committee, who has most admirably served as research advisor, teacher, colleague, and friend. Her enthusiasm, guidance, patience, insight, sensitivity, and support coupled with her dedication to research excellence all contributed to make this study possible.

I wish to express my thanks to the other members of my dissertation committee for their cooperation, assistance, and guidance: Dr. Richard Desmond, Dr. Raymond Garris, Dr. Anne Golin, and to Dr. Milton Seligman, who also served as my academic advisor throughout my doctoral program.

I would like to express my gratitude to Mr. Michael Bilcsik, President of U.S.W.A. Local 1256 and Ms. Patti Leatherwood, Chairperson, St. Peter's Food Bank, for their interest and cooperation during the course of this study.

Special appreciation is extended to Mrs. Ginny Dunsavage whose extraordinary secretarial services and personal involvement throughout this research project were

truly invaluable.

Finally, I would like to dedicate this dissertation to the memory of three very special fathers:

Merle J. Milke

Frank M. Walker

Charles J. Ruffo

I would also like to dedicate this research to the unemployed steelworkers of the Mon Valley.

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION.....	1
II. REVIEW OF LITERATURE.....	6
A. Stress and Life Change Events.....	6
B. Physical and Psychological Reactions to Unemployment.....	12
C. Impact of Unemployment on the Family....	31
D. Mediators to the Stress of Unemployment.	37
E. Summary.....	43
III. STATEMENT OF THE PROBLEM.....	48
A. Purpose of the Study.....	49
B. Research Questions.....	50
C. Definition of Terms.....	53
IV. METHODS.....	55
A. Sample.....	55
B. Instrumentation.....	56
C. Procedures.....	63
V. RESULTS.....	64
VI. DISCUSSION.....	110
VII. IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSIONS.....	130

	<u>Page</u>
A. Implications.....	130
B. Recommendations.....	139
C. Conclusions.....	142
APPENDICES.....	149
Appendix A - Steelworker's Questionnaire...	150
Appendix B - Letter of Transmittal.....	160
Appendix C - Letter of Support from Union President.....	162
Appendix D - Follow-up Letter.....	164
REFERENCES.....	166

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1	Demographic Analysis of Respondents to the Steelworker's Questionnaire.....66
2	Perceptions of Selected Life Change Events as Major Stressful Problems.....69
3	Chi-Square Test of Significant Difference Between Perceptions of Physical Health Before and After Becoming Unemployed.....71
4	Chi-Square Test of Significant Difference Between the Perceptions of Physical Health Before and After Becoming Unemployed for the Subsample Who Returned to Work.....72
5	Reported Frequency of Selected Ailments.....74
6	Chi-Square Test of Significant Difference Between Perceptions of Psychological Health Before and After Becoming Unemployed.....76
7	Chi-Square Test of Significant Difference Between the Perceptions of Psychological Health Before and After Becoming Unemployed for the Subsample Who Returned to Work.....77
8	Reported Incidence of Depression.....80
9	Reported Degree of Depression.....81
10	Perceptions of Level of Support Received During Unemployment.....83
11	Reported Frequency of Selected Coping Mechanisms and Support Systems Utilized During Unemployment.....85
12	Chi-Square Test of Significant Difference for Age and Satisfaction with Occupying Time.....86

<u>Table</u>	<u>Page</u>
13	Chi-Square Test of Significant Difference for Age and Frequency of Depression.....91
14	Chi-Square Test of Significant Difference for Race and Frequency of Depression.....93
15	Chi-Square Test of Significant Difference for Age and Degree of Depression.....94
16	Chi-Square Test of Significant Difference for Age and Number of Arguments with Spouse.....96
17	Chi-Square Test of Significant Difference for Age and Amount of Alcohol Consumed.....97
18	Chi-Square Test of Significant Difference for Race and Amount of Alcohol Consumed.....99
19	Chi-Square Test of Significant Difference for Marital Status and Amount of Alcohol Consumed..100
20	Chi-Square Test of Significant Difference for Race and Social Contacts with Relatives.....102
21	Chi-Square Test of Significant Difference for Age and Level of Support.....104
22	Reactions of Respondents to Selected Reasons That Influenced Their Decision to Become a Steelworker.....105
23	Summary of Steelworkers' Responses of Their Needs and Suggestions as to How Their Personal/ Vocational Needs Could Best be Met.....107

CHAPTER I. INTRODUCTION

From the grass roots unemployed worker to the labor unions that represent individual members, to governmental bodies, local, state, and federal, the plight of the unemployed/displaced worker in contemporary America has been the focal point of much attention, concern, and discussion. According to recent estimates (U.S. Bureau of Labor Statistics, July, 1983), the nation's unemployment rate is 10.2%, while Pennsylvania's unemployment rate is slightly above the national average at 12.9%. Although unemployment has affected a wide cross section of the American labor force, the workers from the basic steel industry have been particularly hard hit with a higher than average unemployment rate. Pennsylvania's Allegheny County is exemplary of this fact. Within Allegheny County and along the banks of the Monongahela, Youghiogheny, Allegheny, and Ohio Rivers are some of the world's largest basic steel manufacturing industries. As a result of the state of the economy, unemployment within the entire County is at 14.2% (U.S. Bureau of Labor Statistics, July, 1983). This figure represents only a modest increase over both state and national levels. However, upon closer examination of the communities that provide the labor force for basic steel manufacturing the rate of unemployment is

still on the increase. For example, the community of McKeesport, Pennsylvania, which is along the banks of both the Youghiogheny and Monongahela Rivers and whose major industry is steel manufacturing, has an unemployment rate of 21.3% (Pennsylvania Economy, June, 1983). This unemployment rate is also representative of other communities along the rivers in the Mon Valley Area.

The high unemployment rates are presumably due to an economy which is in transition from basic manufacturing, such as basic steel production, to high technology industries, such as, robotics and computer technology. In addition, foreign-based manufacturing industries have become a major competitive force in the basic steel industry. The impact has had a devastating effect on the men and women who have lost their jobs, sources of income, and work-related identity, including status, prestige, and a primary source of self-esteem. This devastating effect was echoed by Dumont (1977) when he asserted, "For people in this society the loss of work represents not only financial insecurity but a bio-psychosocial assault of such magnitude that it must be counted as one of the great public health menaces of all time" (p. 9).

During recent months, media coverage has featured shallow profiles, usually in cameo, of selected unemployed workers. Most expositions highlight economic issues, such as unemployment benefits and extensions in time of coverage,

foreign dumping, cost of technological change, unemployment debt liabilities, loans, mortgage foreclosures, and bankruptcies. Conferences and conventions are and have been convened with the expressed intention of doing something about skyrocketing unemployment. Again, recommendations highlight primarily economic issues which involve reducing foreign dumping, creating new job markets, and retraining workers for the new "high-tech" era. It has been generally agreed that if these economic trends continue, a vast number of basic steelworkers will not return to their old jobs. The probability of job recall has markedly diminished due to the fact that workers' jobs are being phased out. They may have to find new areas of employment.

Much effort has been devoted towards an attempt to clearly understand such concepts as national economic policies, governmental regulation and deregulation, inflationary spirals and new technological industries. What seems to be equally important, however, was an effort devoted to a clearer understanding of the concepts of stress and life change events, such as the experience of job loss, and how they personally affect the unemployed worker and his/her family. Studies of the stress of unemployment reviewed by Hagen (1983) indicated that job loss is threatening to many people and seriously disrupting to others. He concluded that the evidence showed that job loss caused measurable (quantifiable) psychological and physiological changes. However, although excellent personal

accounts of the effect that unemployment brought to some individuals and families were found in the literature by Borrero (1980), he noted that the unemployment literature was not always quantified. He stated that "it would seem imperative that we obtain quantifiable data as to the impact of unemployment. Without such data our knowledge of the effects of unemployment will remain incomplete and impressionistic" (Borrero, 1980, p. 917).

The object of this study was to survey and quantify the perceptions of a group of unemployed steelworkers on selected variables including the life change event of being unemployed. Investigated in this survey were the following areas of concern: (a) the presence of various physical ailments experienced by unemployed steelworkers, (b) the presence of various psychological ailments experienced by unemployed steelworkers, (c) impact of unemployment on the family, (d) coping mechanisms and support systems utilized by unemployed steelworkers during the period of their unemployment, and (e) reactions of unemployed steelworkers to selected options that might affect a change in their vocational status.

It was hoped that the information obtained from this survey would help serve as a basis for discussion for all who are interested in obtaining a broader awareness and understanding of the personal plight of the unemployed steelworker. As Tabor (1982) has stated, "Since health professionals, union officials, and especially management

personnel (and government officials) may be in positions to help individuals cope with the problem of job loss, it can be important for them to understand its effects on workers and help them find ways in which its negative effects can be minimized" (p. 21).

CHAPTER II. REVIEW OF LITERATURE

A. Stress and Life Change Events

According to Appelbaum (1981), "Psychological and physical problems caused by stress have become the number one health problem within the last ten years. Usual medical estimates indicate that approximately 75% of all diseases have their origin in stress" (p. 80). Appelbaum noted further that stress-induced disorders have replaced infectious diseases as the most common problem of the postindustrial period. Stress is a global term used to describe the body's reactions to environmental conditions with which one cannot easily cope (Lefrancois, 1980). Pearlin, Lieberman, Menaghan, and Mullan (1981) indicated that "there is probably a general agreement that stress refers to a response of the organism to conditions that, either consciously or unconsciously, are experienced as noxious" (p. 341). Selye (1956, 1976, 1981, 1982) defined stress as the nonspecific response of the body to any demand. On the other hand, "stressors are those situations in the environment that present challenges, or that are disturbing and unsettling, and lead to stress" (Lefrancois, 1980, p. 508). Antonovsky (1979) viewed stressors as demands by the individual's internal or external environment that upsets homostasis, while Lazarus and Cohen (1977)

viewed stressors as demands that tax or exceed the resources of the individual's system. The perception of the stressor and the reaction of stress as essentially reflective of the rate of all wear and tear caused by life events was promoted by Selye (1976). He noted that the same stress that makes one person ill can be invigorating for another and stated that, "Life is largely a process of adaptation to circumstances in which we exist" (Selye, 1976, p. xv). In his theory of stress Selye (1956, 1974, 1976, 1980, 1982) proposed that there is a general pattern of reaction to stress which he termed the General Adaptation Syndrome (G.A.S.). The G.A.S. is made up of three stages:

1. Alarm Reaction. The organism's reaction when it is suddenly exposed to diverse stimuli to which it is not adapted. The reaction has two phases:
 - a. Shock phase. The initial and immediate reaction to the noxious agent. Various signs of injury-such as tachycardia, loss of muscle tone, decreased temperature, and decreased blood pressure-are typical symptoms.
 - b. Countershock phase. A rebound reaction marked by the mobilization of defensive phase, during which the adrenal cortex is enlarged and secretion of corticoid hormones is increased. (Most of the acute stress diseases correspond to these two phases of the alarm reaction).
2. Stage of Resistance. The organism's full adaptation

to the stressor and the consequent improvement or disappearance of symptoms. At this stage, however, there is a concurrent decrease in resistance to most other stimuli.

3. Stage of Exhaustion. Since adaptability is finite, exhaustion inexorably follows if the stressor is sufficiently severe and prolonged. Symptoms reappear, and, if stress continues unabated, death ensues. (Selye, 1980, p. 129)

Selye related the stages of the G.A.S. as being analogous to the stages of man's life, i.e., childhood, adulthood, and senility. Childhood is characterized by low resistance and marked responses to any kind of stimulation. Adulthood is characterized by adaptation to most commonly encountered life events with increased resistance. Finally, senility is characterized by irreversible loss of adaptability with subsequent exhaustion and death. He observed further, "The stressor effects depend not so much upon what we do or what happens to us but on the way we take it" (Selye, 1976, p. 370). Stress is omnipresent in human existence (Antonovsky, 1979). However, it is not something to be avoided (Selye, 1981); taken to the extreme, "complete freedom from stress is death" (Selye, 1981, p. 129).

Nevertheless, it has long been recognized that there is a relationship between major stressful events in an individual's life and ill health (Zung and Cavenar, 1980).

There appears to be a broad cultural if not universal consensus that certain life experiences are perceived as variably stressful (Antonovsky, 1979; Holmes and Rahe, 1967). There is, however, no unanimity of opinion among researchers as to which life experiences are most representative, meaningful, and/or stressful in any individual's life (Appelbaum, 1981; Dohrenwend, Krasnoff and Askenasy, 1978).

In an attempt to identify the most stressful life change events, which are defined as discrete happenings requiring some degree of readjustment in one's life circumstances, Holmes and Rahe (1967) developed a 43 item life event rating scale. Item content ranged in topics from death of a spouse and mortgage over \$10,000 to minor violations in the law. Each item was subsequently ranked from 1 to 43 and assigned a mean weighted value called a Life Change Unit. The results revealed that the death of a spouse, divorce, and marital separation ranked one, two, and three, respectively, for severity of stress with mean Life Change Units of 100 (maximum score), 73, and 65 respectively. Being fired from one's job ranked eighth on the list with a mean Life Change Unit of 47. This could be interpreted to mean that losing one's job by being fired was considered less than half as stressful as the death of a spouse. Subsequent research with this scale found that it was possible to predict with statistically significant accuracy who would become ill and who

would stay healthy during the following year (Rahe, 1972).

Holmes (1980) noted:

Of those people with over 300 Life Change Units for the past year, almost 80% get sick in the near future; with 150 to 299 Life Change Units, about 50% get sick in the near future; and with less than 150 Life Change Units, only about 30% get sick in the near future.

(p. 123)

Fairbank and Hough (1981) noted the conclusions of several authors who researched this rating scale with various culture groups: Masuda and Holmes (1967) with the Japanese; Komaroff, Masuda, and Holmes (1968) with Mexican Americans and Blacks; and Rahe, Lundberg, Bennet, and Theorell (1971) with Swedes; all were all essentially similar and concordant. However, Fairbank and Hough scrutinized these findings and found methodological problems, especially with regard to the samples typically used in these research studies. The same criticism can be attributed to the original sample in the Holmes and Rahe (1967) study, whereby a "sample of convenience" composed of 394 subjects was used. The representativeness of the sample is in question and therefore generalizability compromised.

In contrast, Kiev and Kohn (1979) used samples of over 1,000 middle management and 1,000 top management personnel and ranked the top 12 stressors experienced by these groups. Their findings indicated that financial

worries, problems with children, and physical injury/illness/discomfort ranked in the top three areas of severity of stress for both groups. Marital separation, divorce, and death of a spouse ranked in the tenth, eleventh, and twelfth position, respectively, for both groups and were at the bottom of the scale. Ironically, these categories are in the exact reverse order of the results of the Holmes and Rahe (1967) scale which ranked death of a spouse, divorce, and marital separation at the top of the scale in first, second, and third position, respectively. Justification for these seemingly diametrically opposite findings would have to include an hypothesis that different individuals and/or groups of individuals perceive stress and stressors in a myriad of ways. Their personal hierarchy of stress might, therefore, be contingent upon their subjective perception of both the nature of the stressor and the potential of the stressor to inflict harm. This is an important concept which seems to be consistent with the viewpoint of Pearlin, et al. (1981) that "recognition that events of different (perceived) quality may produce different effects represents an important development in life-events research" (p. 339).

Dohrenwend, et al. (1978) compiled a list of 102 specific Life Change Events grouped under five general areas: personal and social, home and family, financial, health, and work. It is known that these events do create stress, but there is no unanimity among researchers as to

which ones are the most representative, meaningful, or stressful in a person's life. Although there have been other attempts at categorizing life change events, a general consensus regarding the absolute stress-related value of each event is lacking in the professional literature. Despite this lack of consensus, however, Perkins (1982) emphasized that there still exists a significant relationship between the experience of stress as assessed by life change events and a host of adverse physical and psychological conditions. Finally, Appelbaum (1981) concluded that "the recent life change events of individuals (do) appear to be an important element in explaining the onset of physical and emotional (psychological) illness" (p. 187).

B. Physical and Psychological Reactions to Unemployment Unemployment as a Life Event

"Perhaps no single activity defines adulthood more specifically than work. To a large extent, it influences how and where the person lives; it provides a title, a description, and an environment that reinforce an identity intrapsychically and interpersonally" (Group for the Advancement of Psychiatry, 1982, p. 1). U.S. Senator Donald W. Riegle, Jr. (1982) added to these dimensions by asserting that "work is a fundamental aspect of the American experience. It provides our citizens with a reason and means by which to live" (p. 1114). Tausky and Piedmont (1967) asserted that work provides a means to obtain such

physical necessities of life as food, clothing, and shelter. Further, work fits the worker to his/her community and furnishes a critical means for maintaining role patterns within the family. Work also provides a means to obtain status and prestige; it is a primary source of self-esteem (Manuso, 1977). The life event of being out of work is, for many people, a tremendously stressful experience which has the potential to efface these tenets or, at least, to put them in jeopardy. The stress of unemployment may constitute a serious problem for the individual, that is, measurable individual physical and psychological change. And, by way of a ripple effect, such stress may have a profound impact on family, friends and community (Figueria-McDonough, 1978; Group for the Advancement of Psychiatry, 1982; Hagen, 1983; Liem & Rayman, 1982; Riegle, 1982).

A review of literature by Borrero (1980) indicated that at least 80% of the publications on the physical and psychological effects of unemployment were written during or shortly after the Great Depression of the 1930's, and since that period interest in unemployment has been rather minimal and sporadic. Although research on unemployment and related concerns has been reported for decades since the Great Depression, according to Liem and Rayman (1982) "the line of study initiated on a large scale by Harvey Brenner (1973, 1976) has clearly been the catalyst for centering attention on this area of work" (p. 1116).

Brenner's research focused on the relationship between unemployment and stress and his findings showed a statistically significant relationship between unemployment and various indicators of illness and social stress. For example, Brenner found that there was an inverse relationship between hospital first admission and economic prosperity. During economic decline with elevated unemployment, there was a statistically significant increase in: suicide, homicide, deaths from cirrhosis of the liver, cardiovascular, and alcohol-related diseases, admission to state prisons, first admission to psychiatric hospitals, and rate of infant mortality. Higher unemployment rates were found to be generally associated with higher death rates. Brenner (1973, 1979) found that when unemployment rose 1.4% during 1970, suicides increased 5.7%, homicides increased 8.0%, state mental hospital admissions increased 4.7%, state prison admissions increased 5.6%, while cirrhosis of the liver mortality, cardiovascular-renal disease mortality, and total mortality each increased 2.7%. There was an observed "lag phenomena" (time lag) for economic changes and health changes. For homicide and suicide the rates rise within one year of increased unemployment, while for cardiovascular diseases the lag period was two to three years. Similar findings have been observed in England, Wales, and Sweden (Brenner, 1976).

Unemployment has been found to be a consistently good predictor of life events and has a strikingly potent

impact on society (Brenner, 1976; Catalano & Dooley, 1977; Monahan & Vaux, 1980). Brenner (1977) elaborated on this concept when he stated:

Unemployment creates stressful situations for laid-off workers and their families as well. And stress has long been recognized as a major contributor to a variety of physical and mental illnesses. Yet, no systematic evaluation of this straight forward relationship-the link between job loss and stress-related illness-has occurred covering a long period of time or the entire country. (p. 2)

Although Brenner's work has been widely lauded and publicized, not everyone has been in agreement with his findings. For example, Kahn (1979) opposed Brenner's thesis that economic decrements caused increased mental illness and stated that "for one thing, mental illness is not the modal response to poverty, sudden or prolonged. Most people do not become mentally ill when the economy dips. Economic downturns may be considered causal, but they cannot be considered sufficient causes" (p. 226). He further noted that "work is neither a sovereign remedy for mental illness nor a general preventative against it" (Kahn, 1979, p. 232). Dooley and Catalano (1979) noted that the magnitude of the effects on mental health due specifically to economic changes may not be sufficiently large enough to warrant major economic policy changes, such as those promoted by Brenner. In a survey of life.

events and unemployment in Kansas City, Dooley and Catalano (1979) found that "the possibility that job-related environmental economic change measures are associated only or primarily with job-related life events . . . did not receive support" (p. 384). In a prospective study of the effects of a plant closing on a worker's physical and psychological health (Kasl, 1979; Kasl, 1982; Kasl, & Cobb, 1979; and Kasl, Gore, & Cobb, 1975), it was found that although many different variables were measured, "on diverse indicators of mental health status (for example, depression, anxiety-tension, psychophysiological symptoms) no significant differences attributable to employment status could be detected" (Kasl, 1982, p. 640).

Methodological and design limitations of Brenner's research were also noted by various authors. Dooley and Catalano (1979) as well as Liem and Liem (1978) attacked the aggregate nature of Brenner's investigation as being in risk of an ecological fallacy. Liem and Liem (1978) addressed the concept of ecological fallacy when they wrote that "relations among variables at the aggregate level do not necessarily replicate with units of analysis smaller than the aggregate" (p. 145). Brenner's aggregate data was obtained by reviewing approximately 750,000 admissions to the New York State mental hospital system over a 127 year period from 1840 to 1967. This aggregate data obtained at the social-systems level, according to Liem and Liem (1978) "are not necessarily related

isomorphically to dynamics at the individual level" (p. 145). Brenner's work was additionally criticized for indexing the incidence of psychological disorders and drawing epidemiological inferences from the use of hospital first-admission statistics (Liem & Liem, 1978; Marshall & Funch, 1979). Marshall and Funch (1979) examined Brenner's attempt to adjust secular trends in his data, i.e., trends or factors that might have influenced the independent (economic) or dependent (hospital admissions) variables, and found that "trend adjustment may be criticized in terms of the resultant ambiguity of the detrended data . . . the analysis of detrended data may be incomplete or misleading" (p. 283). Further, Dooley and Catalano (1979) observed that Brenner used the year as his unit of analysis and noted that this time frame was probably "too long to capture the psychological processes occurring in emotional crisis" (p. 382).

Finally, not everyone faced with the threat of job loss or economic stress due to unemployment reacts in ways delineated by Brenner. Some studies have reported positive responses to job loss, whereby employees who were underemployed found better positions and opportunity to escape from undesirable situations (Little, 1976; National Institute for Occupational Safety and Health, 1977). Liem and Rayman (1982) asserted that collective, diverse literature representing behavioral, medical and social sciences, do not portray job loss as a source of dramatic

and overwhelming stress for everyone.

It becomes clear that Brenner's research has certainly been a catalyst for discussion of both convergent and divergent points of view. Sifting through the pros and cons of professional criticism, Hagen (1983) raised the question, "Do Brenner's studies indicate, as he claims, that of all forms of social stress, the one with the greatest impact on mental disturbances is change in the economy and, by implication, change in the economic situation of individuals?" (p. 434). Hagen answered his own question by citing a National Institute of Mental Health conference in 1979 convened to review the evidence. "One participant later reported that 'there was little doubt in anyone's mind that Brenner's correlations were correct'" (Hagen, 1983, p. 439). Liem and Liem (1978) reported that Brenner's work provided major empirical support for their hypothesis that economically related stress plays a significant role in the relationship between socio-environmental conditions and physical and psychological impairment. Liem and Rayman (1982) even qualified their review of the diverse literature previously cited: "However, there is good evidence that losing one's job can increase health risks, exacerbate chronic and latent disorders, alter usual patterns of health - seeking behavior, and exact numerous other social and interpersonal costs" (p. 1116).

Finally, Dumont (1977) described unemployment as a health crisis of tragic proportions. He, probably best

of all, condensed and echoed the concern of many when he stated, "For people in this Society the loss of work represents not only financial insecurity but a biopsychosocial assault of such magnitude that it must be counted as one of the great public health menaces of all times" (p. 9). There does seem to be a general consensus within the literature that unemployment is associated with elevated levels of stress which have the potential to precipitate varied physical and psychological reactions. This consensual viewpoint is, however, qualified by opponents whose findings differ, indicating that reactions to job loss are, at best, selective, interactive, and by no means homogeneous (Hepworth, 1980; Kasl & Cobb, 1982).

Stages of Reaction to Unemployment

Despite the warning by Hepworth (1980) that "it should not be assumed that every unemployed person passes through a similar pattern of subjective experiences" (p. 145), several authors have observed and categorized various affective and cognitive responses assumed to be precipitated by the stress of unemployment. Selye's (1956, 1974, 1976, 1981) stages of reaction to stress and the concept of the General Adaptation Syndrome have already been discussed. However, as early as 1935, Zawadski and Lazarsfeld (1935) identified six stages or moods that were experienced by unemployed individuals:

- Stage 1. Feeling of injury, fears, distrust, revenge, hatred, indignation and fury.

- Stage 2. Numbness and apathy.
- Stage 3. Calmness, steadiness, resumption of activity.
- Stage 4. Hope becomes weaker and with sense of futility.
- Stage 5. With income and resources depleted a feeling of hopelessness with attacks of fear possibly being expressed through attempts at suicide.
- Stage 6. Sober acquiescence, apathy and passivity, with alternations between hope and hopelessness.

Eisenberg and Lazarsfeld (1935) outlined a similar four-stage reaction sequence. Grief has been viewed as one of the manifold reactions engendered by unemployment. The Group for the Advancement of Psychiatry (1982) supported this viewpoint when they wrote, "Certainly the ultimate occupational stressor - the loss of one's job - can evoke a crushing grief reaction" (p. 26). Parkes (1964) developed a three stage reaction process for grief which included: (1) feeling of numbness lasting for a few hours to several days; (2) yearning and protest associated with loss of appetite, insomnia, anger and physiological responses; and (3) apathy and aimlessness, especially directed toward the future. Jones (1979) made the point that "it is also important to realize that grief over the loss of career may well be more acute than over the death of a loved one" (p. 197). It has also been noted by Borrero (1980) that

various stages of unemployment parallel psychological reactions to loss, grief, and separations and are similar to the reactions of dying patients. The well-known work of Kubler-Ross (1969) delineated five stages or phases that individuals go through when experiencing death or dying: denial, anger, bargaining, depression, and acceptance. If the observations by Borrero (1980) and Jones (1979) are correct, then a basic understanding and sensitivity to the thrust of Kubler-Ross' work might be applicable to an understanding of the plight of the unemployed worker with all the sensitivity that is inherently required.

The stages or phases of reactions to unemployment do not occur in isolation. It has been observed by Brenner (1973, 1977) that hospitalizations significantly increased as a result of stress due to unemployment. Riegle (1982) observed that there was a 30% increase in psychological counseling for children at Children's Hospital of Michigan due to unemployment of nearly the same percentage. While studying the incidence of utilization of public mental facilities, both inpatient and outpatient, as a function of the state of the economy, Barling and Handal (1980) found that inpatient first hospitalizations were significantly related to economic downturn. But, curiously, when the economy turned for the worse, there was a significant decrease in outpatient hospital services. Oliver and Pomictor's (1981) work replicated Barling and Handal's (1980) and Brenner's (1973) finding which correlated

unemployment and first hospital admission. An analysis of data for hospital-based ambulatory care utilization by Cohen, Ginsberg, and Vladeck (1978) suggested that increases in unemployment do not cause increases in volume (utilization) for these hospital services. Several reasons were offered for this finding, including continued (extended) medical benefits that would cover private health care providers, delayed billing procedures, and sliding fee schedules.

Stress-related Physical Reactions

If one accepts Appelbaum's (1981) estimate that 75% of all diseases have their origins in stress, then one might speculate that 75% of all the physical and psychological reactions to unemployment are vested in the stress of losing one's job. This, obviously, would need to be demonstrated. However, the literature does focus on a variety of symptomatology experienced presumably as a result of being unemployed. From a physical standpoint stress can produce, among other things, an increase in blood pressure, increase in pulse rate, increased blood sugar production, increased cholesterol and fatty acids in the blood, increased gastric acid, increased rate of metabolism, etc. (Selye, 1956, 1974, 1977, 1981, 1982). Brenner (1973, 1977) demonstrated an increase in mortality due to cirrhosis of the liver as well as an increased mortality in cardiovascular-renal disease which was correlated with the stress of unemployment.

Eriksen, Rognum, and Jervell (1979) found that unemployment may affect blood pressure, while Bunn (1979) as well as Jobling (1979) observed a correlation between the incidence of ischemic heart disease mortality and unemployment. In his review of literature and clinical practice, Dumont (1977) discovered that job loss exerts a strong influence on coronary artery disease, hypertension, peptic ulcers, bronchial asthma, rheumatoid arthritis, ulcerative colitis, neurodermatitis, and infectious diseases. Liem and Rayman (1982) also observed that an overwhelming majority of respondents in their study who had experienced job loss sometime during a 10-year span related periods of serious physical (as well as emotional) strain, including high blood pressure, alcoholism, insomnia, and neurasthenia.

In a series of reports on a prospective study related to the effects of plant closing and job loss Cobb (1974); Cobb and Kasl (1977); Kasl (1979); Kasl and Cobb (1979, 1982); and Kasl, et al. (1975) among other things, found that during the period of anticipation of job loss physiological changes that would suggest coronary disease took place, as did changes in uric acid, norepinephrine, serum creatinine, serum cholesterol, blood sugar, pepsinogen and uric acid. Such changes suggested the potential increase in risk of diabetes, peptic ulcers, gout, arthritis, and hypertension. However, a further analysis of their data suggested "that the men did not maintain a state of arousal, distress, and sense of work

role deprivation as long as the unemployment experiences lasted; rather, they showed evidence of adaptation, so that following an initial period of unemployment those remaining unemployed could not be distinguished from those finding a new job" (Kasl & Cobb, 1982, p. 450). It seems that after an initial reaction to losing one's job, unemployed individuals returned to rather normal levels of functioning. As Kasl (1982) described, "In short, it appeared that we could demonstrate acute effects of the factory closure and job loss experience but not prolonged or chronic effects" (p. 641).

Kasl and Cobb (1979) noted that for rather diverse indicators of health, including psychophysiological symptoms, no significant differences which were attributable to unemployment status could be detected. Kasl (1982) reaffirmed this point when he asserted that a correlational analysis of the data failed to establish a link that would be suggestive of even an indirect impact of the job loss experience and (mental) health. These series of findings are, however, in marked contrast to other works (Brenner, 1973, 1976, 1977, 1979; Dumont, 1977; Figueira-McDonough, 1978; Group for the Advancement of Psychiatry, 1982; Liem & Rayman, 1982; etc.). As Liem and Rayman (1982) put it, "The most striking finding from (their) research relative to those reported by Kasl and Cobb is the clear indication that emotional strain (stress) was a direct consequence of work loss . . ." (p. 1119).

Stress-related Psychological Reactions

Responses to the loss of one's job are not limited to physical reactions such as the one's previously reviewed. Psychological reactions frequently go hand-in-hand with physical ones. According to Borrero (1980), "By far, the most serious emotional stress experienced by the unemployed is depression" (p. 923). He noted that depression due to losing one's job takes on different forms for different individuals and can manifest itself in feelings of discouragement and hopelessness, diminished morale, and a lowering of self-confidence. Additionally, depression can be characterized by brooding, despondency, apathy, irritability and restlessness. Although various researchers have reported a greater incidence in depression associated with unemployment (Figueira-McDonough, 1978; Manasco, 1977; Oliver & Pomicter, 1981), the findings of Kasl (1982), Kasl and Cobb (1982), and Kasl, et al. (1975) indicated that the factor of depression showed extremely small fluctuations in their research. And, as one of the indicators of mental health status, the factor of depression showed no significant change over time which could be attributed to the status of unemployment.

Investigators have examined the link between unemployment and the incidence of suicide, which can be an extreme expression of profound depression and, according to Borrero (1980), is another manifestation of depressive behavior. Brenner (1977) reported that during the period

1940 through 1973, for every 1% rise in unemployment, suicides increased 4.1%. Additionally, he maintained that during 1970 a 1.4% rise in unemployment increased the rate of suicide by 5.7%. Boor (1980) studied the relationship between suicide and unemployment rates in eight countries: Canada, France, Germany, Japan, Sweden, United States, Italy, and Great Britain covering a period between 1962 and 1976. His results indicated that relatively high unemployment rates were, indeed, associated with relatively high suicide rates. Bunn (1979) observed similar trends in Australia; while in the United States, Vigderhous and Fishman (1978) found unemployment to be the most stable predictor of short and long-term variations in suicide rates over a period of time ranging from 1920 through 1969. Dumont (1977) related that during the 1974 massive layoffs in Detroit's automobile industry, the suicide prevention squad documented a doubling of the suicide rate over the previous year. Similarly, Rushing (1968) found that 50% of New Orleans suicides were not working at full-time jobs and, further, that while about one-third of Philadelphia suicides had regular employment; one-fourth were not employed at all. These studies collectively reflect a striking and consistent correlation over time between unemployment and the incidence of suicide.

Some theorists feel that depression is a form of displaced aggression and that suicide is an extreme expression of this aggression turned on one's self

(Borrero, 1980; Morris, 1982). Not everyone reacts to unemployment by turning their aggression inwardly, however. To the contrary, external expression of aggression has been documented in the form of increased crime and violence (Brenner, 1973; Borrero, 1980; Shaw, 1976). For example, Brenner (1973, 1977) pointed out that a 1% rise in unemployment was concurrent with a 5.7% increase in homicides spanning a period from 1940 through 1973. He also reported that while there was a 1.4% rise in unemployment during 1970, homicides had risen by 8.0% for that same year.

Guttentag (1968) studied the relationship between juvenile crime and male unemployment but his results lead to contradictory conclusions. Juvenile crime was observed to both increase and decrease over various locations and times. The author related the increased crime to high shifts in population mobility and social change in seeking work. Whereas, low crime was, in part, attributed to stable communities and social norms. The Group for the Advancement of Psychiatry (1982) noted research showing that black youth commit the largest number of crimes against person and property. And, that among black males, there was a high positive relationship among unemployment, criminal behavior, and high death rate. This apparent correlation may be reflective of how unemployment could affect minority and/or economically disadvantaged groups, in general, and Black Americans, in particular. As Bowman, Jackson, Hatchett, and Gurin (1982) have observed, "while

Blacks comprise roughly 10 percent of the population, they constitute 20 percent of the unemployed and nearly 40 percent of the discouraged who are no longer looking for employment" (p. 85). They went on to say that Blacks are particularly vulnerable to discouragement which leads to, among other things, psychological and psychosomatic distress.

Feldman (1973) concluded that a considerable difference existed between race and economic groups in their perceptions and reactions to unemployment. This conclusion had been previously supported by the work of Hollingshead and Redlich (1958) and Rushing (1968) and has more recently been supported by the work of Dohrenwend (1973), Dooley and Catalano (1979) and Liem and Liem (1978, 1981). Regardless of race and/or economic deprivation, it should be known that the incidence of violence and crime associated with unemployment has infiltrated the family domain. This fact is of special interest, and, therefore, is more fully discussed in a subsequent section of this review.

Psychological reactions to unemployment are certainly varied, and a contributing factor to these reactions is what individuals do with their time. The best single predictor of the status of mental health was found to be whether or not an individual felt that his/her time was productively occupied (Hepworth, 1980). A similar observation was promoted by Shaw (1976) when he

addressed the fact that one of the major problems that faced unemployed workers was an uncomfortable sense of timelessness and the inherent feelings of frustration associated with the "new freedom" of unoccupied, rather meaningless time.

As the length of time goes on from losing one's job and frustration increases, unemployed workers have, historically, tended to blame themselves for being out of work (Briar, 1980; Dumont, 1977; Kasl, 1982; Liem & Liem, 1977; Tabor, 1982). They also have been observed to have a fundamental alteration or erosion of self-esteem (Catalano & Dooley, 1977; Cohn, 1978; Dumont, 1977; Group for the Advancement of Psychiatry, 1982; Lawlis, 1971; Tausky & Piedmont, 1967). Kasl (1974) concluded from his review of research on unemployment and mental health that the loss of self-esteem was the most consistently reported finding resulting from the combined effect of self-blame for unemployment and financial insecurity. Braginsky and Braginsky (1975) compared a group of jobless men with a control group and observed a difference between the two groups, specifically, a dramatic loss of self-esteem in the jobless group. Even after reemployment, the jobless group never attained the level of self-esteem of the control group whose members had never been laid off from their jobs. The results of this study differed markedly from that of Liem and Rayman (1982) who found that when unemployed workers returned to their jobs they were indistinguishable from other workers

who were continuously employed. A similar, though not exact, finding was observed by Kasl (1982). The results of the work by Hartley (1980), too, have suggested that loss of self-esteem might be less affected by unemployment than had previously been thought. Hartley's work, however, focused singularly on the impact of unemployment on the self-esteem of managerial personnel, and the findings, therefore, are limited in terms of generalizability.

Lastly, the question remains whether the magnitude of stress-related physical and psychological reactions to unemployment are in some way correlated with various age groups. Unfortunately, the literature was not clear on this issue, and, in fact, conflicting results were present. Brenner (1977) hypothesized that the middle-aged group would be especially sensitive to unemployment. This view was supported by Dumont (1977) when he wrote:

Job loss appears to be most devastating to the middle-aged man. Even in the absence of a crisis (unemployment) the so-called 'prime of life' is frequently a time of desperation and despair. The fear of waning sexual powers, anticipation of old age, concerns about health, departure of children and the cresting of life goals often combine in a characteristic mid-life depression. (p. 9)

Middle-aged heads of households with young dependents, were found to experience more intense stress reactions than younger single workers according to Liem and Rayman

(1982). As has been previously discussed, one of the strongest personal reactions to the stress of unemployment is suicide. The correlation between increased suicide and rise in unemployment has already been established by Boor (1980) and Brenner (1973, 1977). By examining the differential rates of suicide among various age groups, it would seem that one source of extreme age-related impact could be indexed. Contrary to previous assumptions, Boor (1980), who found that annual variations in suicide rates between 1962 and 1976 were concomitant with annual variations in unemployment, reported that "relatively young persons showed generally increasing suicide rates during this period whereas older persons showed relatively stable or decreasing suicide rates" (p. 1099). Contrary to Brenner's hypothesis, Dooley and Catalano (1979) found that the middle-aged group was not especially sensitive to unemployment. Further, their results demonstrated that the young group was no more sensitive to unemployment than either of two older-aged groups in their study. These results were supported in a later study by Briar, Fielder, Sheean, and Kamps (1980) who found that the impact on young, middle-aged, and older workers was, in many respects, similar. Information pertaining to the question of the relative impact of unemployment on various age groups was inconclusive.

C. Impact of Unemployment on the Family

In our review of literature, thus far, the focus

has been primarily on the phenomenon of stress as it pertains to life change events, in particular, unemployment, and the subsequent physical and psychological reactions experienced by individuals who are out of work. However, few, if any, of these reactions occur solely in isolation, that is, without having an impact upon other individuals who are either in physical or emotional proximity to the unemployed worker. Although unemployment is an individual stress-related variable contributing to a person's reaction(s), when the individual is a family's breadwinner, it, then, becomes a family-level stress-related variable (Moen, 1980). It is of such magnitude that the former Secretary of the Department of Health, Education, and Welfare, Joseph Califano, in a campaign position paper, called unemployment the single greatest threat facing families (Moen, 1979). Burgess (1947) outlined three types of events (crises) that could lead to family disruption: (a) a change in status; (b) conflict among members in their conceptions of their roles; and (c) loss of family members through divorce, separation, desertion, or death. Burgess, however, did not feel that unemployment itself, was a crisis situation. Following Burgess' outline of crises, Moen (1979) took issue with and qualified the remarks when she wrote:

Unemployment of the family breadwinner can result in all three forms of crises mentioned by Burgess . . . It can bring about sudden changes in the economic

status of the family. It can bring about role conflict as if the wife takes on the provider role vacated by her spouse. It can precipitate marital disruption in the form of desertion, separation, or divorce. It can encourage adolescent children to leave the parental home and make their own living.
(p. 563)

The crisis of losing one's job precipitates affective and cognitive responses which bring forth a sense of alienation, rejection, callousness, uncaring, bewilderment, embarrassment and shame pertaining to society, friends and family (Group for the Advancement of Psychiatry, 1982). The unemployed person goes through a personal period of adjustment to the crisis of being unemployed as well as going through a period of adjustment to his/her family, and vice-versa. The family as a whole has also been described as going through various stages of adjustment to the crisis. For example, Bakke (1940) observed six stages that the family goes through in adjusting to job loss: (a) adjustment to reduced means of support; (b) adjustment to employment and job outlook prospects; (c) adjustment to expenditures; (d) adjustment to new community associations and activities; (e) family foresight and planning; and (f) rationalization of the family's current position and maintenance of moral standards.

During the various stages or phases of unemployment the role of the worker as the "breadwinner" or "provider"

is threatened as is his/her authority within the family constellation (Borrero, 1980). In addition to the erosion of authority, there has been documented a diminution in status and prestige (Bakke, 1940), although this is not a universal happening (Borrero, 1980; Moen, 1980). While initially family members become protective and, apparently, maintain family unity with extra-familial relationships, the unity eventually deteriorates, internal family disruption ensues, customary family activities such as holidays, birthdays, etc., are abandoned, and the family unit becomes both socially isolated and withdrawn (Group for the Advancement of Psychiatry, 1982). The anxiety, frustration, and anger that seemed so characteristic of individual stress-related responses to unemployment seems also to permeate the fabric of the family unit.

Concern over the welfare of children has been of special interest to various authors (Margolis & Farran, 1981; and McLaughlin, 1979). The extent to which unemployment leads to child and wife abuse is not clear (Borrero, 1980), although Skinner and Castle (1969) have noted that 41% of the 79 families involved in child abuse in their study were unemployed at the time the battering incident occurred. Dumont (1977) noted research that implied that in many ways it is difficult to discriminate abusing from non-abusing families. However, the one variable that has been most frequently related to child abuse is the father's unemployment. In addition to child abuse, Margolis and

Farran (1981) found that children of unemployed workers were at greater overall risk for episodes of illness in general, infectious illness, and illnesses of longer duration than their counterparts from families who were employed. Finally, some children have been known to react to the crisis of unemployment and its inherent stress by becoming involved in crime and/or turning to drugs or alcohol as a way to structure time or gain income (Briar, 1980).

Moen (1979) asserted that unemployment can precipitate marital disruption in the form of desertion, separation or divorce. Peterson's (1974) work gave strong support to this assertion when he found that 75% of the men in his study who remained unemployed for nine months or longer faced divorce proceedings. Miao (1974) found that unemployment and marital instability were only linked to periods of high or rapidly fluctuating unemployment rates. However, according to Borrero (1980) a comprehensive review of literature suggested that unemployment is not a cause of separation and divorce. He noted that "while unemployment does have serious effects on the family unit and its members, fortunately, these effects on the whole are not serious enough to cause separation or divorce" (Borrero, 1980, p. 925). This viewpoint was partially reaffirmed by Brinkerhoff and White (1978), whose results suggested that income and unemployment do not have a direct effect on marital satisfaction or on marital roles. They cautioned, however, that there might be some threshold

which might emerge as an independent factor in determining marital satisfaction.

Regarding the issue of the impact of unemployment on the incidence of divorce, the literature is unclear. Vigderhous and Fishman (1978), while studying the impact of unemployment and family integration on changing suicide rates, discovered that familial disintegration as measured by the ratio of divorce to marriage was not found to be a significant predictor of suicide rate. Additionally, they noted:

The fact that marriage rates are not significantly related to suicide rates and the fact that changes in divorce rates do not produce higher suicide rates suggest that the institution of marriage does not necessarily regulate human wants and needs and that the institution of divorce does not necessarily produce disorganization and anomie. (p. 246)

These findings are of particular interest when one examines the relative hierarchy of stress-related life change events on the Holmes and Rahe (1976) scale, and further clouds the role and relative impact that unemployment has on the family unit, in general, and the institution of marriage, in particular. Finally, Thomas, McCabe, and Berry (1980) studied unemployment and family stress research dating from the Great Depression of the 1930's. While it appeared that unemployment did tend to precipitate crises for many families, their reassessment of this issue, in the 1970's,

indicated that for a majority of families, including white and blue collar workers, crises (family stress) did not accompany unemployment. Apparently, at the present time, the issue of the degree to which the stress of unemployment has an impact on the family remains unresolved.

D. Mediators to the Stress of Unemployment

Various physical and psychological reactions to the stress of unemployment were discussed throughout this review of literature, including increased alcohol and drug consumption, increased levels of crime and violence, child and wife abuse, etc. Although not specifically addressed in the literature, each of these in addition to being specific reactions presumably attributed to the stress of unemployment, are also ways in which individuals buffer or cope with stress. With heightened levels of frustration (Shaw, 1976) and diminished levels of self-worth (Catalano & Dooley, 1977; Cohn, 1978), "the result is nothing less than a mutilation of the ego" (Dumont, 1977; p. 32). If one entertains the Freudian viewpoint, the ego will attempt to protect itself at all cost. As Hall (1954) described:

One of the major tasks imposed upon the ego is that of dealing with the threat and dangers that beset the person and arouse anxiety. The ego may try to master danger by adopting realistic problem-solving methods, or it may attempt to alleviate anxiety by using methods that deny, falsify, or distort reality

. . . The latter are called defense mechanisms of the ego. (p. 85)

Included in the armamentarium of major ego defense mechanisms are repression, reaction formation, isolation, undoing, rationalization, intellectualization, denial, projection, regression, introjection, acting out and displaced aggression (Freedman, Kaplan, & Sadock, 1972; Hinsie & Campbell, 1970). It would seem, then, that under certain circumstances, the high levels of stress (anxiety) associated with unemployment and the inherent threat that this life change event brings, one's ego could facilitate the use of any or all of these defenses. Moreover, any one of them could be manifest in any or all of the particular stress-related responses that have been delineated to this point. Although this conceptualization has been applied to psychological sequela of stress-related events, there is a known close association between psychological and physical reactions in the form of psychophysiological (psychosomatic) responses (Alexander, 1950). In this regard Alexander stated: "One must bear in mind that every organic (physical) symptom has an emotional significance for the patient of which his ego takes advantage for the relief of emotional conflicts" (p. 269). It should be emphasized that these so-called defense mechanisms which serve as coping behaviors to perceived stress operate primarily on an unconscious level.

Pearlin, et al. (1981) have observed two styles

of coping behaviors. The first style is highlighted by the fact that people perceptually seek out other people or groups whose economic situation is similar to, or, at least, no better than their own. This position was reaffirmed in a California study where 75% of the respondents in a research survey reported that they would follow the above strategy (In Pursuit of Wellness, 1979). The second style of coping behavior was a kind of devaluation of economic achievements such as demeaning the value of money and monetary success. This had the advantage of shielding the individual from the stressful consequences of economic problems. The authors noted that both styles served similar functions to the extent that each attributed benign meaning to the experience and, therefore, reduced its stressfulness.

Support systems are seen to play an important role in helping persons cope with the stress of being out of work. Gore (1978) reported that there is no single explanation as to how support systems short-circuit the response to stress, but she asserted that it is widely understood that support increases coping ability. Informal social support systems play a role in one's adjustment to unemployment, such as, the amount of sympathy and help received from friends, (Figueira-McDonough, 1978), but their role is, as yet, poorly understood (Blehar, 1979). According to Liem and Liem (1978), the most detailed contemporary report of the role of social supports

in relation to physical and psychological consequences of job loss are offered in a longitudinal study of two groups of blue-collar workers who lost their jobs because of plant closing, researched by Cobb and Kasl (1977), Kasl, (1982), and Kasl, et al. (1975). Their data indicated that the consequences of job loss were less severe in the group who perceived their spouses, relatives, and friends as being supportive during the ordeal of unemployment.

Support is not provided by the entire range of social relations, however, but only from those relations where there are the qualities of trust and intimacy (Pearlin, et al., 1981). These same authors viewed marriage as an institution distinguished for its potential as being a continuous reservoir of emotional support. However, Liem and Liem (1978) point to the fact that the family is also, primarily, an independent source of stress which produces a variety of tension reactions in an individual. Nevertheless, they conclude that "based on available findings in several areas of family research, there is substantial support for the view that the degree of stress associated with the experience of life events, economic and non-economic, depends in part on the individual's family supports" (p. 150). Generally, the literature seems to be in agreement that support systems, such as family (nuclear and extended), other relatives, friends, work organizations, clubs, religious affiliations, and

other community resources, do mediate the stress of unemployment and, in some way, help cushion the impact and increase coping ability (Cobb, 1976; Gore, 1978).

There would seem to be a number of coping strategies which an unemployed worker could use to help buffer the impact of unemployment. Some are obvious and widely used, for example, increased sleeping time, greater number of hours watching television, or playing pool with other unemployed workers at the union hall. With the exception of Kasl's (1982) finding that cigarette smoking was a rather stable trait whose use was not generally affected by the stress of unemployment and that alcohol consumption and drug usage increased, the literature on unemployment did not seem to focus on either the nature or the frequency of use of coping mechanisms. Further, other than general statements attesting to the widely held view that support systems are beneficial for mediating the stress of unemployment, the literature was lacking in this area as well.

In order to delineate a more definitive perspective on these areas, it was necessary to look for research outside of the domain of unemployment, per se, but still within the area of stress and life change events. In a study undertaken by the California Department of Mental Health, the perceptions of over 1,000 California residents pertaining to their attitudes and beliefs regarding mental and physical health provided such information (In Pursuit

of Wellness, 1979). Part of this research probed the frequency of various coping strategies used for emotional upsets related to various life change problems. The findings indicated that for California residents, at least in matters pertaining to the life change event of work, many individuals used "social networks" such as, (a) confided in a friend (48%); (b) talked to people at work (20%); (c) sought out others with similar problems (14%); (d) talked to acquaintances or neighbors (9%); or (e) sought more social contacts (5%). Other coping strategies included family contact such as confiding in a spouse (41%) or confiding in a relative (26%). Seeking professional assistance for coping was not, generally, as widely used as either the use of social networks or family. For example, although 22% of the respondents sought out a physician, only 6% sought out a mental health specialist (psychologist, psychiatrist, therapist, or counselor), 5% turned to a religious figure (minister or religious counselor), and only 1% turned to social agencies.

Turning to the self was another form of coping detailed in the California Study. Twenty-two percent of the respondents prayed or went to church, 16% withdrew from people, watched television, or slept, while 15% kept to themselves, meditated, or used relaxation exercises. Various activities were also utilized as coping devices. Twenty-eight percent of the individuals engaged in sports or exercise programs, while 24% took a vacation. Only 16%

of the individuals studied or read about their problem and another 15% worked harder. Increased alcohol and drug consumption reached 6%. Alcohol and drugs were more likely to be used when people perceived that a problem was within themselves. In addition, it was determined that self-esteem was related to how people rated their overall mental and physical well-being.

In conclusion, there are a variety of potential mediators to the stress of life change events, and, in particular, to unemployment. Utilization of buffers, coping mechanisms or social support systems, will be contingent, therefore, upon an individual's perception of the stress-related event and its impact on his/her physical or psychological well-being.

E. Summary

Stress is a rather ubiquitous phenomenon that has the potential to directly or indirectly affect an individual's physical and/or psychological well-being. There are certain experiences in life that seem to precipitate stress-related reactions, and there appears to be a broad cultural, if not universal, consensus that these experiences called life change events are perceived as variably stressful (Antonovsky, 1979; Holmes & Rahe, 1967). Although several attempts have been made to categorize these life change events (Dohrenwend, et al, 1978; Holmes & Rahe, 1967), there is no unanimity among writers as to which events are most stressful in a

hierarchical order. Despite the lack of unanimity in the serial order of magnitude, it has been emphasized by Perkins (1982) that there still exists a significant relationship between stress as assessed by life change events and a variety of adverse physical and psychological reactions. In fact, it was stated by one author that physical and psychological problems caused by stress have become the number one health problem in the past 10 years, replacing the infectious diseases as the most common problem of the postindustrial period (Appelbaum, 1981).

Unemployment is a life change event that has been found to precipitate rather profound levels of stress on individuals and, further, has a ripple effect on family, friends, and community (Figueria-McDonough, 1978; Group for the Advancement of Psychiatry, 1982; Liem & Rayman, 1982; Reigle, 1982). Although 80% of the literature on physical and psychological reactions to unemployment was written during or shortly after the Great Depression (Borrero, 1980), the work initiated on a large scale basis by Brenner (1973) has been credited as being a catalyst for centering attention on this area of work (Liem & Rayman, 1982). His findings, in part, demonstrated that as unemployment increased so did the incidence of suicides, homicides, state hospital admissions, state prison admissions, cirrhosis of the liver mortality, cardiovascular-renal disease mortality, and total mortality. Although Brenner's work was criticized for

Catalano, 1979; Liem & Liem, 1978; Marshall & Funch, 1979), his work has been generally supported (Hagen, 1983).

Having laid the foundation for the relationship between physical and psychological stress-induced reactions and unemployment, this review then focused on specific physical and psychological manifestations, ranging in nature from increased coronary artery disease, bronchial asthma, rheumatoid arthritis, ulcerative colitis, neurodermatitis, hypertension, peptic ulcers, etc., on the physical side, to depression, suicidal ideation, frustration, self-blame, anxiety, hopelessness, diminished self-esteem on the psychological side. Also, various stages or phases related to stress and reactions to unemployment were reviewed (Borrero, 1980; Kubler-Ross, 1969; Parkes, 1964; Selye, 1956, 1974, 1976, 1981; Zawadski & Larzarsfeld, 1935). However, it seems clear in light of the research findings available that physical and psychological reactions to the stress of unemployment and their various stages or phases are not homogeneous experiences. The literature was not consistent with regard to either content or prevalence of specific responses.

Finally, subsequent sections reviewing the literature on (a) the impact of unemployment on the family and (b) mediators to the stress of unemployment revealed, at times, incomplete or conflicting data. It was,

therefore, necessary to seek out related literature dealing with stress and life change events in order to more comprehensively secure information relevant to this study. In this regard, a study conducted for the Department of Mental Health of the State of California (In Pursuit of Wellness, 1979) was reviewed. This study surveyed the perceptions of over 1,000 randomly selected California residents, men and women over the age of 18, pertaining to their attitudes and beliefs regarding mental and physical health. Investigated were selected stress-related physical and psychological reactions, as well as selected coping mechanisms and support systems used to buffer the impact of stress. Many of the questions used in the California study elicited the kind of information that had a direct bearing upon this study.

In conclusion, in light of the findings reviewed, it seems clear that life change events can produce varied amounts of stress which have been operationally expressed in both physical and psychological symptomatology. Unemployment is a life change event which has been known to be correlated with various stress-related physical and psychological reactions. In light of the depressed and at times catastrophic economic climate prevalent in our society at present for which no immediate end was in sight, it was the position of this writer that a systematic investigation of the phenomenon of unemployment and how the stress of this life change event affects the physical

and psychological health of a group of individual cases of unemployed workers was a worthy undertaking. It was hoped that the information obtained from this study would help serve as a basis for discussion for all who are concerned about the plight of the unemployed worker. It was further hoped that such discussion would stimulate action from individuals or groups of individuals who might be in positions to help the unemployed worker cope with the varied problems associated with job loss.

CHAPTER III. STATEMENT OF THE PROBLEM

Although the literature rendered, at times, rich and varied information, the research reviewed reflected fundamental inconsistencies in findings. Further, certain areas reflected a paucity of content or were devoid of content, altogether. For example, with few exceptions, such as, Kasl, et al. (1975), who studied the closing of two plants comprised of machine operators, assembly line workers, clerks, and tool and die makers, no studies reviewed had particularly focused on a representative sample of unemployed steelworkers in order to examine a wide range of selected physical and psychological sequelae, both personal and familial, that might be associated with the stress of unemployment. Moreover, the investigator did not find a study which specifically surveyed a wide range of selective coping mechanisms and support systems used by unemployed steelworkers to buffer the stress of unemployment or surveyed their perceptions regarding options that might affect a change in vocational status. Additionally, as a professional who lives and works in the community under study, this investigator, through his clinical practice, had become aware of the apparent stress of these persons. Discussions with union leaders, food bank coordinators, personnel from support groups such as the Mon Valley

Unemployed Committee, government officials, and unemployed steelworkers, themselves, lent credence to this investigator's personal observations and experiences with this population. For example, according to a recent survey of unemployed steelworkers conducted by the Mon Valley Unemployed Committee (May, 1983) at various unemployment offices and food banks in the Mon Valley area, approximately 70% of the people whose unemployment claims were to expire by the end of July, 1983, would be ineligible for a new claim. The number of unemployed seeking provisions at the food bank had markedly increased. Some individuals who had no food were seeking welfare, but did so with deep humiliation and embarrassment. They had become angry, resentful, and distrusting. For many, medical benefits had run out months previously. Of real concern was the type of situation or reaction which might occur once this large group of people had no source of income left.

Finally, although large sums of money were being funneled into such efforts as vocational retraining and job placement, little was really known about the varied physical or psychological health needs of the unemployed steelworker which the impact of unemployment might have spawned that could interfere with these efforts and/or preclude successful personal/vocational rehabilitation.

A. Purpose of the Study

The purpose of this study was to examine the perceptions of unemployed steelworkers regarding the stress

of unemployment and the coping mechanisms which they had utilized to deal with their unemployed status. Specifically, the study investigated their perceptions of: (a) the presence of various physical ailments, (b) the presence of various psychological ailments, (c) the impact of unemployment on the family, (d) coping mechanisms and support systems utilized during the period of unemployment, and (e) options that might affect a change in their vocational status.

B. Research Questions

Research Question 1: From a list of selected life change events, which are perceived as the most stressful by unemployed steelworkers?

A review of the research indicated rather divergent viewpoints, for example, the research of Holmes and Rahe (1967) and Kiev and Kohn (1979) show markedly different hierarchical rankings.

Research Question 2: How do unemployed steelworkers describe the general state of their physical health?

Research Question 3: What is the reported frequency of selected physical ailments of unemployed steelworkers?

Although the literature on unemployment highlighted numerable physical reactions to the stress of unemployment, with few exceptions, such as Kasl, et al. (1975) none

inventoried the frequency of selected physical reactions for a representative sample of unemployed steelworkers.

Research Question 4: How do unemployed steelworkers describe the general state of their psychological and emotional health?

Research Question 5: What is the reported frequency of selected psychological ailments of unemployed steelworkers?

Although the literature on unemployment highlighted numerous psychological reactions to the stress of unemployment, with few exceptions, (Kasl, et al., 1975), none had investigated the frequency of selected psychological reactions for a representative sample of unemployed steelworkers.

Research Question 6: How do unemployed steelworkers perceive the level of support they have received from family, friends, organizations and community?

Research Question 7: What is the reported frequency of selected coping mechanisms and support systems utilized by unemployed steelworkers during the period of their unemployment?

Throughout the literature there was a general agreement that support is useful to help buffer the impact of unemployment (Cobb, 1976; Gore, 1978). However, delineation of specific coping mechanisms and support

systems with reported frequency of use was not available.

Research Question 8: Do the variables of age, race, and marital status have a differential effect on the frequency or type of physical or psychological reactions of unemployed steelworkers?

It was observed in the literature that unemployment has been and is higher among minority groups and that black Americans are more vulnerable to discouragement which leads to physical and psychological distress (Bowman et al., 1982). Other data pertaining to these variables showed conflicting findings.

Research Question 9: Do the variables of age, race, and marital status have a differential effect on the frequency or type of coping mechanisms or support systems utilized by unemployed steelworkers during the period of their unemployment?

The literature was devoid of substantive work in this area, with the exception of the California study, In Pursuit of Wellness (1979).

Research Question 10: What are the reactions of unemployed steelworkers to selected options that might affect a change in vocational status?

This topic was not addressed in the literature to

any significant degree.

C. Definition of Terms

Independent Variable

Unemployment. Unemployment refers to the status of individuals who were previously employed, but at the time of the study were no longer working.

Dependent Variables

Coping Mechanisms. Coping mechanisms are specific physical or psychological actions employed by individuals (or groups of individuals, such as families) to buffer the impact of stress. Coping mechanisms were measured by the frequency of responses to appropriate questionnaire items.

Physical Ailments. Physical ailments are physiological phenomena or symptomatology that are experienced as bodily disorders. Physical ailments were measured by the frequency of responses to appropriate questionnaire items.

Psychological Ailments. Psychological ailments are emotional phenomena or symptomatology that are experienced as mental disorders. Psychological ailments were measured by the frequency of responses to appropriate questionnaire items.

General Terms

Life Change Event. A Life Change Event was defined as a discrete happening or experience in a person's life that requires some degree of readjustment in one's life

circumstances, for example, unemployment.

Mediators of Stress. In the context of this study, mediators of stress refer to coping mechanisms, social networks, and the total support system used by individuals to buffer the impact of stress.

Social Network. The concept of social networks refers to social components that make up support systems, such as friends, neighbors, and work compeers. Also included in this concept were individuals who had experienced similar problems to the individuals under study. Social networks are used as part of coping strategies to buffer stress.

Stress. Stress was defined as the body's physical and/or psychological reactions - both conscious and unconscious - to any environmental conditions that are perceived as noxious with which one cannot easily cope.

Support Systems. Support systems refer to the total of all social networks, including family, religious and fraternal organizations, and all other community and professional resources that help cushion the impact of stress and increase coping ability.

CHAPTER IV. METHODS

A. Sample

The participants represented the entire population of unemployed steelworkers from union Local 1256 of Duquesne, Pennsylvania, who were registered with the area food bank at the time of this study. Local 1256 is an affiliate of the parent union, the United Steelworkers of America, which represents approximately 1,400,000 members in over 5,300 affiliated local unions. Local 1256 was chartered on May 2, 1942, which, coincidentally, was the same date that the United Steelworkers of America, CIO (Congress of Industrial Organizations) was formed in Cleveland, Ohio. This local represents both production and maintenance personnel from the United States Steel Corporation's Duquesne Works, which is a steelmill located along the banks of the Monongahela River in the suburbs of Pittsburgh, Pennsylvania. Membership in Local 1256 is approximately 2,700 men and women of whom over 1,300 (48%) are currently unemployed. Most of these workers had been without a job in excess of 16 months. Because of the nature of layoff procedures, the majority of steelworkers became unemployed at approximately the same time.

Since Local 1256 did not have a comprehensive list of their unemployed members, the union president

referred this investigator to the local area food bank coordinator who did maintain such a list. There were, however, approximately 200 unemployed steelworkers who were not registered with the food bank and, therefore, were not included in this study. According to the food bank coordinator, there was no evidence to suggest that this group was significantly different than the sample included in the survey.

Additionally, there was also a group of steelworkers who did not respond to the survey. However, there was no evidence to suggest that this group of nonrespondents was significantly different than those who did respond to the survey. The entire sample of unemployed steelworkers were homogeneous in that they had a similar length of seniority (compared to those steelworkers who were still working) and became unemployed at approximately the same time. Nevertheless, one could speculate on issues such as: only those who were (a) interested, (b) motivated, and/or (c) concerned about their unemployment status participated in the survey.

B. Instrumentation

As a result of the information obtained from (1) the review of literature, (2) meetings with various union leaders, (3) discussions with government officials, and (4) conversations with unemployed steelworkers and personnel from support groups, it became apparent that more broadly based, yet detailed information was needed to help more

clearly understand the plight of the unemployed steelworker. In order to obtain such information, the study utilized the method of descriptive research, whose purpose has been described as systematically obtaining facts and characteristics of a given population or area of interest, factually and accurately (Isaac & Michael, 1971). The instrument developed to facilitate the collection of data was a research questionnaire. The questionnaire is a key element for conducting survey research which has as its purpose (a) to collect detailed factual information that describes existing phenomena, (b) to identify problems and/or justify current conditions and practices, (c) to make comparisons and evaluations, and (d) to determine what others are doing who are experiencing similar problems or situations and benefit from their experience in making future plans and decisions (Van Dalen & Myer, 1966, cited in Isaac & Michael, 1971, p. 18).

Questionnaire Content

The questionnaire was designed to answer the 10 research questions that were delineated in Chapter III. The first research question asked how steelworkers perceive the stress of various life change events, including unemployment. Although the review of literature addressed the issue of the impact of various life change events, the research offered divergent viewpoints and findings (Holmes & Rahe, 1967; Kiev & Kohn, 1979). These divergent findings might have been due, in part, to the different populations

that were studied. Nevertheless, no one had examined the general question of how life change events are perceived among a population of unemployed steelworkers.

The second research question was designed to collect information pertaining to the perceptions of steelworkers about the general state of their physical health. With the exception of the In Pursuit of Wellness (1979) study, no data were readily available for this question. The survey provided a general question to obtain such data.

The third research question focused on the presence of various physical phenomena or symptomatology. A number of research studies had reported various physical reactions to the stress of being unemployed (Brenner, 1973, 1977; Bunn, 1979; Cobb, 1974; Dumont, 1977; Erikssen et al., 1979; Jobling, 1980; Liem & Rayman, 1982). However, no one had inventoried the frequency of selected physical reactions for unemployed steelworkers. The questionnaire generated data that would permit the investigator to examine the frequency of selected physical reactions among a representative sample of unemployed steelworkers.

The fourth research question was directed at the perceptions of unemployed steelworkers with regard to the general state of their psychological health. With the exception of the In Pursuit of Wellness (1979) study, no data were readily available for this question. The

survey provided a general question to obtain this data.

Research Question 5 examined the reported frequency of various psychological phenomena or symptomatology. A number of research studies had reported various psychological responses to the stress of being unemployed (Boor, 1980; Borrero, 1980; Brenner, 1973, 1976, 1977, 1979; Catalano & Dooley, 1977; Cohn, 1978; Dumont, 1977; Figueira-McDonough, 1978; Group for the Advancement of Psychiatry, 1982; Hagen, 1983, Liem & Rayman, 1982; Manuso, 1977; Oliver & Pomicter, 1981; Rushing, 1968). With few exceptions (Kasl, et al., 1975), no one had inventoried the frequency of selected psychological reactions for unemployed steelworkers. The proposed questionnaire inventoried the frequency of a variety of psychological reactions.

Research Question 6 was designed to secure information pertaining to the perception of unemployed steelworkers regarding the level of support received from family, friends, organizations and community. The survey provided a general question to obtain this data.

Research Question 7 examined the frequency with which selected coping mechanisms and support systems were used during the period of unemployment. Throughout the literature there was general agreement that the use of support systems helped to cushion the impact of being unemployed (Blehar, 1979; Cobb, 1976; Cobb & Kasl, 1977; Figueira-McDonough, 1978; Gore, 1978; Kasl, 1982; Kasl,

et al., 1975; Liem & Liem, 1978). A broad delineation of both coping mechanisms and support systems with accompanying frequency of use for unemployed steelworkers was, to the limits of our inquiry, non-existent in the literature. The questionnaire included a sampling of numerous coping mechanisms and support systems.

Research Question 8 examined the effect of the variables of (1) age, (2) race, and (3) marital status on the frequency or type of physical and psychological ailments experienced by unemployed steelworkers. These variables were of interest because the findings reported in the existing literature were not consistent. For example, Brenner (1977), Dumont (1977), and Liem and Rayman (1982) indicated that unemployment affected middle-aged men more severely than other age groups. On the other hand, Dooley and Catalano (1979) found that middle-aged men were not especially sensitive to unemployment, while Markush and Favero (1974) and Boor (1980) found that relatively young people (not older people) reacted to unemployment with increased depression or suicide. Finally, Briar et al. (1980) reported that young, middle-aged, and older workers, in many respects, were similar.

The effect of race upon individual physical and psychological reactions to unemployment was divergently reported in the literature. For example, Jackson et al. (1982) hypothesized that black workers were more vulnerable to certain stress-related factors which led to physical

and psychological distress, while the work of Markush and Favero (1974) did not support this hypothesis. Lastly, no systematic research had been conducted to compare the relative impact on single versus married unemployed steelworkers. Therefore, this study utilized the variables of age, race, and marital status in order to gain additional knowledge as to their differential effect on personal physical and psychological reactions to unemployment.

Research Question 9 examined whether the variables of age, race, and marital status had a differential effect on the frequency and type of coping mechanisms or support systems utilized during the period of unemployment. The literature failed to provide any substantive information on these issues. Therefore, this study looked at the variables of age, race, and marital status in order to gain further knowledge as to their differential effect on the rate and type of coping mechanisms or support systems used by unemployed steelworkers.

Research Question 10 examined the reactions of unemployed steelworkers to various options that might affect a change in vocational status. Although information pertaining to this question, such as one's willingness to engage in job retraining, willingness to pursue additional education, or willingness to relocate in another part of the country to find work would seem to be important for all policymakers, this topic was not addressed in the literature in any substantive way. The questionnaire

included items that surveyed these reactions.

Questionnaire Format

Following the guidelines for survey research proposed by Berdie and Anderson (1974), Bradburn and Sudman (1980), Orlich (1978), and Sudman and Bradburn (1982) the questionnaire was placed on quality bond paper, type set by a professional printer, and had an appropriate title. The date of the study was included at the beginning of the questionnaire. Instructions were included on the questionnaire with an appropriate reference that the investigator would assure the confidentiality of the information provided by individual respondents. It was intended that the questionnaire design be succinct, yet comprehensive. Demographic data such as age range, race, sex, and marital status were included at the beginning of the questionnaire. Each questionnaire was coded for a three-week follow-up which was appropriately explained in the accompanying cover letter. Further, each item was coded to facilitate data analysis. A combination of nominal and ordinal measurement scales were utilized in the construction format of questionnaire items. Closed-typed questions with forced-response options were used although one open-ended question was included at the end of the questionnaire to provide an opportunity for the respondent to fully express his/her views. Primarily, either check-list type response categories with the option of multiple response (nominal scale) or multiple-part (Likert-type)

response categories with a single response option were utilized. However, in order to maximize data collection, many questions had the additional response option of "other (please specify)". Finally, the order of the questions was presented in a logical progression with each item being consecutively numbered in a vertical format, whenever possible.

C. Procedures

A copy of the questionnaire (see Appendix A), a letter of transmittal/cover letter (see Appendix B), a letter of support from union president Mr. Mike Bilcsik (see Appendix C), and a self-addressed, stamped return envelope were forwarded to each unemployed steelworker from U.S.W.A. Local 1256. Each participant was informed that the confidentiality of his/her responses would be maintained and that personal anonymity would be guaranteed. A deadline of two weeks to respond to the questionnaire was requested. (Both confidentiality/anonymity and return deadline requests were established in the letter of transmittal/cover letter.) One week after the deadline a follow-up letter (see Appendix D), the research questionnaire, the letter of support from Mr. Mike Bilcsik, union president, and a self-addressed, stamped return envelope were sent to the nonrespondents (who were determined by questionnaire coding procedures). Participants were again given a two-week deadline to respond. Questionnaires received after a one-week grace period following the second two-week deadline were not included in the study.

CHAPTER V. RESULTS

The purpose of this study was to examine the perceptions of unemployed steelworkers regarding the stress of unemployment and the coping mechanisms which they utilized to deal with their unemployed status. Specifically, the study investigated how unemployed steelworkers perceived the relationship between unemployment and self-reports of: (a) the presence of various physical ailments, (b) the presence of various psychological ailments, (c) the impact of unemployment on the family, (d) coping mechanisms and support systems utilized during the period of unemployment, and (e) options that might affect a change in vocational status.

The Steelworker's Questionnaire was mailed to the entire population of unemployed steelworkers from union Local 1256 of Duquesne, Pennsylvania who were registered with the area food bank at the time of this study. The sample consisted of 1,096 unemployed workers. The initial mailing yielded 344 responses which constituted a 31.4% return. The follow-up mailing yielded 126 responses which constituted an additional 11.5% return. The total survey response rate was 42.9% based on 470 returns. Of these, 30 questionnaires were not included in the data analysis. Nineteen of the 30 respondents were

called back to work and did not complete the questionnaire. Three persons sent in duplicate forms as a result of the overlap of the follow-up mailing. Two respondents were retired from the mill and six of the respondents' questionnaires were received after the survey deadline. The total usable response rate for this study was 40.1% which was computed on the basis of the ratio of usable questionnaires (440) to total sample size (1,096). This return rate is considerably higher than anticipated based on other studies in the review of literature. For example, Oliver & Pomicter (1981) who surveyed unemployed U.A.W. members received an 11% return rate of which 9% were usable, while Margolis and Farran (1981) who surveyed other unemployed workers received a 10% response rate.

A demographic analysis of the respondents to the Steelworker's Questionnaire is contained in Table 1. The proportion of male and female respondents was nearly identical to the proportion of males and females who comprised the original sample of 1,096 unemployed steelworkers who were under study (Males = 87.8%, $n=962$; Females = 12.2%, $n=134$). An analysis of the demographic variables presented in Table 1 indicated that a majority of the respondents to the Steelworker's Questionnaire were white, married males between 20 and 35 years of age.

Further analysis of the sample showed that 49% ($n=217$) had one or two children still living at home,

TABLE 1
 Demographic Analysis of Respondents
 to the Steelworker's Questionnaire

Demographic Variable		
	<u>N</u>	<u>%</u>
Sex:		
Male	381	(87)
Female	<u>58</u>	<u>(13)</u>
Total	439	(100)
Age:		
19 or under	0	(0)
20 - 35	327	(74)
36 - 50	88	(20)
51 - 65	24	(5)
66 - or over	<u>1</u>	<u>(0)</u>
Total	440	(99)
Race:		
Black/Negro	38	(9)
Mexican-American/Chicano	4	(1)
White/Caucasian	395	(90)
Other	<u>3</u>	<u>(1)</u>
Total	440	(101)
Marital Status:		
Married	266	(60)
Widowed	3	(1)
Divorced	43	(10)
Separated	12	(3)
Never married	<u>115</u>	<u>(26)</u>
Total	440	(100)

Note. Some groups' responses may add to 99% or 101% because of rounding.

while 8% ($n=39$) had three or more children still living at home. Fifty-five percent ($n=243$) either owned their own home or paid mortgage and 32% ($n=139$) rented an apartment or home. Fourteen percent of the workers ($n=62$) had changed residence since becoming unemployed. Of these, 53% ($n=33$) could not make rent payments, 15% ($n=9$) could not make mortgage payments, 34% ($n=21$) could not make utility payments, and 11% ($n=7$) could not pay their taxes.

Since becoming unemployed 28% ($n=123$) had found work outside the steel industry. Of this number, 67% ($n=83$) had secured part-time work and 31% ($n=38$) had secured full-time work. The income generated from the new line of work compared to the income generated as a steelworker was described as being "decreased moderately" by 14% ($n=17$). Eighty-two percent ($n=101$), however, described their new earnings as being "decreased significantly".

Of the 440 participants in this study, 31% ($n=137$) had other sources of income; seventy-two percent of these ($n=98$) indicated that their spouse was working. Unemployment compensation for 44% of the workers ($n=195$) had already run out at the time of this survey. Another 26% of the workers ($n=113$) would cease to have unemployment compensation benefits in less than three months. Health insurance for 65% of the unemployed steelworkers ($n=287$) had already expired at the time of this study. Approximately

20% ($n=89$) were either purchasing health insurance on their own or were covered under their spouse's policy.

The results of the Steelworker's Questionnaire were further analyzed to answer 10 research questions.

Research Question 1: From a list of selected life change events, which are perceived as the most stressful by unemployed steelworkers?

Table 2 shows a ranking of responses by the surveyed unemployed steelworkers regarding the stressfulness of selected life change events. For this sample the three life change events that were perceived as most stressful are all related to jobs and unemployment status.

Research Question 2: How do unemployed steelworkers describe the general state of their physical health?

Since becoming unemployed 28% of the workers ($n=121$) described their physical health as "excellent", while 47% ($n=205$) described their physical health as "good". Twenty-five percent ($n=112$) rated their physical health as "fair" to "poor". In order to provide some basis for comparison of these findings the respondents were also asked to describe the general state of their physical health before becoming unemployed. The results indicated that prior to becoming unemployed 60% of the workers ($n=262$) perceived their physical health to have been

TABLE 2
Perceptions of Selected Life Change Events
as Major Stressful Problems

Life Change Event	N	%
Being unemployed	354	(80)
Financial worries	338	(77)
Changing jobs	101	(23)
Marital problems	60	(14)
Problems with children	47	(11)
Emotional illness	43	(10)
Death of a close family member	38	(9)
Change in residence	34	(8)
Birth of a child	29	(7)
Divorce or separation	28	(6)
Physical illness	25	(6)
Death of a close friend	15	(3)
Death of a spouse	3	(1)
None of these	36	(8)

"excellent", while 37% ($n=164$) perceived their physical health to have been "good". Only 3% ($n=13$) described their physical health to have been "fair" and none felt that their health had been "poor" prior to being out of work. Table 3 presents results yielded by the chi-square test of significance for the difference between the perceptions of physical health before and after becoming unemployed. There was a statistically significant difference in the perceptions of steelworkers regarding their general physical health before and after becoming unemployed, $\chi^2(3, N = 877) = 135.2, p < .001$.

A subsample of approximately 9% of the respondents were identified as having returned to full-time work. Table 4 indicates the results yielded by the chi-square test of significance for the difference between the perceptions of physical health before and after becoming unemployed. There was not a statistically significant difference in the perceptions of the steelworkers who returned to full-time work regarding the general state of their physical health before and after becoming unemployed, $\chi^2(1, N = 80) = 2.23, n.s.$

Research Question 3: What is the reported frequency of selected physical ailments of unemployed steelworkers?

Table 5 contains a breakdown of the reported frequency of selected ailments that were experienced within one month of the time the survey was conducted.

TABLE 3
 Chi-Square Test of Significant Difference
 Between Perceptions of Physical Health
 Before and After Becoming Unemployed

Unemployment Status	<u>Physical Health Rating</u>									
	<u>Excellent</u>		<u>Good</u>		<u>Fair</u>		<u>Poor</u>		<u>Total</u>	
	N	%	N	%	N	%	N	%	N	%
<hr/>										
Before										
Unemployment	262	(60)	164	(37)	12	(3)	1	(0)	439	(100)
After										
Unemployment	121	(28)	205	(47)	93	(21)	19	(4)	438	(100)

$\chi^2(3, N = 877) = 135.2, p < .001.$

TABLE 4
 Chi-Square Test of Significant Difference
 Between the Perceptions of Physical Health
 Before and After Becoming Unemployed for the
 Subsample Who Returned to Work

Unemployment Status	<u>Physical Health Rating</u>				<u>Total</u>	
	<u>Excellent + Good</u>		<u>Fair + Poor</u>		N	%
	N	%	N	%		
Before						
Unemployment	39	(95)	2	(5)	41	(100)
After						
Unemployment	32	(82)	7	(18)	39	(100)

$\chi^2(1, n = 80) = 2.23, n.s.$

The table has been arranged to summarize the data into four categories. Categories I and II illustrate ailments that were referred to as "medical conditions" and "non-specific medical conditions", respectively. Since it was often difficult to differentiate purely physical conditions from those physical conditions that were present as a result of the contribution of psychological factors, Categories III and IV were developed and labeled "psychological states" and "dependencies", respectively. It was understood that many of the ailments listed in Table 5 could be viewed from both a physical as well as psychological perspective. Twenty to 25% of the respondents reported either back trouble, frequent headaches, frequent stomach aches, frequent anxiety or frequent insomnia, being 20+ pounds overweight or consuming alcohol more than they should. Thirty-four to 42% of the respondents were either frequently depressed, frequently irritable, or smoked more than they should.

Research Question 4: How do unemployed steelworkers describe the general state of their psychological health?

Since becoming unemployed 10% of the workers ($n=42$) described their psychological health as "excellent", while 42% ($n=183$) described their psychological health as "good". Forty-nine percent related that their psychological health was "fair" or "poor". In order to provide some basis for comparison of these findings the respondents were also

TABLE 5
Reported Frequency of Selected Ailments

Ailment	N	%
I. Medical conditions		
Back trouble	87	(20)
Ulcers	16	(4)
Arthritis	12	(3)
Asthma, serious allergies	12	(3)
Bronchitis or other lung problems	12	(3)
Kidney or bladder trouble	12	(3)
Cancer	4	(1)
Diabetes	6	(1)
Heart condition	5	(1)
Stroke	1	(0)
II. Non-specific medical conditions		
Frequent headaches	109	(25)
Frequent stomach aches	86	(20)
High blood pressure	41	(9)
Spells of dizziness	24	(5)
III. Psychological states		
Frequent depression	185	(42)
Frequent irritability	163	(37)
Frequent insomnia	99	(23)
Frequent anxiousness	88	(20)
Seriously considered suicide	20	(5)
IV. Dependencies		
Smoke more than I should	148	(34)
Drink more than I should	93	(21)
Overweight by 20+ pounds	93	(21)
Dependent on drugs to keep going	13	(3)
Other things	12	(3)
None of these	106	(24)

asked to describe the general state of their psychological health before becoming unemployed. The results indicated that prior to becoming unemployed 65% of the workers ($n=286$) perceived their psychological health as "excellent", while 33% ($n=144$) perceived their psychological health to have been "good". Only 2% ($n=9$) described their psychological health to have been "fair" and none felt their health was "poor" prior to being out of work. Table 6 contains a presentation of the results of the chi-square test of significance between the perceptions of psychological health before and after becoming unemployed. There was a statistically significant difference in the perceptions of steelworkers regarding the status of their general psychological health before and after becoming unemployed, $\chi^2(3, N = 876) = 372.3, p < .001$.

Table 7 shows the results of the chi-square test of significant difference between the perceptions of psychological health before and after becoming unemployed for the subsample of steelworkers who returned to full-time work. There was a statistically significant difference in the perceptions of the general state of psychological health before and after becoming unemployed for this subsample, $\chi^2(1, N = 76) = 16.57, p < .001$.

Research Question 5: What is the reported frequency of selected psychological ailments of unemployed steelworkers?

Table 5 has already been reviewed concerning

TABLE 6
 Chi-Square Test of Significant Difference
 Between Perceptions of Psychological Health
 Before and After Becoming Unemployed

Unemployment Status	<u>Psychological Health Rating</u>									
	<u>Excellent</u>		<u>Good</u>		<u>Fair</u>		<u>Poor</u>		<u>Total</u>	
	N	%	N	%	N	%	N	%	N	%
<hr/>										
Before										
Unemployment	286	(65)	144	(33)	8	(2)	1	(0)	439	(100)
After										
Unemployment	42	(10)	183	(42)	170	(39)	42	(10)	437	(101)

Note. Some groups' responses may add to 101% because of rounding.

$$\chi^2(3, N = 876) = 372.3, p < .001.$$

TABLE 7
 Chi-Square Test of Significant Difference
 Between the Perceptions of Psychological Health
 Before and After Becoming Unemployed for the
 Subsample Who Returned to Work

Unemployment Status	<u>Psychological Health Rating</u>				<u>Total</u>	
	<u>Excellent + Good</u>		<u>Fair + Poor</u>		N	%
	N	%	N	%		
Before						
Unemployment	40	(100)	0	(0)	40	(100)
After						
Unemployment	22	(61)	14	(39)	36	(100)

$$\chi^2_{(1, n = 76)} = 16.57, p < .001.$$

selected physical ailments that were experienced by steelworkers within one month of this survey. A re-examination of Table 5 should highlight certain ailments that could be viewed from a psychological as well as a physical perspective. Categories III and IV, "psychological states" and "dependencies", respectively, offered such a perspective. Since these data have already been reviewed, no repetition of the analysis of the responses in this table will be made. The reader should be alerted to the fact that insomnia, anxiety, depression, irritability, being overweight by 20+ pounds, smoking and drinking more than one should, drug dependence, and suicidal ideation were all reported.

According to Hepworth (1980), the best single predictor of the status of mental health was whether or not an individual felt that his/her time was productively occupied during the period of unemployment. In this study, 52% of the participants ($n=230$) were either "dissatisfied" or "very dissatisfied" with the way they had occupied their time since becoming unemployed. Sixty-two percent ($n=273$) felt that becoming unemployed changed the way they felt about themselves. This was reflected by 48% ($n=131$) who felt less personally satisfied while another 49% ($n=134$) reported that their feelings of satisfaction about themselves were continually changing. Relating self-satisfaction to being the head of one's household or family revealed that 45% ($n=123$) of those who reported that unemployment contributed to a change in personal

feelings were less satisfied with themselves as head of household or family. Another 34% ($n=94$) had feelings which were constantly changing.

Forty-two percent of the respondents indicated that they experienced frequent depression within one month of this survey (Table 5, Category III). However, 75% ($n=328$) reported experiencing personal depression at some time since becoming unemployed. For all the respondents, Table 8 reveals that 45% ($n=198$) are depressed at least once a week and another 25% ($n=109$) are depressed at least once a month. The degree of this depression has been summarized in Table 9. While 6% of the workers have described their depression as "severe", Table 5 Category III indicated that 5% ($n=20$) had "seriously considered suicide".

Since becoming unemployed 40% of the individuals ($n=178$) found it difficult to complete a task which required concentration and energy and 66% ($n=291$) described losing their temper more often when things did not seem to go their own way. Within the family, arguments with a spouse (applicable to 332 of the respondents) "increased significantly" for 26% ($n=87$), "increased moderately" for 32% ($n=105$), and "remained about the same" for 37% ($n=125$). Only 4% ($n=15$) indicated that since becoming unemployed arguments with a spouse "decreased moderately" or "significantly". For those who responded to the question regarding the need to discipline children (256 of the respondents),

TABLE 8
Reported Incidence of Depression

Range of Occurrence	N	%
At least once a week	198	(45)
At least once a month	109	(25)
At least once every two months	50	(11)
Other	<u>83</u>	<u>(19)</u>
Total	440	(100)

TABLE 9
Reported Degree of Depression

Range of Occurrence	N	%
Severe depression	28	(6)
Moderate depression	139	(32)
Mild depression	203	(46)
Other	70	(16)
Total	440	(100)

11% ($n=29$) reported that disciplinary action "increased significantly", for 20% ($n=52$) they had "increased moderately", and for 66% ($n=170$) they had "remained about the same".

Research Question 6: How do unemployed steelworkers perceive the level of support they have received from family, friends, organizations and community?

Table 10 illustrates a composite of the perceptions of steelworkers who indicated the three support systems that they felt provided the most support during their unemployment. In terms of total frequency, the primary support system selected by 78% of the respondents ($n=345$) was the family. Support from friends and the local union were also among the three most supportive systems, ranking second and third, respectively. In addition to the support systems listed in Table 10, write-in responses for local area food banks reached 3% ($n=11$). Other write-in support systems included the Mon Valley Unemployed Committee, the Salvation Army, the Pennsylvania State Bureau of Employment Security, and the Pennsylvania Department of Public Welfare. Each of these accounted for less than 1% of the responses.

Research Question 7: What is the reported frequency of selected coping mechanisms and support systems utilized by unemployed steelworkers during

TABLE 10
 Perceptions of Level of Support
 Received During Unemployment

Support System	N	%
Family	345	(78)
Friends	258	(59)
Local union	147	(33)
Church group	98	(22)
Federal government	53	(12)
Social agencies	40	(9)
Local government	31	(7)
Business/industry	10	(2)
Fraternal organizations	10	(2)
National union	3	(1)
Other	50	(11)
None of these	20	(5)

Note. Respondents were asked to indicate the three support systems that they felt had provided the most support during their unemployment.

the period of their unemployment?

Table 11 provides a compilation of the reported frequency of selected coping mechanisms and support systems that steelworkers had utilized to ease the stress of unemployment. The table was arranged to summarize the data into eight categories: Social Network, Family, Professional, Self, Activity, Drug and Alcohol, Other, and None of these. Forty-three percent ($n=189$) chose to confide in a close friend. Confiding in one's spouse or partner was chosen by 48% of the respondents ($n=210$) and 6% or less sought out the assistance of a physician, minister, religious counselor, therapist/counselor, or social service agency. Many individuals did, however, keep to themselves and carried on as usual (31%; $n=138$) and others just withdrew from people by sleeping alot or watching television (28%; $n=121$). Cumulatively, less than 3% engaged in somewhat miscellaneous activities such as woodworking hobbies, fishing, hunting, playing musical instruments and going to school.

Research Question 8: Do the variables of age, race, and marital status have a differential effect on the frequency or type of physical or psychological reactions of unemployed steelworkers?

Data for this research question were analyzed using BMDP Statistical Software computer program P4F (Brown, 1981). Because of the demographic characteristics of this

TABLE 11
Reported Frequency of Selected Coping Mechanisms
and Support Systems Utilized During Unemployment

Coping Mechanism/Support System	N	%
I. Social Network		
Confided in a close friend	189	(43)
Talked to an acquaintance or neighbor	91	(21)
Sought out others who are dealing with a similar problem	65	(15)
Talked to people at work	61	(14)
Sought more social contacts, went out more	24	(5)
II. Family		
Confided in my spouse or partner	210	(48)
Confided in a relative	140	(32)
III. Professional		
Saw a doctor	28	(6)
Saw a minister or religious counselor	24	(5)
Saw a psychiatrist, therapist or counselor	9	(2)
Went to a social service agency	8	(2)
IV. Self		
Kept to myself, carried on as usual	138	(31)
Withdrew from people (slept a lot or watched television a lot)	121	(28)
Prayed, went to church	107	(24)
Meditated, did relaxation exercises	19	(4)
V. Activity		
Engaged in sports, exercise	126	(29)
Took a vacation, got a change of scene	72	(16)
Worked harder	51	(12)
Studied, read up on the problem	29	(7)
VI. Drug and alcohol		
Used alcohol or drugs	74	(17)
Other things	15	(3)
None of these	28	(6)

sample, the data pertaining to each of the variables of age, race, and marital status always yielded statistically significant differences. Therefore, it was necessary to do an interactional analysis of the data by examining structural relationships between the variables (Feinberg, 1980). In order to facilitate data analysis, each of the three variables was collapsed into dichotomous categories: (a) age = under 36 or 36 and over, (b) race = white or non-white (Black/Negro, Mexican-American/Chicano), and (c) marital status = married or single (single included those who were widowed, divorced, or separated).

Question 17 and 18 of the Steelworker's Questionnaire asked that the respondents describe the general state of their physical health before and after becoming unemployed, respectively. For both questions there were significant interactions. Before becoming unemployed more respondents under the age of 36 (< 36) described their physical health as "excellent" ($n=209$) than "good" ($n=118$). However, more respondents who were 36 years of age and over (≥ 36) described their physical health as "good" ($n=59$) than "excellent" ($n=53$). This disordinal interaction with age was significant, $\chi^2(1, N = 439) = 9.42, p < .05$. After becoming unemployed, however, both age groups reported more frequently that their physical health was "good" ($< 36, n=230; \geq 36, n=87$) than "excellent" ($< 36, n=96; \geq 36, n=25$). This ordinal interaction with age was not significant, $\chi^2(1, N = 438) = 2.18, n.s.$,

suggesting that both groups were responding similarly.

Although there was not a significant interaction with race on the question of physical health before becoming unemployed ($\chi^2(1, N = 439) = 0.35, n.s.$), there was a significant interaction with race and the question of physical health after becoming unemployed. Both whites and non-whites reported a greater frequency of responses for "good" physical health (whites, $n=279$; non-whites, $n=38$) than "excellent" physical health (whites, $n=114$; non-whites, $n=7$). This ordinal interaction was significant, $\chi^2(1, N = 438) = 4.05, p < .05$. The relative difference between the two groups indicated that after becoming unemployed, non-whites reported more of a decline in their physical health than did whites.

Questions 23 and 24 asked the respondents to describe the general state of their psychological and emotional health before and after becoming unemployed. Although there was not a significant interaction for any of the variables pertaining to the reported status of psychological health before unemployment, there was a significant interaction with race and the reported status of psychological health after unemployment. Both whites and non-whites reported a greater frequency of "good" psychological health (whites, $n=352$; non-whites, $n=43$) than "excellent" psychological health (whites, $n=41$; non-whites $n=1$). This ordinal interaction was significant, $\chi^2(1, N = 437) = 4.13, p < .05$. The

relative difference between the two groups indicated that after becoming unemployed, non-whites reported their psychological and emotional health as less satisfactory than did whites.

Question 25 investigated how satisfied the respondents were with the way they occupied their time since becoming unemployed. Table 12 presents the results of the chi-square test of significance for age and level of satisfaction for the way time has been occupied. Both age groups indicated a higher frequency of responses for being "dissatisfied" with the way they occupied their time than either of the other choices. More respondents in the < 36 age group indicated that they were "undecided" than "satisfied". This order was reversed in the ≥ 36 group. These interactions were significant, $\chi^2(2, N = 436) = 9.24, p < .05$.

Question 26 asked, "Has becoming unemployed changed the way you feel about yourself?" Both age groups indicated a higher frequency of "Yes" responses ($< 36, n=215$; $\geq 36, n=58$) than "No" responses ($< 36, n=110$; $\geq 36, n=53$). This ordinal interaction was significant, $\chi^2(1, N = 436) = 6.71, p < .05$. "Yes" responses were reported nearly twice as frequently by the < 36 group.

Feelings of satisfaction as the head of a household or family were examined by question 28. Married individuals reported a higher frequency of responses for being "less satisfied" as a head of a household or family ($n=101$) than having feelings that were "constantly

TABLE 12
 Chi-Square Test of Significant Difference for
 Age and Satisfaction with Occupying Time

Age	<u>Rating</u>			<u>Total</u> N
	<u>Satisfied</u> N	<u>Undecided</u> N	<u>Dissatisfied</u> N	
< 36	71	81	172	324
≥ 36	38	16	58	112
Total	109	97	230	436

$$\chi^2(2, N = 436) = 9.24, p < .05.$$

changing" ($n=50$). However, respondents who were single reported a higher frequency of responses for feelings of satisfaction that were "constantly changing" ($n=44$) than "less satisfied" ($n=28$). This disordinal interaction was significant, $\chi^2(1, N = 223) = 15.64, p < .05$.

The incidence of personal depression was explored by question 29. Each of the age groups had a higher frequency of experiencing personal depression since becoming unemployed ($< 36, n=225; \geq 36, n=73$) than not experiencing personal depression ($< 36, n=66; \geq 36, n=38$). This ordinal interaction was significant, $\chi^2(1, N = 438) = 8.03, p < .05$. Depression was reported more than three times higher than was no depression in the < 36 group as compared to less than two times higher in the ≥ 36 group.

The frequency of depression was elicited by question 30. Both the variables of age and race showed significant interactions to this question. Table 13 depicts the results of the chi-square test of significance for age and frequency of depression. Both age groups indicated that they experience depression "at least once a week" more frequently than either of the other choices. More individuals < 36 experienced depression "at least once a month" than experienced depression "at least once every two months". For individuals ≥ 36 , these findings were reversed. This interaction was significant, $\chi^2(2, N = 338) = 12.85, p < .05$.

Table 14 represents the results of the chi-square

TABLE 13
 Chi-Square Test of Significant Difference for
 Age and Frequency of Depression

Age	<u>Rating</u>			<u>Total</u>
	<u>Once/Week</u>	<u>Once/Month</u>	<u>Once/2 Months</u>	
	N	N	N	N
< 36	131	92	29	252
≥ 36	48	17	21	86
Total	179	109	50	338

$$\chi^2(2, N = 338) = 12.85, p < .05.$$

test of significance for race and frequency of depression. Both whites and non-whites had the same order of ranking for frequency of depression. The greatest frequency for both groups was experiencing depression "at least once a week". This was followed in descending order by experiencing depression "at least once a month" and experiencing depression "at least once every two months". This ordinal interaction was significant, $\chi^2(2, N = 338) = 11.80, p < .05$. Experiencing depression "at least once a week" alone accounted for 50% of the white responses; however, it accounted for 79% of the non-white responses.

Degree of depression was examined by question 31. Table 15 displays the results of the chi-square test of significance for age and degree of depression. The hierarchical rankings of the degree of depression experienced by the steelworkers were the same for both age groups. "Mild depression" ranked first in terms of frequency. In the second position there was "moderate depression" followed by "severe depression". However, the ordinal interaction was significant, $\chi^2(2, N = 370) = 6.24, p < .05$. The largest variance was in the category "moderate depression" which accounted for 41% of those < 36 and only 26% of those ≥ 36 .

The inquiry into whether an individual loses his/her temper more often since becoming unemployed was addressed by question 33. There was a significant ordinal interaction with this question and age, $\chi^2(1, N = 434) =$

TABLE 14
 Chi-Square Test of Significant Difference for
 Race and Frequency of Depression

Race	<u>Rating</u>			<u>Total</u> N
	<u>Once/Week</u> N	<u>Once/Month</u> N	<u>Once/2 Months</u> N	
White	152	105	47	304
Non-white	27	4	3	34
Total	179	109	50	338

$\chi^2(2, N = 338) = 11.80, p < .05.$

TABLE 15
 Chi-Square Test of Significant Difference for
 Age and Degree of Depression

Age	<u>Rating</u>			<u>Total</u> N
	<u>Severe</u> N	<u>Moderate</u> N	<u>Mild</u> N	
< 36	20	115	145	280
≥ 36	8	24	58	90
Total	28	139	203	370

$$\chi^2(2, N = 370) = 6.24, p < .05.$$

5.42, $p < .05$. Both age groups reported with higher frequency that they lose their temper more often (< 36 , $n=226$; ≥ 36 , $n=65$) than those who reported that they did not lose their temper more often (< 36 , $n=96$; ≥ 36 , $n=47$). Seventy percent of the individuals < 36 indicated they lose their temper more easily compared to 50% of those ≥ 36 .

The number of arguments that a person had with his/her spouse was investigated in question 34. Table 16 shows the results of the chi-square test of significance for age and number of arguments with a spouse. Workers < 36 most frequently indicated that the number of arguments "increased moderately or significantly". This was followed in rank by arguments whose number "remained about the same". However, the reverse order was indicated by workers ≥ 36 . Both age groups had the lowest frequency for the number of arguments which "decreased moderately or significantly". These interactions were significant, $\chi^2(2, N = 332) = 9.75, p < .05$.

The amount of alcohol that a worker drinks since becoming unemployed was examined by question 38. The data showed a significant interaction for each of the three variables of age, race, and marital status. Table 17 presents the results of the chi-square test of significance for age and amount of alcohol consumed. More workers < 36 indicated that the amount of alcohol consumed "remained about the same" than "decreased moderately or

TABLE 16
 Chi-Square Test of Significant Difference for
 Age and Number of Arguments with Spouse

Age	<u>Rating</u>			<u>Total</u> N
	<u>Increase</u> N	<u>Same</u> N	<u>Decrease</u> N	
< 36	153	80	10	243
≥ 36	39	45	5	89
Total	192	125	15	332

$\chi^2(2, N = 332) = 9.75, p < .05.$

TABLE 17
 Chi-Square Test of Significant Difference for
 Age and Amount of Alcohol Consumed

Age	<u>Rating</u>			<u>Total</u> N
	<u>Increase</u> N	<u>Same</u> N	<u>Decrease</u> N	
< 36	102	120	102	324
≥ 36	19	41	50	110
Total	121	161	152	434

$$\chi^2(2, N = 434) = 21.85, p < .05.$$

significantly". The reverse was true for workers ≥ 36 . For each group the lowest frequency was related to an increase in alcohol consumption. These interactions were significant, $\chi^2(2, N = 434) = 21.85, p < .05$.

Table 18 displays the results of the chi-square test of significance for race and amount of alcohol consumed. Whites reported more frequently that their alcohol consumption "remained about the same", followed in decreasing order by "decreased moderately or significantly" and, lastly, "increased moderately or significantly". This order was reversed for non-whites, that is, non-whites reported more frequently that their alcohol consumption "increased moderately or significantly" followed in decreasing order by "decreased moderately or significantly" and lastly, "remained about the same". This disordinal interaction was significant, $\chi^2(2; N = 434) = 10.38, p < .05$.

Table 19 shows the chi-square test of significance for marital status and amount of alcohol consumed. The interaction pattern for marital status was similar to that described above for race. More married individuals reported that their alcohol consumption "remained about the same", followed in decreasing rate of prevalence by "decreased moderately or significantly", and, lastly, "increased moderately or significantly". The reverse pattern was observed for single individuals. This disordinal interaction was significant, $\chi^2(2, N = 434) =$

TABLE 18
 Chi-Square Test of Significant Difference for
 Race and Amount of Alcohol Consumed

Race	<u>Rating</u>			<u>Total</u> N
	<u>Increase</u> N	<u>Same</u> N	<u>Decrease</u> N	
White	101	153	136	390
Non-white	20	8	16	44
Total	121	161	152	434

$\chi^2(2, N = 434) = 10.38, p < .05.$

TABLE 19
 Chi-Square Test of Significant Difference for
 Marital Status and Amount of Alcohol Consumed

Marital Status	<u>Rating</u>			<u>Total</u> N
	<u>Increase</u> N	<u>Same</u> N	<u>Decrease</u> N	
Married	53	114	97	264
Single	68	47	55	170
Total	121	161	152	434

$$\chi^2(2, N = 434) = 10.91, p < .05.$$

10.91, $p < .05$.

Research Question 9: Do the variables of age, race, and marital status have a differential effect on the frequency or type of coping mechanism or support systems utilized by unemployed steelworkers during the period of their unemployment?

Data for this research question were analyzed by using BMDP Statistical Software computer programs P4F (Brown, 1981). As mentioned previously, because of the demographic characteristics of this sample it was necessary to do an interactional analysis of the data and an analysis of structural relationships. The variables of age, race, and marital status were collapsed into the same dichotomous categories as those which were discussed in Research Question 8.

Question 39 of the Steelworker's Questionnaire asked the workers to describe their social contacts with relatives since becoming unemployed. Table 20 depicts the results of the chi-square test of significance for race and social contacts with relatives. Although whites reported that their social contacts with relatives "remained the same" more frequently than they "decreased", for non-whites this order was reversed. Of the three options, both groups responded least often that contacts with relatives "increased". These interactions were

TABLE 20
 Chi-Square Test of Significant Difference for
 Race and Social Contacts with Relatives

Race	<u>Rating</u>			<u>Total</u> N
	<u>Increase</u> N	<u>Same</u> N	<u>Decrease</u> N	
White	89	188	114	391
Non-white	7	15	22	44
Total	96	203	136	435

$$\chi^2(2, N = 435) = 7.48, p < .05.$$

significant, $\chi^2(2, N = 435) = 7.48, p < .05$.

Question 41 asked, "How would you describe the level of support you have received from friends, family, organizations, community, etc., since becoming unemployed?" Table 21 presents the results of the chi-square test of significance for age and level of support. While an equal number of individuals ≥ 36 reported that the level of support received was either "good" or "poor", nearly twice as many individuals < 36 reported that the level of support received was "good" as opposed to "poor". Of the three options, both groups responded least often to being "undecided". These interactions were significant, $\chi^2(2, N = 430) = 9.39, p < .05$.

Research Question 10: What are the reactions of unemployed steelworkers to selected options that might affect a change in vocational status?

In order to help understand the responses to selected options that might affect a change in vocational status, the participants were asked the question, "Why did you become a steelworker?" Table 22 is a listing of the reactions of respondents to selected reasons that influenced this decision. A large proportion (73%; $n=320$) indicated that "it was the best paying job at the time".

When the respondents were asked if they would be willing to relocate to another part of the country to

TABLE 21
 Chi-Square Test of Significant Difference for
 Age and Level of Support

Age	<u>Rating</u>			<u>Total</u> N
	<u>Good</u> N	<u>Undecided</u> N	<u>Poor</u> N	
< 36	177	58	90	325
≥ 36	46	13	46	105
Total	223	71	136	430

$\chi^2(2, N = 430) = 9.39, p < .05.$

TABLE 22
 Reactions of Respondents to Selected Reasons That
 Influenced Their Decision to Become a Steelworker

Reason	N	%
It was the best paying job at the time	320	(73)
I knew it would be a secure job	244	(55)
The benefit package was the best available	225	(51)
My father or close relative was a steelworker	187	(43)
I did not have any money to go to school	120	(27)
I had no desire to go to school	95	(22)
I needed the first job I could get	82	(19)
It was the only job available	67	(15)
All my friends worked in the mill	58	(13)
I never considered any other job	55	(13)
I couldn't get into another trade	37	(8)
Other	22	(5)

Note. Respondents were asked to check as many of the above reasons as applied to them.

find work, 51% ($n=223$) stated "Yes", 18% ($n=80$) stated "No", and 30% ($n=132$) were "Undecided". The question as to whether training for another job was the way to solve their problem of unemployment resulted in 38% ($n=167$) "Yes" responses, 29% ($n=129$) "No" responses, while 31% ($n=136$) were "Undecided". However, 80% of those surveyed ($n=351$) indicated that they would be willing to learn a new trade at this point in their lives. Only 8% ($n=36$) replied "No" and 11% ($n=48$) were "Undecided".

Table 23 provides a general categorization of the replies to the open-ended question: "If you wanted to make your legislator, people who are in charge of training programs, health service providers and other people aware of your needs and how you feel they could best be met, what suggestions would you make?" More than 50% of those surveyed responded to this question. Combined, personal reactions and recommendations related to business and industry accounted for the majority of the replies. In terms of specific responses, the suggestion to stop foreign imports and trade on steel, automobiles, and electronic equipment was given by 10% of the workers ($n=46$). The second most frequent suggestion (10%; $n=44$) promoted more job training programs supplemented by monies from the Comprehensive Employment and Training Act (C.E.T.A.) and Trade Readjustment Allowances (T.R.A.). Interestingly, the third most frequent

TABLE 23
Summary of Steelworkers' Responses of Their
Needs and Suggestions as to How their
Personal/Vocational Needs Could Best be Met

Category	N	%
Business/Industry Related Recommendations	134	(30)
Health and Welfare Concerns	41	(9)
Personal Reactions	103	(23)
No Suggestions/Undecided	190	(43)

Note. Participants were asked to respond to the open-ended question, "If you wanted to make your legislator, people who are in charge of training programs, health service providers and other people aware of your needs and how you feel they could best be met, what suggestions would you make?"

Suggestions were provided by 231 of the 440 participants (52.5%).

suggestion offered was for politicians to experience what steelworkers are experiencing during the plight of their unemployment (6%; $\underline{n}=25$). In this regard responses included frequent references to "Walk a mile in my shoes". Five percent ($\underline{n}=22$) simply indicated "Get my job back". Four percent of the respondents ($\underline{n}=16$) recommend sharing the results of the Steelworker's Questionnaire and making the plight of the steelworkers more widely known. Other comments (2% or less) promoted: (a) modernizing American plants in order to stimulate the U.S. steel industry and become more competitive, (b) increasing tariffs, (c) stopping American banks from investing in foreign countries, and (d) impeachment of the President.

Certain personal reactions to the open-ended question were reflective of the anger, frustration, humiliation, bitterness, bewilderment and desperation of these unemployed workers. In order to evidence these, the following are illustrations of the kinds of comments that individuals expressed: "No suggestions....They would simply fall on deaf ears and be ignored as always.... No one gives a damn about the unemployed because their way of life has not been threatened." "The whole system stinks....One agency tells you one thing another tells you something else altogether....All you get is a hassle and a runaround." "I paid my share of state and federal taxes, now I'm in the minority and when I need help I'm

refused....We are bitter, very bitter." "Shut down the country. The President is an ignorant, inconsiderate, cold-hearted fool. He's more interested about other countries and their people than his own country.... Charity begins at home, not overseas....Help American people first." "We lost our jobs and nobody could give a F__k. (I'm) one dissatisfied, unhappy, bitching mad person at this great country of ours." "Steelworkers are proud people who are used to paying their own way. When they finally admit they need financial or moral support and seek it out and get slapped down--they won't go back a second time for the same thing." "Who is going to help us get back on our feet, to find good jobs like we had before and be able to hold our heads up and be proud that we are working and making a living...not holding our hands out for welfare or food stamps.... There's no where to go - no where to turn....Who is going to help us? Who?" "I say demonstrate, protest, riot like in the 60's....Our leaders are tyrants." "Start a war, it's the only way out." "Help!"

CHAPTER VI. DISCUSSION

The purpose of this study was to examine the perceptions of unemployed steelworkers regarding the stress of unemployment and the coping mechanism which they have utilized to deal with their unemployed status. The results of the study will be discussed in terms of the 10 research questions that were raised in Chapter III.

An analysis of the demographic variables indicated that the sample of respondents in this survey were predominately young (between the ages of 20 and 35), white, married males. This information must be kept in mind when analyzing the responses for the entire sample under study.

The first research question pertained to life change events that were perceived as major stressful problems in the lives of unemployed steelworkers. Despite the noted lack of consensus in the review of literature regarding the correlation of stress and the status of being unemployed, for the sample of unemployed steelworkers in this study "being unemployed" was the major stressful problem in their lives. This was indicated by a large proportion (80%) of the respondents. Closely related in second place were "financial worries" followed in third place by "changing jobs". It appears that the three major

stressful problems contemporarily experienced by the participants of this study are all related to their unemployed status. Psychological difficulties as manifested in marital problems, problems with children, and emotional illness ranked fourth, fifth, and sixth, respectively. These rankings of life change events do not follow the patterns reported in the literature by either Holmes and Rahe (1967) or Kiev and Kohn (1978). What seems to be apparent is that at a given point in time a personal hierarchy of stress is contingent upon the subjective perception of both the nature of the stressor and the potential of that stressor to inflict harm. This view seems to be consistent with that of Pearlin, et al. (1981).

Research Question 2 pertained to the perception of steelworkers as to the general state of their physical health. In order to provide a basis for comparison of responses, the participants were asked to describe the general state of their physical health both before and after becoming unemployed. While 97% of the workers perceived their physical health to be either "excellent" or "good" prior to becoming unemployed, only 75% felt this way after becoming unemployed. Within the category "excellent" physical health, alone, 54% downgraded their status. In fact, while only 4% viewed their physical health to be "fair" or "poor" prior to becoming unemployed, the number increased to 25% after becoming unemployed.

A subsample of approximately 9% of the respondents were identified as having returned to full-time work. Table 4 indicated that a chi-square test between the perceptions of physical health before and after becoming unemployed for this subsample failed to demonstrate any significant statistical difference, $\chi^2(1, n = 80) = 2.23$, n.s. A vast majority of unemployed workers in this study had been out of work approximately 16 - 18 months at the time the survey was conducted. For those in the subsample who had been recalled to work, their time of unemployment was less than the rest of the sample. Two factors account for the marked difference in perception of physical health before and after unemployment for these two groups. First, it can be hypothesized that perceptions of diminished physical health abate after being recalled to work. Secondly, it can be hypothesized that perceptions of diminished physical health are, in part, a function of the length of time of unemployment. This latter viewpoint seems to be consistent with the "lag phenomena" reported by Brenner (1973, 1976, 1979).

The third research question dealt with the reported frequency of selected physical ailments that were experienced within one month of the time of this study. Of the physical ailments listed in Table 5 under "medical conditions", singularly elevated was the response for having back trouble (20%). Considering the physical demands of the steelworker's job, one

might question whether this ailment is rather indigenous to the occupation itself. None of the other "medical conditions" surpassed a 4% rate of prevalence. However, "non-specific medical conditions" showed a 20 - 25% rate of prevalence for stomach aches and headaches with a nearly identical rate for anxiety and insomnia, categorized under "psychological states". Frequent depression and irritability were reported by 42% and 37% of the respondents, respectively. If a trend can be gleaned from these results, it is characterized by the increased reporting of ailments away from purely physical medical conditions toward more non-specific medical (psychophysiological) conditions, psychological states, and dependencies.

Research Question 4 was concerned with the perception of psychological and emotional health. As with the physical health rating, in order to provide a basis for comparison of responses, the participants were asked to describe the general state of their psychological and emotional health both before and after becoming unemployed. While 98% of the workers perceived their psychological health to be either "excellent" or "good" prior to becoming unemployed, only 52% felt this way after becoming unemployed. Within the category of "excellent" psychological health, alone, 85% downgraded their status. Notably, while only 2% viewed their psychological health to be "fair" or "poor" prior to becoming unemployed, the

number increased to 49% after becoming unemployed.

The previously described subsample of unemployed workers who returned to full-time employment was used to compare their perceptions of psychological health both before and after becoming unemployed. Table 7 revealed a statistically significant difference in these perceptions, $\chi^2(1, n = 76) = 16.37, p < .001$. This finding was consistent with the hypothesized trend that psychological ailments are experienced more frequently than physical ones. Further, even after returning to work, psychological health continues to be perceived as being significantly different than it was prior to being unemployed.

The fifth research question addressed the reported frequency of selected psychological ailments. It has been previously noted that many physical ailments could be viewed from a psychological perspective as well. Several of the ailments that fall in this category were listed in Table 5 and have already been discussed. In terms of occurrence, both frequent depression (42%) and frequent irritability (37%) were those experienced most often within a one month time period of this study. Perhaps more revealing was the fact that three-fourths of all the respondents had experienced depression since becoming unemployed, 45% at least once per week. Thirty-eight percent were described as being in the "moderate" to "severe" range of depression with 5% reporting that they

had seriously considered suicide within 30 days of this survey. These findings are supportive of those of Borrero (1980), Figueira-McDonough (1978), Manuso (1977), and Oliver and Pomicter (1981) that depression is a major factor in the experience of unemployed workers and are in contrast to those of Kasl (1982), Kasl and Cobb (1982), and Kasl, et al. (1975).

Suicide can be viewed as an extreme expression of profound depression. The correlation of increased suicides with increased unemployment rates in Australia, Canada, France, Germany, Japan, Sweden, Italy, Great Britain as well as in the United States has already been established (Boor, 1980; Brenner, 1973, 1976, 1977, 1979; Bunn, 1979; Dumont, 1977; Rushing, 1968; Vigderhous and Fishman, 1978). Within the context of this study, 5% ($n=20$) of the unemployed steelworkers revealed that they had "seriously considered suicide" within one month of the time this survey was conducted. Although there was information pertaining to at least one case of suicide, there was insufficient statistical data on the actual incidence of suicide for steelworkers to warrant definitive conclusions. However, the fact that so many steelworkers had seriously contemplated suicide warrants deep concern and seems to amplify their perceptions of their unemployed status.

One's psychological state or emotional well-being can be reflective of or determined by how an individual

feels about himself/herself. Seventy-two percent of all the respondents indicated that their feelings about themselves had changed and this was directly attributed to their unemployed status. Nearly all of the workers (97%) either felt less satisfied with themselves or had feelings of satisfaction that were continually changing. Similar findings were revealed pertaining to respondents' feelings of satisfaction as the head of his/her household or family. Seventy-nine percent experienced either being less satisfied or having feelings that were constantly changing. Such a large percentage of individuals experiencing a reduction in personal satisfaction and self-worth or ambivalent or constantly vacillating feelings would seem to make the reported frequency of personal depression more understandable. This fundamental alteration or erosion of self-worth (self-esteem) is consistent with the findings of Catalano and Dooley (1977), Cohn (1978), Dumont (1977), Group for the Advancement of Psychiatry (1982), Lawlis (1971), and Tausky and Piedmont (1967). It is considered to be the most consistently reported finding in the research on unemployment resulting from the combined effect of self-blame for being out of work and financial insecurity (Kasl, 1974). However, only 11% of the steelworkers in the present study felt even partly to blame for their being unemployed.

As was indicated in the review of literature, some theorists contend that depression is a form of

displaced aggression (Borrero, 1980; Morris, 1982). With such a high degree of ambivalent or constantly changing feelings being reported by unemployed steelworkers, it could be hypothesized that the range of such feelings could vacillate between the manifestation of depression (with diminished feelings of self-worth) and aggression. An examination of these data seems to support this hypothesis. Since becoming unemployed, 86% of the workers indicated that they lose their temper more often when things do not go their way. Further, within the context of the family, the number of arguments with spouses had increased either moderately or significantly for 58%. The frequency with which an individual feels compelled to discipline his/her children has also been viewed as a form of displaced aggression (Briar, 1980; Dumont, 1977; Margolis & Farran, 1981). Thirty-one percent described that the number of times they had to discipline their children increased either moderately or significantly, since becoming unemployed.

Alcohol consumption can be viewed from a psychological as well as a physical perspective. For those who drink alcoholic beverages, 35% described their consumption as increasing either moderately or significantly since becoming unemployed, while 18% felt that their consumption decreased. This trend of increased alcohol consumption during unemployment is consistent with other reported findings (Brenner, 1973, 1979; Liem and Rayman, 1982).

Research Question 6 examined the support systems that workers perceived as giving them the most support during their period of unemployment. To summarize the results, among a variety of support systems, the "family" of the worker was indicated by an overriding majority of respondents (78%) followed by "friends" (59%) and the "local U.S.W.A. union" (33%). Lowest among the list was "business/industry" (2%), "fraternal organizations" (2%), and lastly the "national U.S.W.A. union" (1%). The locus of support seemed to emanate from both "family" (spouse or partner, children, or other relatives) and "social networks" (close friends, neighbors, others with similar problems) with whom the worker is or has been interpersonally involved on a somewhat sustained basis. Research data have indicated that the consequences of job loss have been experienced as less severe when individuals perceived their family and friends as being supportive during the ordeal of unemployment (Cobb & Kasl, 1977; Kasl, 1982; Kasl, et al., 1975).

A rather curious dichotomy existed when the data on support systems were compared within the union hierarchy, that is, between the "local" U.S.W.A. (Local 1256) and the "national" U.S.W.A. While 1 out of every 3 workers felt that the local union was among the three most supportive systems during their unemployment, less than 1 in 100 felt that the national union was supportive. No other support system received fewer votes.

Research Question 7 was designed to elicit the frequency of various coping mechanisms and support systems utilized by steelworkers. To ease the stress of unemployment "social networks" and "family" again headed the list of preferred support systems and coping strategies. Within these systems nearly one-half (48%) chose to confide in their spouse or partner, 43% chose to confide in a close friend and 32% elected to confide in a relative. In addition to seeking out spouse or partner, close friends, and relatives in that order of preference, the common denominator to all three methods of coping involved confiding. As has been indicated previously, support is not provided by the entire range of social relations, but only those relations where there are the qualities of trust and intimacy (Pearlin, et al., 1981). This perception of trust and intimacy apparently is conducive to risk confiding in someone else about one's self. Indeed, because of the magnitude of the prevalence of this strategy for this population it would appear that confiding in someone might be both a necessary and/or essential component in the repertoire of coping mechanisms. However, comparatively few individuals (less than 6%) confided in professionals (physicians, ministers or religious counselors, therapists, or social agencies). As a result, it is not surprising that many workers - nearly one out of every three - elected to cope by withdrawing in some way from other people through sleeping, watching television, praying,

or just keeping to themselves.

The eighth and ninth research questions investigated the variables of age, race, and marital status as to their differential effect on physical or psychological reactions and coping mechanisms or support systems, respectively. From the questions reviewed, the variable of age was a factor in 10 significant interactions. This was twice the number for the variable of race, which accounted for 5 significant interactions, and over three times the number for marital status which accounted for 3 significant interactions.

Age was a factor in how younger workers (< 36) and older workers (≥ 36) perceived their physical health before unemployment. Younger workers were more prone to report the condition of their physical health as "excellent", while older workers were more prone to report their health as "good". It can be hypothesized that this interaction could be attributable to the aging process alone and that younger people would, naturally, be in relatively better physical health than older people. However, after becoming unemployed for 16 - 18 months, there were no significant differences in the way younger and older people perceived their physical health. The most dramatic change, however, occurred in the younger group of unemployed workers. These results seem to support the findings of Brair (1980) and Catalano and Dooley (1970) and are in contrast to the findings of Brenner (1977),

Dumont (1977), and Liem and Rayman (1982).

How a worker felt about the way his/her time was occupied since becoming unemployed was also related to age. Compared to being "satisfied" or "undecided", both younger and older workers reported more frequently that they were "dissatisfied" with the way they occupied their time. However, older workers seemed to be more clearly either "dissatisfied" or "satisfied", that is, one or the other. Younger workers, on the other hand, were "dissatisfied" more than twice as often as "undecided", but reported being "undecided" 25% of the time. Older workers seem to be more sure of their feelings pertaining to this question.

Whether a respondent was either a younger worker or an older worker seemed to be associated with the response to the question, "Has becoming unemployed changed the way you feel about yourself?" Even though both age groups indicated that their feelings about themselves had changed, the relative magnitude between the groups was significant. Older workers were nearly equally divided on the question, but nearly two times as many younger workers reported a change in personal feelings compared to those who did not.

Age was also related to the reported experience of personal depression. In fact, the age variable was significantly involved with all three areas of depression that were examined: (a) incidence, (b) frequency, and

(c) severity. While both age groups reported experiencing personal depression, younger workers reported experiencing depression with a greater relative frequency (79%) than older workers (65%). The reported incidence of depression for younger workers was 1.8 times higher than for their older counterpart.

Experiencing depression "once a week" was reported by both younger and older workers more frequently than either of the other time periods examined (Table 13). Moreover, a relatively larger percentage of younger workers (36%) reported experiencing depression once a month compared to their older counterparts (19%). A somewhat similar finding occurred in regard to age and the reported degree of depression. Each age group reported experiencing mild depression more frequently than either of the other two degrees of depression investigated (Table 15). But, a relatively larger percentage of younger workers (41%) more frequently indicated that they experience moderate depression than did their older co-workers (26%).

Younger workers consistently reported a relatively higher incidence, frequency, and degree of depression than older workers. These results support the findings of Boor (1980) and Markush and Favero (1974) and are in contrast to the findings of Brenner (1977), Briar, et al. (1980), Dumont (1977) and Liem and Rayman (1982).

Age was a factor in the response to the question as to whether a worker loses his/her temper more often

since becoming unemployed. Even though both age groups indicated that they did lose their temper more often since they became unemployed, the relative difference was, again, greater for the younger group of workers (70%) than for older workers (58%). This relative difference was also found in the results of the question pertaining to the number of arguments an individual had with his/her spouse. While the relative number of arguments increased for 43% of workers ≥ 36 , this relative number increased to 62% for those < 36 .

Alcohol consumption and age were also related. Alcohol consumption tended to remain about the same for over one third of the respondents < 36 . The remaining two thirds of this group were equally split between increased and decreased alcohol consumption. Nearly one half of the ≥ 36 group decreased their alcohol intake. While alcohol consumption increased for 17% of those ≥ 36 , this increase reached 31% for those < 36 . After becoming unemployed, younger workers' drinking habits tended to remain the way they were before they were unemployed, while older workers tended to change their habits and reduce their drinking. Although there were reported increases in the amount of alcohol consumed by both groups, the relative rate of increase was greater (+14%) for younger workers.

Lastly, age was related to how workers perceived the level of support received from family, friends,

organizations, and community since becoming unemployed. Whereas 43% of older workers were equally divided between whether the level of support was either "good" or "poor", younger workers were more prone to respond that level of support was "good" (54%). Only 28% of them indicated that help from these support systems were "poor".

In summary, age was found to be a statistically significant factor in 10 of the areas investigated: (a) physical health before unemployment, (b) level of satisfaction for the way an individual occupied his/her time, (c) feelings about one's self, (d) incidence of depression, (e) frequency of depression, (f) severity of depression, (g) temper, (h) number of arguments with spouse, (i) alcohol consumption, and (j) level of support received from family, friends, organizations, and community.

Race was found to be a statistically significant factor in five of the areas investigated: (a) physical health after becoming unemployed, (b) psychological health after becoming unemployed, (c) frequency of depression, (d) alcohol consumption, and (e) social contacts with relatives.

Although no significant differences were found between race and the questions pertaining to physical or psychological health before unemployment, the factor of race became significantly related to these questions after unemployment. On each of the questions addressing the overall state of physical and psychological health since

becoming unemployed, non-whites reported the state of their health as less satisfactory than did whites. More specifically, both whites and non-whites reported experiencing depression "once a week" more frequently than either of the other two time periods examined (Table 14). However, the relative magnitude of difference was pronounced. While whites reported a 50% rate of prevalence for experiencing depression at least once a week, non-whites reported a 79% rate of prevalence. Additionally, related to the question of alcohol consumption, while whites tended to remain the same in their drinking habits, non-whites tended to change their drinking habits and increase their alcohol consumption. Forty-five percent of the non-white group increased their intake compared to 25% of the white group.

Finally, race was related to the question pertaining to social contacts with relatives. After becoming unemployed, nearly half of the white group kept their contacts with relatives at about the same level it was before becoming unemployed, while about half of the non-white group decreased their contacts with relatives.

In general, these findings support the conclusion by Bowman, et al. (1982) and Feldman (1973) that both perceptions and reactions to unemployment differ when one accounts for the factor of race.

Lastly, marital status was found to be a statistically significant factor in two of the areas investigated:

(a) level of self-satisfaction as head of a household or family, and (b) alcohol consumption.

With reference to the question pertaining to an individual's level of personal satisfaction as the head of his/her household or family, 86% of the married individuals indicated that they were less satisfied with themselves. However, 61% of the single people reported that they had feelings that were constantly changing. It could be hypothesized that many single persons had not yet assumed the role, head of household or family. As a result, a bonafide feeling associated with this role may not have been fully realized. Therefore, the marked elevation in constantly changing feelings might have been attributable, in part, to a lack of full personal identity with this topic.

With regard to alcohol, married and single workers displayed markedly different patterns of consumption. For example, while married workers most frequently indicated that their level of alcohol consumption "remained about the same" as before becoming unemployed, single workers most frequently indicated that it "increased moderately or significantly". Forty-three percent of the married group indicated that their drinking remained the same compared to only 27% of the single group. Moreover, while only 20% of the married group reported an increase in drinking, 40% of the single group reported an increase. Overall, the two groups' drinking patterns were reversed

(Table 19).

The tenth research question examined reactions to selected options that might affect a change in vocational status. Reviewing the various reasons that influenced individuals to become steelworkers can provide some basis for understanding these reactions. Money, job security, and benefit package ranked first, second, and third, respectively, as reasons that influenced individuals to become steelworkers. Any successful job change, retraining program, or effort to relocate to find work would, necessarily, take into account these factors. However, embedded in fourth place was the influence of the family because either father or close relative was a steelworker. This was indicated by 43% of the respondents. The fact that so many of the steelworkers followed the path of other family members (nuclear or extended) might be reflective of their rootedness to family and vocation, as well as to their community. These variables may influence a worker's perception of options for vocational change. Indeed, a change in residence was already reported by 8% of the workers as currently being a major stressful problem in their lives. Further, nearly one in four (23%) reported that changing jobs was a major stressful problem. The underlying theme for these responses was the perception that change, from what had been experienced as usual, customary, and stable, was now being viewed as stressful.

The direction of change in vocational status

(seeking similar work elsewhere, seeking another line of work without acquiring specific skill training, or pursuing retraining/reeducation for a new vocation) may be influenced by additional factors. One in four (27%) did not have money to go on to school. For many, this condition still exists, especially since the T.R.A. monies have been halted. Further, more than one in five (22%) had no desire to go to school. Nineteen percent of the respondents became steelworkers because they needed the first job they could get, while 15% indicated it was the only job available. The factors of money, desire, necessity and opportunity were all integral in making previous vocational choices. Combined with the other reasons that were previously delineated, these factors may well influence reactions to options that might affect a change in vocational status for these unemployed steelworkers.

One of every two respondents (51%) indicated that they would be willing to relocate to another part of the country to find work. The rest of the respondents were either not willing to relocate or were, at the time, undecided. Although only 38% felt that training for another job was the way to solve the problem of unemployment, a strong majority, represented by 80% of the respondents, indicated they would be willing to learn a new trade at this point in their lives. Having an opportunity to do it over again, one third of the men and

women in this study indicated that they would not seek work in the steel industry.

CHAPTER VII. IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSIONS

A. Implications

An analysis of the demographic characteristics of the sample of steelworkers under study revealed a rather skewed distribution for each of the variables of age, race, sex, and marital status. The composition of the group of workers who responded to the Steelworker's Questionnaire (Table 1) were primarily young (between the ages of 20-35) white, married males. Even though the variables of age, race and marital status were each subdivided into categories for analysis of interaction effects, the overall composition of the sample must be kept in mind when drawing implications or conclusions from the data. Further, whether the composition of this sample of unemployed steelworkers was comparable to or representative of other samples of unemployed steelworkers needs to be determined. Also, the same would be true concerning the representativeness of the responses to the Steelworker's Questionnaire. Until this representativeness can be established, caution and restraint should be exercised in generalizing from these data.

The major stressful life change events indicated by unemployed workers (being unemployed, financial worries, and changing jobs) were markedly different than those

observed in other studies (Holmes & Rahe, 1967; Kiev & Kohn, 1979). These findings support the contention of Dohrenwend, et al. (1978) that there is no unanimity among researchers as to which life change events are most representative, meaningful, or stressful in a person's life. This sample of unemployed steelworkers reported a series of stressful life change events based on their own experience at a given point in time. In many respects, reality lies in one's perception of what is real. It is the reality of their own experience which needs to be understood by any and all who are in a position to help the plight of these workers.

Since becoming unemployed, the reported incidence of change in physical and psychological health for both an overall appraisal and for specific ailments was pronounced. Interestingly, with the exception of back trouble which reached a frequency of 20%, none of the "medical conditions" listed in Table 5 achieved more than a 4% rate of prevalence. The fact that one in five steelworkers reported back trouble has already been viewed from the perspective that such a high rate of incidence might be indigenous to the nature of the work. However, compared to the findings of the previously cited study conducted in California (In Pursuit of Wellness, 1979) that was a survey of over 1,000 randomly selected residents, this sample of steelworkers reported 4% less problems with back trouble. Keeping this in perspective,

the reported frequency for all the ailments listed under "medical conditions" was relatively insignificant. This phenomenon is somewhat similar to the lag phenomena described by Brenner (1973, 1976, 1979), in that a rise in physical ailments, such as cardiovascular disease, have a time lag of two to three years. Recall that at the time of this survey, workers had been unemployed for approximately 16 - 18 months. These findings are, however, in opposition to those of Kasl and Cobb (1979) who noted in their work that for diverse indicators of health, including psychophysiological symptoms, no significant differences which were attributable to unemployment status could be detected.

Borrero (1980) felt that the most serious emotional stress experienced by the unemployed was depression. The results of this study are consistent with this view. Of all the questions on the Steelworker's Questionnaire, no other received such a high percentage of affirmative responses as did the question pertaining to the incidence of personal depression. Seventy-five percent of those responding indicated that they had experienced personal depression since becoming unemployed. Other researchers (Figueira-McDonough, 1978; Manuso, 1977; Oliver & Pomictier, 1981) have also reported a greater incidence of depression associated with unemployment. Conversely, Kasl (1982), Kasl and Cobb (1982), and Kasl, et al. (1975) reported that the factor of depression showed no significant change

over time which could be linked to unemployment. Nevertheless for the group of steelworkers in this study, the factor of depression was not only significant in terms of rate of prevalence, it was also a significant factor in terms of reported frequency and severity.

The variables of age, race, and marital status were implicated as major factors in the response patterns of steelworkers. Salient were the responses to depression (prevalence, frequency, and severity) and consumption of alcohol. If a respondent was young (< 36), he/she was more likely to report both a greater prevalence and frequency of depression than his/her older counterpart. Non-whites reported a greater relative frequency of depression than whites. Therefore, young, non-white workers were more prone to report both a greater prevalence and frequency of depression than their young, white peers. With respect to alcohol consumption, if a respondent were married, white, and under the age of 36, (a) for most, drinking tendencies remained approximately the same, and (b) as a group had the lowest rate of increased alcohol consumption. However, if a respondent was single and non-white, his/her drinking tendencies significantly increased. Lastly, if a respondent was ≥ 36 , the reported tendency was for drinking to decrease. The overall implication of these findings, in addition to other findings reported in this text, is that younger unemployed workers who are single are more prone to indicate a greater

relative frequency of varied physical and psychological ailments since becoming unemployed than any other paired group. This elevated reported frequency might imply that since becoming unemployed this young and single group was more vulnerable to the kinds of ailments investigated in this survey. If a third variable, that of being non-white, is combined with the younger (< 36) and single group, then a newly formed group, albeit considerably smaller emerges. This young, single, non-white group of workers was found to be the most vulnerable of all multiple group combinations.

Brenner (1977), Dumont (1977), and Liem and Rayman (1982) hypothesized that middle-aged men and women would be especially sensitive to unemployment, manifesting more intense stress reactions, greater concerns about health, and increased mid-life depression than their younger-aged counterparts. For the present sample of steelworkers none of these hypotheses proved to be valid. Even in terms of extreme depression coupled with suicidal ideation, four times as many younger workers (8%) reported that they had seriously contemplated committing suicide within a one month time period of this survey than older workers (2%). This is a somewhat similar finding to that reported by Boor (1980).

Of the many physical and/or psychological ailments examined in this survey, few, if any, occur solely in isolation, that is, without having an impact upon others

who are either in close physical or psychological proximity to the unemployed worker. By way of a ripple effect, the problems associated with unemployment can pervasively spread from the unemployed worker himself/herself to spouse and children. Personal problems frequently become family-level problems (Moen, 1980). With personal income for 96% of those responding being reported as moderately or significantly decreased, a total family level readjustment to a more modest life style seems evident. Personal as well as family security might become diminished as unemployment compensation and health insurance ran out for many. In addition, at the time of this survey, 72% of the workers had not found any work - part-time or full-time - outside the steel industry. Of those who reported that they had other sources of income, 72% indicated that their spouse was working. Therefore, a change in the status of roles, and possibly prestige, and authority might ensue. These changes might cause disruption or conflict in traditional family dynamics. These implications were also hypothesized by Moen (1980).

Moen (1979) asserted that unemployment could precipitate marital disruption in the form of desertion, separation or divorce, and Peterson's (1974) work amplified this assertion when he found that 75% of the men in his study who remained unemployed for nine months or longer faced divorce proceedings. By comparison, separation or divorce was a minor factor in this study as only 9%

were either divorced or separated. These findings are consonant with those of Borrero (1980) and Brinkerhoff and White (1978).

Turning to level of support received from family, friends, organizations and community, although more than half of the respondents felt that the support received was "good" or "excellent", nearly one third felt it was "fair" or "poor". The remaining respondents were "undecided". The question arises as to why so many people (nearly 50%) felt that the level of support received was neither good nor excellent? A further analysis of the data revealed that nearly twice as many single people indicated that support was "good" compared to "poor", whereas married individuals were equally divided on the question. The answer to the proposed question is not readily available from the data obtained. It is, however, an observed phenomenon which needs further investigation.

Nevertheless, the family was indicated more frequently than any other support system as the one which provided the most support during unemployment (Table 10). This was followed, in decreasing order of reported frequency, by friends, the local unión, and church group. Pearlin, et al. (1981) have hypothesized that support is not provided by the entire range of social relations, but only those relations where there are the qualities of trust and intimacy. If this hypothesis is true, then this sample of steelworkers has established its own hierarchy of

trusting and intimate support systems.

The three coping mechanisms most frequently reported (Table 11) all included the element of confiding, whether it be with spouse, partner, relative or close friend. The concept of confiding was discussed previously as potentially a necessary and/or essential component to the repertoire of successful coping strategies. Confiding in someone presupposes the elements of trust and intimacy described under support systems. It, then, is not surprising that the top three coping mechanisms are associated with the top two support systems. Nevertheless, even though a large percentage of people turned to family and friends for support, nearly one third of the workers reported a decrease in social contacts with family and more than 40% reported a decrease in social contact with friends. With the exception that non-whites tended to decrease their social contacts with relatives, while whites tended to remain about the same, the finding of decreased social contact with family and friends remained constant throughout the variables of age and marital status. This increase in personal and social withdrawal and isolation, may have the potential to exacerbate such feelings as depression and alienation.

Table 22 depicts a composite of reasons why a person chose to become a steelworker in the first place. These hierarchical rankings provide a basis for understanding significant influencing factors pertinent to

the decision-making process for subsequent occupational/vocational choices.

Nearly one half of the workers were either undecided or unwilling to relocate to another part of the country to find work at the time of this survey. This is a curious finding in-so-far as only 8% indicated that a change in residence was a major stressful problem in their lives. On the other hand, these responses might not be related to stress at all. Rather, they might be reflective of the workers' firm commitment to family, friends, and community to maintain the status quo in the tradition and spirit of their forefathers.

When posed the question, "Is training for another job the way to solve your problem of unemployment?", 60% responded either "No" or "Undecided". Yet, when asked if they would be willing to learn a new trade at this point in their life, more than 80% responded, "Yes". Because of this response pattern the question arises, "If a worker does not feel that training for another job is the way to solve his/her problem of unemployment or is undecided about the issue, why engage in learning a new trade?" To fully answer this question, the level of personal and collective motivation would need to be explored. Personal motivation for any job retraining effort would have to be ascertained on a individual basis. Collectively, however, certain hypotheses can be entertained. First, it seems plausible that intuitively many

workers felt that job retraining was not the best way to solve their unemployment problem, but that rationally a vast majority felt that it was. Secondly, it is possible for many workers to engage in job retraining as a sort of stop-gap vocational/economic measure, while still holding on to the notion that eventually they will be called back to their old job. Thirdly, for more than one third of the workers, job retraining was indicated as the way to solve their problem of unemployment, and, further, they would be willing to learn a new trade at this point in their lives. These distinctions in personal motivation should be carefully examined by each worker, himself/herself, and by individuals responsible for training programs before a firm, perhaps long-term commitment to vocational retraining is initiated.

B. Recommendations

As a result of the findings of this study, and in order to help those who will be dealing with the unemployed and/or engaging in future research on unemployment, the following recommendations are offered:

1. A long-term follow-up study of the workers included in the present survey should be initiated in order to help monitor any changes in the status of their physical or psychological health and coping mechanisms or support systems that might occur over time. The results of the present study can be used as a basis for comparison.

2. There is a need for longitudinal research (similar to that reported by Kasl, et al., 1975) to examine a group of workers, who know that their jobs will be terminated in the future, during both their period of employment and subsequent unemployment. Data obtained from pre and post job termination periods could aid in the understanding of the development of workers' personal reactions to unemployment.

3. The current study examined primarily blue collar workers and their perceptions of the impact of unemployment. Future research studies should be designed to investigate the impact of unemployment on white collar workers and clerical personnel as well.

4. Individual-level problems experienced by the unemployed worker frequently infiltrate the family domain and become family-level problems. There is a need to study how unemployment affects family dynamics, in general, and spouses and children, in particular.

5. In terms of doing multivariate analysis, it is recommended that researchers focus only on critical factors and keep the variables under study to a minimum. This has the advantage of reducing the number of statistical problems that might result from the numerous calculations involved. The questionnaire used in this survey contained 50 questions with over 260 response options per questionnaire. In this study, virtually tens of thousands of pieces of information were analyzed.

6. Individuals who will be involved in health care, education, or retraining programs should become aware of the varied effects unemployment can have on the worker, especially psychological ones. A clear understanding of and a sensitivity to these effects from both an individual and group perspective can provide a basis for relevant, effective personal and vocational rehabilitation.

7. In this study 6% or less of the respondents reported that they utilized professional services, such as mental health specialists, to help cope with their problems. There is a need to make innovative, comprehensive professional services, specifically tailored to meet the needs of the unemployed, more available, visible, and accessible. Additional emphasis should be placed on expanding comprehensive support services to the family as a whole, as well as to spouses and children, individually. Professionals should be instrumental in the development of self-help groups and other programs such as those dealing with stress management.

8. Nearly one third of the respondents in this survey indicated that the local union was a major support system during their period of unemployment. Because so many workers tend to relate to this support system, by expanding its responsibilities the local union could be in a particularly strong position to be even more responsive to the needs of its unemployed members. Union

officials are encouraged to take a more active role in exploring ways in which additional services could be implemented or coordinated on behalf of those who are unemployed.

9. Services providing relevant, factual, updated information pertaining to retraining programs, job development, and relocation should be expanded. Such information is vital to decision-making for successful personal/vocational rehabilitation.

10. Leaders from labor, industry, and government should convene to conjointly establish, fund, and support programs that will meet the very complex and pervasive problems of those faced with unemployment. Such a concerted effort is both necessary and essential if these problems are to be adequately addressed.

C. Conclusions

According to Liem and Rayman (1982) collective, diverse literature representing behavioral, medical, and social sciences, do not portray job loss as a source of dramatic and overwhelming stress for everyone. Indeed, some feel that reactions to job loss are, at best, selective, interactive, and by no means homogeneous (Hepworth, 1980; Kasl & Cobb, 1982). The review of literature in the present study examined various divergent findings relevant to these and related topics. Summarily, in contradistinction to the above viewpoints, there does seem to be a general consensus in the literature that

unemployment is associated with elevated levels of stress which have the potential to precipitate varied physical and psychological reactions. For 80% of the unemployed steelworkers surveyed in this study, being unemployed was the major stressful problem in their lives. In fact, the three primary stressors that were reported all pertained to their unemployed status. In a manner similar to other groups surveyed in the past, these unemployed steelworkers established their own hierarchy of stress-related life change events which could serve in the future as a basis for comparison with other research findings.

Since becoming unemployed, more workers reported being overweight by more than 20 pounds, smoking and drinking more than they should, frequently experiencing insomnia, anxiousness, irritability and depression than they reported other specific or non-specific medical conditions. For this sample of steelworkers, who had been out of work for 16 - 18 months at the time of this survey, psychologically-related ailments were more prevalent than physically-related ailments. If, as Brenner (1973) has suggested, there is a two to three year time lag for certain physical ailments to emerge, then a shift in magnitude from psychologically-related ailments to more physically-related ones can be anticipated. This, however, needs to be demonstrated. At the present time, however, it seems clear that a vast majority of these steelworkers are experiencing significant psychologically-related

distress.

By virtue of close association or proximity, through a ripple effect, individual problems frequently turn into family-level problems. This was evident in the current study. Marital problems and problems with children ranked fourth and fifth, respectively, on the list of current major stressful experiences. Additionally, arguments with a spouse increased for more than half of the workers. Nevertheless, despite the prevalence of family-level friction, 91% of the married families remained intact, that is, did not become either divorced or separated. This might be reflective of the unemployed worker and his/her family's deeply rooted commitment to preserve the family unit. Further, implied is a tenacity to survive together in the face of personal and/or economic crisis. Even after 16 - 18 months of unemployment, the family was chosen by an overwhelming majority of workers as their major support system.

Steelworkers did not seem to be united as to how their personal or vocational needs could best be met. No set of responses achieved greater than a 10% rate of concordance. Moreover, considering the present state of both the political and economic climate, many of the suggestions offered seem unlikely to be implemented. For example, the most frequently reported suggestion was to stop foreign imports or stop foreign trade on steel, automobile, and electronic equipment. Considering the

current administration's foreign trade policy with limited trade restrictions, it seem improbable that this suggestion will be adopted. The second most frequently reported suggestion - to provide more training programs - was put into motion by monies provided through the Trade Act of 1974. However, the flow of such funds for job retraining programs has been halted. Many indicated that they simply wanted their old jobs back. But, U.S. Steel Corporation's most recent plans, to make additional sweeping reductions in both steel-making and jobs nationwide, and, more specifically, at the Duquesne plant, make this recommendation unrealistic as well.

Even though 70% of the workers have exhausted their unemployment benefits and are no longer included on government unemployments lists, their plight of being out of work goes on. The factors of stress, physical and psychological ailments, changing family roles, social readjustments, change in economic status, and vocational retraining and/or job placement all need to be directly addressed.

Borrero (1980) stressed the importance of obtaining quantifiable data with respect to the impact of unemployment. The present study offers such quantification. It must be remembered, however, that these statistically derived data represent the effects of unemployment from the perceptions and experiences of people. Health care providers, educators, vocational trainers, family,

friends, organizations, and all who endeavor to assist the unemployed must recognize and become sensitive to these effects on those individuals with whom they may become involved. The reality of the worker's own experience of the impact of unemployment needs to be clearly comprehended by the service provider and policy maker in order that a basis for relevant, effective, personal and vocational rehabilitation might exist.

Finally, the findings of this study need to be put in perspective. From a background of gainful employment and relative economic prosperity, individuals in this study suddenly became faced with the harsh realities of being unemployed, including a significant decline in their economic status. After 16 - 18 months of unemployment, the large majority of these men and women are either frustrated, bitter, angry, resentful, bewildered, humiliated, or desperate. Additionally, a subgroup of young, single, non-white workers was identified as being especially vulnerable to the stress of unemployment. Further, the stress of unemployment has infiltrated the family domain, the workers' primary support system. In this regard, the questions arise: "To whom do families under stress turn for support?", and "What happens to all involved if the family support system breaks down?" To make matters worse, many workers feel victimized, alienated and abandoned due to their perception that nobody really cares what happens to them. The belief that there is nowhere to

turn is pervasive. Even the workers' own suggestions as to how their personal and vocational needs could best be met seem unrealistic. Conditions are presently even worse than they were when this survey was initiated, and, with more permanent layoffs and plant closings imminent, the situation can only deteriorate further. As a result, a potentially volatile set of social conditions exists. A similar - though not exact - set of circumstances was observed in the Watts district of Los Angeles and the Huff district of Cleveland during the turbulent years of the sixties. This investigator recognizes, however, that in drawing this parallel the socio-political climate of the sixties had a significant influence upon and was partially responsible for the ensuing civil disruption and violent acts which followed. Moreover, this same set of socio-political parameters was not present in the world of the formerly employed, property-owning, primarily white group of individuals surveyed in this study. But, one cannot help but wonder what might occur with another group of individuals in our society who are experiencing personal and social stress, while believing that their problems are not being heard and that underlying issues are not being addressed. As one unemployed steelworker in this survey wrote, "If you think that the racial problems of the 1960's were bad, wait until the working people of the 1980's say 'Enough is enough!'"

The purpose of this study was to survey, analyze,

and report various conditions that exist, factually and accurately. It is the investigator's belief that policy-makers from governmental bodies, labor unions, business and industry, health-related services, educational and vocational facilities, and other organizations and/or support systems who deal with the unemployed, need to give serious and deliberate consideration to the findings of this survey, which have been specifically directed at the perceptions of the unemployed steelworkers of the Mon Valley.

APPENDICES

APPENDIX A

Steelworker's Questionnaire

STEELWORKER'S QUESTIONNAIRE

This questionnaire was designed to help understand (1) the perceptions of unemployed steelworkers regarding the stress of unemployment, and (2) how the unemployed steelworker copes with the stress of unemployment.

GENERAL DIRECTIONS

Most items of this questionnaire can be answered by placing a check mark in the blank space next to the response statement. Please respond to all the items. Your responses will be strictly confidential and will remain anonymous.

So that we can compare the responses of various groups of people who complete the Steelworker's Questionnaire, we need some information about you.

1. What is your current age group? (check one)

- (1) 19 or under
- (2) 20 - 35
- (3) 36 - 50
- (4) 51 - 65
- (5) 66 or over

2. Are you: (check one)

- (1) Black/Negro
- (2) Mexican-American/Chicano
- (3) White/Caucasian
- (4) Other (please specify) _____

3. What is your sex?

- (1) Male
- (2) Female

4. What is your current marital status? (check one)

- (1) Married
- (2) Widowed
- (3) Divorced
- (4) Separated
- (5) Never married

5. How many children do you have? (check one)

- (1) None
- (2) One
- (3) Two
- (4) Three
- (5) Four or more

6. How many of your children are still living at home?
(check one)
- (1) None
 (2) One
 (3) Two
 (4) Three
 (5) Four or more
7. Do you: (check one)
- (1) Own your own home or pay mortgage
 (2) Rent an apartment or home
 (3) Other (please specify) _____
8. Have you changed residence since becoming unemployed?
(check one)
- (1) Yes
 (2) No
9. If you answered "Yes" to question #8, did you change your residence because:
- (CHECK AS MANY ITEMS AS APPLY TO YOU)
- (1) Could not make mortgage payments
 (2) Could not make rent payments
 (3) Could not make utility payments
 (4) Could not pay taxes
 (5) Other (please specify) _____
10. Have you found other employment outside of the steel industry since becoming unemployed? (check one)
- (1) Yes
 (2) No
11. If you answered "Yes" to question #10, your work is:
(check one)
- (1) Part-time
 (2) Full-time
12. If you answered "Yes" to question #10, how does your current income from this new job compare with your earnings as a steelworker? (check one)
- (1) My earnings have increased significantly
 (2) My earnings have increased moderately
 (3) My earnings have remained about the same
 (4) My earnings have decreased moderately
 (5) My earnings have decreased significantly
13. Do you have other sources of income? (check one)
- (1) Yes
 (2) No

14. If you answered "Yes" to question #13, please check as many of the following items as apply to you.
- (1) Spouse is working
 - (2) Child/Children is/are working
 - (3) Other family members help when they can
 - (4) Other
15. Unemployment Compensation: (check one)
- (1) Ran out more than 3 months ago
 - (2) Ran out less than 3 months ago
 - (3) Will run out in less than 3 months
 - (4) Will run out in more than 3 months
 - (5) Other (please explain) _____
16. Health Insurance: (check one)
- (1) Ran out more than 3 months ago
 - (2) Ran out less than 3 months ago
 - (3) Will run out in less than 3 months
 - (4) Will run out in more than 3 months
 - (5) Other (please explain) _____
17. How would you describe the general state of your physical health before you became unemployed? (check one)
- (1) Excellent
 - (2) Pretty good
 - (3) Only fair
 - (4) Poor
18. How would you describe the general state of your physical health since becoming unemployed? (check one)
- (1) Excellent
 - (2) Pretty good
 - (3) Only fair
 - (4) Poor
19. How many times within the past year have you needed the services of a hospital, clinic, or emergency medical service? (check one)
- (1) Not at all
 - (2) 1 - 2 times
 - (3) 3 - 5 times
 - (4) More than 5 times
20. How many times within the past year have other members of your family needed the services of a hospital, clinic, or emergency medical service? (check one)
- (1) Not at all
 - (2) 1 - 2 times
 - (3) 3 - 5 times
 - (4) More than 5 times

21. If, within the past month, you have experienced any of the illnesses or conditions listed below, please put a check mark alongside the ones that apply to you.

(CHECK AS MANY ITEMS AS APPLY TO YOU)

- (1) Back trouble
- (2) Arthritis
- (3) Asthma, serious allergies
- (4) Bronchitis or other lung problems
- (5) Heart condition
- (6) Kidney or bladder trouble
- (7) Diabetes
- (8) Ulcers
- (9) Stroke
- (10) Cancer
- (11) High blood pressure
- (12) Frequent headaches
- (13) Frequent stomach upsets
- (14) Spells of dizziness
- (15) Frequent insomnia
- (16) Frequent anxiousness
- (17) Frequent depression
- (18) Frequent irritability
- (19) Seriously considered suicide
- (20) Overweight by 20+ pounds
- (21) Smoke more than I should
- (22) Drink more than I should
- (23) Dependent on drugs to keep going
- (24) Other (please specify) _____

22. There are certain events in life that cause each of us stress. Below is a list of some of these events that other people have found to be stressful. Please look over the list carefully and put a check mark alongside those items that are major problems in your life right now.

(CHECK AS MANY ITEMS AS APPLY TO YOU)

- (1) Death of a spouse
- (2) Problems with children
- (3) Change in residence
- (4) Being unemployed
- (5) Marital problems
- (6) Death of a close friend
- (7) Financial worries
- (8) Changing jobs
- (9) Birth of a child
- (10) Death of a close family member
- (11) Physical illness
- (12) Divorce or separation
- (13) Emotional illness

23. How would you describe the general state of your psychological and emotional health before you became unemployed? (check one)
- (1) Excellent
 (2) Pretty good
 (3) Only fair
 (4) Poor
24. How would you describe the general state of your psychological and emotional health since becoming unemployed? (check one)
- (1) Excellent
 (2) Pretty good
 (3) Only fair
 (4) Poor
25. How satisfied are you with the way you occupy your time since becoming unemployed? (check one)
- (1) Very satisfied
 (2) Satisfied
 (3) Undecided
 (4) Dissatisfied
 (5) Very dissatisfied
26. Has becoming unemployed changed the way you feel about yourself? (check one)
- (1) Yes
 (2) No
- If your answer to question #26 was "Yes", please answer the following two items:
27. (check one)
- (1) I feel less satisfied with myself
 (2) I feel more satisfied with myself
 (3) My feelings of satisfaction about myself are continually changing
28. (check one)
- (1) I feel less satisfied with myself as the head of my household/family
 (2) I feel more satisfied with myself as the head of my household/family
 (3) My feelings are constantly changing
 (4) Not applicable
29. Have you experienced personal depression since becoming unemployed? (check one)
- (1) Yes
 (2) No

30. How often would you say that you experience depression?
(check one)
- (1) At least once a week
 (2) At least once a month
 (3) At least once every two months
 (4) Other (please specify) _____
31. How would you describe the degree of your depression?
(check one)
- (1) Severe depression
 (2) Moderate depression
 (3) Mild depression
 (4) Other (please specify) _____
32. Do you find it difficult to complete a task which requires concentration and energy since becoming unemployed?
(check one)
- (1) Yes
 (2) No
33. Do you lose your temper more often when things do not seem to go your way since becoming unemployed? (check one)
- (1) Yes
 (2) No
34. How would you describe the number of arguments you have with your spouse since becoming unemployed? (check one)
- (1) Increased significantly
 (2) Increased moderately
 (3) Remained about the same
 (4) Decreased moderately
 (5) Decreased significantly
35. How would you describe the number of times you have had to discipline your children since becoming unemployed?
(check one)
- (1) Increased significantly
 (2) Increased moderately
 (3) Remained about the same
 (4) Decreased moderately
 (5) Decreased significantly
36. Have you become divorced or separated since becoming unemployed? (check one)
- (1) Yes
 (2) No
 (3) In process

37. Do you feel partly to blame because you are out of work? (check one)
- (1) Yes
 (2) No
 (3) Undecided
38. How would you describe the amount of alcohol that you drink (beer, wine, liquor, etc.) since becoming unemployed? (check one)
- (1) Increased significantly
 (2) Increased moderately
 (3) Remained about the same
 (4) Decreased moderately
 (5) Decreased significantly
 (6) I do not drink alcoholic beverages
39. How would you describe your social contacts with relatives since becoming unemployed? (check one)
- (1) Social contacts have markedly increased
 (2) Social contacts have increased somewhat
 (3) Social contacts have remained the same
 (4) Social contacts have decreased somewhat
 (5) Social contacts have markedly decreased
40. How would you describe your social contacts with friends/acquaintances since becoming unemployed? (check one)
- (1) Social contacts have markedly increased
 (2) Social contacts have increased somewhat
 (3) Social contacts have remained the same
 (4) Social contacts have decreased somewhat
 (5) Social contacts have markedly decreased
41. How would you describe the level of support you have received from friends, family, organizations, community, etc. since becoming unemployed? (check one)
- (1) Excellent support
 (2) Good support
 (3) Undecided
 (4) Fair support
 (5) Poor support
42. Please put a check mark alongside the three (3) support systems that you feel have given you the most support during your unemployment. (check three)
- (1) Business/industry
 (2) Church group
 (3) Federal government
 (4) Fraternal organizations
 (5) Family
 (6) Friends
 (7) Local government
 (8) Local union
 (9) National union
 (10) Social agencies
 (11) Other (please specify) _____

43. The following list represents things that various people have said they sometimes do to help deal with stress. Please look over the list carefully and put a check mark alongside the things that you have done to help ease the stress of unemployment.

(CHECK AS MANY ITEMS AS APPLY TO YOU)

- (1) Saw a doctor
- (2) Saw a minister or religious counselor
- (3) Saw a psychiatrist, therapist or counselor
- (4) Went to a social service agency
- (5) Confided in my spouse or partner
- (6) Confided in a relative
- (7) Confided in a close friend
- (8) Talked to an acquaintance or neighbor
- (9) Talked to people at work
- (10) Withdrew from people (slept a lot or watched television a lot)
- (11) Prayed, went to church
- (12) Used alcohol or drugs
- (13) Engaged in sports, exercise
- (14) Meditated, did relaxation exercises
- (15) Studied, read up on the problem
- (16) Sought out others who are dealing with a similar problem
- (17) Sought more social contacts, went out more
- (18) Worked harder
- (19) Took a vacation, got a change of scene
- (20) Kept to myself, carried on as usual
- (21) Other (please specify) _____

44. Why did you become a steelworker?

(CHECK AS MANY ITEMS AS APPLY TO YOU)

- (1) My father or close relative was a steelworker
- (2) All of my friends worked in the mill
- (3) I did not have money to go on to school
- (4) I had no desire to go on to school
- (5) It was the only job available
- (6) It was the best paying job at the time
- (7) I couldn't get into another trade
- (8) I needed the first job I could get
- (9) I knew I would be in a secure job
- (10) The benefit package was the best available
- (11) I never considered any other job
- (12) Other (please specify) _____

45. Would you be willing to relocate to another part of the country to find work? (check one)

- (1) Yes
- (2) No
- (3) Undecided

46. Is training for another job the way to solve your problem of unemployment? (check one)
- (1) Yes
 (2) No
 (3) Undecided
47. Would you be willing to learn a new trade at this point in your life? (check one)
- (1) Yes
 (2) No
 (3) Undecided
48. Who do you feel is in the best position to get your job back? (check one)
- (1) Business/industry
 (2) Federal government
 (3) Local government
 (4) National union
 (5) Other (please specify) _____
49. If you had to do it over again, would you seek work in the steel industry? (check one)
- (1) Yes
 (2) No
 (3) Undecided
50. If you wanted to make your legislator, people who are in charge of training programs, health service providers and other people aware of your needs and how you feel they could best be met, what suggestions would you make?

APPENDIX B

Letter of Transmittal

Steelworker's Questionnaire

161

RAY M. MILKE

P.O. BOX 15

NORTH VERSAILLES, PENNSYLVANIA 15137

August 8, 1983

Dear Union Member:

The enclosed research questionnaire was designed to help understand the perceptions of unemployed steelworkers regarding the stress of unemployment. In cooperation with your union, Local 1256 of the United Steelworkers of America, your name was obtained from a list of over 1,100 unemployed steelworkers out of Local 1256. Please note that this questionnaire is being mailed to all steelworkers of Local 1256 who were on this list at the time of this research project so that everyone who is unemployed will have an opportunity to be included in this survey.

It is through an understanding of the collective data obtained from questionnaires such as the one enclosed that union officials, governmental bodies and policy makers, business/industry, health care facilities, and social service organizations, etc., can be enlightened so they can better serve the needs of the unemployed steelworker and their families.

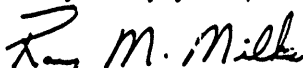
Please take a few minutes and complete this important questionnaire. Directions are on the form and a stamped return envelope is included for your convenience. This information is strictly confidential! The number in the upper right-hand corner is coded for a 'reminder' letter in case you forgot to mail in this questionnaire. Once the questionnaires are received they immediately become part of an anonymous "pool" of data, where no names are correlated with responses. It is this "pool" of information that will be analyzed for all the unemployed steelworkers of Local 1256.

The results of this research will be made available in December, 1983. You are most welcome to review a copy of the major text or the executive summary. Copies of both will be on file and available at the Local 1256 Union Hall, 111 Hamilton Avenue, Duquesne, PA 15110.

It would be appreciated if you could complete and return the Steelworker's Questionnaire by August 22nd in the enclosed self-addressed stamped envelope.

Thank you for your cooperation.

Very truly yours,


Ray M. Milke

APPENDIX C

Letter of support from
Union President

UNITED STEELWORKERS OF AMERICA

163



C.I.O.
 LOCAL 1256
 111 HAMILTON AVE.
 DUQUESNE, PA. 15110
 Phone 412-466,8400

Michael Bilcsik
 President

August 8, 1983

Dear Fellow Union Member:

During these many difficult months of high unemployment, each of us and our families have experienced many different kinds of personal reactions as a result of being unemployed. In order to help develop better policies and programs a clearer understanding of what you as a group of unemployed union workers are really experiencing is strongly needed.

I sincerely urge you to complete and return the enclosed questionnaire. This is your chance to give your reactions to being out of work. It will take only a few short minutes to complete and a stamped return envelope is enclosed.

Thank you for your cooperation and participation.

Michael Bilcsik
 President
 U.S.W.A. Local 1256

APPENDIX D

Follow-up Letter

Steelworker's Questionnaire**RAY M. MILKE****P.O. BOX 15****NORTH VERSAILLES, PENNSYLVANIA 15137**

August 23, 1983

Dear Union Member:

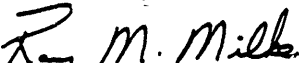
Recently, you received a request to participate in a survey and complete the Steelworker's Questionnaire that was sent to all unemployed steelworkers out of U.S.W.A. Local 1256. As you know, a high questionnaire return rate is desirable so that the responses of as many unemployed steelworkers as possible can be obtained.

Your responses on the Steelworker's Questionnaire are very important and needed.

Since your completed questionnaire has not yet been received, I would like to encourage you to participate in this survey. For your convenience, I have enclosed another Steelworker's Questionnaire and a self-addressed stamped envelope. It would be appreciated if you could complete and return the Steelworker's Questionnaire by September 6, 1983.

Thank you for your cooperation.

Very truly yours,


Ray M. Milke

REFERENCES

- Alexander, F. (1950). Psychosomatic medicine: It's principles and applications. New York: Norton.
- Antonovsky, A. (1979). Health, stress, and coping. San Francisco: Jossey-Bass.
- Appelbaum, S.H. (1981). Stress management for health care professionals. Maryland: Aspen Systems Corporation.
- Bakke, E.W. (1940). Citizens without work. New Haven, CT: Yale University Press.
- Barling, P.W., & Handal, P.J. (1980). Incidence of utilization of public mental health facilities as a function of short-term economic decline. American Journal of Community Psychology, 8 (1), 31-39.
- Berdie, D.R., & Anderson, J.F. (1974). Questionnaires: Design and use. Metuchen, NJ: Scarecrow Press.
- Boor, M. (1980). Relationships between unemployment rates and suicide rates in eight countries, 1962-1976. Psychological Reports, 47, 1095-1101.
- Borrero, M. (1980). Psychological and emotional impact of unemployment. Journal of Sociology and Social Welfare, 7 (6), 916-934.
- Bowman, P.J., Jackson, J.S., Hatchett, S.J., & Gurin, G. (1982). Joblessness and discouragement among black Americans. Economic Outlook U.S.A., 9 (4), 85-88.
- Bradburn, N.M., & Sudman, S. (1980). Improving interview method and questionnaire design. San Francisco: Jossey-Bass.

- Braginsky, D.D., & Braginsky, B.M. (1975, August).
Surplus people: Their lost faith in self and system.
Psychology Today, pp. 69-72.
- Brenner, M.H. (1973). Mental health and the economy.
Cambridge, MA: Harvard University Press.
- Brenner, M.H. (1976). Estimating the social costs of
national economic policy: Implications for mental
and physical health, and criminal violence. Report
prepared for the Joint Economic Committee of Congress.
Washington, DC: U.S. Government Printing Office.
- Brenner, M.H. (1977). Personal stability and economic
security. Social Policy, 8 (1), 2-4.
- Brenner, M.H. (1979). Unemployment, economic growth,
and mortality. The Lancet, 1, (8117), 672.
- Briar, K.H. (1980). Helping the unemployed client.
Journal of Sociology and Social Welfare, 7 (6),
895-906.
- Briar, K.H., Fielder, D., Sheean, C., & Kamps, P. (1980).
The impact of unemployment on young, middle-aged and
aged workers. Journal of Sociology and Social Welfare,
7 (6), 907-916.
- Brinkerhoff, D.B., & White, L.K. (1978). Marital
satisfaction in an economically marginal population.
Journal of Marriage and the Family, 40, 259-267.
- Brown, Morton B. (1981). Two-way and multiway frequency
tables - measures of association and the log-linear
model. In W.J. Dixon (Ed.), BMDP statistical software

- (pp. 143-206). Berkeley, CA: University of California Press.
- Bunn, R. (1979). Unemployment, morbidity, and mortality. The Lancet, 1 (8122), 923-924.
- Burgess, E.W. (1947). The family and sociological research. Social Forces, 26, 1-6.
- Catalano, R., & Dooley, C.D. (1977). Economic predictors of depressed mood and stressful life events in a metropolitan community. Journal of Health and Social Behavior, 18 (3), 292-307.
- Catalano, R., Dooley, D., & Jackson, R. (1981). Economic predictors of admissions to mental health facilities in a nonmetropolitan community. Journal of Health and Social Behavior, 22, 284-297.
- Cobb, S. (1974). Physiologic changes in men whose jobs were abolished. Journal of Psychosomatic Research, 18 (4), 245-258.
- Cobb, S. (1975). Social support as a moderator of life stress. Psychosomatic Medicine, 38, 300-314.
- Cohen, S.D., Ginsberg, A.S., & Vladeck, B.C. (1978). The effects of unemployment and inflation on hospital-based ambulatory care. American Journal of Public Health, 68 (12), 1219-1221.
- Cohn, R.M. (1978). The effect of employment status change on self-attitudes. Social Psychology Quarterly, 41, 81-93.
- Dohrenwend, B.S. (1973). Social status and stressful

life events. Journal of Personality and Social Psychology, 28, 225-235.

- Dohrenwend, B.S., & Dohrenwend, B.P. (1974). Overview and prospects for research on stressful life events. In B.S. Dohrenwend & B.P. Dohrenwend (Eds.), Stressful life events: Their nature and effects (pp. 313-331). New York: John Wiley & Sons.
- Dohrenwend, B.S., Krasnoff, L., & Askenasy, A.R. (1978). Exemplification of a method for scaling life events: The PERI life events scale. Journal of Health and Social Behavior, 19 (2), 205-229.
- Dooley, D., & Catalano, R. (1979). Economic, life, and disorder changes: Time-series analyses. American Journal of Community Psychology, 7, 381-396.
- Dumont, M.P. (1977). Is mental health possible under our economic system? - No! Psychiatric Opinion, 14, 3, 9-11; 32-33, 44-45.
- Eisenberg, P., & Lazarsfeld, P. (1935). The psychological effects of unemployment. Psychological Bulletin, 35, 378.
- Erikssen, J., Rognum, T., & Jervell, J. (1979). Unemployment and health (Letter to the editor). The Lancet, 1 (8127), 1189.
- Eyer, J. (1977). Does unemployment cause the death rate peak in each business cycle? A multifactor model of death rate change. International Journal of Health Services, 7 (4), 625-662.

- Fairbank, D.T., & Hough, R.L. (1981). Cross-cultural differences in perceptions of life events. In B.S. Dohrenwend & B.P. Dohrenwend (Eds.), Stressful life events and their contexts (pp. 63-84). New York: Prodist.
- Feinberg, S.E. (1980). Analysis of cross-classified categorical data (2nd ed.). Cambridge, MA: M.I.T. Press.
- Feldman, J.M. (1973). Race, economic class, and perceived outcomes of work and unemployment. Journal of Applied Psychology, 58 (1), 16-22.
- Figueira-McDonough, J. (1978). Mental health among unemployed Detroiters. Social Service Review, 52 (3), 383-399.
- Freedman, A.M., Kaplan, H.I., & Sadock, B.J. (1972). Modern synopsis of Psychiatry. Baltimore, MD: Williams & Wilkens.
- Gore, S. (1978). The effect of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19, 157-165.
- Group for the Advancement of Psychiatry, Committee on Psychiatry in Industry. (1982). Job loss - a psychiatric perspective. New York: Mental Health Materials Center.
- Guttentag, M. (1968). The relationship of unemployment to crime and delinquency. Journal of Social Issues, 24 (1), 105-114.

- Hagen, D.Q. (1983). The relationship between job loss and physical and mental illness. Hospital and Community Psychiatry, 34, 438-440.
- Hall, C.S. (1954). A primer of Freudian psychology. New York: New American Library.
- Hartley, J.F. (1980). The impact of unemployment upon the self-esteem of managers. Journal of Occupational Psychology, 53, 147-155.
- Hepworth, S.J. (1980). Moderating factors of the psychological impact of unemployment. Journal of Occupational Psychology, 53, 139-146.
- Hinsie, L.E., & Campbell, R.J. (1974). Psychiatric dictionary (4th ed.). New York: Oxford University Press.
- Hollingshead, A., & Redlich, F. (1958). Social class and mental illness. New York: Wiley.
- Holmes, T.H. (1979). In A. Howell & M. Jackson, Stress (p. 123). California: Concept Media.
- Holmes, T.H., & Masuda, M. (1974). Life change and illness susceptibility. In B.S. Dohrenwend & B.P. Dohrenwend (Eds.), Stressful life events: Their nature and effects (pp. 45-72). New York: John Wiley & Sons.
- Holmes, T.H., & Rahe, R.H. (1967). The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.
- In pursuit of wellness, Vol. 1, No. 1. A study of

California public attitudes and beliefs regarding mental health and physical health. (1979).

San Francisco: California Department of Mental Health, Office of Prevention.

Isaac, S., & Michael, W.B. (1971). Handbook in research and evaluation. San Diego: Edits.

Jobling, R.G. (1979). Unemployment and health (Letter to the editor). The Lancet, 1 (8127), 1189.

Jones, W.H. (1979). Grief and involuntary career change: It's implications for counseling. Vocational Guidance Quarterly, 27, 196-201.

Kahn, R.L. (1979). Economic changes and mental illness: A commentary. In L.A. Ferman & J.P. Gorduc (Eds.), Mental health and the economy (pp. 225-233). Kalamazoo, MI: UpJohn Institute.

Kasl, S. (1974). Work and mental health. In J. O'Toole (Ed.), Work and the quality of life (pp. 171-196). Cambridge, MA: MIT Press.

Kasl, S.V. (1979). Changes in mental health status associated with job loss and retirement. In J. Barrett (Ed.), Stress and mental disorder. New York: Raven Press.

Kasl, S.V. (1982). Strategies on research on economic instability and health. Psychological Medicine, 12 (3), 637-644.

Kasl, S.V., & Cobb, S. (1970). Blood pressure changes in men undergoing job loss: A preliminary report.

Psychosomatic Medicine, 32 (1), 19-38.

- Kasl, S.V., & Cobb, S. (1979). Some mental health consequences of plant closing and job loss. In L. Ferman & J. Gordus (Eds.), Mental health and the economy (pp. 255-299). Kalamazoo, MI: UpJohn Institute.
- Kasl, S.V., & Cobb, S. (1980). The experience of losing a job: Some effects on cardiovascular functioning. Psychotherapy and Psychosomatics, 34, 88-109.
- Kasl, S.V., & Cobb, S. (1982). Variability of stress effects among men experiencing job loss. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 445-465). New York: The Free Press.
- Kasl, S.V., Cobb, S., & Brook, G.W. (1968). Changes in serum uric acid and cholesterol levels in men undergoing job loss. JAMA, 206 (7), 1500-1507.
- Kasl, S.V., Gore, S., & Cobb, S. (1972). Reports of illness and illness behavior among men undergoing job loss. Psychosomatic Medicine, 34, 475.
- Kasl, S.V., Gore, S., & Cobb, S. (1975). The experience of losing a job: Reported changes in health, symptoms and illness behavior. Psychosomatic Medicine, 37 (2), 106-122.
- Kiev, A., & Kohn, V. (1979): Executive stress (An AMA survey report). New York: AMACOM.
- Komaroff, A.L., Masuda, M., & Holmes, T.H. (1968). The

- Social Readjustment Rating Scale: A comparative study of Negro, Mexican and white Americans. Journal of Psychosomatic Research, 12, 121-128.
- Kubler-Ross, E. (1969). On death and dying. New York: Macmillan.
- Lawlis, G.F. (1971). A psychological view of the chronically unemployed: Personality and motivation. Psychological Reports, 28 (3), 838.
- Lazarus, R.S., & Cohen, J.B. (1977). Environmental stress. In I. Altman & J.F. Wohlwill (Eds.), Human behavior and environment (Vol. 2). New York: Plenum.
- Lefrancois, G.R. (1980). Psychology. California: Wadsworth.
- Liem, R., & Liem, J. (1978). Social class and mental illness reconsidered: The role of economic stress and social support. Journal of Health and Social Behavior, 19, 139-156.
- Liem, R., & Liem, J. (1979). Social support and stress: Some general issues and their application to the problem of unemployment. In L. Ferman & J. Gordus (Eds.), Mental health and the economy (pp. 347-377). Kalamazoo, MI: UpJohn Institute.
- Liem, R., & Liem, J.H. (1981). Relations among social class, life events and mental illness: A comment on findings and methods. In B.S. Dohrenwend & B.P. Dohrenwend (Eds.), Stressful life events and their contexts (pp. 234-256). New York: Prodist.

- Liem, R., & Rayman, P. (1982). Health and social costs of unemployment. American Psychologist, 37 (10), 1116-1123.
- Little, C.B. (1976). Technical-professional unemployment: Middle-class adaptability to personal crisis. Sociological Quarterly, 17, 262-274.
- Manuso, J.S.J. (1977). Coping with job abolishment. Journal of Occupational Medicine, 19 (9), 598-602.
- Margolis, L.H., & Farran, D. (1981). Unemployment: The health consequences in children. North Carolina Medical Journal, 42 (12), 849-850.
- Markush, R.E., & Favero, R.V. (1974). Epidemiologic assessment of stressful life events, depressed mood, and physiological symptoms: A preliminary report. In B.S. Dohrenwend & B.P. Dohrenwend (Eds.), Stressful life events: Their nature and effects (pp. 171-190). New York: John Wiley & Sons.
- Marshall, J.R., & Funch, D.P. (1979). Mental illness and the economy: A critique and partial replication. Journal of Health and Social Behavior, 20, 282-289.
- Masuda, M., & Holmes, T.H. (1967). The Social Readjustment Rating Scale: A cross-cultural study of Japanese and Americans. Journal of Psychosomatic Research, 11, 227-237.
- McLaughlin, B. (1979). When daddy loses his job. Nursing Mirror, 149 (16), 25-27.
- Miao, G. (1974). Marital instability and unemployment

- among whites and nonwhites, the Moynihan report revisited - Again. Journal of Marriage and the Family, 36, (1), 77-86.
- Moen, P. (1979). Family impacts of the 1975 recession: Duration of unemployment. Journal of Marriage and the Family, 41 (3), 561-572.
- Moen, P. (1980). Measuring unemployment: Family considerations. Human Relations, 33 (3), 183-192.
- Monahan, J., & Vaux, A. (1980). Task force report: The macronenvironment and community mental health. Community Mental Health Journal, 16, 14-26.
- Morris, C.G. (1982). Psychology an introduction (4th ed.). New Jersey: Prentice-Hall.
- National Institute for Occupational Safety and Health. (1977). Termination: The consequences of job loss (Pub. No. 77-224). Washington, DC: U.S. Department of Health, Education, and Welfare.
- Oliver, J.M., & Pomicter, C. (1981). Depression in automobile assembly-line workers as a function of unemployment variables. American Journal of Community Psychology, 9, 507-512.
- Orlich, D.C. (1978). Designing sensible surveys. Pleasantville, NJ: Redgrave.
- Parkes, C.M. (1964). Effects on physical and mental health: A study of the medical records of widows. British Medical Journal, 2, 274-279.
- Pearlin, L.I., Lieberman, M.A., Menaghan, E.G., & Mullan,

- J.T. (1981). The stress process. Journal of Health and Social Behavior, 22, 337-356.
- Perkins, D.V. (1982). The assessment of stress using life events scales. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 320-331). New York: The Free Press.
- Peterson, J. (1974, December). National Observer, p. 1.
- Rahe, R.H., Lundberg, U., Bennet, L., & Theorell, T. (1971). The Social Readjustment Rating Scale: A comparative study of Swedes and Americans. Journal of Psychosomatic Research, 15, 241-249.
- Riegle, D.W., Jr. (1982). The psychological and social effects of unemployment. American Psychologist, 37 (10), 1113-1115.
- Rushing, W.A. (1968). Income, unemployment, and suicide: An occupational study. The Sociological Quarterly, 9 (4), 493-503.
- Selye, H. (1974). Stress without distress. Philadelphia: Lippencott.
- Selye, H. (1976). Stress in health and disease. Boston: Butterworth.
- Selye, H. (1976). The stress of life (2nd ed.). New York: McGraw-Hill.
- Selye, H. (1980). The stress concept today. In I.L. Kutash & L.B. Schlesinger, Handbook on stress and anxiety (pp. 127-143). San Francisco: Jossey-Bass.
- Selye, H. (1982). History and present status of the

- stress concept. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 445-465). New York: The Free Press.
- Shaw, D. (1976). Unemployment hurts more than just the pocketbook. Today's Health, 53 (2), 23-26.
- Skinner, A.E., & Castle, R.L. (1969). 78 battered children: A retrospective study. London: National Society for the Prevention of Cruelty to Children.
- Staff. (1983, June). Pennsylvania Economy, Vol. 3, No. 9., p. 4.
- Sudman, S., & Bradburn, N.M. (1982). Asking questions: A practical guide to questionnaire design. San Francisco: Jossey-Bass.
- Tabor, M. (1982). The stress of job loss. Occupational Health and Safety, 51 (6), 20-26.
- Tausky, C., & Piedmont, E.B. (1967-1968). The meaning of work and unemployment: Implications for mental health. International Journal of Social Psychiatry, 14 (1), 44-49.
- Thomas, L.E., McCabe, E., & Berry, J.E. (1980). Unemployment and family stress: A reassessment. Family Relations, 29 (4), 517-524.
- U.S. Bureau of the Census. (1983). Statistical Abstract of the United States (103rd ed.). Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- U.S. Bureau of Labor Statistics. (1983). State and Metropolitan Area Employment and Unemployment, press

release, July 8, 1983. Washington, DC: U.S.

Department of Labor, Bureau of Labor Statistics.

Vigderhous, G., & Fishman, G. (1978). The impact of unemployment and familial integration on changing suicide rates in the U.S.A., 1920-1969. Social Psychiatry, 13 (4), 239-248.

Zawadski, B., & Lazarsfeld, P. (19-5). The psychological consequences of unemployment. Journal of Social Psychology, 6 (2), 224-251.

Zung, W.K., & Cavenar, J.O., Jr. (1980). Assessment scales and techniques. In I.L. Kutach & L.B. Schlesinger, Handbook on stress and anxiety (pp. 348-363). San Francisco: Jossey-Bass.

VITA

Ray M. Milke was born on May 9, 1944 in Pittsburgh, Pennsylvania. He was graduated from Westinghouse Memorial High School in 1962. In 1971 he received a Bachelor of Arts Degree (B.A.) in Psychology from The Pennsylvania State University. In 1972 a Master of Education Degree (M.Ed.) was earned in Educational Psychology from Duquesne University. A Certificate for Advanced Graduate Study (C.A.G.S.) in School Psychology was received in 1974 from Duquesne University.

Dr. Milke is a licensed and certified psychologist in the State of Pennsylvania. He completed a clinical internship in psychology at Homestead Hospital's Community Mental Health/Mental Retardation Center in 1974. He was employed as a Consulting Psychologist at South Hills Health System from 1974 through 1976. From 1976 to the present he has been engaged in the private practice of clinical/rehabilitation psychology. He has been a psychological consultant and clinical service provider to both the Disability Determination Division of the Social Security Administration and the State of Pennsylvania's Office of Vocational Rehabilitation. Dr. Milke is an adjunct faculty member of The Community College of Allegheny County, College Center-North. He is a member of the Pennsylvania Psychological Association and has served on the Board of Directors for numerous community organizations.

Dr. Milke resides in North Versailles, Pennsylvania with his wife, Barbara, and their two sons, Ray and Rick.

STATEMENT
OF
ALAN WILLIAM WOLFF
Partner
VERNER, LIIPFERT, BERNHARD AND McPHERSON, CHARTERED
On Behalf Of The
AMERICAN IRON AND STEEL INSTITUTE

Before The
SUBCOMMITTEE ON TRADE
of the
COMMITTEE ON FINANCE
U.S. SENATE

June 8, 1984

Mr. Chairman:

My name is Alan Wm. Wolff. I am a partner in the Washington, D.C. law firm of Verner, Lipfert, Bernhard and McPherson, Chartered. I am representing the American Iron and Steel Institute in connection with this hearing, but I have been concerned with U.S. Government steel policy for some time, both when I served as Deputy Special Trade Representative and as the first chairman of the Steel Committee of the Organization for Economic Cooperation and Development. This morning, I would like to present to the Subcommittee my views concerning the current problems of the U.S. steel industry and the world context in which those problems have developed.

SUMMARY

The steel problem is multifaceted. There are many things that the steel industry itself can do, and it is making substantial efforts towards achieving these goals. The steel companies are restructuring and making major capital investments. Through the joint efforts of steel management and labor, steel company hourly labor costs have been reduced from \$23.78 in 1982 to \$21.17 per hour in March 1984. What is being done is no doubt less than what is needed. I would submit that this is caused in substantial part by the inadequacy of U.S. public policies.

There are changes in the U.S. Government's domestic policies that could assist in the necessary restructuring of our steel industry. There are basic questions of the impact on the

international competitiveness of this industry of trade, antitrust, tax, environmental and other domestic policies.

Appreciation of the need for these efforts on the part of firms and for appropriate governmental policies (other than trade) does not obviate the urgent need to re-examine U.S. trade policy. It is necessary to consider whether our usual approach to trade policy adequately addresses the steel trade problem. The trade policy decisions of the Congress and the Administration will determine whether the industry's restructuring efforts can be successful. Hearings such as this Subcommittee is holding are an important factor in assuring that these decisions are well informed and thereby result in more nearly optimum solutions to tough problems.

The U.S. steel industry and its problems cannot be correctly understood without an understanding of the world market and the factors that dictate the flow of steel within it. Our firm is just completing an extensive study of the nature of international competition in steel mill products. In the study, we have examined the steel industries of most of the major steel producing countries. We have looked at the development of these industries, the determinants of current production and export levels, and the pervasive government involvement affecting trade and investment. We have found that natural comparative advantage -- the traditional economic concept upon which the world and U.S. trade policy philosophy is based -- has little to do with most foreign steel exports. In Japan, a steel industry has been created and defined largely by government industrial

policy; in the European Community (EC), overall steel production levels are sustained by subsidies and dictated by regional employment problems; and, in developing countries, production and exports have come to be motivated substantially by requirements for foreign exchange and severe debt problems.

In addition, the study examines the ways in which these major producing areas treat steel imports, and in none did we find anything approaching open markets for steel imports. The EC limits steel imports to a maximum of about 12 million net tons, or about 10 percent of apparent EC steel consumption. Imports accounted for about 3 percent of Japan's apparent steel consumption in 1982 and may have reached 4 percent in 1983, and even this modest level represents a quadrupling over very recent years. Most developing countries limit steel imports to those products which indigenous producers do not make or cannot make in sufficient quantity.

After looking at these foreign steel industries, the study examines the combined effects of international competition, including sales from subsidized and protected foreign steel producers, on the U.S. domestic industry. In part because of these foreign programs, employment in the domestic industry fell from over 500,000 in 1970 to 247,000 in March 1984. At the same time, steel imports grew from 13 percent of the U.S. market for steel in 1970 to over 20 percent in 1983 and now over 25 percent in the first four months of 1984. Since January 1982, the U.S. Department of Commerce has investigated, or is investigating, approximately 170 dumping and subsidy complaints involving basic

steel mill products. The results of these investigations have been largely affirmative. For example, final countervailing duty investigations revealed subsidy margins with respect to Brazilian cold rolled sheet and other products of 17 percent, 36 percent, and 62 percent, depending on the Brazilian manufacturer.

Imports have been the most significant but not the sole determinant of the state of the U.S. industry today. Other factors, including the relatively higher costs of labor and capital in the United States, are also major factors. The trade policy problem to be confronted is how best to prevent imports whose price and volume is determined by government policies from undermining the viability of U.S. producers.

THE JAPANESE STEEL INDUSTRY

Industrial Policy

In July 1983, a study prepared by our firm titled "Japanese Government Promotion of the Steel Industries: Three Decades of Industrial Policy" was released. This study documented a series of Japanese government actions which protected the Japanese steel industry from many of the adverse effects of free market competition.

During periods of falling demand and falling prices, Japanese steel firms formed government sanctioned cartels to restrict output and prevent sharp declines in steel prices. These cartels were sometimes "depression cartels" implemented pursuant to administrative order, at other times they were "de facto cartels" formed pursuant to "administrative guidance" from Japan's Ministry of International Trade Industry (MITI), or, they may

have been cartels formed merely with tacit approval of the Japanese government. By preventing price collapses during recessions, Japanese cartels have served as a mechanism for averting the sort of plant closings and layoffs that typically afflict the U.S. steel industry in severe recessions.

There are also numerous other forms of Japanese government aid which facilitated the development of overseas sources of raw materials, equipment investment and improvement in the steel transportation infrastructure. The Japanese government has recently bought surplus steel bars from Japanese firms and given them away free to developing nations as a means of supporting the minimill sector of its steel industry. It has also encouraged collective efforts among its steel makers with respect to new plant investment to insure optimum scale economies and plant locations.

The Japanese government took a variety of measures during the formative years of the restructuring of its industry to insulate their producers from market competition. It intervened in 1965 and 1966 to prevent the collapse of the Japanese specialty steel sector, by bailing out two large bankrupt firms and presiding over a series of mergers and "tie-ups" in that sector to improve integration and scale economies. During the period 1965-1970, MITI promoted the merger of the two largest Japanese integrated steel producers to enhance the Japanese industries economy of scale in international competitiveness. In recent years, the Japanese government has been overseeing a program to rationalize

its ailing minimill sector, encouraging mergers, cartels and joint use of facilities by firms in that sector.

Import Policy

The Japanese government formally protected its steel industry against import competition until the early 1960's and, since then, has condoned continued structural barriers to imports, notably the reported refusal of large trading companies to handle imported steel. (This practice is not confined to steel, but is reported in many product areas, such as copper and chemicals.)

Much to the alarm of Japanese producers, imported steel, largely from the Republic of South Korea, has recently begun to make some inroads into the Japanese steel market. Imports took 3.1 percent of the Japanese steel market in 1982. A February, 1982, article from a Japanese magazine, Nikkei Business, suggests that Japanese steel consumers feel strong pressure from the Japanese steel producers not to purchase low-priced foreign steel. The article relates the efforts of an importer to keep its foreign steel purchases and the identity of its Japanese consumers confidential to prevent discovery by the major Japanese steel producers. After unloading a shipment of Korean steel onto the wharf at Osaka, the importer covered it with a tarp and at dusk slipped the steel onto a barge for delivery via canal to the Japanese consumer. The article asserts that steel delivered more openly and transported to the consumers by truck is followed and the consumer identified to the major Japanese producers.

Results

Within this protected environment, the Japanese steel industry has developed about 142 million net tons of steelmaking capacity, far more capacity than is needed to meet total Japanese domestic demand, which reached 79 million net tons in 1973 but has not exceeded 69 million net tons since then. ^{1/} This capacity has in turn naturally created pressure to export, particularly during recessions, when domestic demand is low and may be subject to cartel imposed output restrictions. In 1982, Japan exported 26 million net tons of steel, 22 percent of world steel exports. The U.S. market has been a primary destination for Japanese steel.

The purpose of this narrative is not to condemn Japanese government policies and practices as wrongful but simply to underscore the differences from our own. They are policies which must necessarily be taken into account in evaluating the competitive position of our own steel industry.

THE EUROPEAN ECONOMIC COMMUNITY

The Commission of the European Coal and Steel Community (ECSC), and the governments of its Member States, are extensively involved in the steel industry, and their actions have dominated much of the European steel industry since the world wide structural crisis in 1974-1975. After 1974-1975, these efforts have been remedial in nature, designed to assist a severely distressed

^{1/} Source: Steel Statistical Yearbook 1983, International Iron and Steel Institute, and OECD preliminary production capacity data.

industry. Prior to the structural crisis, the European governments had promoted their steel industries' growth by extending financial aid to these industries and assisting in expansion of capacity. Since the structural crisis, government financial aid and anti-competitive controls have allowed EC producers to retain and even at times expand capacity. While steel demand has decreased since 1974, EC steel production capacity increased until 1979. In 1983, EC steel production capacity was still 175 million net tons, 7.4 percent above its 1974 level. In 1981, EC surplus steel production capacity was estimated by the EC to be over 50 million net tons. To put this amount into perspective, it is over 40 percent the total quantity of raw steel produced in the United States during that same year.

The intervention by the European governments has resulted in distortions in the EC market which have had substantial spillover effects in the EC steel exports. EC steel takes a major share of the U.S. market for steel mill products. In 1982, before the U.S./EC Arrangements restricted EC steel exports to the United States, EC steel accounted for 7.3 percent of U.S. consumption of steel. When the U.S. Government investigated these imports of EC steel, it found preliminary dumping margins as high as 41 percent and final subsidy margins as high as 26 percent. This dumped and subsidized steel has been found to have caused material injury to the U.S. industry due to both its volume and price effects.

Our study of the European steel industry revealed a curious phenomenon resulting from the massive subsidies which many of the European steel producers have received from their national

governments and the EC itself. Large state supported enterprises have aggressively cut their prices in the world market, and other producers even announced expansion plans while they were experiencing huge operating losses. Such market behavior, despite the EC efforts to limit price-cutting in its home market, has had such a detrimental effect on the few previously non-subsidized EC producers that these producers are either being driven out of business or are being forced to demand subsidies from their own governments. For example, most steel producers in the Federal Republic of Germany have long condemned subsidization but are now beginning to accept financial aid simply to enable them to remain in the market. Subsidies, rather than efficiency or comparative advantage, have become the decisive market force.

These subsidies are augmented by a comprehensive network of government market controls, most of which was put into place between 1975 and 1977 and which has been modified and strengthened at various times since. The European Coal and Steel Community, working with its major producers, has formed an EC-wide steel cartel to increase EC prices in the EC market. This cartel, in its current form, consists of the following principal elements:

1. Production quotas. The ECSC has imposed mandatory steel production quotas on key product lines and voluntary steel production quotas on other lines within the EC to stabilize steel prices in the Common Market by

reducing the quantity of steel available to European consumers.

2. Minimum prices. The ECSC periodically establishes mandatory minimum prices in some product lines and establishes minimum "guidance" prices in other product lines with which producers are expected to comply voluntarily.
3. Import restrictions. The ECSC further supports these quantity and price restrictions by imposing restrictions on imported steel. The EC has negotiated a comprehensive array of restrictive bilateral agreements with each of its major foreign steel suppliers. The prices of any steel imports that are not covered by these bilateral agreements are monitored by the EC against minimum import prices.

While protection of the home market has not always functioned smoothly, it has assisted EC producers in maintaining "floor prices" for their products and even allowed them to raise prices for sustained intervals, conferring a financial benefit comparable to a subsidy. The EC has limited steel imports (from outside the EC) to about 10 percent of its domestic steel consumption.

This cartel and the massive financial aid received by the EC producers has had severe adverse effects on U.S. steel producers. By severely restricting competition within the EC itself, the

system encourages the EC producers to seek non-European markets and to sell in these markets at price levels that are too low to be sustained other than by subsidized producers. The U.S. market has functioned as a release valve for the excess EC production capacity. Significantly, when the EC home market cartel has been functioning most successfully in maintaining the internal price floor and output restrictions, low-priced EC exports to the U.S. have surged. Conversely, on those occasions when the U.S. has responded with trade actions against the low-priced European steel, the steel has been diverted into the EC market and caused the EC internal price structure to collapse.

To date, the ECSC has had only marginal success in its efforts to reduce its surplus capacity. Under a competitive market situation, the surplus capacity would have been reduced long ago. The EC had about 163 million net tons of capacity in 1974 which increased to a peak of about 185 million net tons in 1979. By 1983, this had only decreased to 175 million net tons, still 12 million net tons above the 1974 level. The EC is unlikely to achieve significant reductions in its surplus capacity in the foreseeable future.

THE DEVELOPING COUNTRIES

In the 1970s, numerous developing countries (LDCs) launched ambitious efforts to expand their steel industries. These efforts were, in part, designed to enhance national self-sufficiency in steel, but they were based on what have proven to be grossly over-optimistic projections of domestic demand. Further, many new LDC mills were frankly intended to supply

export markets. Entire state-of-the-art "turn-key" steel plants were imported from developed countries, who often competed with each other to extend generous terms to buyers. These plants were financed in part by government subsidies and loans, but also through loans on extraordinarily generous terms from western financial institutions -- who, like the equipment suppliers, competed with each other to extend financing to the developing nations. Between 1977 and 1980, an estimated \$7.8 billion in export credits, largely on a concessionary basis, were extended to LDCs by developed countries to finance LDC steel projects.

The rapid growth of steelmaking capacity in these nations has had a profound impact on global steel competition. The LDCs once constituted major steel-importing markets where European and Japanese producers could dispose of their surpluses. As nations like Brazil and South Korea have achieved self-sufficiency, however, this source of demand has no longer been available -- and indeed, most of these nations have imposed severe restrictions on imports as their industries have matured. The shrinkage or disappearance of many of these markets has inevitably increased the pressure of European and Japanese exports on the U.S. market.

Moreover, the expansion of LDC steelmaking capacity has coincided with the stagnation of worldwide steel demand, and has been a major factor contributing to global excess capacity in steel. When the recession of the early 1980s began to affect these countries, they found that they possessed steelmaking capacity far greater than that needed to satisfy domestic demand -- and in many cases, these countries were also facing a crushing

burden of debt to western banks. Use of the new steel plants to produce for export has been a significant way for these nations to maintain domestic employment and generate foreign exchange needed to continue payments on their foreign debt.

LDC governments have displayed a determination to export at any cost -- exports have been massively subsidized, and national currencies depreciated, to achieve this end. While one can sympathize with the current plight of the LDCs, their low priced steel exports can hardly be characterized as reflecting the normal working of a free market. In fact, misguided government policies have produced, and continue to produce, an extraordinary distortion of the market on a global scale.

In 1983, foreign steel producers, other than Japan, the EC, and Canada, exported 6,340 thousand net tons of steel to the United States, an increase of 57 percent over 1982 levels. By April 1984, producers in fourteen of these countries had been included in steel antidumping and/or countervailing duty complaints. Brazil, for example (an LDC with severe debt problems), accounted for 20 percent of the 6.3 million net tons of imports from these countries in 1983.

U.S. imports of Brazilian steel increased from 605 thousand net tons in 1982 to 1,206 thousand tons in 1983, an increase of more than two-fold, and 80 percent of these 1983 imports were eventually included in unfair trade complaints. One of the first such cases filed in August 1982, concerned U.S. imports of Brazil wire rod. The Department of Commerce found dumping margins ranging from 49.6 percent to 76.5 percent, and the USITC determined

that the U.S. wire rod industry had been materially injured by the imports. On November 16, 1983 -- fifteen months after the complaint was originally filed -- the Department of Commerce published an antidumping order on Brazil wire rod. ^{2/} In late April 1984, the Department of Commerce determined that Brazil was also selling carbon steel plate and hot and cold rolled sheet in the United States at prices that reflected subsidy margins of 17 percent to 62 percent.

Access for foreign steel into these developing country markets is nearly universally restricted to satisfying demand which the domestic industry cannot satisfy, usually because of an inability for domestic companies to produce a specific steel product. The curtailing of market forces is employed by almost every developing country during the establishment of production capacity, and during achievement of expanded production and export levels. Driving this expansion are motivations very different from those (such as return on investment) which affect

^{2/} The Department substantially nullified the effect of the order on April 10, 1984, when it completed an early review of the antidumping order. The review was based on a single sale which was greatly affected by a Brazilian government currency devaluation. The review looked at the U.S. imports of Brazilian wire rod since the Department of Commerce's May 4, 1983 announcement of its preliminary findings in the original case. During the period covered by the review, the Department of Commerce found no dumping margins on the sales of one of the two Brazilian exporters and 7.4 percent margin on the other. This means that one of the Brazilian producers has to pay neither dumping duties nor post a cash deposit despite its 1982-1983 dumping margins of 76.5 percent. The other producers pays dumping duties and posts cash deposits of 7.4 percent of the Customs value of its U.S. sales despite its earlier dumping margins of 49.6 percent.

American producers. The determinants in the developing countries are debt repayment requirements, acquiring foreign currency, and maintaining employment.

U.S. POLICY

The foreign practices described above have helped create the substantial share of the U.S. market that imports of basic steel mill products have obtained over the past 20 years. In the early 1960s, U.S. imports of basic steel mill products were 3 million to 4 million net tons and represented less than 5 percent of the U.S. market. By 1981, U.S. imports of steel mill products had reached nearly 20 million tons and accounted for 19 percent of the U.S. market. In 1982 and 1983, when the U.S. steel industry was operating at only 47 percent and 55 percent of its production capability, imports remained at 16.7 and 17.1 million tons taking 22 percent and 20 percent of the U.S. market in 1982 and 1983, respectively. Now in the first four months of 1984, imports accounted for more than 25 percent of the U.S. market. Over this 10 year period, U.S. steel industry employment has dropped from over 500 thousand workers in 1970 to half that amount or about 247 thousand in 1983 and early 1984. Domestic raw steel capability has fallen from 153 million net tons in 1975, when it was first estimated, to around 135 million net tons today.

1968-1974 Voluntary Restraint Agreements

The U.S. Government's response to these imports has been varied. In 1968, the U.S. Government negotiated voluntary restraint agreements with the Europeans and the Japanese. The

agreements were relatively successful for the first two years (1969 and 1970) -- most likely because of strong demand in the source countries. But in late 1970 and 1971, the European market slumped and, as is typical with steel when a home market slumps, foreign producers look for outside markets. In 1971, both the EC and Japanese producers exceeded their quotas, by 13 percent and 9 percent, respectively. The voluntary restraint agreements incorporated no U.S. enforcement element. Despite the problems in 1971, the U.S. renegotiated these voluntary restraint agreements in 1972 to last through 1974.

In both 1973 and 1974, there was a worldwide steel shortage and import restraints were not an issue. The voluntary restraints were allowed to lapse in the hope that the strong demand for steel would continue and import problems would not return. But this was not to be the case. By 1976, foreign producers were returning to the U.S. market and by 1977, they had taken 18 percent of the market. In 1976, the American Iron and Steel Institute filed a section 301 petition against Japan, arguing that Japanese export restrictions on Japanese steel to the EC were deflecting the Japanese steel to the U.S. market.

This complaint was ultimately rejected as being unsupported by evidence on the record just after the trigger price mechanism was introduced.

Steel Trigger Price Mechanism

In 1976 and 1977, U.S. steel producers filed over 20 anti-dumping complaints against Japanese and European pricing practices in the U.S. market. Upon receiving this volume of

complaints, the Carter Administration, concerned that the investigations would result in the virtual exclusion of European steel from the U.S. market, a result thought to be politically and diplomatically unacceptable, created a task force headed by Under Secretary of the Treasury Anthony Solomon to develop an alternative solution. The antidumping statute did not provide the Administration the administrative flexibility of delaying a substantive response in those cases as in the steel industry's section 301 petition.

Under Secretary Solomon developed the steel trigger price mechanism (TPM) as an alternative to the individual antidumping cases. This system recognized the global nature of the steel problem and the importance of expeditious relief to the long-term health of the U.S. steel industry. Under the TPM, the U.S. Government promised to monitor the prices of all steel imports and to initiate expedited formal antidumping investigations whenever the price and quantity of a specific steel product from any country indicated that the imports were being sold at less than fair value and causing material injury. Selling steel in the U.S. market below the applicable trigger price was considered preliminary evidence of a below fair value sale.

Trigger prices were based on an estimate of Japanese cost of production. Since the Japanese steel producers were generally recognized as the world's most efficient steel producers, using Japanese cost of production as a benchmark allowed the less efficient European producers to sell in the United States at prices substantially below their own fair value. This situation

was aggravated further in 1979 when trigger prices failed to increase, and even declined slightly despite rising steel production costs worldwide. The decrease was a function of the depreciation of the Japanese yen relative to the dollar in 1979 and was totally independent of changes in steel production costs. This failure to increase with increasing production costs made trigger prices an even less realistic tool for monitoring for European dumping, and U.S. imports of EC steel remained high throughout 1979. U.S. steel producers filed antidumping complaints against the EC producers in March 1980 in response to continued injury from European below fair value sales.

The U.S. Government again resisted direct enforcement of the unfair trade statutes. After lengthy negotiations, the U.S. Government induced the steel producers to withdraw their complaints in favor of a strengthened TPM system that was accompanied by a quantitative element. This revised system was implemented in October 1980, but was in trouble almost immediately.

The U.S. market for steel was entering a deep slump at the end of 1980, led by collapse in the market for steel sheet, a market that was heavily dependent on U.S. automobile production. Import levels of steel mill products were fairly low in the first half of 1981. But then in the Spring of 1981, foreign producers, particularly the Europeans, began to ignore completely the steel trigger prices and sell large quantities of very low-priced steel later determined to be dumped and subsidized in an increasingly depressed U.S. steel market.

Finally, in November 1981, after import statistics began substantiating the flood of imports, the U.S. Government self-initiated seven unfair trade cases.

The U.S. Government argued that these seven cases would cause other foreign producers to cease violations of the U.S. trade statutes. The U.S. steel producers believed that they could not afford to wait to see if this would be the result. They filed 132 antidumping and countervailing duty complaints in February 1982, and the steel trigger price mechanism was again suspended -- this time not to be reinstated on the major steel products.

With the establishment of the trigger price mechanism, the U.S. Government correctly recognized the uniqueness of the steel import problem. The U.S. steel industry produces a variety of products. Under the dumping statute, the U.S. International Trade Commission views the production of each of these products as constituting a separate industry. Therefore, domestic steel companies must prove material injury due to dumping separately for each of the various different steel products. This fact combined with the large number of steel producing countries which ship significant quantities of steel to the United States has meant that the problems of dumping and subsidization cannot be resolved by a few unfair trade cases. The impact of unfair trade practices continually shifts to new product/country combinations which are seemingly infinite in variety.

U.S./EC Arrangements

Shortly after these 132 antidumping and countervailing duty complaints were filed, the U.S. Government began negotiating with the EC to devise a means of substantially relieving the unfair trade problem while minimizing the strain on U.S./EC relations. The U.S./EC Arrangements were the result of these negotiations and they were put in place in October 1982. The principal Arrangement, the Arrangement Concerning Certain Steel Products, restricts EC exports of each covered steel products to the United States to an agreed share of the U.S. market, calculated by product, by requiring EC export licensing for about 75 percent, and the monitoring with potential for licensing for another 13 percent, of the steel entering the U.S. from EC.

In the companion Arrangement on Steel Pipes and Tubes, which covers about another 12 percent of U.S. imports of steel, the EC agreed that if imports of pipes and tubes exceed 5.9 percent of the U.S. market for pipes and tubes that the U.S. and EC would consult to find an appropriate means of preventing diversion of EC steel exports to the United States into these products and the resulting growth in EC market share from the 5.9 percent level. The intent was to preclude the necessity of another round of U.S. antidumping and countervailing duty cases against EC producers.

Developing Country Imports

With the exception of the agreement on Pipes and Tubes, the U.S./EC Arrangements seem to be working reasonably well through last year and into 1984. However, the breadth and persistence of the steel import problem has again become apparent. In 1983,

after most European shipments were finally controlled by the U.S./EC Arrangements, imports from developing countries increased by nearly 60 percent over their 1982 levels. Deputy Assistant Secretary Holmer, as recently as September 1983, indicated that his office was conducting 42 separate steel investigations with respect to imports from Brazil, Mexico, Argentina, South Korea, Taiwan, Spain, Australia, Poland, Finland, Czechoslovakia and South Africa.

Mr. Holmer further indicated that in total his office had conducted nearly 170 steel cases since January, 1982. This means that the U.S. industry may have experienced almost 170 separate product/country cases of material injury from imported steel products.

OECD Steel Committee

As early as 1978, the U.S. Government recognized that the steel problem was a world steel problem and that any multilateral solution would require major adjustments in national policies in many countries. The United States led the way in 1978 in the formation of the International Steel Committee in the OECD. The OECD Steel Committee was created as a forum for consultation among the major trading partners with the hoped for addition of less developed countries to review a wide range of steel problems. The U.S. has used the OECD Steel Committee repeatedly as a place to press for a reduction in government created and supported excess steel capacity and for the elimination of the massive subsidies which steel industries continue to receive. The U.S. Government has also used this forum to press our trading

partners for an agreement to halt the subsidized loans to build steel plants in developing countries. The OECD Steel Committee has provided a forum for continuing consultations with other countries regarding the world steel problem, but it has not proved to be, nor was it intended to be, a panacea for the steel problem.

Strength of the U.S. Dollar

Some observers have attributed much of the recent rise in steel imports to the strength of the U.S. dollar. Assessing the impact of the exchange value of the dollar on U.S. steel imports over the last five years is a difficult task because of the continuing depressed demand for steel worldwide, and extensive government intervention in steel production and trade, including the existence of various types of trade restrictions on U.S. steel imports since 1979. The dollar has been strong throughout this period and has adversely affected the competitiveness of the U.S. steel industry as it has other U.S. manufacturing industries.

Since July 1980, the dollar has risen almost 30 percent against other major currencies on a trade-weighted basis. Adjusted for inflation, the dollar appreciation has been almost 40 percent. There have been a number of factors that have contributed to this appreciation of the dollar, perhaps most importantly, rising U.S. interest rates.

Also contributing to the dollar's strength over this period were the severe debt repayment difficulties of many developing countries. The U.S. dollar's sharp fall in 1971-1973, and again

in 1977-1978, attracted heavy borrowing by developing countries in dollar-denominated liabilities.

A final outcome of the debt crisis, significant for steel trade, is the export push by major debtor countries to earn foreign exchange. The two largest developing country debtors dramatically increased steel exports to the United States in 1983 compared to 1982. Brazil's exports doubled from 1982 to 1983, increasing from 605,000 net tons to 1,257,000 net tons. Mexico's exports rose sevenfold, growing from 113,000 net tons to 651,000 net tons.

The dollar's increasing value has not been the controlling factor in determining overall levels of U.S. imports of steel since 1979. However, the dollar's 32 percent ^{3/} overvaluation aggravates the U.S. industry's other competitive disadvantages such as low foreign wages, huge foreign subsidies and other government assistance, and closed foreign markets.

CONCLUSION

Several options are open to the U.S. Government regarding steel trade. One option is to let things continue as they are now. This option should not be chosen under the mistaken assumption that it is without major costs. The steel trade policy to date has been to provide some minimum level of relief and hope that the problem will disappear. This explains the VRAs in 1968 and 1972, the TPM in 1977 and 1980, and the hodgepodge of measures since then. Quotas have been imposed on about 75

^{3/} Economic Report of The President, February 1984 at 53.

percent of U.S. imports of European steel, and we "consult" regarding U.S. import levels on the rest of our steel imports from Europe. And, part of this deal--which is just reaching the mid-point in its three-year life--is being severely threatened as U.S. imports of European pipe and tube took nearly 14 percent of the U.S. pipe and tube market in the first quarter of 1984, over 130 percent in excess of the agreed market share of 5.9 percent.

The 1982 U.S./EC Arrangements, which should have allowed the U.S. steel industry with an opportunity to focus its attention on modernization rather than pursuing unfair trade cases, as well as to relieve U.S./EC trade tensions, has certainly not done the former. The unfair trade merely shifted its primary point of origin from Europe to the developing countries. While U.S. imports of European steel decreased by nearly 1.5 million net tons in 1983 from 1982 levels, U.S. imports of steel from countries other than Japan, the EC Member States, or Canada increased by 2.4 million net tons in 1983. By early 1984, domestic steel producers had filed unfair trade cases covering about two-thirds of the imports from these surging suppliers.

Some may look at this situation and declare that the system is working -- a massive surge of unfairly traded imports was met by U.S. steel producers filing numerous unfair trade complaints. The Department of Commerce and the International Trade Commission performed the investigations and many antidumping and countervailing duty orders are being issued.

This result, however, has come at a high cost the U.S. steel industry. U.S. trade laws require the petitioning industry to

demonstrate material injury or threat of material injury, with the standard for threat being high enough that the U.S. industry generally must have experienced real injury before it can receive relief from unfair trade practices.^{4/}

Even after the U.S. producer has proven that the foreign producer/exporter has been dumping merchandise in the U.S. market and injuring a U.S. industry -- a process that requires 9 to 13 months -- the foreign producer may never pay an antidumping duty. Our trade laws provide each producer/exporter at least one free shot per product at the U.S. market. The original anti-dumping order may require large cash deposits reflecting the severe price cutting which injured the U.S. producers, but once the order is issued, the foreign producer/exporter may request an immediate review of the margins found in the original determination. This review covers only imports occurring after the first Department of Commerce affirmative determination of less than fair value sales and it must be completed within 90 days of the publication of the antidumping order. If the foreign producer/exporter stopped dumping by the time Commerce makes its first affirmative determination of less than fair value sales, then Commerce's 90 day review will relieve the producer/exporter of the requirement to post cash deposits on the import entries. Regardless of the size of the original dumping margins or the degree of injury to the U.S. industry, the foreign producer/

^{4/} Countries which have not signed the GATT Subsidies Code are an exception to this rule. Countervailing duties can be applied without the need for showing injury.

exporter may be able to avoid ever paying antidumping duty or posting a cash deposit. Given the more than 30 basic steel mill products and more than 20 countries supplying steel to the U.S. market, over 600 free shots at the U.S. market are provided and a lot of injury can occur to the U.S. industry.

Section 201 of the Trade Act of 1974 is another possible solution, but this remains to be seen. Section 201 can work satisfactorily for some industries, but the complexity of the steel problem may exceed the scope of this statute. There is a substantial risk that even if the USITC and the Administration provide short term relief for some products, that major products may be excluded and thereby result in merely illusory relief with the problem immediately shifting to the uncovered products. Even if there were comprehensive import relief provided, adequate domestic restructuring would not be assured.

Another alternative to the status quo is legislated quotas. The steel quota bill has attracted many sponsors. The failure to deal with the international competitive problems of the steel industry, both in terms of trade policy and domestic policy, gives rise to this support. If alternative policy options are rejected, the enactment of quota legislation becomes inevitable.

The steel problem is too severe, too resistant to the normal trade policy solutions, and the industry too important to the U.S. economy, to leave to chance. The U.S. steel industry must adjust, and is adjusting with great pain and no concerted program of government assistance, to become more competitive.

This adjustment of U.S. steel companies is severely hindered by the flood of imported foreign steel which has been entering the United States in quantities and at prices that reflect foreign government subsidies and industrial policies rather than natural competitive advantage. Enforcement of the trade statutes cannot be considered a satisfactory solution when 170 antidumping and countervailing duty cases have not resolved the unfair trade problem. Assertions that the U.S. market is the only major open market for steel are statements of fact, not exaggerations. As such, our market acts as a dumping ground for the problems of the world steel industry, with enormous costs for the U.S. economy.

A comprehensive solution is needed that goes beyond trade restrictions. Yet it would be naive to conclude that trade restrictions will not play their part in this matter. A way should be found to deal with the continual drain of U.S. producers' economic strength due to government supported foreign competition and to foster U.S. producers' successful restructuring. By holding these hearings the Subcommittee is making an important contribution to defining the problem. There is an urgent need for the U.S. Government to do a better job than it is currently doing in reducing the effects on this market of unfair trade and in facilitating rationalization of our domestic industry.

STATEMENT

BY

ALTON D. SLAY

FINANCE COMMITTEE

UNITED STATES SENATE

. 8 JUNE 1984

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE. I APPRECIATE VERY MUCH BEING ALLOWED TO SUBMIT THIS STATEMENT. THE TOPIC OF TODAY'S HEARING IS OF GREAT INTEREST TO ME. BEFORE MY RETIREMENT FROM THE MILITARY APPROXIMATELY THREE YEARS AGO, I APPEARED BEFORE OTHER CONGRESSIONAL COMMITTEES AND TESTIFIED CONCERNING THE STATUS OF OUR INDUSTRIAL BASE IN GENERAL AND ABOUT TRENDS IN SOME OF OUR BASIC INDUSTRIES LIKE MINING AND METALS PROCESSING. I BELIEVED AT THAT TIME AND STILL BELIEVE STRONGLY THAT OUR NATION'S DEFENSE POSTURE IS BEING ADVERSELY AFFECTED BY THOSE TRENDS.

IN GENERAL, I WILL FOCUS ON OUR AILING INDUSTRIAL BASE AND HOW THAT ILLNESS AFFECTS OUR NATIONAL DEFENSE POSTURE WITH EMPHASIS ON OUR BASIC MATERIALS PROCESSING INDUSTRIES LIKE STEEL.

UNLIKE MANY OTHER WITNESSES WHO HAVE APPEARED AND WILL APPEAR BEFORE THIS COMMITTEE, I AM NOT AN EXPERT IN THE STEEL BUSINESS. BUT I AM AN EXPERT IN THINGS RELATED TO THE DEFENSE OF OUR COUNTRY, AND AM VERY SENSITIVE TO AND CONCERNED BY ANY SITUATION, TREND, OR FORECAST WHICH COULD ADVERSELY AFFECT IT. AND WHAT HAS HAPPENED OVER THE PAST TWO DECADES AND CONTINUES TO HAPPEN TO OUR INDUSTRIAL BASE IN GENERAL, TO OUR BASIC MATERIALS INDUSTRY SPECIFICALLY, AND TO OUR STEEL INDUSTRY IN PARTICULAR IS A SITUATION, A TREND, AND A FORECAST WHICH, IN MY OPINION CAN AND VERY DEFINITELY WILL ADVERSELY AFFECT THE DEFENSE CAPABILITY OF OUR NATION. I AM SENSITIVE TO THAT FACT AND I AM CONCERNED ABOUT THAT FACT; AND THAT IS WHAT I'M GOING TO TALK ABOUT.

ABOUT THREE AND ONE-HALF YEARS AGO, I TOLD SEVERAL COMMITTEES OF CONGRESS, AND THE ENTIRE HOUSE LEADERSHIP SITTING 'IN CAMERA', OF MY VERY STRONG CONVICTION THAT WE WERE, AT THAT TIME, IN THE GRIP OF A VIRULENT INDUSTRIAL DISEASE WHICH WAS SAPPING OUR STRENGTH AND WHICH, UNLESS CURED, WOULD INEVITABLY RESULT IN FORFEITURE OF OUR POSITION

OF LEADERSHIP IN THE WESTERN WORLD---LEADERSHIP NOT ONLY IN AN INDUSTRIAL SENSE, BUT POLITICALLY AND MILITARILY AS WELL.

NOW SOME--PERHAPS MANY--WILL SAY THAT THIS IS 1984, NOT 1980 AND THAT THINGS HAVE CHANGED; THAT WE'VE SEEN A GREAT RESURGENCE OF OUR ECONOMY AND OUR INDUSTRY IS BOOMING ONCE AGAIN. ALL OF WHICH IS TRUE; BUT THE INFERENCE THAT OUR INDUSTRIAL ILLNESS HAS BEEN CURED IS NOT TRUE. SOME OF THE MOST VISIBLE SYMPTOMS HAVE BEEN MASKED, BUT THE BASIC UNDERLYING PROBLEMS ARE STILL THERE; NONE HAVE DISAPPEARED-- IN FACT, SOME OF THEM HAVE BECOME WORSE SINCE 1980.

I HAVE SPENT THE GREATER PART OF MY LIFETIME WEARING A UNIFORM. BECAUSE OF THAT, ONE COULD LOGICALLY CONCLUDE THAT MY PRINCIPAL CONCERN IS FOR THE DEFENSE INDUSTRIAL BASE. SUCH A CONCLUSION WOULD BE TECHNICALLY CORRECT BUT NOT COMPLETELY CORRECT. ALTHOUGH I HAVE SPENT MANY YEARS DEALING WITH DEFENSE PROCUREMENT, I AM INCAPABLE OF SEPARATING THE DEFENSE INDUSTRIAL BASE FROM OUR INDUSTRIAL BASE IN GENERAL. I FRANKLY CAN'T EVEN DEFINE, MUCH LESS FIND WHERE ONE STARTS AND THE OTHER LEAVES OFF.

I DO WORRY GREATLY ABOUT THE DEFENSE ASPECTS OF AN AILING INDUSTRIAL BASE. BUT I ASSERT TO YOU THAT THOSE ASPECTS CANNOT BE CONSIDERED SEPARATELY FROM THE PROBLEM AS IT RELATES TO OUR TOTAL INDUSTRY AND THE ECONOMY AS A WHOLE..

AND THE CONVERSE OF THAT ASSERTION IS, IN MY MIND, ALSO TRUE. ONE CANNOT ADEQUATELY CONSIDER THE ECONOMIC ASPECT OF OUR INDUSTRIAL BASE PROBLEM AND ITS SOLUTION IN ISOLATION FROM THE DEFENSE ASPECT OF THE PROBLEM. THEY ARE COMPLETELY AND INEXTRICABLY INTERTWINED.

DEFENSE PREPAREDNESS WITHOUT INDUSTRIAL PREPAREDNESS IS A SNARE AND A DELUSION. AT THE VERY HEART OF WHAT I HAVE TO SAY TO THIS SUBCOMMITTEE IS MY CONVICTION THAT IT IS A GROSS CONTRADICTION TO THINK THAT WE CAN MAINTAIN OUR POSITION AS A FIRST-RATE MILITARY POWER WITH A SECOND-RATE INDUSTRIAL BASE. IT HAS NEVER BEEN DONE IN THE HISTORY OF THE MODERN WORLD.

ONE CANNOT TALK FOR VERY LONG ABOUT DEFENSE PREPAREDNESS, AS I WILL TODAY, WITHOUT DISCUSSING THE THREAT. THEREFORE I WANT TO SPEND JUST A FEW PARAGRAPHS ON THAT SUBJECT.

I ASK THAT YOU CAST YOUR MINDS BACK 22 YEARS AND THINK IN THE CONTEXT OF OUR MILITARY SITUATION IN 1962.

IN THOSE DAYS, AND FOR THE PRECEDING TWO DECADES, WE WERE THE STRONGEST NATION IN THE WORLD, BY FAR; WE WERE PROBABLY STRONGER THAN THE REST OF THE WORLD COMBINED.

WE HAD A CONVENTIONAL FORCE SECOND TO NONE; BUT, MORE IMPORTANTLY, WE HAD OVERPOWERING NUCLEAR SUPERIORITY.

WE COULD MEET AGGRESSION SQUARELY BECAUSE WE WERE NOT SUSCEPTIBLE TO NUCLEAR BLACKMAIL--EITHER DIRECT OR IMPLIED. AND WE DID MEET AGGRESSION AGAINST OUR INTERESTS SQUARELY WHEREVER AND WHENEVER IT OCCURRED.

RIGHT AFTER WW II, WE TOLD THE SOVIETS TO GET OUT OF IRAN. THEY DID. THEY HAD NO CHOICE.

A SHORT TIME LATER, WE TOLD THE SOVIETS, THROUGH THE TRUMAN DOCTRINE, TO STAY OUT OF GREECE AND THE MIDDLE EAST. THEY DID. THEY HAD NO CHOICE.

IN 1948, WE MET HEAD-ON THE CHALLENGE THE SOVIETS THREW AT US IN BERLIN AND KEPT THAT CITY OUT OF SOVIET HANDS.

IN 1950, WE MET THEIR CHALLENGE IN KOREA AND PREVENTED A TAKEOVER OF THE REPUBLIC OF KOREA.

AND CUBA IN 1962. WHEN KRUSCHEV DECIDED TO PLACE NUCLEAR MISSILES IN CUBA, PRESIDENT KENNEDY SAID, IN ESSENCE--"REMOVE YOUR MISSILES OR WE'LL DESTROY THEM." AND KRUSCHEV HAD TO BACK DOWN. HE KNEW THAT THE CONVENTIONAL ARMS HE COULD BRING TO BEAR IN CUBA WOULD BE TOTALLY INSUFFICIENT TO PREVENT THE DESTRUCTION OF THE MISSILES AND PERHAPS THE INSTALLATION OF A DEMOCRATIC FORM OF GOVERNMENT IN CUBA, FOR THAT MATTER.

BUT MORE IMPORTANTLY, HE KNEW THAT HIS NUCLEAR MISSILE RATTLING MEANT NOTHING. THE U.S.---NOT THE SOVIET UNION---HELD ALL THE NUCLEAR HIGH CARDS.

BUT THAT WAS THEN---THAT WAS THE 1962 CONTEXT. AND THAT'S THE WRONG CONTEXT. WHAT A DIFFERENCE THOSE 22 YEARS HAVE MADE!!!

THE OVERWHELMING STRATEGIC NUCLEAR EDGE THAT WE ENJOYED FOR SO MANY YEARS HAS DISAPPEARED. AND I COULD GIVE YOU A LOT OF STATISTICS ON THE RELATIVE CONVENTIONAL MILITARY POWER OF THE SOVIET UNION AND THE WARSAW PACT VERSUS THE US AND NATO, BUT I WON'T DO THAT. THOSE STATISTICS ADD UP TO JUST ONE POINT--THE SOVIETS AND THEIR ALLIES HAVE BUILT OVER THE PAST QUARTER CENTURY THE MOST POWERFUL WAR MACHINE THE WORLD HAS EVER SEEN.

NOW, CONSIDER FOR A MOMENT--WHAT IF WE HAD ANOTHER CUBAN MISSILE CRISIS, OR FOR THAT MATTER, A NICARAUGUAN MISSILE CRISIS THIS MONTH--APRIL, 1984? WHAT WOULD WE DO? WHAT WOULD BE OUR OPTIONS? WHAT WOULD BE THE HAZARDS? HOW WOULD WE CONFRONT THE SITUATION?

QUITE OBVIOUSLY, THE SITUATION IS MUCH DIFFERENT. AND ALSO QUITE OBVIOUSLY, WE WOULD HAVE TO CONFRONT THE SITUATION; WE WOULD HAVE TO ANALYZE THE HAZARDS; WE WOULD HAVE TO SELECT AN OPTION AND CARRY THAT OPTION OUT. BUT TODAY'S PRESIDENT

WOULD HAVE A MUCH TOUGHER DECISION TO MAKE THAN DID OUR 1962 PRESIDENT.

I SPOKE A MOMENT AGO ABOUT THE VAST BUILDUP OF SOVIET ARMS OVER THE PAST TWO DECADES. THIS VAST BUILDUP OF MILITARY MEN AND EQUIPMENT WAS MADE POSSIBLE BY A NATIONAL POLICY THAT HAS CONSISTENTLY MADE MILITARY MATERIAL PRODUCTION THE VERY HIGHEST NATIONAL PRIORITY.

UNDERLYING SOVIET MILITARY POWER IS A VAST AND COMPLEX INDUSTRIAL BASE WHICH HAS BEEN DESIGNED FOR AND IS DEDICATED TO THE FURTHERANCE OF SOVIET ABILITY TO WAGE WAR. FOR DECADES, SOVIET INDUSTRY HAS MANUFACTURED A BROAD SPECTRUM OF WEAPONRY AND MILITARY SUPPORT EQUIPMENT IN STAGGERING QUANTITIES. THE MEMBERS OF THIS SUBCOMMITTEE ARE CERTAINLY WELL AWARE OF THE STATISTICS SO I DO NOT NEED TO DISPLAY THEM HERE.

UNFORTUNATELY, WE FACE AN ADVERSARY WHOSE LEADERS UNDERSTAND FULL WELL THE MILITARY VALUE OF A STRONG INDUSTRIAL BASE AND HAVE TAKEN ACTION TO ASSURE THAT SUCH A BASE IS MAINTAINED. I MUST SAY THAT WE ALSO HAVE MANY HERE IN THE UNITED STATES IN LEADERSHIP ROLES WHO RECOGNIZE THE DANGER OF A DETERIORATING INDUSTRIAL BASE.

IN THE PAST FEW YEARS, A NUMBER OF CONGRESSIONAL COMMITTEES HAVE WARNED THAT THE US INDUSTRIAL BASE HAD DETERIORATED TO THE POINT THAT NATIONAL SECURITY WAS IN JEOPARDY. THE REPORT BY THE DEFENSE INDUSTRIAL BASE PANEL OF THE HOUSE ARMED SERVICES COMMITTEE SAID THAT AN ALARMING EROSION OF CRUCIAL INDUSTRIAL SEGMENTS OF OUR ECONOMY, COUPLED WITH A MUSHROOMING DEPENDENCE ON FOREIGN SOURCES FOR CRITICAL MATERIALS, IS ENDANGERING OUR INDUSTRIAL POSTURE AT ITS VERY FOUNDATION.

BUT WE STILL HAVE MUCH OF OUR DEFENSE-CRITICAL BASIC INDUSTRY ON THE DOWNHILL SLIDE TO PERDITION.

WE ARE OVERWHELMINGLY DEPENDENT ON FOREIGN SOURCES FOR OUR SUPPLY OF MANY MANY MINERALS WHICH ARE ABSOLUTELY CRITICAL TO DEFENSE. AND OUR MAIN SOURCE OF SUPPLY FOR MOST OF THESE CRITICAL MINERALS IS ONE OF THE MOST UNSTABLE AREAS OF THE WORLD--PLACES LIKE ZAIRE, ZAMBIA, BOTSWANA, ZIMBABWE, GABON, GUYANA, ETC.

OUR MINING INDUSTRY IS SICK AND GETTING SICKER; OUR MINERALS PROCESSING INDUSTRY IS SICK AND GETTING SICKER. IF CURRENT TRENDS CONTINUE, I DOUBT SERIOUSLY WHETHER WE WILL HAVE A SMELTING INDUSTRY OF ANY CONSEQUENCE IN ANOTHER DECADE. OUR MACHINE TOOL INDUSTRY HAS BEEN GOING STEADILY DOWNHILL FOR A NUMBER OF YEARS; OUR INDUSTRIAL FASTENER INDUSTRY LIKEWISE; AND THE CONTINUING TROUBLES IN THE STEEL INDUSTRY ARE VERY FAMILIAR TO THIS SUBCOMMITTEE.

ALL OF THESE INDUSTRIES ARE ABSOLUTELY BASIC TO OUR LONG TERM SECURITY POSTURE. AND NONE IS MORE BASIC THAN STEEL. VIRTUALLY EVERY MAJOR HARDWARE SYSTEM BUILT FOR OUR DEFENSE FORCES STARTS WITH STEEL AS THE PRIMARY INGREDIENT. APPLICATIONS OF STEEL IN DEFENSE RANGE FROM A FEW POUNDS OF VERY SOPHISTICATED ALLOYS IN SPACECRAFT TO TONS OF PLATE FOR THE HULL AND OTHER COMPONENTS OF A WARSHIP OR TANK.

FROM THE PROSAIC TO THE EXOTIC--FROM FUEL DRUMS TO BLACK BOXES FOR ELECTRONIC GEAR TO INTERCONTINENTAL MISSILES--STEEL IS ESSENTIAL TO MILITARY PREPAREDNESS. ORDINARY JET ENGINES CONTAIN UP TO TEN DIFFERENT TYPES OF STEEL. SUPER-THIN STEEL WIRES GUIDE THE TOW ANTI-TANK MISSILE TO ITS TARGET. MORE THAN HALF A TON OF STEEL IS REQUIRED TO MAKE OUR AIR FORCE F-15 FIGHTER AIRCRAFT. WHETHER AN ENEMY IS ENGAGED ON LAND, ON THE SEA, IN THE AIR, OR IN SPACE, STEEL IS AN ESSENTIAL PART OF THE WEAPONS USED. IT IS THE UBIQUITOUS MATERIAL ON ANY BATTLEFIELD.

AND, AS THE SAYING GOES, ARMIES MAY TRAVEL ON THEIR STOMACHS; BUT THEY AND THEIR STOMACHS MUST TRAVEL ON ROADS, BRIDGES, TRUCKS, BUSES, TRAINS, SHIPS, TANKS, AND AIRCRAFT--ALL DEPENDENT FOR THEIR CONSTRUCTION UPON STEEL IN ONE FORM OR ANOTHER.

AND SPEAKING OF HIGHWAYS AND BRIDGES, DATA RECENTLY RELEASED BY THE FEDERAL HIGHWAY ADMINISTRATION REVEALS THAT OUR INTERSTATE HIGHWAY SYSTEM IS DETERIORATING AT THE RATE OF 2000 MILES PER YEAR AND THAT THE DECAY RATE IS WORSE FOR STATE AND COUNTY ROADS. THE REPORT ALSO SHOWED THAT 248,537 BRIDGES OUT OF A TOTAL OF 557,516 THAT IT INVENTORIED ARE "STRUCTURALLY DEFICIENT" OR "FUNCTIONALLY OBSOLETE". "STRUCTURALLY DEFICIENT" BRIDGES ARE RESTRICTED TO LIGHT TRAFFIC ONLY WHILE "FUNCTIONALLY OBSOLETE" BRIDGES HAVE DECK WIDTHS, VERTICAL CLEARANCE, OR SOME OTHER PROBLEM WHICH RENDER THEM UNSUITABLE FOR MODERN INTERSTATE TRUCK TRAFFIC. THEY CALCULATED THAT IT WOULD REQUIRE 287 YEARS TO REPLACE OR REPAIR ALL THOSE BRIDGES AT THE RATE OF THE PAST DECADE. AND IN THOSE 287 YEARS, THE REST OF THE BRIDGES WOULD DECAY, AS WOULD MOST OF THE ONES REPAIRED OR REPLACED.

THE CORPS OF ENGINEERS HAS FOUND THAT 8,794 DAMS IN THIS COUNTRY POSE A HAZARD TO LIFE AND PROPERTY. THEY ALSO FOUND THAT 56 OF 184 LOCKS IN USE ON OUR INLAND WATERWAYS ARE OBSOLETE AND SHOULD BE REPLACED. WATER TRANSPORTATION OF THINGS IN HIGHLY EFFICIENT AND COST EFFECTIVE. FOR INSTANCE, A TON OF TACONITE CAN BE HAULED 800 MILES FROM THE MESABI REGION OF MINNESOTA TO STEEL MILLS IN OHIO FOR THE COST OF A SINGLE CARTON OF CIGARETTES. THIS ASTOUNDING EFFICIENCY IS MADE POSSIBLE THROUGH THE USE OF WHAT IS KNOWN AS A "POE-CLASS BULKER" WHICH GETS ITS NAME FROM THE POE LOCK AT SAULT STE. MARIE, MICHIGAN. THESE POE CLASS VESSELS RANGE IN LENGTH FROM 767 FEET TO 1010.5 FEET AND CAN CARRY FROM 30,000 TO 62,000 GROSS TONS. THERE ARE CURRENTLY 25

SUCH VESSELS IN SERVICE ON THE GREAT LAKES WHICH TOGETHER CAN MOVE 1,165,000 TONS OF CARGO IN A SINGLE VOYAGE.

BUT THESE FINE VESSELS HAVE AN ACHILLES HEEL--THE LOCK FOR WHICH THEY ARE NAMED. THEY ARE SO LARGE THAT THEY CAN ONLY TRANSIT THE POE LOCK WHEN THEY ARE ENGAGED IN THE "HEAD OF THE LAKES" TRADE. EITHER THEIR LENGTHS AND/OR BEAMS KEEP THEM FROM USING THE DAVIS, SABIN, AND MCARTHUR LOCKS.

IF THE POE LOCK WERE SHUT DOWN FOR ANY REASON DURING A NATIONAL EMERGENCY SITUATION REQUIRING A STEEL PRODUCTION INCREASE, WE WOULD BE IN SERIOUS TROUBLE. THE CORPS OF ENGINEERS RECOGNIZES THIS AND HAS PLACED THE CONSTRUCTION OF A SECOND POE SIZED LOCK HIGH ON THEIR PRIORITY LIST. BUT IT IS NOT YET AUTHORIZED OR FUNDED.

OBVIOUSLY, IN THE EVENT OF A MOBILIZATION OR NATIONAL EMERGENCY, WE WOULD NEED ALL THOSE HIGHWAYS, BRIDGES, AND WATERWAYS. ALSO OBVIOUSLY, A LOT OF STEEL IS REQUIRED TO REPAIR OR REPLACE THEM.

IF THAT IS SO--AND IT IS--THEN HOW CAN WE CONTEMPLATE ALLOWING THAT INDUSTRY TO CONTINUE TO GO DOWNHILL? THERE ARE THOSE WHO ASSERT THAT FRIENDS AND ALLIES LIKE JAPAN, KOREA, WEST GERMANY, AND OTHERS WOULD SUPPLY ANY SHORTFALLS IN BASIC PROCESSED MATERIALS-LIKE STEEL--THAT OCCURRED DUE TO INCREASED USE BY DEFENSE. THESE PEOPLE TELL US THAT WE SHOULD NOT WORRY SO MUCH ABOUT "THE EFFICIENT CONSOLIDATION" OF SOME OF OUR SMOKESTACK INDUSTRIES--OR OTHER INDUSTRIES, FOR THAT MATTER. IN THEIR OPINION, THE WORLD MARKETPLACE SHOULD DETERMINE WHICH COUNTRY PRODUCES WHICH PRODUCTS MOST EFFICIENTLY AND WE SHOULD NOT FIGHT THAT DETERMINATION UNLESS IT IS VERY CLEARLY IN THE NATIONAL INTEREST TO DO SO. FOR INSTANCE, THERE IS A RATHER WIDESPREAD FOLKLORE THAT HOLDS THAT WE MIGHT BE MUCH BETTER OFF TO CONCENTRATE ON HIGH TECHNOLOGY CONTENT INDUSTRIES, SINCE WE ARE STILL THE WORLD LEADER IN TECHNOLOGY.

BUT, IN MY OPINION, THOSE PEOPLE ARE WRONG. HEALTHY AND VIABLE BASIC MATERIALS AND MATERIALS PROCESSING INDUSTRIES ARE VERY MUCH IN THE NATIONAL INTEREST. I ASK THAT YOU CONSIDER FOR A MOMENT THE POSSIBLE CONSEQUENCES OF A SITUATION WHERE OUR INDUSTRY IN GENERAL AND OUR DEFENSE INDUSTRY IN PARTICULAR SURVIVED AT THE WHIM OF OVERSEAS SUPPLIERS.

I CHALLENGE THE ASSERTION THAT SHORTFALLS IN BASIC MATERIALS COULD ALWAYS BE ACQUIRED FROM OUR FRIENDS AND ALLIES.

THE MEMBERS OF THIS SUBCOMMITTEE WILL CERTAINLY RECALL WHAT HAPPENED IN 1973 WHEN ALL OF OUR FRIENDS AND ALLIES WITH THE EXCEPTION OF PORTUGAL DENIED THE UNITED STATES LANDING RIGHTS FOR OUR C-58 AND C-141S WHICH WERE RE-SUPPLYING THE ISRAELIS IN THEIR WAR WITH THE MIDDLE EASTERN ARAB STATES.

WHY DID THEY DO THAT? VERY SIMPLE!! THEY CONSIDERED IT NOT TO BE IN THEIR NATIONAL INTEREST TO ASSIST THE UNITED STATES IN ASSISTING ISRAEL. WHY?? AGAIN, VERY SIMPLE!! THE THREAT THAT THEIR OIL SUPPLY FROM THE ARAB STATES WOULD BE SHUT OFF.

THERE ARE PROBABLY MANY WHO DO NOT REMEMBER THE SITUATION VIS-A-VIS OURSELVES AND OUR FRIENDS IN GREAT BRITAIN IN 1939. AT THAT TIME, STRANGELY ENOUGH, THE GENERAL SENSE OF CONGRESS WAS THAT IT WAS NOT IN OUR BEST INTERESTS TO PROVIDE ARMS AND OTHER WAR MATERIALS TO GREAT BRITAIN IN HER FIGHT WITH GERMANY. COMPROMISES WERE FINALLY WORKED OUT, AND WE DID, IN FACT, SUPPLY HUGE QUANTITIES OF WAR MATERIAL AND ARMS TO GREAT BRITAIN BEFORE OUR ENTRY INTO THE WAR THROUGH "CASH ON THE BARRELHEAD" SALES AND, LATER, THROUGH THE LEND LEASE PROGRAM. BUT THE POINT IS THAT, ALTHOUGH GREAT BRITAIN WAS OUR FRIEND, WE HAD CONSIDERABLE QUALMS ABOUT HELPING HER WITH THE MATERIALS SHE NEEDED TO SUCCESSFULLY PROSECUTE HER WAR WITH GERMANY. WE TEND TO FORGET THINGS LIKE THAT.

I'M NOT AT ALL CONFIDENT THAT ALL FRIENDS AND ALLIES, UPON WHOM WE ARE NOW OR MIGHT BECOME DEPENDENT UPON FOR SUPPLIES OF WAR MATERIALS LIKE STEEL FOR OUR DEFENSE INDUSTRY, WOULD ALWAYS AGREE THAT THEIR BEST INTERESTS COINCIDE WITH OURS.

AND THE POSSIBILITY OF THE SUPPLIERS OF SOME OF THE BASIC NECESSITIES OF DEFENSE PRODUCTION REFUSING TO SUPPLY US IS BY NO MEANS THE TOTALITY OF THE PROBLEM. THERE'S THE SUPPLY PIPELINE PROBLEM.

CONSIDER THE FACT THAT, ALTHOUGH THE UNITED STATES IS BY FAR THE WORLD'S LARGEST TRADING POWER AND OVER 90 PERCENT OF THAT TRADE IS BY SHIPS, LESS THAN 5 PERCENT OF ITS FOREIGN TRADE IS CARRIED IN U.S. BOTTOMS. U.S. SHIPS CARRY LESS THAN 2 PERCENT OF THE NON-FUEL MINERALS WE IMPORT AND ONLY 3 PERCENT OF OUR OIL IMPORTS. WE DON'T HAVE THE SHIPS IN OUR MERCHANT MARINE. WHAT IF THE COUNTRIES THAT OWN THE SHIPS DECIDE THAT THEY DON'T WANT TO PLAY BALL WITH US ANY MORE???

ALSO THERE IS ANOTHER VERY LARGE FACTOR TO BE CONSIDERED IN A SITUATION OF DEPENDENCY FOR MATERIALS WE MUST HAVE TO MAKE OUR DEFENSE INDUSTRY RUN. A SUPPLY DISRUPTION CAUSED BY ENEMY ACTION WOULD HAVE THE SAME GRAVE CONSEQUENCES AS IF OUR SUPPLIER DECIDED TO CUT OFF OUR SUPPLY. AND SUPPLY DISRUPTIONS THERE MOST SURELY WOULD BE. IT IS 7,500 MILES FROM OUR WEST COAST TO JAPAN AND 3,500 MILES FROM OUR EAST COAST TO EUROPE. THAT IS A VERY LONG AND VULNERABLE PIPELINE.

TO ILLUSTRATE MY POINT, IN 1942, ONE OUT OF EVERY 4 BAUXITE CARRYING SHIPS HEADING TO THE UNITED STATES FROM CARIBBEAN PORTS WAS SUNK BY GERMAN U-BOATS RIGHT IN OUR OWN BACKYARD. OUR ALUMINUM INDUSTRY WAS PLACED IN GRAVE JEOPARDY. AND

PLEASE NOTE THAT THE GERMANS DID THAT WITH MILITARY TECHNOLOGY THAT WAS STONE AGE VINTAGE COMPARED TO TODAY'S.

AS ANOTHER POINT, STEEL PRODUCTION FACILITIES IN ASIA AND WESTERN EUROPE WOULD BE MUCH MORE VULNERABLE TO CONVENTIONAL ARMS ATTACK THAN WOULD FACILITIES IN THE US. EVEN IF OUR FRIENDS WERE AGREEABLE TO SUPPLY OUR NEEDS, AS INDEED THEY MIGHT BE, COULD WE COUNT ON THOSE FACILITIES SURVIVING??? AND REMEMBER THAT ALL RAW MATERIAL AND FUEL FOR JAPAN'S STEEL MILLS AND KOREA'S STEEL MILLS HAS TO BE IMPORTED. THAT'S ANOTHER VULNERABILITY.

IT SEEMS AXIOMATIC THAT, EVEN IF WE CORRECT ALL OF OUR OTHER INDUSTRIAL ILLS, IF WE DON'T HAVE THE BASIC MATERIALS TO MAKE THAT INDUSTRY RUN, IT WON'T MATTER VERY MUCH.

WHAT TO DO?

WE'RE NOT LACKING IN NATIONAL POLICY.

THE NATIONAL SECURITY CLAUSE OF THE UNITED STATES TRADE LAWS REFLECTS THE LONGSTANDING POLICY AND SENSE OF CONGRESS THAT ANY ADVANTAGES FROM INTERNATIONAL TRADE DURING PEACETIME MUST BE SUBORDINATED TO REASONABLE PRECAUTIONS FOR NATIONAL SECURITY. THIS POLICY IS TOTALLY CONSISTENT WITH PREVAILING INTERNATIONAL LAW AND IS EXPRESSLY RECOGNIZED IN ARTICLE TWENTY-ONE OF THE GENERAL AGREEMENT ON TARIFFS AND TRADE. INDEED, IT COULD HARDLY BE OTHERWISE, FOR NO OBLIGATION OF THE FEDERAL GOVERNMENT IS MORE IMPORTANT THAN THE ASSURANCE OF OUR NATIONAL SECURITY.

THE MINING AND MATERIALS POLICY ACT OF 1970 AFFIRMED THAT IT IS THE POLICY OF THE FEDERAL GOVERNMENT "TO FOSTER AND ENCOURAGE PRIVATE ENTERPRISE IN THE DEVELOPMENT OF ECONOMICALLY SOUND AND STABLE DOMESTIC INDUSTRIES."

THEN, IN 1980, CONGRESS PASSED AND THE PRESIDENT SIGNED THE NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH AND DEVELOPMENT ACT OF 1980, WHICH STATES THAT IT IS THE POLICY OF THE US GOVERNMENT "TO PROMOTE AN ADEQUATE AND STABLE SUPPLY OF MATERIALS NECESSARY TO MAINTAIN NATIONAL SECURITY, ECONOMIC WELL BEING, AND INDUSTRIAL PRODUCTION."

AND THERE HAS BEEN A MUCH BROADER POLICY ON THE BOOKS FOR FOUR DECADES THAT WE MUST PREPARE IN PEACETIME FOR THE POSSIBILITY OF A FUTURE MILITARY CONFLICT. THAT POLICY WAS RESTATED IN JULY 1982 IN NATIONAL SECURITY DECISION DIRECTIVE NUMBER 47. IN FACT, NSDD 47 EXPRESSLY PROVIDES FOR INCREASING THE CAPABILITY OF INDUSTRY TO MEET NATIONAL SECURITY NEEDS THROUGH USE OF IMPORT AND EXPORT CONTROLS.

TITLE III OF THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED, PROVIDES A SOUND LEGAL BASIS FOR BUILD-UP OF INDUSTRIES CRITICAL TO NATIONAL DEFENSE, AND FOR GUARANTEED DEFENSE

MARKETS FOR OUTPUT FROM CRITICAL INDUSTRIES TO MAKE OR KEEP THEM VIABLE. IT WAS USED TO GREAT BENEFIT IN THE EARLY 1950S DURING THE KOREAN WAR. THE ACTIVITIES STARTED DURING THAT TIME UNDER DPA 1950 HAD SOME STARTLING RESULTS:

---ALUMINUM PRODUCTION WAS DOUBLED.

---COPPER MINING WAS EXPANDED BY 25%.

---THE TITANIUM INDUSTRY WAS CREATED.

---TUNGSTEN MINING WAS QUADRUPLED.

---MAGNESIUM PRODUCTION WAS INCREASED BY 160%.

---SUPPLIES OF NICKEL, TIN, URANIUM, COBALT, LEAD, ZINC, IRON, MANGANESE, MOLYBDENUM, AND 12 OTHER STRATEGIC MINERALS WERE INCREASED DRAMATICALLY.

IN SHORT, THE TOTAL MATERIALS INDUSTRY EXPANSION STARTED UNDER DPA 1950 DURING THE KOREAN WAR WAS VALUED AT \$37 BILLION. AND ALL OF THAT WAS DONE WITH A TOTAL APPROPRIATION OF JUST UNDER \$8.5 BILLION, MOST OF WHICH WAS NOT SPENT. IN FACT, AFTER ALL THE BILLS WERE TOTED UP, WE SPENT ONLY \$851 MILLION.

DPA 1950 IS STILL ON THE BOOKS AND IS RECONFIRMED EACH YEAR, BUT WE'VE ONLY USED IT A VERY FEW TIMES IN THE LAST 25 YEARS. IN FACT, THERE HAS BEEN LITTLE IMPLEMENTATION OF ANY OF THESE POLICIES.

IN MY OPINION, WE DON'T NEED MORE POLICY; WHAT WE NEED IS MORE ACTION. WE NEED SOME IMPLEMENTATION OF SOME OF THE VERY FINE POLICY THAT SEVERAL CONGRESSES HAVE PASSED AND THAT SEVERAL PRESIDENTS, INCLUDING THE LAST FIVE, HAVE SIGNED.

I BELIEVE THE AMERICAN PEOPLE ARE AWARE OF A FUNDAMENTAL CRISIS IN MANY SEGMENTS OF OUR ECONOMY AND ARE READY TO SUPPORT MEASURES TO REVERSE THE TRENDS OF THE PAST SEVERAL YEARS.

I BELIEVE THE AMERICAN PEOPLE ARE READY TO SUPPORT SUCH ACTIONS AS THAT ENVISIONED BY THE FAIR TRADE IN STEEL ACT. THAT BILL OUGHT TO BE PASSED AND SIGNED INTO LAW.

WE NEED TO FIND MORE WAYS TO INCENTIVIZE CAPITAL FORMATION AND CAPITAL INVESTMENT IN R & D AND MODERN PLANT AND EQUIPMENT. EVERY OTHER COUNTRY IN THE INDUSTRIALIZED WESTERN WORLD HEAVILY INCENTIVIZES THEIR INDUSTRY TO DO THESE THINGS THAT ARE TOTALLY IN THE NATIONAL INTEREST TO DO. THE CAPITAL COST RECOVERY ACT OF 1981 WAS A GOOD START, BUT WE NEED ADDITIONAL FOCUS IN AN AMENDMENT WHICH RECOGNIZES THE PLIGHT OF OUR BASIC MATERIALS INDUSTRIES.

WE HAVE TO RECOGNIZE THAT MOST PRIMARY INDUSTRIES IN OTHER INDUSTRIALIZED WESTERN NATIONS ARE, TO SOME EXTENT, SUBSIDIZED BY THEIR GOVERNMENTS. I DON'T BELIEVE THAT OUR STEEL INDUSTRY NEEDS OR WANTS DIRECT SUBSIDIES. AN EQUAL OPPORTUNITY TO COMPETE IS WHAT THEY NEED.

IN MY OPINION, THE PROBLEMS CURRENTLY BEING EXPERIENCED BY THE STEEL INDUSTRY AND OTHER BASIC INDUSTRIES ARE OF CRISIS PROPORTIONS. THEIR PROBLEMS ARE NOT NEW. THEY HAVE BEEN GROWING FOR SOME TIME. INDIVIDUALLY, EACH PROBLEM CHIPS AWAY AT OUR INDUSTRIAL BASE. COLLECTIVELY, THESE PROBLEMS THREATEN THE VERY FOUNDATION OF OUR INDUSTRIAL SECTOR, OUR NATIONAL ECONOMY, AND OUR NATIONAL DEFENSE. AND THE TIME TO CORRECT THEM IS NOW.

THANK YOU.

MARSHALL BARTLETT, INCORPORATED
1778 MASSACHUSETTS AVENUE
LEXINGTON, MASSACHUSETTS 02173
(617) 862-9292

TESTIMONY

OF

DR. PAUL W. MARSHALL

FOR

THE SUBCOMMITTEE ON INTERNATIONAL TRADE
OF
THE COMMITTEE ON FINANCE
OF
THE UNITED STATES SENATE
HEARING ON THE STATE OF THE DOMESTIC STEEL INDUSTRY

SUBMITTED ON BEHALF OF
AMERICAN IRON AND STEEL INSTITUTE
JUNE 8, 1984

INTRODUCTION

My name is Paul W. Marshall. I am President of Marshall Bartlett, Incorporated, a Management and Economic Consulting firm located in Lexington, Massachusetts. Before becoming a full-time consultant I was on the faculty of the Harvard Graduate School of Business Administration where my primary teaching and research interests were in the area of Production and Operations Management with particular emphasis on the Steel Industry. I have worked on many projects for American and Foreign Steel producers and for various agencies of the United States Government. In 1975 I was a consultant to the Council on Wage and Price Stability and prepared a report on the conditions of the U.S. Steel Industry. In 1977 and 1978 I, along with others, prepared two reports for the American Iron and Steel Institute on the economic implications of Foreign Steel Trade for the American Economy. In 1977 I worked for the Ecumenical Coalition of Youngstown and assisted in their efforts to reopen the Campbell Steel Works. I was invited to the White House Meeting in October 1977 to discuss the crisis facing the American Steel Industry. In February 1980 I was a panel member at the OECD Symposium on the Future of the World Steel Industry. I have prepared major studies for the U.S. Environmental Protection Agency and the Department of Energy analyzing the impact of regulation on the American Steel Industry.

I have testified before the International Trade Commission on matters relating to competition in the Western United States Steel market and matters relating to the Specialty Steel Industry. I have also testified before the House Ways and Means Committee's subcommittee on Trade and the House Committee on

Energy and Commerce subcommittee on Oversight and Investigation on matters relating to the American Steel Industry.

Much of my testimony today is based on a study my firm prepared and submitted to the International Trade Commission in their current investigation relating to Carbon and Certain Alloy Steel products. I presented testimony based on this study before the Commission on May 9, 1984 on behalf of Bethlehem Steel Corporation and the United Steel Workers of America.

Our study treated the steel industry as a single industry and relied on data representing an aggregation of individual steel products. The major reason is that up to the semi-finished stage, steel is in fact a single product. It is generally true that most of the investment is required and most of the expenses are incurred for this portion of processing. In addition, we demonstrated that foreign producers' steel exports to the U.S. can best be explained by analyzing their production in aggregate. Their desire to maintain operating rates at the raw steel level causes foreign producers to shift final production into different products at different times. However, the basic force behind these decisions is the amount of raw steel capacity to be utilized. Such behavior requires that any careful analysis view the industry as a single entity.

In this introduction I would like to briefly summarize our conclusions and provide several general statements concerning the current steel crisis. In later sections of my statement more details from this study will be presented.

Let me briefly summarize the major points of our study.

1. Steel imports as a share of the U.S. market are primarily driven by the amount of excess capacity outside the U.S. at any point in time. This is

consistent with the desires of foreign producers to stabilize their operating rates.

2. Market forces in the U.S. are not the primary influence on the flow of imports. This is because the economies of the world are linked in their cyclical behavior.
3. The net result of these supply and demand factors is that steel imports' share of our market is countercyclical and increases the cyclical swing faced by domestic producers. Such behavior is injurious not only to steel producers, but in the long run to the entire economy.
4. Imports have taken 21.9 m. tons of shipments from domestic producers from 1977-1983. This measure assumes that an appropriate level of imports would be 15% share of the domestic market. This reference share for measuring loss is based on the approximate share of the U.S. market taken by imports during the 1970s which was about 15%.
5. These excess imports have cost the industry \$2.6 billion in lost profits and have conservatively cost employees \$2.4 billion in lost wages as jobs have been eliminated.
6. Severe price suppression by imports in 1982-83 cost the industry over \$8.0 billion in lost profits.
7. A model of import behavior we developed suggests that continued excess capacity in the world will drive import share to higher levels in the 1980's, exceeding 25%.

The American Steel market is currently in a serious state of disequilibrium. This has resulted because many foreign producers have capacity far in excess of their home market needs. It is natural for them to want to increase their volume by exporting. If the entire world steel market were open and available to them we would not need to be here today. Under free market conditions this excess capacity would be used to supply steel at a world price and the most inefficient producers in the world would be driven out of business. A lower capacity level would result and the remaining steel producers could operate profitably.

Unfortunately there is not a free open world steel market. Two major categories of distortions are currently present in the market. First, many countries limit their home steel markets to imports from other countries and secondly, many governments are willing to subsidize the losses of their domestic producers when they export steel at levels below their production costs. The result is that import prices to the U.S. are well below any equilibrium level that would exist in a free market and many producers more inefficient than U.S. companies are kept in business and continue to supply steel.

During the last decade, the U.S. government has not effectively dealt with these unfair trading practices and market distortions. It has hoped they would go away. What has been done by our government has been only in response to numerous unfair trade cases filed by American companies. Given the nature of our laws such cases can address only specific countries and specific products. Such a piece meal response is not only costly but it is ineffective.

In summary I would make the following observations:

- (1) There is an excess of steel capacity in the world

that will continue for the next five to ten years.

- (2) Because of government interferences with market forces, particularly in Europe, the least efficient producers have not gone out of business.
- (3) Steel imports, priced at unrealistically low prices, have been sent to the United States by these less efficient producers as well as by other more efficient foreign producers causing serious injury to American production.
- (4) The American steel industry has been unable to reduce its costs to compete successfully with these imports. This is true even with concessions made in wages and benefits by American steel workers.
- (5) The U.S. government has been ineffective in developing and implementing a policy to counteract the unfair trading practices of foreign steel products in the U.S.
- (6) American steel producers are reducing their steel-making capacity and diversifying into other businesses.


I believe these trends will continue without a new governmental policy. Thus, we will continue to see a shrinking of the American steel industry. Many analysts argue this is the natural consequence of market forces and that the American steel producers should not complain, but rather get on with their business. I do not agree that this situation has evolved from market forces. However, I do agree that individual steel companies will get on with their business -- namely reducing their commitment to steel and moving their investments into other areas if there is no change in government policy.

Unfortunately, there still remains a problem. Specifically, the United States will become increasingly dependent on foreign sources for steel and there will be significant regional unemployment in areas where much of the marginal American steel capacity now exists.

These are problems for the U.S. government! During the past five years many government agencies and Congressional committees have studied the steel industry as though the problem was that of the industry. I submit the individual companies who produce steel are solving "their problem." They are reducing capacity and moving into other businesses. It is now time for the government to look at "its problem:" namely, whether or not we can develop a rational, stable policy for the steel industry. I believe the enactment of the quota bill, now before the Congress would be a good first step in helping establish such a policy.

SUMMARY OF MARSHALL BARTLETT STUDY

I. THEORY OF STEEL IMPORT BEHAVIOR



Imports of steel products have been the subject of public policy debate for over fifteen years. Beginning with the Voluntary Restraint Agreements in 1969, the U.S. government has implemented various programs to deal with the steel import problem. Since then, a series of formal and informal policies have attempted to control import volume, share of market, or price. All of these policies have been designed to provide relief to domestic steel producers from injury caused by imports.

The financial performance of the steel industry suggests that government policies have not been effective. The industry has lost some \$6 billion in the last two years while imports have surged to record levels in early 1984. These imports have caused substantial injury to the domestic industry by reducing its market share and suppressing prices.

It is useful to understand how steel imports play such an important role in the U.S. market. The objective of this section is to develop a theory which can explain the historic pattern of imports' share of the U.S. steel market.

Background

There are two general theories that have been used to explain the behavior of steel imports into the United States. One theory can be called the "Demand Pull" theory. This theory is based on the premise that the steel requirement of all domestic industry exceeds the amount that the domestic steel mills can produce at a reasonable price. A reasonable price level is one which is consistent with efficient worldwide

steelmaking costs. Under this theory, foreign producers act as "swing" suppliers; i.e., as market demand increases, import levels and share of market increase, and vice versa. The major determinant of import behavior is therefore market demand. As demand increases, new efficient supply is created.

The alternate theory for explaining U.S. steel imports can be called the "Supply Push" theory. This theory argues that steel is sent to the U.S. by foreign producers for many reasons, both economic and non-economic. In particular, foreign manufacturers use the U.S. market to absorb their unused capacity, in order to maintain politically acceptable employment levels or to cover high fixed costs in addition to employment costs. Increasingly, some of these producers are also motivated to generate foreign exchange to help repay large dollar denominated debts. This theory suggests that the dominant factor in explaining U.S. imports is the excess capacity of foreign steel producers not met by their home country and non-U.S. export demand. When there is excess capacity, a foreign producer will reduce the export price for its product until a sufficient export demand is generated to bring production up to an acceptable level. In general, this volume target for foreign producers is achieved at the expense of domestic producers in the U.S. market, since the total consumption of steel is relatively insensitive to price changes in the short run. Thus, under this theory, the U.S. export price for foreign producers is influenced to a significant degree by their estimate of the level of capacity utilization that would result without exports to the U.S. In short, export price is determined by excess supply.

No single theory can completely and perfectly explain behavior as complex as that of steel trade; clearly, there will be some influence from both the demand and supply side in any trade situation. However, it is a useful exercise to see which, if either, of these theories can give meaningful insight

to the behavior that has taken place over the past twenty years.

First, it is important to understand the implication for imports' share of the U.S. market under these two theories. The demand pull theory would result in some variability in total imports, in coordination with swings in total demand. As a swing supplier, import levels and share of market would tend to increase as overall demand for steel increased, and vice versa. Market price levels would be expected to reflect steelmaking costs, and therefore be relatively stable over time.

The supply push theory results in a highly variable share of market for imports. Imports into the U.S. would be a function of the capacity utilization level outside the U.S. As foreign capacity utilization rose because of increases in home market demand, the supply for export would be held constant or decreased. If at the same time U.S. demand was increasing, imports' share of the U.S. market would drop rapidly. On the other hand, if foreign producers were experiencing low capacity utilization rates, the supply for export would tend to increase. If the U.S. was experiencing a coincident decline in economic activity, and thus lower steel demand, imports' share of market would increase rapidly. These changes in share of market would be accomplished through changes in export prices. Thus the supply push theory would argue that export price is also highly variable and is primarily established by supply conditions. As these utilization rates tended to fall, the price of exported steel would be lowered to obtain an increased share of U.S. market.¹ Thus in summary, under the supply push

¹One important feature of the supply push theory is that often this export price is not available to home market
(Footnote Continued)

theory of export behavior, one would expect high variability in imports' share of the U.S. steel market and positive correlation between export price and foreign utilization rates.

These two theories can be analyzed with respect to foreign producers' historic behavior in the U.S. steel market, which is shown in Exhibit I-1. As the U.S. market grew throughout the 1960's, imports captured an increasing share of the market. This is consistent with demand pull behavior, since the U.S. market was expanding and, with a few exceptions, imports' share of market was rising steadily. It should also be noted that this behavior is also consistent with supply push, since without exports to the U.S., the excess capacity of foreign producers was also steadily increasing.

In order to clarify the situation, one must look ahead into the 1970's and 1980's. As Exhibit I-1 again shows, imports' share of market fell dramatically in 1973-1974. This decline corresponded with a period in which U.S. consumption reached an all-time high. It was also a period in which foreign producers reduced their total exports substantially, which is consistent with the supply push theory. Following this drop in participation from about 18 percent to under 12 percent of the market, imports rebounded back to 19 percent of the U.S. market in 1977. Simultaneously, world demand had dropped and exporters were increasing their total exports, again consistent with the supply push theory. Imports' share fell again in 1979, as world production rose rapidly over

(Footnote Continued)

consumers of the same product. Because of this ability to price discriminate between home and export markets, the magnitude of export price changes is much greater than would be possible under more competitive market conditions. In turn, this potential for larger price variability in the export markets greatly enhances the exporter's chance of obtaining an increased market share of another country's market.

1977-1978 levels. Since 1979, imports have been steadily increasing while world demand has been steadily declining. Thus, a general review of the actions of foreign suppliers in the U.S. market during the 1970's and 1980's would lead to the conclusion that the supply push theory explains foreign steel export behavior more appropriately than does the demand pull theory.

Description of the Domestic Steel Market

Based on the foregoing discussion, a theoretical model of the domestic steel market has been developed which describes the supply and demand forces which result in the following observations about the steel market:

- The imports' share of market has exhibited an overall increase in the last two decades.
- In periods of peak world demand, imports' share of the domestic market falls.
- Apparent consumption of steel mill products is highly cyclical in nature, exhibiting little trend growth.

The framework which explains these phenomena consists of a description of the behavior of the major players in the market: the domestic consumers, the domestic steel suppliers and foreign steel suppliers.

The demand for most steel mill products can be described as derived demand, since it is based on the needs of other industries, rather than the final consumer. For the most part, the cost of steel as a percent of the final consumer product is fairly small. Conversion to alternate materials is often a costly process for steel consumers. For these reasons, it is unlikely that the short run demand for steel is significantly

impacted by its cost; that is, steel demand is price inelastic in the short run. This is consistent with the observation of very high prices in peak demand periods, and very little demand response to extremely low prices in the last two years. This is not to say that the demand for steel from individual producers is not sensitive to their pricing strategy. Steel companies can significantly affect their market share through price changes, as foreign producers have demonstrated. In aggregate, however, total market demand is not substantially impacted by market price changes.

A final observation concerning the demand for steel products is that steel consumption is increasing at a slower rate than that of the general economy; i.e., industries consuming steel are growing more slowly than other industries and also are substituting lighter, less energy intensive products for steel. The U.S. economy is becoming less steel intensive.

In summary, steel demand can be modelled as being positively correlated to consuming industry behavior and general economic performance, and negatively correlated to a time trend and, to a small extent, market price.

Domestic suppliers of steel can be described as traditional competitive suppliers. The competitive nature of domestic suppliers has been heightened by the increases in minimill producers and in imports. Domestic steel suppliers respond to two factors in determining their level of supply. As steel prices increase, steel producers can bring on less efficient facilities and increase supply. This is consistent with the traditional economic theory of a positive relationship between supply and price. On the other hand, steel producers will reduce their supply (at a given price level) if their variable costs increase. Domestic steel supply can therefore be modelled as positively influenced by market price and negatively influenced by domestic variable costs.

Foreign steel producers, on the other hand, cannot be described as traditional competitive suppliers. Many foreign steel producers are heavily subsidized by their governments, or are wholly owned by the state. Because of the nature of the management structure, profits are often sacrificed to maintain politically acceptable employment levels. This is true for most integrated steel producers in Europe and for many in the developing nations. The goal of these producers is to maintain as high an operating rate in the steel mills as possible, to maintain employment levels, generate foreign exchange and stabilize national politics. Because the U.S. is the only market which is relatively accessible to these producers, it is the obvious destination for production above domestic needs. Import supply from these countries could therefore be modelled simply as negatively related to their steel mill operating rates (excluding exports to the U.S.).

Market price levels are established at the equilibrium position of market demand and import and domestic supply behavior. Although quality and delivery terms affect the relative attractiveness of steel suppliers, prices for imported and domestic steel are highly correlated. Statistical analysis shows a significant negative correlation between the ratio of import price to domestic price and excess foreign capacity, suggesting that the foreign producers' pricing strategy is consistent with the supply push theory.

Historical Estimation

A model of steel import behavior was specified by econometrically estimating supply and demand functions simultaneously, using all the variables described above in one equation. The analysis suggests the following statistically significant relationship between import levels and these variables:

- Non-U.S. Operating Rate - A statistically significant negative correlation confirms the theory that import share increases with a decline in world operating rate. This supports the supply push theory of import behavior.²
- Trend - A statistically significant positive correlation confirms the theory that there is a growing acceptance of steel imports by consumers.
- Apparent Consumption - A significant positive relationship demonstrates that imports behave, to some extent, as swing suppliers, supporting the demand pull theory. The overall impact of this parameter on import share is less than the non-U.S. operating rate, however.
- Strike Hedge - A significant positive relationship demonstrates that historically hedge buying in contract negotiation years impacted import share.

A graph of estimated versus actual import share values is displayed in Exhibit I-2. The exhibit indicates graphically that the model describes historic import behavior with reasonable accuracy.

Having estimated the model it is important to analyze the interaction of the apparent consumption and non-U.S. operating

²It is important to note that this operating rate is calculated by excluding exports to the U.S. If U.S. exports are included, then the operating rate loses its explanatory power. Obviously if the strategy to export in order to stabilize operating rates is successful, there will be little correlation between the resulting actual operating rate and other factors.

rate variables to make conclusions about the alternate theories of import behavior. In order to illustrate the sensitivity of imports and import share of market to changing conditions, the following example was evaluated. A base case was defined as 24 million tons of quarterly apparent consumption and a non-U.S. world operating rate of 75 percent. Exhibit I-3 shows the effect of increasing each variable by 10 percent separately and of increasing both by 10 percent simultaneously.

If consumption increases 10 percent with no change in non-U.S. operating rate, then imports increase 15.8 percent. However, because of the increased consumption the share of market only increases 5.3 percent. If non-U.S. operating rate increases 10 percent, then imports fall 9.8 percent below the base case, and since consumption is unchanged, the share of market for imports also decreases by 9.8 percent. In general, however, U.S. consumption and non-U.S. operating rate change at the same time, and over the long run they move together since economies throughout the world are closely linked. Therefore, it is necessary to see what happens when both variables change.

Returning to Exhibit I-3, it can be seen that with a 10 percent increase in both variables, imports increase by 4.5 percent, and thus they supply some of the increased demand. However, the share of market for imports falls about 5 percent in this case. Thus, when demand is on the upswing, imports are not available to provide a constant share and withdraw in a relative way from the market. This unreliability of supply is only consistent with the supply push theory, because the demand pull theory would suggest an increase in supply to service the growing U.S. market.

This simple example illustrates the major problem for the U.S. steel producers when they plan their future to respond to imports. Assuming that the U.S. and other economies in the world move in a parallel or linked manner, then as demand

increases imports are available to provide a smaller share of the market. Thus the upswing is magnified for domestic producers. A similar pattern but in an opposite direction happens in a downturn. As economic activity declines, imports come into the market to provide an expanded share. Thus, the decline in demand for domestic producers is also magnified.

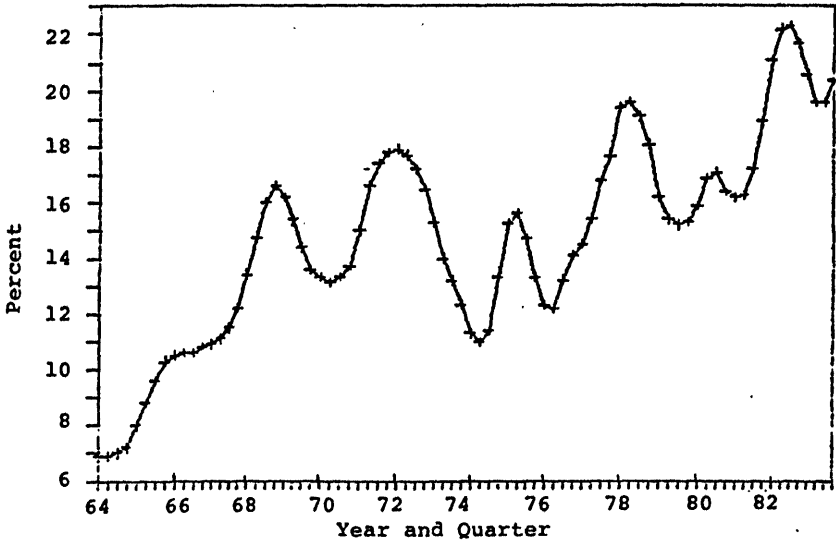
This countercyclical behavior on the part of imports increases the magnitude of the swings in demand faced by domestic producers. This is translated into greater uncertainty and thus greater risk. Increasing the risk of an industry will increase the cost of borrowing funds and attracting equity investment. The net result is a justified unwillingness on the part of domestic producers to expand their capability to produce steel. In fact it can be argued that this increasing risk has been a major factor in the reduction of steelmaking capacity in the U.S.

The implication of the supply push behavior of imports is clear for the government. The market acting alone will not assure a reliable supply of low-cost steel. Thus it is necessary for any intervention to focus on a method for assuring the U.S. consumer of steel will have a reliable supply of steel at the lowest cost possible consistent with this reliability.

In summary, this chapter has discussed two theories of import behavior "demand pull" and "supply push". It has been shown that at a minimum, during periods when U.S. consumption and non-U.S. operating rate are moving in the same directions the best explanatory theory is "supply push". This means that imports behave in a countercyclical manner and greatly increase the risk for the domestic producers. The injury resulting from this behavior is the topic of the next two sections.

EXHIBIT I-1

IMPORT SHARE OF DOMESTIC APPARENT CONSUMPTION*



* Four-quarter moving average.

Source: Department of Commerce data

EXHIBIT I-2

QUARTERLY STEEL IMPORTS, ACTUAL VS. ESTIMATED

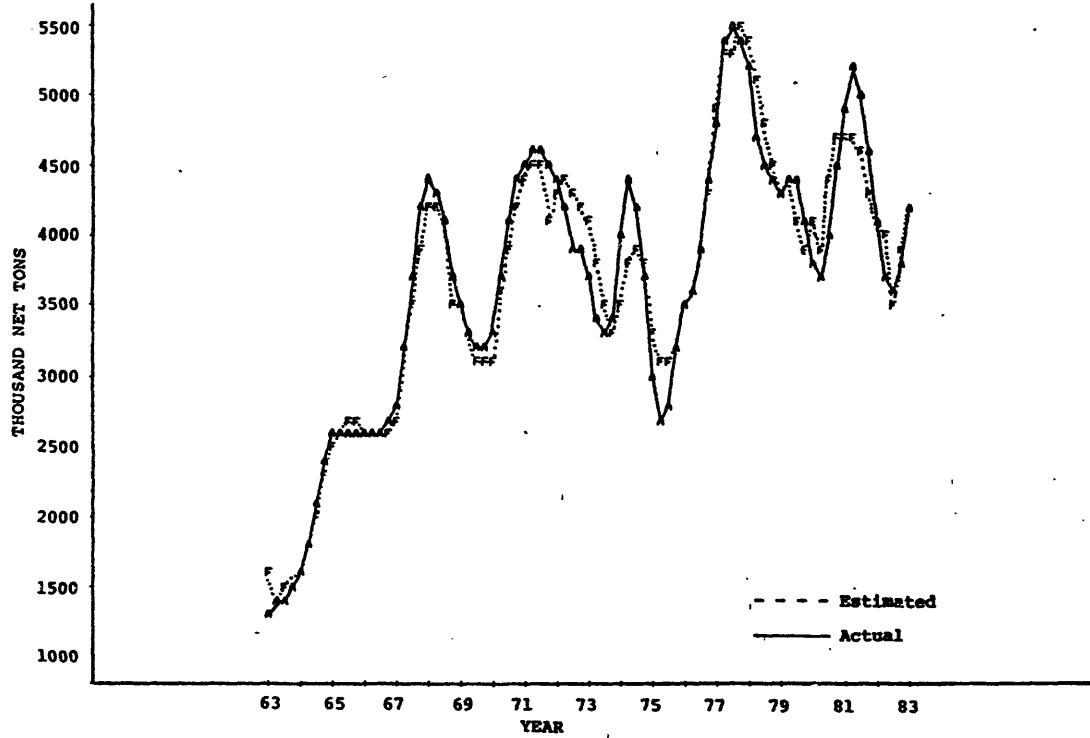


EXHIBIT I-3

FORECAST FOR A TYPICAL QUARTER

	<u>Base Case</u>	<u>10% Increase In Consumption</u>	<u>10% Increase In Operating Rate</u>	<u>10% Increase In Both</u>
Apparent Consumption (m.NT)	24.0	26.4	24.0	26.4
Percent Increase	--	+10	--	+10
Non-U.S. Operating Rate (%)	75	75	82.5	82.5
Percent Increase	--	--	+10	+10
Predicted Imports (m.NT)	4.666	5.405	4.210	4.877
Percent Increase Over Base	--	+15.8	-9.8	+4.5
Predicted Import Share of Market	19.44	20.47	17.54	18.47
Percent Increase Over Base	--	5.3	-9.8	-5.0

Source: MBI model of import behavior. (See text.)

II. VOLUME-RELATED INJURY

Volume-related injury takes many forms, including lost contribution to fixed costs and profit, lost employment, and idling of capacity. Such injury occurs when import tonnage increases and captures a part of the market that otherwise would have been supplied by domestic producers. It can also occur when other factors, such as a decline in general economic or market conditions, cause a reduction in domestic shipments.

Injury Due to Imports

Imports of steel products have fluctuated significantly over the past ten years, as has import share of market. In many cases, as discussed in Section I, those fluctuations have coincided with U.S. demand in a countercyclical fashion. That is, when demand rises, import share of market falls. This has had the effect of magnifying the cycles experienced by domestic producers and thus increasing their risk.

Over the past ten years, import share of market troughs have coincided with consumption peaks on three occasions, each time at a higher share level:

1. From 1973III through 1974II, consumption reached a peak of 119.2 million tons, while imports fell to 13.2 million tons, or 11.1 percent of the market. A low share was reached in 1974I of 8.5 percent.
2. From 1978IV through 1979III, consumption reached a peak of 116.0 million tons, while imports fell to 17.6 million tons, or 15.1 percent of the market. A low share was reached in 1979I of 12.5 percent.

3. From 1980IV through 1981III, consumption reached a peak of 104.8 million tons, while imports were 18.2 million tons, or 17.3 percent of the market. A low share was reached in 1981I of 13.9 percent.

Between these periods, imports have reached peaks representing substantial increases over the low share of market described above. As discussed earlier, these peaks generally coincide with foreign capacity utilization troughs, as foreign producers seek to smooth their production. Conversely, foreign producers tend to withdraw from the U.S. market when their capacity utilization rates are high.

Imports in excess of 15 percent has been the rule since 1977, a period during which the industry has experienced low or negative profitability and other forms of injury. Further, the variability of imports and the countercyclical behavior described above have added a high degree of volatility and risk to the portion of the market served by domestic producers. In Section I, it was suggested that a reasonable goal for government policy would be to insure a long-run reliable supply of steel at the lowest price consistent with such reliability. One way to implement such a goal would be to review historic performance and accept imports at the level at which they have demonstrated their reliability. Whatever market share was provided during all market conditions would be a benchmark for judging future performance. Such a view would support a 15 percent limit on imports.

When imports do exceed 15 percent of the market, the opportunistic behavior of foreign producers injures domestic producers by taking away part of the market. This injury can be quantified by comparing actual imports with a steady import supply level calculated as 15 percent of the market in any time period. This analysis is contained in Exhibit II-1, which shows quarterly imports and consumption from 1973 through 1983.

Since 1977, imports have exceeded 15 percent of quarterly consumption frequently. Over the entire seven-year period, imports have exceeded the baseline level in the amount of 21.9 million tons. This represents a direct loss of shipments to U.S. producers and has had serious ramifications for the domestic industry.

Before beginning the computation of volume-related injury, it is worth digressing briefly to determine what the import model suggests regarding a 15 percent import share of market. Section I described how adjusted foreign operating rate is a key determinant of imports. Based on this relationship, it can be estimated that a level of non-U.S. capacity of 410 million tons in 1982-83 (71 million tons below the actual level) would have resulted in a 15 percent import market share. Had foreign steel producers reacted differently in the last five to ten years by retiring obsolete capacity (especially the EEC) and not overbuilding new capacity (especially developing countries), the world supply/demand balance could have precluded injury to U.S. producers.

Contribution to Fixed Costs and Profit

When a domestic producer loses a ton of steel to imports, the amount of financial injury to the company is less than the price of that ton. This is because certain costs -- the variable costs -- can be avoided when production declines. Note that lost variable costs do injure parts of the steel industry, such as hourly employees and material suppliers, but do not injure steel companies financially. The domestic producer is injured by the difference between price and variable cost, which represents the unit contribution to fixed costs and profit. By definition, fixed costs are those which are unaffected by production level and thus must be borne by the producer at any output level. Fixed costs for the steel industry have changed in the last few years, due to costs

associated with plant shutdowns, re-starting facilities, and the future liability for early employment retirements.

Variable costs can be estimated by observing the relationship between total costs and output. The results are summarized in Exhibit II-2. The analysis, based on the experience of the seven largest domestic steel producers, suggests that each ton of steel results in a contribution to fixed costs of \$128 compared to an average price of \$605/ton, based on 1978-1982 experience.³ Thus, 21 percent of the price of steel represents a contribution to fixed costs and profits. Finally, the 21 percent contribution rate can be converted into a unit (dollar per ton) rate for the entire industry by applying it to the industry average price for steel. Using the average real domestic price of \$553/ton during the Trigger Price Mechanism as a base, an industry average contribution rate of \$118/ton is estimated.

Had the domestic producers sold the 21.9 million tons lost to imports, their revenues would have been \$12.1 billion higher over the seven-year period. As discussed above, the variable portion of the \$12.1 billion loss was not felt by the producers, but rather by their employees and suppliers. Laid-off workers suffered a loss in compensation, and suppliers of goods and services to the steel industry lost revenue they otherwise would have received. This chain of events resulting from lost volume must be traced through if the full impact of injury is to be measured. In the following analysis, only the lost profit to the industry and the lost compensation to workers will be quantified.

³Recall all prices are expressed in 1983 dollars.

Volume-related profit injury to the domestic industry is calculated by multiplying lost tonnage by the unit contribution to fixed costs and profits. This analysis is performed on a quarterly basis from 1977 through 1983, as shown in Exhibit II-3 and summarized below:

	Average <u>Contribution</u> (1983 \$/ton)	Excess <u>Imports</u> (m. tons)	<u>Injury</u> (m. 1983 \$)
1977	118	3.05	359
1978	118	3.62	427
1979	118	.31	36
1980	118	1.21	143
1981	118	4.06	478
1982	118	5.13	604
1983	118	<u>4.55</u>	<u>536</u>
		21.93	2581

Opportunistic behavior by imports, which has taken some 21.9 million tons from the domestic industry, resulted in lost profits of nearly \$2.6 billion (1983 dollars). In particular, excessive imports in the last three years have caused nearly two-thirds of the entire injury since 1977.

Employment

Employment in the steel industry has declined for many reasons. In addition to imports, long-term declining demand and economic cycles discussed earlier, employment is reduced as a result of improved productivity and production yields.

Reduced employment directly injures the workforce and causes related injury to local communities and throughout the domestic economy.

The approach used in estimating employment injury in this section is conservative. For example, only direct employees are considered, despite large reductions in salaried workers which may have been precipitated by imports. Thus, our analysis is limited in that it only considers employment injury associated with excess imports and involving direct employees.

For each year, the actual average hours per worker and average compensation in real (1983) dollars are used to estimate lost jobs and wages, respectively. It is important to note that declines in each of these factors, in themselves, represent injury to the industry and its workers. For example, a decline in real wages, such as the drop observed between 1982 and 1983, reflects a real loss of welfare for industry employees. The portion of this drop which is attributable to increased import penetration should be included in the calculation of injury. However, this analysis utilizes actual hours per worker and wage levels for each year. Therefore, the figures conservatively reflect minimum estimates of employment-related injury in terms of lost jobs and wages.

The injury through lost jobs and wages calculated in this analysis is suffered directly by industry employees. In turn, these losses cause additional injury to the families and communities of those employees, as well as to the nation as a whole. Direct community impacts result through the "multiplier effect": unemployed workers have reduced demands for goods and services, which, in turn, cause unemployment in other industries. Studies have estimated this multiplier at between 1.8

and 2.4 workers per manufacturing employee.⁴ Tax revenues are lost at the same time that additional government benefits payments are required. In addition, studies have indicated that significant negative public health and social impacts result from unemployment and plant closures.

The analysis is shown in Exhibit II-4. Average (1977-1983) excess imports of 3.1 million tons per year are translated into lost hours for direct employees using their productivity, which averaged 9.1 hours per ton of finished steel from 1977-1983. Over the 1977-1983 period, employment injury has averaged about 28 million worker-hours per year, representing about 14,000 jobs lost. The particularly strong surge of imports in 1982 caused even greater injury, totalling almost 47 million hours or almost 25,000 jobs. These figures represent direct employment injury alone and exclude the tremendous salaried force reductions that occurred in 1982-1983. Inclusion of the job multiplier effect (using an average value of 2.1) indicates that the average total injury level is almost 30,000 total jobs per year, reaching over 50,000 in 1982.

Translating this injury into dollars (Exhibit II-4) indicates a loss of almost \$2.5 billion (1983 dollars) in direct steelworker compensation alone over the 1977-1983 period. This figure represents the total variable portion of hourly compensation which was foregone by domestic producers. Part of this injury to industry employees is assuaged by payments such as supplemental unemployment or government benefits. However, these are pure transfers, which do not reduce total injury but merely spread the injury burden. In addition, lost tax revenues and wages lost through the

⁴Rhyne, Elisabeth, Federal Policy Toward Plant Closings, Harvard University, 1980.

multiplier effect should be considered in evaluating the total cost of employment injury to the domestic economy.

EXHIBIT II-1

COMPUTATION OF EXCESS IMPORTS, 1973-1983
(thousands of net tons)

<u>Period</u>	(1) <u>Apparent Consumption</u>	(2) <u>Imports</u>	(3) <u>Imports @ 15%</u>	(4) <u>Excess Imports</u>
1973 Q1	30,330	3,812	4,550	-738
Q2	31,311	3,845	4,697	-852
Q3	29,446	3,736	4,417	-681
Q4	30,051	3,605	4,508	-903
1974 Q1	29,532	2,508	4,430	-1,922
Q2	30,220	3,365	4,533	-1,168
Q3	28,811	4,113	4,322	-209
Q4	29,381	5,770	4,407	1,363
1975 Q1	25,625	4,083	3,844	239
Q2	21,119	2,693	3,158	-475
Q3	21,061	2,210	3,159	-949
Q4	20,199	2,834	3,030	-196
1976 Q1	24,381	2,958	3,657	-699
Q2	26,845	3,315	4,027	-712
Q3	25,208	3,621	3,781	-160
Q4	23,351	4,187	3,503	684
1977 Q1	24,292	3,261	3,644	-383
Q2	29,117	4,690	4,368	322
Q3	27,057	5,423	4,059	1,364
Q4	26,589	5,733	3,988	1,745
1978 Q1	28,411	5,694	4,262	1,432
Q2	29,398	4,970	4,410	560
Q3	28,759	5,194	4,314	880
Q4	28,647	5,049	4,297	752
1979 Q1	29,161	3,642	4,374	-732
Q2	29,597	4,042	4,440	-398
Q3	28,558	4,888	4,284	604
Q4	26,081	4,743	3,912	831
1980 Q1	27,280	3,999	4,092	-93
Q2	22,276	4,016	3,341	675
Q3	19,797	3,478	2,970	508
Q4	24,644	3,819	3,697	122

<u>Period</u>	(1)	(2)	(3)	(4)
	<u>Apparent Consumption</u>	<u>Imports</u>	<u>Imports @ 15%</u>	<u>Excess Imports</u>
	----- (thousand of net tons) -----			
1981 Q1	25,998	3,618	3,900	-282
Q2	28,216	5,146	4,232	914
Q3	25,927	5,571	3,889	1,682
Q4	23,937	5,336	3,591	1,745
1982 Q1	21,261	4,830	3,189	1,641
Q2	19,682	4,449	2,952	1,497
Q3	17,009	3,697	2,551	1,146
Q4	17,311	3,445	2,597	848
1983 Q1	18,082	3,314	2,712	602
Q2	20,185	3,774	3,028	746
Q3	20,695	4,489	3,104	1,385
Q4	23,010	5,269	3,452	1,817
1977-83 Total	690,977	125,579	103,649	21,930*

*Total is net of imports below 15 percent; i.e., the negative figures in the column are included in the total.

Source: Column (1): Apparent Consumption is calculated as Shipments + Imports - Exports. Data from the Dept. of Commerce
Column (2): Imports from the Dept. of Commerce.
Column (3): Column (1) x .15.
Column (4): Column (2) - Column (3).

EXHIBIT II-2

CONTRIBUTION TO FIXED COSTS AND PROFIT BY COMPANY

	(1)	(2)	(3)	(4)
	Average Price ----- (1983 dollars)	Variable Cost ----- dollars	Contribution ----- per ton)	Ratio of Contribution to Price (ratio)
Armco	539	422	117	.217
Bethlehem	574	436	138	.240
Inland	508	375	133	.262
J&L	667	540	127	.190
National	575	415	160	.278
Republic	718	507	211	.294
U.S. Steel	<u>622</u>	<u>541</u>	<u>81</u>	<u>.130</u>
Average weighted by percent of shipments from 1978-82	605	477	128	.213

Note: Totals may not add due to rounding.

Source: Column (1): From Annual Reports of
companies.
Column (2): MBI analysis of data from
Annual Reports.
Column (3): Column (1) - Column (2).
Column (4): Column (3)/Column (1).

EXHIBIT II-3

VOLUME-RELATED PROFIT INJURY DUE TO EXCESS IMPORTS, 1977-1983

		(1) Average Contribution (1983 \$/ton)	(2) Excess Imports (000 tons)	(3) Injury (m.1983\$)
1977	Q1	118	-383	-45
	Q2	118	322	38
	Q3	118	1364	161
	Q4	118	1745	205
1978	Q1	118	1432	169
	Q2	118	560	66
	Q3	118	880	104
	Q4	118	752	89
1979	Q1	118	-732	-86
	Q2	118	-398	-47
	Q3	118	604	71
	Q4	118	831	98
1980	Q1	118	-93	-11
	Q2	118	675	79
	Q3	118	508	60
	Q4	118	122	14
1981	Q1	118	-282	-33
	Q2	118	914	108
	Q3	118	1682	198
	Q4	118	1745	205
1982	Q1	118	1641	193
	Q2	118	1497	176
	Q3	118	1146	135
	Q4	118	848	100
1983	Q1	118	602	71
	Q2	118	746	88
	Q3	118	1385	163
	Q4	118	1817	214
Total			21,930	2,581*

*Total is net of negative injury; i.e., the negative figures in the column are included in the total.

Source: Column (1): Based on 21.3% contribution applied to TPM base price of \$553.
 Column (2): Imports above 15% share (Exhibit II-2)
 Column (3): Column (1) * Column (2).

EXHIBIT II-4

EMPLOYMENT-RELATED INJURY DUE TO EXCESS IMPORTS, 1977-1983

	(1)	(2)	(3)	(4)	(5)	(6)
<u>Year</u>	<u>Excess Imports</u> (000 NT)	<u>Production Workers</u> <u>Hrs/Ton</u> (000)	<u>Total Lost Hours</u>	<u>Total Lost Jobs</u>	<u>Total Dollar Injury</u> (million 1983\$)	<u>Total Lost Jobs Including Multiplier Effect</u>
1977	3,048	9.74	29,688	14,661	408.73	30,787
1978	3,624	9.48	34,356	16,557	493.67	34,769
1979	305	9.41	2,870	1,393	42.09	2,926
1980	1,212	9.43	11,429	5,802	169.67	12,183
1981	4,059	9.07	36,815	18,225	552.62	38,273
1982	5,132	9.10	46,701	24,644	721.26	51,753
1983	4,550	7.64	34,762	17,781	502.24	37,340
Total	21,930	NA	196,621	99,063	2,481.53	208,032
Average	3,133	NA	28,089	14,152	412.89	29,719

Note: Totals may not add due to rounding.

Source: Column (1) : Imports above 15% share (Exhibit II-1).
 Column (2) : Column (1) hours per ton factors, computed from shipments and Bureau of Labor Statistics Employment Data, based on 50 weeks per year.
 Column (3) : Column (1) x Column (2)
 Column (4) : Column (3) divided by hours per worker factors for BLS Data.
 Column (5) : Column (3) times variable compensation per hour which includes BLS wage figures and 20.9 percent of AISI benefit rate.
 Column (6) : Column (4) times 2.1 multiplier factor

EXHIBIT II-5

CAPACITY UTILIZATION INJURY DUE TO EXCESS IMPORTS, 1977-1983

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<u>Excess Imports</u> (000 NT)	<u>Raw Steel Equivalence Factor</u> (% Yield)	<u>Lost U.S. Tonnage</u> (000 NT)	<u>U.S. Capability</u> (000 NT)	<u>Actual Utilization</u> (%)	<u>Lost Utilization</u> (%)	<u>Potential Utilization</u> (%)
1977	3,048	72	4,233	160,000	78.3	2.7	81.0
1978	3,624	72	5,033	157,900	86.8	3.2	90.0
1979	305	72	424	155,300	87.8	0.3	88.1
1980	1,212	73	1,660	153,700	72.8	1.1	73.8
1981	4,059	73	5,560	154,300	78.3	3.6	81.9
1982	5,132	73	7,030	154,000	48.4	4.6	53.0
1983	4,550	76	5,987	150,500	56.2	4.0	60.2
Average 1977-1983	3,133	73	4,275	155,100	72.7	2.8	75.4

Note: Totals may not add or multiply due to rounding.

Source: Column (1): Imports above 15% share from Exhibit II-1.
 Column (2): World Steel Dynamics, Core Report J and Core Report Q.
 Column (3): $(\text{Column (1)}/\text{Column (2)}) * 100$.
 Column (4): American Iron and Steel Institute.
 Column (5): American Iron and Steel Institute.
 Column (6): Column (3)/Column (4).
 Column (7): Column (6) + Column (7).

III. PRICE-RELATED INJURY

When imports increase, volume is taken away from domestic producers with the resulting effects described in the last section. As discussed in Section I, such share gains by foreign producers are made using pricing tactics. Simply put, foreign capacity utilization dictates U.S.-bound export targets, and import prices are set to meet those targets. As a result, import prices are driven down -- frequently below cost -- causing domestic producers to follow suit or lose even greater market share. Such price suppression by foreign producers has had a serious impact on the domestic industry. This section describes and quantifies the resulting price-related injury.⁵

Pricing During the Trigger Price Mechanism

In the four years between 1978II and 1982I, the existence of the Trigger Price Mechanism (TPM) limited the ability of foreign producers to significantly reduce prices. Although the TPM did not substantially curtail imports or enable domestic producers to make reasonable profits, it did provide a stable pricing environment by bringing import prices more in line with economic factors.

Steel pricing during TPM can be summarized as follows:

1. Import prices and domestic prices were relatively constant in real terms, with import prices maintaining about a 3 percent discount below domestic prices.

⁵The price analysis is based on domestic mill prices and delivered import value. While the latter may not be an exact transaction price, it is believed to closely approximate price.

2. Steel price inflation during the TPM was not significant; domestic prices increased only 3.4 percent in real terms when comparing average prices during the four-year TPM with the three years prior to the TPM. This is less than 1 percent per year real increase, while costs were increasing at a much faster rate.
3. Import prices averaged about 8 percent below the full cost (including profit and delivery) of Japanese producers, when calculating costs using actual Japanese operating rates and exchange rates. Costs measured this way are above trigger prices, since the TPM used multi-year average operating and exchange rates which behaved in a way to reduce cost estimates in 1978-81.

Domestic versus Import Prices

Real (expressed in 1983 dollars) domestic and import prices are graphed in Exhibit III-1. Both series represent an identical mix of carbon steel products. Exhibit III-2 lists the two sets of prices and their ratio.

It is immediately apparent from these exhibits that the TPM, which was in place from 1978II to 1982I, provided considerable price stability. This can be observed both in terms of the variability of domestic and import prices as well as the ratio of the two. While the ratio of import to domestic prices swung from as high as 1.31 (+31 percent) in 1974 to a low of .84 (-16 percent) in 1977, the ratio hovered at a fairly stable average of .97 (-3 percent) during the TPM.

The lifting of U.S. price controls in 1974 spurred a rapid increase in domestic prices from the beginning to the end of

that year. Since then, however, domestic prices were remarkably stable in real terms until 1982-1983. The average real domestic price (1983 dollars) during 1975I-1978I was \$535/NT, varying no more than 5 percent above or below that level. During the TPM, the average real domestic price was \$553/NT, only 3.4 percent above the pre-TPM period. Again, prices varied by less than five percent above or below the TPM average level.

While real domestic prices were increasing by under 1 percent per year during the TPM, real costs were increasing by far greater amounts. Specifically, real hourly employment costs rose 12.6 percent⁶ (about 3.5 percent per year) and real material costs rose 7.0 percent⁷ (about 2.0 percent per year) when comparing 1978-1981 with 1975-1977. This means that gross margins for domestic steel companies declined during the TPM, and allegations of excessive profit-taking are false. The most important conclusion from this analysis is that inflationary impacts of the TPM were minimal. Real price increases by domestic producers were modest -- less than one percent per year versus the pre-TPM period -- and far less than cost increases. Real domestic prices (1983 dollars) were actually lower at the end of the TPM (\$525/NT) than at its beginning (\$555/NT) or even compared to 1975 (\$547/NT).

Stable domestic steel pricing from 1975-1981 was due not only to the TPM but also to the inelastic nature of steel demand. This means that steel demand is relatively insensitive to price. This is because demand for steel is derived from demand for other products, such as automobiles, heavy equipment, oil and gas, and many others. An important

⁶1982 Annual Statistical Report, AISI

⁷Steel Strategist #8, World Steel Dynamics, July, 1983

conclusion from analyzing domestic prices from 1975-1981 is that they were extremely stable and not significantly influenced by market conditions. Recall that this period included two demand troughs, in 1975 and in 1980.

Due to the inelastic nature of steel demand in the short run, real price changes are generally attributable to a desire by one or more market participants to change their share of market. It is worth noting that real domestic prices, real import prices, and import share of market changed little during the TPM, since imports could not use price as a share-gaining tactic. Prior to the TPM, however, foreign producers dropped import prices and did gain share of market. Thus, any price suppression observed after 1981 can be directly attributable to foreign producers and their attempt to gain market share.

Import Prices versus Japanese Costs

In 1978, the U.S. Department of Treasury instituted the Trigger Price Mechanism. The TPM was designed to trigger an anti-dumping investigation when import prices fell below a certain floor, set for each individual steel product. The floor was based on the full cost (including profit) of the world's most efficient producer, assumed to be Japan. Trigger prices provided an accurate look at Japanese costs as they were based on data from Japan's Ministry of International Trade and Industry and reviewed by U.S. government personnel.

Trigger prices can be viewed as the minimum long-term price for steel, permitting recovery of costs and profits adequate to attract capital and to sustain investment. Although periodic pricing shortfalls may occur, these are expected to be offset by periodic pricing premiums such that average long-term prices equal trigger prices. Without such price levels, privately-held steel companies are in a liquidation mode. Note that less efficient producers (virtually all other

countries, with the possible exception of Korea), must actually require higher prices in order to cover their higher costs and to attract capital and sustain investment.

Based on the foregoing discussion, it is reasonable to use the cost of the most efficient producer, assumed to be Japan, as a minimum acceptable price against which to compare actual import prices. Note that using this benchmark for the cost of all imports is low because importers other than Japan are less efficient.

It was assumed that actual Japanese import prices and trigger prices were equivalent for the last full year of the TPM, 1981 II to 1982 I. This period was chosen for two reasons. First, since the TPM was refined throughout its duration, it was most accurate toward its end. Second, actual trigger prices (based on average operating rate and exchange rate) and adjusted trigger prices (based on actual operating rate and exchange rate) were approximately equal since the two sets of rates generally coincided during that period. Thus, Japanese import prices could be expected to be equal to trigger prices, adjusted for operating and exchange rates, in 1981.

Japanese costs are compared to actual import prices in Exhibit III-3. Note that both series are expressed in 1983 dollars. Exhibit III-4 lists real Japanese costs, real import prices, and their difference.

Since 1975, import prices have generally been below full, landed Japanese costs. From approximate parity in late 1975, the margin of underselling increased until 1978 when trigger prices were implemented. In 1979, price and cost parity was again achieved. Underselling began again in 1980, hastened by the suspension of the TPM in 1980II-III. The effects of the suspension continued until early 1981, and price and cost

parity was achieved again at the end of 1981, just prior to the termination of the TPM.

During the TPM, imports undersold full, delivered Japanese costs by an average of 8 percent. Note that actual trigger prices were lower than actual Japanese costs because the TPM used lagged operating rates which were higher than current operating rates and thus drove TPM cost estimates down. Thus, imports may not have been priced substantially below trigger prices even though import prices were below actual Japanese costs.

Pricing in 1982II-1983IV

Since the termination of the TPM in the first quarter of 1982, pricing in the domestic steel market has been chaotic. Steel pricing in the post-TPM period can be summarized as follows:

1. Import prices fell by 16 percent in real terms in less than two years, representing an average decline of \$88/ton. (1983 dollars)
2. In an effort to remain competitive, domestic producers followed the import price cuts and domestic prices fell by 13 percent in real terms, representing an average of \$74/ton.

These observations can be documented by referring to the exhibits referenced earlier in this section, Exhibits III-1 to III-4.

The nosedive in real domestic and import prices is apparent in Exhibit III-1. From an average of \$537/ton during the TPM, real import prices fell to \$396/ton by the end of 1983, a 26 percent drop. The average real decline from TPM to post-TPM

was 16 percent. Real domestic prices fell from an average of \$553/ton during the TPM to \$449/ton by the end of 1983, a 19 percent drop. The average real decline from TPM to post-TPM was 13 percent.

Import prices fell sooner, fell faster, and ultimately fell further than domestic prices. In short, import prices led the decline. The figures in Exhibit III-2 show how domestic and import price parity in early 1982 gave way to a rapid decline in the ratio of import to domestic prices, which fell to .88 (-12 percent) by the end of 1983. The average ratio in the post-TPM period was .94 (-6 percent) compared to the average ratio during TPM of .97 (-3 percent).

It is interesting to note the source of most of the post-TPM import pricing actions. Since the EEC and Japan have agreed to formal and informal import limits, respectively, their need to reduce price is not as pressing as that of other countries. "All other" importing countries -- which exclude Japan, EEC, and Canada -- are in fact the subset responsible for the price decline. The ratio of their prices to domestic prices fell from .99 (-1 percent) in the last quarter of the TPM (1982I) to .78 (-22 percent) by early 1983, where it has stayed. This drop coincided with a tremendous jump in import market share for these countries from 5.0 percent during the TPM to 8.0 percent in the post-TPM period as they took advantage of the Japan and EEC restraint agreements.

The comparison of import prices with Japanese costs makes it clear that the decline in prices can only partially be explained by a reduction in costs or a shift in exchange rates. Exhibit III-3 shows the tremendous drop in import prices, even relative to Japanese costs, in 1982-1983. From parity in early 1982, real prices fell below costs by \$106/ton by the end of 1983. The margin of underselling was 13 percent in the post-TPM period as compared to 8 percent during the TPM.

1983IV data indicate that the import price drop was continuing into 1984.

There can be little doubt that the post-TPM price decline was caused by imports. Imports led the price decline. Further, the magnitude of the import price decline did not reflect the magnitude of cost improvements. Rather, the price decline was a decision by foreign producers based primarily on short-term opportunistic desires and not a reflection of economic reality, i.e., the need to make a profit. Domestic producers had little choice but to follow import pricing tactics in an effort to try and preserve share of market.

Price Suppression Injury

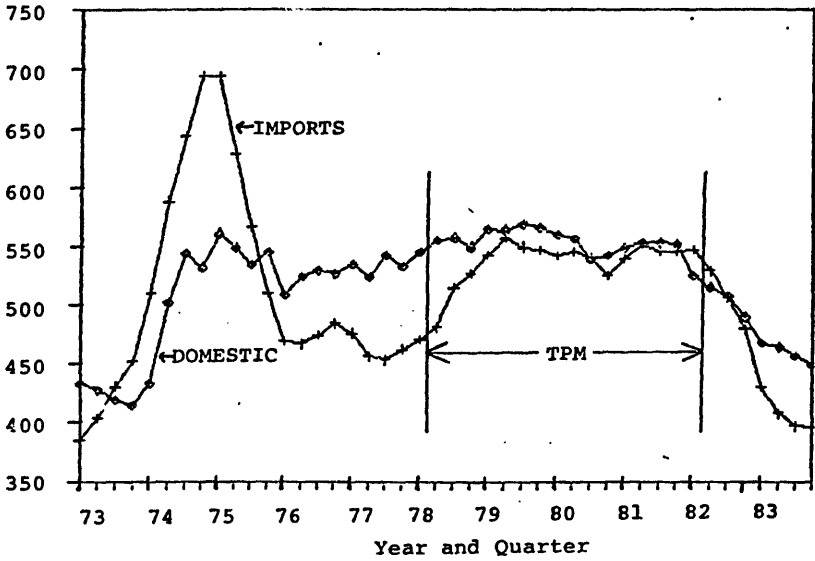
Section I documented that foreign producers have used price as a means of achieving import share changes in accordance with a strategy of maintaining stable operating rates. Thus, price changes occur not because of changing demand levels but because of a desire by foreign producers to change their share of the U.S. market. Foreign producers' ability to substantially reduce import prices was limited during the TPM. After the TPM, however, import prices quickly dropped as foreign producers tried to gain market share. This import price reduction caused a reduction in domestic prices which can be attributed wholly to imports.

Injury related to price suppression can be calculated by comparing domestic prices during the TPM -- a "normal" pricing period -- to those after the TPM, when imports forced domestic prices down. The use of domestic prices during the TPM as a benchmark is extremely conservative. This is because prices then were still inadequate to allow the domestic industry to make a reasonable profit. Further, import prices for nearly all foreign producers were allowed to fall below costs -- in effect, providing for a "license to dump". Thus, any decline

in domestic prices below TPM-period levels represents a minimum estimate of price suppression experienced by domestic producers.

Exhibit III-5 shows the comparison of "baseline" domestic prices (average domestic price during the TPM) and actual domestic prices in the post-TPM period. The difference, calculated quarterly, is multiplied by domestic shipments to estimate total injury due to price suppression. The analysis indicates that price suppression increased from \$38/ton in early 1982 to \$104/ton by the end of 1983. By the fourth quarter of 1983, injury due to price suppression reached \$1.8 billion and showed no indication of slowing. During the seven quarters following the termination of the TPM, price suppression due to imports resulted in a pre-tax profit loss of over \$8.1 billion to the domestic steel industry. Further, it is apparent that domestic prices have not increased to TPM levels in 1984, suggesting that extensive injury is still occurring.

EXHIBIT III-1

GRAPH OF REAL DOMESTIC AND IMPORT CARBON STEEL PRICES
1973-1983

Source: Exhibit III-2.

EXHIBIT III-2

REAL DOMESTIC AND IMPORT CARBON STEEL PRICES
AND THEIR RATIO, 1973-1983

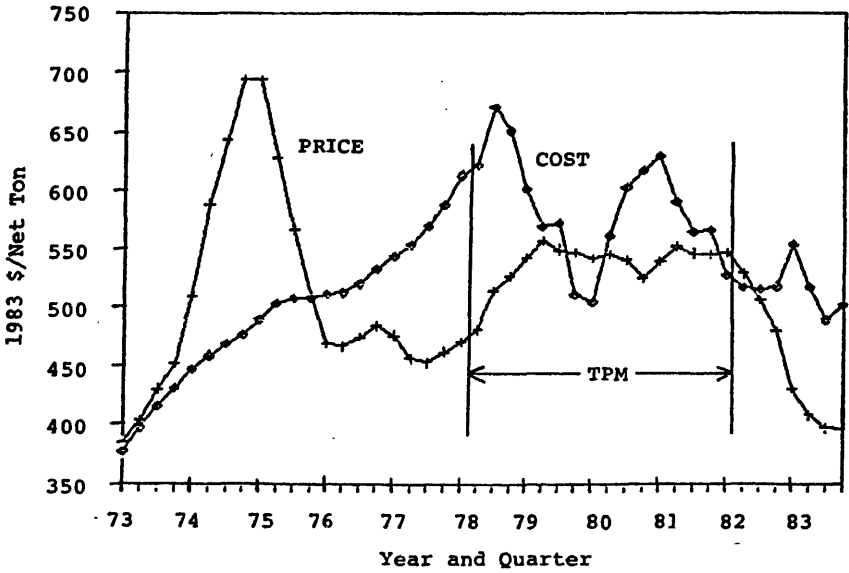
<u>Period</u>	(1)	(2)	(3)
	<u>Domestic Prices</u> (1983 dollars per net ton)	<u>Import Prices</u>	<u>Ratio of Import to Domestic Prices</u>
1973 Q1	433	385	0.89
Q2	428	404	0.94
Q3	420	431	1.02
Q4	415	452	1.09
1974 Q1	433	509	1.18
Q2	502	588	1.17
Q3	544	643	1.18
Q4	532	695	1.31
1975 Q1	560	694	1.24
Q2	548	628	1.15
Q3	535	566	1.06
Q4	545	510	0.94
1976 Q1	508	469	0.92
Q2	524	467	0.89
Q3	529	474	0.90
Q4	526	484	0.92
1977 Q1	534	476	0.89
Q2	524	456	0.87
Q3	542	453	0.84
Q4	533	462	0.87
1978 Q1	545	471	0.86
Q2	555	481	0.87
Q3	557	514	0.92
Q4	549	527	0.96
1979 Q1	564	542	0.96
Q2	563	556	0.99
Q3	568	549	0.97
Q4	565	547	0.97
1980 Q1	559	542	0.97
Q2	556	545	0.98
Q3	539	541	1.00
Q4	542	525	0.97

<u>Period</u>	(1) <u>Domestic Prices</u>	(2) <u>Import Prices</u>	(3) <u>Ratio of Import to Domestic Prices</u>
1981 Q1	548	539	0.98
Q2	553	552	1.00
Q3	553	546	0.99
Q4	552	545	0.99
1982 Q1	525	547	1.04
Q2	515	529	1.03
Q3	508	506	1.00
Q4	490	480	0.98
1983 Q1	468	430	0.92
Q2	464	408	0.88
Q3	457	397	0.87
Q4	449	396	0.88

Source: Columns (1), (2): Department of Commerce and
Bethlehem Steel Corporation
Column (3): Column (2)/Column (1).

EXHIBIT III-3

GRAPH OF REAL IMPORT PRICES AND FULL JAPANESE COSTS
FOR CARBON STEEL
1973-1983



Source: Exhibit III-4.

EXHIBIT III-4

REAL JAPANESE COSTS, REAL IMPORT PRICES,
AND THEIR DIFFERENCE, 1973-1983

<u>Period</u>	(1) Japanese Costs -----(1983 dollars per	(2) Import Prices net ton)----	(3) Margin
1973 Q1	377	385	8
Q2	397	404	7
Q3	416	431	15
Q4	432	452	20
1974 Q1	447	509	61
Q2	459	587	128
Q3	469	643	174
Q4	477	695	218
1975 Q1	489	694	205
Q2	503	627	125
Q3	508	566	58
Q4	508	510	2
1976 Q1	511	469	-42
Q2	512	467	-45
Q3	520	474	-46
Q4	533	484	-49
1977 Q1	544	476	-68
Q2	553	456	-97
Q3	569	453	-117
Q4	587	462	-125
1978 Q1	613	471	-142
Q2	622	481	-141
Q3	671	514	-158
Q4	651	527	-124
1979 Q1	601	542	-59
Q2	569	556	-13
Q3	572	549	-23
Q4	511	547	37
1980 Q1	505	542	37
Q2	561	545	-16
Q3	603	541	-62
Q4	617	525	-92

<u>Period</u>	(1) Japanese <u>Costs</u> ---(1983 dollars per net tons)---	(2) Import <u>Prices</u> ---	(3) <u>Margin</u> ---
1981 Q1	629	539	-90
Q2	591	552	-39
Q3	564	546	-18
Q4	565	545	-20
1982 Q1	528	547	18
Q2	517	529	13
Q3	516	506	-10
Q4	518	480	-38
1983 Q1	553	430	-123
Q2	517	408	-108
Q3	489	397	-91
Q4	502	396	-106

Source: Column (1): MBI analysis based on data from World Steel Dynamics and Trigger Price Mechanism manual.

Column (2): Department of Commerce. Weighted average prices.

Column (3): Column (2) - Column (1).

EXHIBIT III-5

PRICE-RELATED INJURY DUE TO IMPORTS, 1982II-1983IV

	(1) Baseline Price ----- (1983 dollars)	(2) Actual Price	(3) Margin of Price Suppression ----- per ton)	(4) Domestic Shipments (m. tons)	(5) Total Injury (1983 \$m.)
1982 II	553	515	38	15.2	578
III	553	508	45	13.3	599
IV	553	490	63	13.9	876
1983 I	553	468	85	14.7	1250
II	553	464	89	16.4	1460
III	553	457	96	16.1	1546
IV	553	449	104	17.7	<u>1841</u>
Total					8150

Totals may not add due to rounding.

- Source: Column (1): Average real domestic price in 1978II-1982I, from Department of Commerce and Bethlehem Steel Corporation.
- Column (2): Derived from data from the Department of Commerce and Bethlehem Steel Corporation.
- Column (3): Column (1) - Column (2).
- Column (4): Shipments - Exports, from Department of Commerce data.
- Column (5): Column (3) X Column (4).

IV. THREAT OF FUTURE INJURY

Section I discussed the nature of import behavior in the U.S. steel market. The model developed in that section provides an analytical framework with which to analyze the conduct of imports in the future.

In this section, that model framework is used to estimate import share of the U.S. market over the 1985 to 1989 time period. This analysis is grounded in the assumption that current United States public policy will continue. This implies that the U.S. government will take no comprehensive action to reduce steel imports. Therefore, the U.S. will continue to be an open market for world steel trade. World trends in capacity and in steel production can be expected to continue, which will result in the import levels discussed in the projections below.

As discussed in Section II, import levels which exceed 15 percent of the market cause injury to the domestic steel industry. The volume-related injury resulting from forecast import levels beyond 15 percent is quantified in this section for the five years from 1985 through 1989. Additional price-related injury is also likely to occur since price is the mechanism utilized by imports to gain market share.

The analysis is presented in two sections. First, the application of the model to estimate future import behavior is discussed. The import share of the U.S. market derived from that analysis is used to calculate the resulting impacts on the domestic industry. Second, volume-related injury to the domestic industry over the 1985-1989 time period is calculated.

Estimation of Import Share of Market

Based on the model discussed in Section I, the key determinants of the import share of the U.S. market are:

- Foreign operating rate, adjusted for imports to the United States, and
- U.S. apparent consumption.

Three alternative foreign production levels were contemplated which provide three foreign operating rate scenarios. The derivation of the forecasts is discussed below, in terms of the major components. Import market share is then estimated using the import model described in Section I.

Import Share of Market

The factors described above were used to forecast imports and the import share of U.S. apparent consumption of steel for the 1985-1989 period. This is done using the import model described in Section I. These estimates are computed for each of the three world economic scenarios discussed above. The results, which are shown in Exhibit IV-3, indicate that imports could reach 26 million tons and a 25.6 percent share of market by 1989. Note that these estimates are based on trend forecasts; any cyclical movements around the trend could create even greater import penetration.

EXHIBIT IV-1

PROJECTED EFFECTIVE CAPACITY BY REGION, 1984-1990
(All figures in million net tons)

<u>Region</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
EEC	167	166	165	164	163	162	161
Japan	151	151	151	151	151	151	151
Developing Western World	98	104	109	115	121	126	132
United States	138	137	136	135	134	133	132
All Other Western World	71	71	72	72	73	73	74
Total	625	629	633	637	642	646	650

Source: Estimates are based on "Actual/Planned" Effective Crude Steel Capacity from Exhibit D of World Steel Dynamics, Steel Strategist #9, February 1984. Figures for 1985-1989 were linearly interpolated. United States capacity for 1990 is derived from MBI analysis.

EXHIBIT IV-2

PROJECTED WORLD PRODUCTION AND ADJUSTED OPERATING RATE, 1985-1989
(Production in Millions of Net Tons)

<u>Year</u>	-----WORLD ECONOMIC SCENARIO-----					
	<u>High Trend</u>	<u>Adjusted</u>	<u>Base Case</u>	<u>Adjusted</u>	<u>Low Trend</u>	<u>Adjusted</u>
	<u>Production</u>	<u>Operating</u>	<u>Production</u>	<u>Operating</u>	<u>Production</u>	<u>Operating</u>
		<u>Rate</u>		<u>Rate</u>		<u>Rate</u>
		(%)		(%)		(%)
1985	519	79.1	511	77.5	506	76.4
1986	526	79.3	514	77.2	506	75.7
1987	532	79.6	517	76.8	506	74.9
1988	539	79.7	519	76.3	506	74.0
1989	546	79.9	522	76.0	506	73.3

Source: Western World production forecasts are based on growth rates from 15-year trend as described in text. Annual growth rates utilized are:

High trend 1.30%
 Base case (actual trend) .54%
 Low trend No growth from 1985 trend levels.

The adjusted operating rate is computed as world production, less United States apparent consumption in raw steel equivalent tons (see Exhibit IV-3), divided by net foreign capacity from Exhibit IV-1.

EXHIBIT IV-3

STEEL IMPORT FORECAST, 1985-1989
(Millions of net tons except as indicated)

Year	(1) U.S. Apparent Consumption	-----World Economic Scenario-----					
		High Trend		Base Case		Low Trend	
		Imports	Import Share (%)	Imports	Import Share (%)	Imports	Import Share (%)
1985	99.7	21	21.0	21	21.5	22	21.8
1986	100.2	22	21.7	22	22.3	23	22.7
1987	100.8	23	22.4	23	23.1	24	23.6
1988	101.3	24	23.2	24	24.0	25	24.6
1989	101.9	25	24.0	25	24.9	26	25.6

Source: Column (1): Base case U.S. consumption projected at .54 percent annual growth from 1985 levels, which are from Data Resources, Inc. Steel Industry Review, First Quarter 1984.

STATEMENT OF WOLFGANG JANSEN
CHAIRMAN OF THE BOARD
OHIO RIVER STEEL CORPORATION

BEFORE THE

SUBCOMMITTEE ON INTERNATIONAL TRADE
COMMITTEE ON FINANCE
UNITED STATES SENATE

WASHINGTON, D.C.

Mr. Chairman and members of the Subcommittee. My name is Wolfgang Jansen, Chairman of the Board of Ohio River Steel Corporation. Thank you for providing me, on behalf of Ohio River Steel Corporation, this opportunity to state for the record our unique problems with S 2380, the "Fair Trade In Steel Act of 1984."

Ohio River Steel is a steel rolling mini-mill located in Calvert City, Kentucky. We are a new company, less than one year old, which employs 266 people.

Two and one-half years ago I convinced a group of investors to commit \$80 million to the construction of what, by any standards, is one of the most efficient rolling mills in the entire country, if not the world. My case and my investors' decision was, in the final analysis, based upon the often stated position of administration after administration that the free trade goals historically pursued by the United States would remain constant and dependable.

Enactment of this legislation would be a dramatic repudiation of those historical free trade goals.

I won't bore this knowledgeable Subcommittee with a long detailed discussion of why Ohio River's supply needs differ from most of the industry but will instead state briefly the problems those differences cause us.

PROBLEM NUMBER ONE: Ohio River Steel Corporation operates without any melt shop facilities; therefore, it depends on the purchase of semi-finished products for its existence. A domestic supply of semi-finished steel in the sizes Ohio River requires is severely limited. Our process requires 6x6 or 8x8 inch square steel billets. An overwhelming percentage of the limited domestic supply of available semi-finished steel is sized only 4½ to 5 inches square.

PROBLEM NUMBER TWO: When Ohio River Steel can buy competitively priced domestic steel, we do so. Since the day we opened our doors we've purchased all such steel that we could. Despite our buy-domestic policy, however, we depend heavily on imports as the principal source available.

PROBLEM NUMBER THREE: Ohio River Steel finished goods in April were priced at an average of \$275 per short ton. The published price for semi-finished steel -- even the limited amount that is available -- is \$347 - \$369 per short ton -- \$72 - \$94 per short ton more than we sold our finished goods for in April.

PROBLEM NUMBER FOUR: Even if the large integrated mills wanted to produce an adequate supply of semi-finished steel for domestic sale and could do so at a competitive price, they wouldn't because if they did they would encourage rather than discourage competition. A classic example of what I mean can be seen in two price quotes Ohio River Steel received within the past nine months. On July 26, 1983, Wheeling-Pittsburgh quoted us a price of \$278 per short ton FOB Wheeling, while on November 17, 1983, Bethlehem quoted us a

price of \$318. And I respectfully remind the Subcommittee again that Ohio River's finished products sold for \$290 per short ton as late as one month ago.

Gentlemen of the Subcommittee, Ohio River Steel would like nothing better than to have a safe, secure, adequate, competitively priced domestic supply of semi-finished steel in the size necessary to service our needs. The fact is we don't.

And the further fact is that, if our supply of the semi-finished steel we need to make our mill run is shut down, our plant will shut down.

How, Gentlemen of the Subcommittee, can that possibility be considered good for America's economy or America's security?

We at Ohio River Steel respectfully urge this Subcommittee to reject S 2380.

U.S. Council for an Open World Economy

I N C O R P O R A T E D

2716 Stafford Road, Alexandria, Virginia 22307

(202) 785-3772

Statement submitted by David J. Steinberg, President, U.S. Council for an Open World Economy, to the Subcommittee on International Trade of the Senate Committee on Finance in hearings on the state of the U.S. steel industry. June 8, 1984

(The U.S. Council for an Open World Economy is a private, non-profit organization engaged in research and public education on the merits and problems of developing an open international economic system in the overall national interest. The Council does not act on behalf of any "special interest".)

To control or not to control steel imports is not the sum and substance of the question that needs incisive attention. The real issue is (a) whether the steel industry needs and deserves government help of any kind, (b) what forms of government assistance should be provided across the board of applicable public policy, with import control only one of the possible components and even then a measure of last resort, and (c) what kind of steel redevelopment strategy should be adopted, involving commitments by management and labor as well as government, as the framework for any measures of government assistance. Government measures meriting attention include reassessment of all statutes and regulations that materially affect the industry's ability to adjust to new economic realities, and correction of any inequities that may be found.

Careful review of the record of public statements about demands for steel import controls during the past 20 years may well show that, first as a senior staff person with the Committee for a National Trade Policy and later as chief executive officer of the U.S. Council for an Open World Economy, I may have been the sole advocate (at least one of the very few) of a comprehensive, coherent approach to the real problems and needs of the U.S. steel industry. Like most other advocates of freer world trade, I have opposed legislated and other politically pressured controls of steel imports (I oppose the steel import-quota bills now before Congress). But, unlike virtually all other opponents of "protectionism", I have sought the right kind of government attention to the grievous problems of this major industry, its workers and the communities that depend heavily on steel-producing facilities. Calling import controls injurious to the national interest, and opposing them for this reason, is a less than adequate response to such measures and to demands for more. The liberal-trade policy which the so-called "free traders" say is vital to the national interest must be made good for every state in the Union. This requires, among other things, coherent, constructive attention

to helping ensure that industries that can attain viability in today's rapidly changing world economy, and need government assistance in this regard, are reorganized and reinvigorated through adjustment and redevelopment strategies that meet the highest standards of good sense, good judgment and good policy. In the case of the steel industry, viability must be ensured for national security as well as other worthy purposes.

What the government needs to do for the steel industry (to the extent that this industry needs and deserves government help) can better be formulated through incisive investigation of all pertinent factors by the International Trade Commission (ITC), leading to formation of a coherent adjustment strategy by the Executive Branch (coordinating with industry and labor and, where appropriate, state and local governments), than through Congressional hearings where pressure for import controls is the dominant influence. Congressional committees can play an important role in these matters through review of the progress of the adjustment strategy that is needed.

Unfortunately, the import-relief provisions of the trade legislation are inadequately structured for the kind of ITC investigation I have advocated (a point I have argued in previous presentations to your Subcommittee and in other Congressional hearings). Nor has the ITC, on its own initiative, taken steps to ensure that such an investigation is made and that the President gets the kind of documentation he needs for ensuring that government's attention to the industry's problems is fully responsive to the real needs of this industry and to the imperatives of the total national interest. Nor has the Executive Branch adequately addressed the real problems and needs of the steel industry, steel workers and steel communities.

The result is that, if the President accepts the ITC's recent finding of serious injury from steel imports and consequently restricts these imports in one way or another, the nation will have, not a coherent steel strategy designed to ensure a strong steel industry, but a more elaborate steel import-control policy. It would be costly in many ways, including being tantamount to a pig-in-a-poke gamble with the fate of this major industry. If the President does not accept the Commission's finding of import injury, the likelihood is that this decision will terminate even the current, poorly designed process of government attention to the problems of the steel industry. The President would most likely couch his decision in lofty, national-interest terms, but the national interest would not be adequately served, because his decision would most likely not address the question: What government action is needed (if any), whether or not there has been serious injury (or threat thereof) from imports, to help the steel industry achieve the strength so essential to the national interest?

It is regrettable that the appropriate committees of Congress

have not concerned themselves with these legislative and administrative inadequacies.

"The Fair Trade in Steel Act of 1984"

In conclusion, a comment about S.2380 (the "Fair Trade in Steel Act of 1984"), a bill "to reduce unfair practices and provide for orderly trade in certain carbon, alloy, and stainless steel mill products, to reduce unemployment, and for other purposes."

This attempt to impose import quotas via legislation is a disorderly way to "reduce unfair practices". Other procedures of long standing (anti-dumping, anti-subsidy, etc.) have been enacted to deal with unfair trade practices. If these procedures and remedies are not adequate because of legislative or administrative deficiencies, correction of these deficiencies should be sought through suitable legislation targeted at these specific needs, not through blunderbuss efforts to impose quotas on all imports of the particular products (as S.2380 would do). Moreover, if the steel industry (as this bill explicitly explains) is "critical to the national defense and the maintenance of a strong industrial economy," this bill is a poorly designed, counterproductive way to secure a viable, competitive steel industry capable of making its vital contribution to this country's defense and overall economic strength. Among other shortcomings, import quotas, even if definable as an instrument for "orderly trade" in steel mill products, engenders disorder in the procurement of such products by industrial consumers of these materials, who would be denied greatly needed flexibility in their choice of suppliers of these basic products.

While the bill commendably links continuation of its import curbs to the implementation of plans in the overall steel mill industry to "utilize substantially all the cash flow from the steel sector for reinvestment in, and modernization of, the steel sector during the term of this Act," this linkage does not redeem such import controls or produce the coherent strategy I have emphasized. Among other shortcomings, (a) the cash flow for reinvestment must be sustained by "the companies in the steel industry taken as a whole" (meaning that some companies might be remiss in this respect), and (b) a coherent, steel-redevelopment strategy must include much more than the aforementioned linkage if the import-quota subsidies (which is what these import controls are) are to be justifiable in the national interest and in the interest of a strong steel industry.

Finally, the bureaucratic ramifications of administering the proposed curbs on imports of steel mill products and iron ore hardly conjure an image of orderly government administration of such controls, nor orderly, cost-effective adherence to these regulations by U.S. users, importers and producers of these materials.

TESTIMONY OF THE EMBASSY OF THE REPUBLIC OF ARGENTINA

- ECONOMIC COUNSELORS OFFICE -

The Embassy of the Republic of Argentina through its Economic Counsellors Office wishes to present its views to the Subcommittee with respect to the state of the U.S. steel industry and its connection with the Argentine's steel exports to United States.

The Argentine steel industry exports to many countries, including the United States, modest quantities of some of steel products, such as cold-rolled sheet, oil country tubular goods, line pipe, standard pipe, billets, bars, shapes, wire rod, galvanized wire, wire nails, barbed wire, cables, and wire ropes.

As more fully explained below, these products are not being imported into the United States in such increased quantities as to be a cause of serious injury, or the threat thereof, to any U.S. industry.

Argentina is a small and responsible exporter of these few steel products. Given the significant comparative advantages that Argentina has in steel production -including technologically sophisticated production facilities, ready access to abundant supplies of high-quality ore, large natural gas reserves, and realistic wage rates- one would expect Argentina to be among the world's larger producers and exporters of steel products. This, however, is not the case. Argentina produces steel on a relatively small scale. Its

1982 shares of the noncommunist world's production and capacity were about 0.7% and 1.06%, respectively.

Argentina has not built an export-oriented steel industry, oversized in comparison to domestic demand. Rather, Argentina's steel industry exists primarily to meet domestic demand. Indeed, Argentina has been a net importer of steel. In the period 1978-83, Argentina imported steel products valued at U.S. \$2.55 billion against exports of \$ 1.48 billion, for a cumulative net deficit of \$ 1.07 billion. Never during that period did Argentina have a positive balance of trade in steel.

Argentina has imported substantial amounts of steel from the United States. Further details concerning the Argentine trade balance in steel, including a year-by-year breakdown of steel imports and exports, is available at Chart I.

Argentina traditionally has not restricted steel imports. Moreover, as the figures in Chart I demonstrate, Argentina has not prohibited imports of steel mill products.

On the other hand, despite Argentina's dependence on imported steel to supply much of its domestic consumption, the Argentine steel industry undertook significant capacity cutbacks and production rationalizations when domestic demand fell during the recent global recession. Mergers and closings reduced the number of integrated or semi-integrated steel producers in Argentina from eleven in 1975 to

six in 1982. Total annual capacity was cut by almost half a million tons. Employment dropped by 36%. This drastic restructuring was accompanied by great strides in modernizing the industry's productive plant. By 1983, over 30% of its reduction capacity was based on direct reduction techniques. In 1982, 53% of the raw steel produced in Argentina was produced in modern electric furnaces and 52% was made using continuous casting processes.

Moreover, the Argentine industry has maintained a relatively small, diversified export program involving sales to more than fifty nations. Argentine steel exports are not concentrated to the United States but by and large are sold to other developing countries. The United States buys only 16% of Argentina's exported steel by value even though the United States represents by far the largest and most lucrative market for steel in the world. Argentina's steel exports to the United States are quite modest. Imports from Argentina represent only 0.3% of 1983 U.S. apparent consumption. Not surprisingly, Argentine exports do not represent a large proportion of total U.S. steel imports and in recent years have not totalled more than 1.6% of total U.S. steel imports.

Although Argentina's steel exports are modest, they are of tremendous significance to Argentina, the United States, and to the world. Besides providing U.S. purchasers with high-quality and efficiently produced steel products, Argentine steel exports help pay for U.S. exports to Argentina and are a vital source of foreign exchange sorely needed to make debt service payments.

Developing countries such as Argentina have limited export options, most of which involve the export of commodities and low technology goods whose prices are the first to tumble in times of economic distress. Further, the products in which Argentina has the most striking comparative advantage, wheat and meat products, are heavily subsidized by other countries -including the United States- and Argentina's export opportunities for these products are limited by this subsidized competition.

As a result, steel has taken on a significance to Argentina not apparent from raw tonnage figures. Argentina's hopes for economic recovery and the regularization of its external indebtedness depends on its ability to generate balance of payments surpluses in the near future. Export earnings must exceed import expenditures.

Steel is one of Argentina's important export products.

Regardless of what may have been true years or months ago, the U.S. industries producing products such as wire rod and cold-rolled sheet are presently raising their prices for these products and operating at remarkably high capacity utilization rates.

In March of this year, industry journals reported:

"As the first quarter draws toward a close, buyer speculation about a second-quarter price hike for sheet products is growing. With many of the producing mills running full out, lead times for sheet, especially cold-rolled and galvanized, have been lengthening."

"Metal Price Forecast," American Metal Markets, March 12, 1984, at 21. See also "Cold Rolled, Coated Sheet Making Strong Recovery in Most Market Areas", American Metal Markets, Feb. 10, 1984, at 1. The recovery in wire rod that began in 1983 continues into this year with delivery times for products lengthening and price increases expected. See "Second Qtr. Wire Rod Prices Seen Rising," American Metal Markets, Feb. 28, 1984, at 1. See also "Domestic Rod Runs Strong Despite Foreign Competition," American Metal Markets, Nov. 14, 1983, at 25-26.

Difficulties in the U.S. steel industry have primarily resulted from a substantial contraction in demand for steel products in the United States. See United Nations Economic Commission For Europe, The Steel Market in 1982, at 126 (1983) (28% decline in demand from 1981 to 1982). A second preeminent cause of injury to U.S. steel producers has been their own cost structures -cost structures dictated by such secondary factors as excessive wages, unwise sourcing of raw materials, and obsolete, inefficient and poorly located production facilities. The U.S. steel industry's integrated producers

"have been slow to adopt the newest technology, despite the fact that employment cost should have made this the highest priority.

They have devoted a minuscule share of revenues to research and development, so that major process innovations have been developed abroad. Finally, they have failed to grasp the absolute imperative of dynamic cost competitiveness, maintaining increasingly disadvantageous sources of raw materials and trading wage restraint for the sake of a protectionist cabal in Washington".

D. Barnett & L. Schorsch, Steel: Upheaval in a Basic Industry, 73-74 (1983).

If the United States steel industry had received the relief proposed at the beginning of 1983, it would have realized only an increase in the rate of capacity utilization to 58.3% from the actual 55.4% rate. It is unclear how this modest increase in demand relative to potential domestic supply would allow the U.S. industry to operate at significantly more profitable levels. The fact that import relief cannot cure the U.S. industry's problems is strong evidence that imports are not the cause of those problems.

Particular products have been affected by other factors whose significance far outweighs that of imports. For example:

Wire, Bar and Rod - In recent years, mini-mills have captured a large portion of the market for certain steel products, including bar, wire rod and wire products. The advantages these mills have over conventional producers include technologically sophisticated production facilities, more rational plant locations, realistic wage rates and less

investment per ton of capacity. Competition with mini-mills has been a major source of injury, unrelated to imports, for traditional producers of these products who have not secured for themselves the benefits of these economic efficiencies. See "Has Justice Killed Steel Comeback?," Dun's Business Month, March 1984, at 48, 49-50.

Oil Country Tubular Goods - Whatever injury the oil country tubular goods industry has suffered recently is due not to imports but to excessive stockpiling and decline in demand resulting from reduced oil well drilling activity.

OCTG import trends have followed the trends in oil well drilling activity. Imports increased during the boom of 1979-81, reaching 2.9 million tons in 1981. However, as oil well drilling activity declined in 1983 and stockpiles were drawn down, imports decreased dramatically. OCTG imports for 1983 were only 565 thousand tons, as compared with 2.1 million tons in 1982.

This presentation is made based on the conviction that approval of any action in order to provide certain relief to the U.S. steel industry, should take into account the above-mentioned factors.

Furthermore, if the Congress is considering what remedy will be appropriate for the domestic industry, it must confront all the inequities, administrative difficulties and adverse

economic consequences -both at home and abroad- of offering special protection to the U.S. steel industry.

The industry claims mainly against unfair traded imports. But by a rough estimate, more than half of U.S. imports of steel are now subject to countervailing duties, antidumping duties, suspension agreements, etc. In addition, twenty two countervailing and antidumping duty investigations are pending.

The Embassy of the Republic of Argentina -Economic Counsellors Office- considers that the possibility of imposing quotas should be denied. Quotas would be very costly to other U.S. industries, consumers and the economy in general, would be inefficient (and probably ineffective) in helping the U.S. industry adjust to international competition, and would be unfair to other countries.

Quotas could be particularly unfair to countries such as Argentina which are net importers of steel and do not have histories of high export levels to the United States because they have built small, efficient steel industries designed to satisfy domestic demand. A country such as Argentina should not be penalized because it has been responsible in developing its steel industry and has not overbuilt its capacity in order to increase exports.

Quotas would increase costs for U.S. industries that use steel, particularly the U.S. auto industry which is a major

user of sheet and strip products, and would damage their competitiveness at home and abroad.

Quotas would reduce the incentive for foreign producers to compete in the United States on the basis of price and, in large part, would free the U.S. industry from foreign price competition. Increased pricing power of this sort is particularly dangerous in an industry such as steel where concentration is already high, oligopolistic pricing practices are a historical fact, and recent capacity reductions coupled with resurgent demand could create a short supply situation.

Quotas (including market share quotas) restrict imports most severely at precisely those times when imports do the least harm to U.S. producers and provide the greatest benefit to U.S. consumers. When the U.S. steel industry is operating at high capacity -as they are now with respect to cold rolled sheet- increased import levels, both absolute and relative to apparent consumption, are necessary to fill the unsatisfied demand that U.S. producers cannot meet economically. Quotas would restrict or prevent such wholly beneficial increases in relative import levels. Quotas would also exacerbate present problems of regional undersupply.

By reducing competition in the U.S. steel markets, quotas would also retard the necessary adjustment process in the U.S. industry:

"Quantity limitations on imports would undesirably insulate U.S. producers from a potent source of competition and would tend to dull the incentives for U.S. firms to engage in the modernizing and restructuring of their operations necessary to make them more efficient and productive. By reducing the incentives to maximize efficiency and production, these types of restraints would allow our industry to pursue policies that, in the long run, are harmful to U.S. consumers and to its own members and employees". Statement of J. Paul McGrath, Assistant Attorney General before the Senate Labor and Resources Committee, Subcommittee on Employment and Productivity, March 22, 1984, at pp. 3-4.

This conclusion is buttressed by the fact that the U.S. steel industry has failed to modernize and contain costs despite numerous episodes of import relief in the past.

Quotas may also endanger the adjustment process by restricting import competition to such a degree that the Department of Justice challenges mergers and other beneficial restructuring efforts on antitrust grounds; and of course, quotas will produce significant price increases which will reduce steel demand, hasten the substitution of other materials for steel, and result in fewer jobs and lower operating rates in the U.S. industry.

Finally, if the relief granted by Congress is in the form of quotas, it only makes sense to do it on a product-by-product and country-by-country basis in order to allow access

to the market by "new entrants who have demonstrated their ability to compete on the basis of comparative advantage and efficient use of resources".

Argentina's steel industry has significant comparative advantages which include abundant natural gas, access to excellent ore supplies and reasonable wage rates. The Argentine steel industry is also technologically sophisticated and efficient.

The Government of Argentina is confident that the Honorable Members of Congress will explore different possible alternatives to prompt a relief to the domestic industry, while benefitting U.S. consumers without hammering exports from developing countries.

The Embassy of the Republic of Argentina through its Economic Counsellors Office renews to the Honorable Members of the Congress of the United States the assurances of its highest considerations.

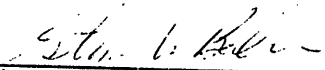
BEFORE THE SUBCOMMITTEE ON INTERNATIONAL TRADE
COMMITTEE ON FINANCE
UNITED STATES SENATE

State of the U.S.
Steel Industry

Hearing Held June 8, 1984

STATEMENT OF THE
WEST COAST METAL IMPORTERS ASSOCIATION, INC.

C. Duane Ericson
President
West Coast Metal
Importers Association, Inc.
World Trade Center
350 S. Figueroa Street
Suite 226
Los Angeles, California 90071
(213) 627-0634


Steven W. Baker

BELLSEY & BAKER
A Professional Corporation
100 California Street
Suite 670
San Francisco, CA 94111
(415) 421-6705

Attorney for the Association

June 22, 1984

BEFORE THE SUBCOMMITTEE ON
INTERNATIONAL TRADE
COMMITTEE ON FINANCE
UNITED STATES SENATE

State of the U.S. Steel Industry))
-------------------------------------	---	---

Hearing Held June 8, 1984

Introduction.

The West Coast Metal Importers Association, Inc. (WCMIA), is a trade organization representing more than 100 importers of steel and metal products in 11 Eastern states. Its regular members are all primarily engaged as importers and distributors of metal products, or as service centers handling imported metal products. Sustaining members include mills, processors, and fabricators, as well as other companies which would qualify for regular member status except that imported metal or metal products do not exceed 50% of metal sales. Associate members include trade associations, exporters, and banks, Customs brokers, attorneys, and other firms engaged in rendering services necessary in the importation of metal and related products. A current roster listing the members of the Association is attached as Appendix A.

WCMIA submits that the U.S. steel industry in the Western states is in a substantially different situation than the industry in the remainder of the United States. Various actions proposed to assist the United States steel

industry could in fact cause further injury to the domestic industry as it exists in the Western states. These actions could also cause substantial harm to the Western economy as a whole, without substantially benefitting the domestic steel industries which are a part of that Western economy.

WCMIA urges careful analysis and consideration of the potential effects of remedial actions on the Western states to insure there is no disproportionate burden placed on the economy of the West Coast.

The West Coast Market.

Users of basic steel mill products on the West Coast have developed a strong, distinct Western state steel market. In its Investigation No. 332-87 on Conditions of Competition in the Western U.S. Steel Market, the U.S. International Trade Commission found that that market encompasses a ten-state region. The Commission has also, in antidumping investigations of particular products, identified a more restricted coastal market including California, Oregon, and Washington, (Carbon Steel Plate from Taiwan, Investigation No. AA-1921-197) or California and the Northwestern states (Steel Bars, Reinforcing Bars, and Shapes from Australia, Investigation No. AA-1921-62).

The interim report, Investigation No. 332-87, Commission Publication 951, notes that the Western steel market "is unique geographically, isolated from the major steel producing regions of the country by great distances and formidable natural barriers." The report also finds

that the nature of demand for steel in the Western states is different than the demand in the total U.S., and that "the ability of producers in the Eastern and Midwestern steel producing centers to market steel mill products in the Western states is limited primarily because of high inland shipping rates".

A recent study of the Western state steel market by Samuel M. Rosenblatt of SMR, Inc., filed as Exhibit 1 to the Post-Hearing Injury Brief submitted on behalf of the West Coast Ad Hoc Steel Wire Producers Committee in the ITC investigation of carbon and certain alloy steel products, Investigation No. TA-201-51, updated the 1977 study, and confirmed the current applicability of many of the conclusions made therein.

These and other studies have disclosed a market which, while slightly less than 10% of the total national market for basic steel mill products, is a strong and growing market for particular types of products used in particular industries. These studies have also made clear the continued inability of the U.S. domestic steel industries to supply the requirements of the Western market. This inability is based in part on the lack of capacity for Western production of steel, and in part on the prohibitive transportation costs for domestic steel produced outside of the Western region.

WCMIA has developed statistics covering the seven continental Western states, California, Oregon, Washington,

Nevada, Arizona, Utah, and Idaho. These states are isolated from the Midwest U.S. steel producers by the Rocky Mountains, which provide an approximate dividing line for economical freight rates for shipments from either region to the other. This seven state region is the same as that identified by Kaiser Steel, and used for many years by it, in preparing reports on its California operations and the steel market in the region. This WCMIA statistical report is attached as Appendix B.

The domestic industry, even at its height, never established production facilities in the Western region for all major products required by that region. Products such as rails, large wide flange structurals, H piling, and sheet piling, all used in substantial quantities, have never been produced on the West Coast.

Imported Steel Products on the West Coast.

The International Trade Commission noted in its study that steel from Eastern and Midwestern producing centers is subject to high inland shipping rates (currently about \$100 per ton). Thus foreign steel suppliers, selling at landed West Coast prices equal to FOB eastern mill prices, would have an approximate price advantage of as much as \$100 per ton. Once these foreign suppliers were able to demonstrate the quality of their merchandise and the reliability of supply, the lack of West Coast production for these products made imported steel products the only economically viable alternative.

In its Conditions of Competition investigation, the Commission found that Western states producers in 1977, operating at about 73% of capacity, supplied only 53% of the Western market. The Commission also noted substantial capacity shortfall for plates, sheets, strip, pipes, and tubes. For these "products which account for the bulk of Western consumption [capacity] was well below consumption in each of the last six years."

Here again, with the Western domestic producers unable to meet demand, importers were able to bring to the market quality steel products with reliability of supply at prices that did not include the high inland freight costs. The availability of these products at competitive prices made many otherwise prohibitively expensive construction projects feasible, and permitted industries using basic steel products as raw materials to establish production facilities to make and sell a wide range of products.

Imported steel products, perhaps initially attractive solely because of price and availability, soon demonstrated to West Coast users many additional benefits, including high quality, reliability of supply, and helpful, cooperative, and aggressive marketers. Many users found importers more willing to adjust to particular product requirements, supplier delivery problems, variances in business cycles, and other factors affecting them than were the marketing arms of the domestic mills.

The excess demand over capacity in the Western region has become even more substantial with the domestic industry continuing to close older, outmoded facilities without investment in newer, more efficient facilities. While the Commission found that in 1977 Eastern and Midwestern producers supplied about 10% of the Western market, and that imports supplied 37%, recent statistics (for the seven state, rather than the ten state region) show that in 1982 imports had increased to 54%, with domestic steel makers east of the Rocky Mountains supplying only 3%. The average percentage of imports throughout the 1978 - 1982 period was 44% of an average market of 8,792,620 short tons. This continues the relationship found by the Commission in its investigation of the Western steel market "that on a percentage basis imports' market share in the Western states is about twice what it is for the entire nation."

WCMIA has calculated that, as of January 1984, there were ten steel producing plants in the seven Western state market area. Based upon optimum yield conditions, the total annual capacity of these producers is 5,160,000 short tons in raw steel capacity and 4,645,200 short tons of finished steel product capacity. From these figures, it can be seen that, even assuming optimum yield conditions, the Western states steel producers could supply no more than 53% of the 1978 - 1982 average Western steel market consumption.

A major factor in the reduction of capacity on the West Coast is the closing of the Kaiser Steel facility at

Fontana. This facility, with a 3.4 million ton capacity before its open-hearth operation was closed, continued to have a raw steel capacity of 1.4 million tons, through operation of the basic oxygen furnace and continuous caster built in the late 1970's. Despite this modernization effort, however, the Fontana facility was burdened with old, worn out coke ovens, location in an area of rapidly escalating real estate values, and a lack of access to tidewater shipping. The costs necessary to refurbish and operate the facility, added to the refusal of the steel workers union to renegotiate a labor contract making Kaiser's workers the highest paid in the country, led to a determination by Kaiser Steel to cease operations and to take action to dispose of the facility.

While there are indications of interest by several parties in acquiring and reopening the Fontana facility, the best estimates indicate that a minimum of two years would be required before any raw steel capacity could be operating. Any finishing operations started earlier would depend on outside (probably import) sources for semi-finished materials. The Kaiser capacity, therefore, cannot be included in any consideration of currently available domestic steel supplies for the West coast.

The West Coast market has become dependent upon imports for over half of its basic steel requirements. Despite the often expressed preference of many steel users in the region for U.S. produced steel "if available on a reliable basis

and at a good price", these users have been unable to supply their requirements from available, competitively priced domestic sources.

Traditional suppliers in Japan and Europe made and have continued to maintain the market for imported steel on the West Coast. Newly industrializing countries in Asia, South America, and other parts of the world, have invested heavily in modern, efficient greenfield plants located at tidewater. As they gained experience and became able to supply high quality products on a regular basis at competitive prices, their sales of steel to the West Coast market became significant. With Japan exercising voluntary restraint on the quantity of exports to the United States, and European volume restricted by the U.S./EEC Agreement, these suppliers, from countries politically important to United States interests, became significant suppliers.

The West Coast market is now highly reliant on imported steel products from numerous sources. As demonstrated above, this volume of imports cannot be replaced by domestic Western producers, and U.S. producers east of the Rocky Mountains cannot supply the West Coast except at prohibitively high costs which would have a devastating effect on the Western economy.

The limited availability of domestic steel products in the Western market has resulted in a marked difference in steel import patterns between the West Coast and the rest of the country. For basic steel mill products, this market of

slightly less than 10% of total domestic consumption accounted for almost 25% of all imported steel products.

Potential Costs of Remedial Actions.

Proposed remedial actions, such as quotas or increased tariffs, whether imposed under the proposed "Fair Trade In Steel Act" or similar legislation, or as a result of the ITC 201 investigation, will result in an increase in the price of steel products. The Federal Trade Commission, in its Pre-hearing Brief in the ITC investigation, estimated the annual cost to all U.S. consumers of an absolute quota of 15% to be at least \$768 million per year, consisting in part of "quota rents" on imported products, in part of inefficiency losses by the economy, and in part of higher prices for domestic products.

In addition to the increase in base prices which would be caused by a quota, Western steel users are faced with the potential shortfall between the market demand and the capacity of the Western producers, plus such imports as are permitted. Using figures from WCMIA's statistics attached as Appendix B, assuming optimum domestic capacity at 53% and imports at 15%, the shortfall would be greater than 30%. If imports above quota levels are unavailable, and domestic Western producers are at capacity, the only source of supply would be producers east of the Rocky Mountains. This would add substantial freight costs on top of the already higher cost for the steel itself.

A tariff rate increase would avoid the shortfall problem, but would by its own terms raise costs. A tariff rate quota would cause cost increases both from the quota restrictions and from the higher duty rates. Regardless of which type of these restrictions might be applied, West Coast users would face cost increases disproportionate to those faced by steel users in other parts of the country. If imports continued to be available, they would be available only at higher prices. If imports were not available, the freight rate penalty would apply.

Effects on Western Economy.

Increase in the cost to end users for the basic steel mill products will have a serious effect on the economy of the West Coast. Manufacturers who utilize steel in making their products will have to handle rising material costs that will not apply at all, or apply only in part, to competitors manufacturing products in other parts of the United States or in other countries. Increased costs for steel in construction projects will threaten the economic viability of such projects, most likely resulting in both reduction in construction levels and reduction in the return on projects which are completed. Reduction in steel usage will affect the warehousing, processing, and distribution companies handling steel products.

Firms involved in the conversion of one type of basic steel mill product to another, which are dependent on import sources, are an important part of the Western economy. The

Pacific Steel Company, Kaiser Steel's pipe making facility, Pinole Point Steel's galvanizing facility, and others participating in the 201 hearings have made clear their dependence upon import sources of semi-finished products. If they are unable to secure sufficient supplies at competitive prices, they will not be able to undertake or maintain their planned operations, clearly damaging both the Western steel industry and the Western economy as a whole. Any reduced output or withdrawal from the market by these companies will substantially reduce the quantity of domestic finished goods available in the Western states, and add significantly to the existing shortfall of domestic capacity.

Manufacturers of products incorporating steel face significant barriers to passing on increased costs for their raw materials. Manufacturers of products such as containers, gutters and downspouts, strapping and baling materials, and the like, must all deal with the possibility of substitution of other products, such as glass or plastics. Manufacturers of more sophisticated products, such as air conditioning, stoves and ovens, water heaters, machinery and parts, and the like, face competition from manufacturers located in other parts of the United States, and located in foreign countries, which will have lower raw materials costs.

Manufacturers of steel products used in the construction trades, and direct construction users of steel

products, will also face problems of substitution of materials (e.g. concrete) and competitors located outside of the Western region having lower raw material costs. For products where freight costs become prohibitive, and for basic steel products used directly in construction, the absolute increase in the cost of construction will tend to depress the entire construction industry, both in absolute size and in profitability.

Firms handling the warehousing, processing and distribution of steel products, whether domestic or imported, including steel service centers, steel processors, and warehouse and transportation companies, would be hard hit by a reduction in steel usage by their customers. Many of these companies have substantial investments in equipment and facilities (slitters, cutters, shapers, formers) which are not adaptable to other materials. This entire sector of the Western economy would be depressed by any action which reduces steel usage on the West Coast.

A major problem with any remedy resulting in increased costs is that Western steel users, and the Western economy as a whole, would unavoidably bear higher costs and greater unemployment than users located in, and the economies of, other parts of the United States. WCMIA believes that it would be inequitable and unfair for the ITC to recommend, and for the President or Congress to impose, any remedial actions which would result in a disproportionate burden on the economy of the West Coast.

Quantitative or Tariff Protection Would Not
Benefit Western Steel Industries

Any limitation on importations of semifinished products will affect many members of the Western steel industry adversely. Kaiser Steel, Pinole Point Steel, and the newly organized Pacific Steel Company, among others, have all represented to the ITC their dependence upon import sources of semi-finished products. If they are unable to secure sufficient supplies at competitive prices, their reduced output or withdrawal from the market will substantially reduce the domestic finished goods available in the Western states.

No integrated domestic steel producer of products covered by the affirmative determinations has shown any indication of an intention to expand or establish new capacity in the Eastern states, even if import protection is provided. The net result of a significant limitation on the importation of these semi-finished products can only be a further shrinking of the domestic industry in the Eastern states.

Quantitative or Tariff Rate Relief Could Be
Counter-Productive:

The American Institute for Imported Steel (AIIS), in its Pre-Hearing Brief in the 201 investigation, described in some detail the past actions of the domestic steel industries when provided with some form of import protection. The failure of the U.S. industries to use such protection for rationalization and modernization of their

own facilities, and the use of additional funds secured through such protections for diversification and non-steel purposes, seems likely to be repeated, as spelled out in the Post-Hearing Injury Phase §201 Brief of the Taiwan Steel and Iron Industries Association.

The AIIS Brief demonstrates that the only significant activities of the domestic industries to modernize and rationalize have taken place during periods when import competition has not been significantly restricted. The Japan Iron and Steel Exporters Association (JISEA), in its §201 Post-Hearing Brief, similarly notes "that import protection will impede...the kind of steps that are necessary to increase competitiveness." (pp. 49-50).

Unfair Trade Practices and Restraint Agreements.

Many parties, including certain domestic integrated steel producers, have indicated that the import problems of the domestic steel industries have been due to unfairly traded imported steel products, and not to steel imports in general. The §201 Injury Phase Post-Hearing Briefs of the Korea Iron and Steel Association and JISEA both detail the effects of the antidumping and countervailing duty determinations, and ongoing investigations, in restricting imports of steel products from certain countries. They also recognize the effects of the arrangements, both formal and informal, covering importations of steel products from the EC, Japan, Mexico, Brazil, and South Africa. The success of the unfair trade practice proceedings, and the restraint agreements, whether voluntary or negotiated, in limiting injurious importations of steel products into the United

States, has been substantial. While such actions have limited or eliminated access to certain sources of low cost steel, they do not by their nature have the same across-the-board disruptive effect on prices that quota or tariff increase remedies would have.

Conclusion.

The West Coast Metal Importers Association strongly believes that import quotas or tariff increases would result in injury to steel users on the West Coast, and injury to the Western economy as a whole, in a much more concrete and substantial manner than steel users located in, and the economies of, other portions of the United States. WCMIA asserts that it would be inequitable and unfair for the Commission to recommend, and for the President or for Congress to impose, remedial action which would result in a disproportionate burden on the economy of the West Coast. WCMIA urges that any remedial action taken in connection with the state of the U.S. steel industries consider the effects of proposed remedies carefully, and avoid any remedies which would increase the price of steel products for Western users.

Respectfully submitted,

BELLSEY & BAKER
A Professional Corporation
100 California St., Ste. 670
San Francisco, CA 94111
(415) 421-6705

By: *Steven W. Baker*
Steven W. Baker

Counsel to West Coast Metal
Importers Association, Inc.

ROSTER

WEST COAST METAL
IMPORTERS ASSOCIATION

1983

WEST CO
METAL
IMPORTERS
ASSOCIATION
INC.

•OFFICERS

President
C. Duane Ericson
C.D. Ericson Co., Inc.

Vice President (North)
Charles C. Whitesaker
Skyline Steel Corp.

Vice President (South)
Lou Ribman
TW, Inc.

Executive Secretary
F.V. Swanson - Los Angeles
James P. Wilson - San Francisco

Treasurer
Claude A. Mouchard
Mouchard Metals, Inc.

•REGULAR MEMBERS

•THE BANTON CORPORATION
P.O. Box 3936
16 Mary Street
San Rafael, CA 94912
(415) 457-8060

Werner F. Chilton, President

(Metals, Metal Products, and
Industrial Supplies)

•BORNEO SUMATRA TRADING COMPANY, INC.
30 West 39th Avenue
San Mateo, CA 94403
(415) 572-0406

Sarkis Kalpakian, Director- West Coast
Operations

73 Union Avenue 07070
Rutherford, NJ
(201) 939-1200

David S. Malka, President

(Nails, Pipe, Barbed Wire, Misc. Metal
Fencing Materials, Cast Iron Stoves,
Foundation Materials, and Fasteners)

•BRUMLEY-DONALDSON COMPANY
3050 East Slauson Avenue
Huntington Park, CA 90255
(213) 383-6761

R.E. Heuser, President
William F. McKenna, Vice President
Manfred Schults, Manager

7890 Edgewater Drive
Oakland, CA 94621
(415) 638-6338

James Taylor, Resident Manager

13201 Bellevue-Redmond Road
Bellevue, WA 98005
(206) 453-8875

Robert Weirens, Resident Manager

(Pipe, Tubing, Cold Rolled, Hot Rolled,
Galvanized Sheets, Coils, Wire Rod, Wire
Products, Pig Iron)

•CAPITOL STEEL COMPANY
P.O. Box 19235
7500 Ean Joaquin Street
Sacramento, CA 95819
(916) 455-2671

M.A. Abrate, President

(Nails, Wire Products, Rebar, and
Farm Products)

APPENDIX A

REGULAR MEMBERS

- C.D. ERICSON COMPANY, INC.
P.O. Box 725
140 West Industrial Way
Benicia, CA 94810
(707) 746-1300/(415) 836-6150
C.D. Ericson, President
W.F. Swarts, Vice President-Sales
(Steel Pipe and Fittings)
- C.D.P. STEEL COMPANY
1055 West Victoria Street
Compton, CA 90220
(213) 774-1746
D.H. Chung, General Manager
(Flat Rolled Steel Products)
- FERROSTAAL CORPORATION
50 California Street
San Francisco, CA 94111
(415) 781-3237
Peter H. Elting, Exec. Vice President
(Steel Rails and Railway Products)
- FERROSTAAL METALS CORPORATION
2121 South El Camino Real, Suite 415
San Mateo, CA 94403
(415) 570-7111
James Bellamy, President
7878 Crow Lane
Houston, TX 77008
(713) 460-4606
P.T. Smith, General Manager
555 East Ocean Blvd., Suite 650
Long Beach, CA 90802
(213) 629-8083/432-0991
W.S. Johnson, District Manager
200 Market Bldg., Suite 1460
Portland, OR 97201
(503) 224-7770
John B. Denny, Manager
535 Fifth Avenue
New York, NY 10017
(212) 687-4330
R. Kramme
(Full Range of Carbon Steel Products,
Alloy Steels, Wire and Wire Products)

REGULAR MEMBERS

- GENERAL PIPE & SUPPLY COMPANY
P.O. Box 5149
222 East Manville Street
Compton, CA 90224
(213) 636-7171
Ted Spence, General Manager
John Dodson, Purchasing Agent
(Hot Rolled Carbon Steel)
- JOSEPH F. GRISAY COMPANY
P.O. Box 107
15733 Colorado Avenue
Paramount, CA 90723
(213) 774-2312
Joseph F. Grisay, President
Robert W. Howey, Vice President
(Nails, Barbed Wire, Black Annealed
and Unannealed Wire, Hardware, CIGCH,
Aircraft Fittings, Airline Channels,
Foundation Bolts, and Steel Window
Sections)
- KLOCKNER, INC.
19782 McArthur Blvd.
Irvine, CA 92715
(714) 833-8970
Helmut Michalik, Asst. Vice President
(Full Range of Carbon and Stainless
Steels, Including Tubular Products)
- MOUCHARD METALS, INC.
12881 Knott Street, Suite 108
Garden Grove, CA 92641
(714) 898-3900/(213) 493-3781
Claude Mouchard, President
Dennis O'Donnell, Vice President
(Steel and Aluminum Mill Products)
- PACIFIC STEEL & SUPPLY COMPANY
P.O. Box 1574
2064 West Avenue 140
San Leandro, CA 94577
(415) 337-0340
Ralph A. Falk, President
Ronald S. O'Connor, Vice President
(Nails, Wire Products, Pipe, Re-Rod,
Weld Products, and Scraping)

APPENDIX A

REGULAR MEMBERS

- SIERRA PACIFIC STEEL, INC.
3200 Depot Road
Hayward, CA 94545
(415) 785-4474
- Joseph Epstein, President
William Stamos, Vice President
- (Pipe, Tubing, Flat Rolled, Bars
and Shapes, Structural)
- SKYLINE STEEL CORPORATION
P.O. Box 35
Corte Madera, CA 94925
60 East Sir Francis Drake Blvd.,
Suite 202
Larkspur, CA 94939
(415) 461-4900
- Charles C. Whiteaker, Vice President
- P.O. Box 488
South Kearny, NJ 07032
(201) 344-1300
- Leonard Goldstein, Exec. Vice
President
- (Steel H Bearing Piling, Sheet
Piling, Pipe Piling, Wide Flange
Beams and Plate)
- STAROW STEEL, INC.
14334 East Firestone Blvd.
La Mirada, CA 90638
(714) 521-2922
- Theodore Starow, President
Victor Starow, Vice-President,
General Manager
Morton Gold, Operations Manager
- (Plate/Sheet/Bar Stock, Angles,
Channels, Pipe, Tubing, Expanded
Metal, and Diamond Plate)
- BERNARD STEINBERG & COMPANY, INC.
P.O. Box 339
18040 Sherman Way
Reseda, CA 91335
(213) 881-4510/873-3949
- Bernard Steinberg, President
- (All Types of Steel Mill Products)

REGULAR MEMBERS

- C. TENNANT, SONS & COMPANY OF
NEW YORK
P.O. Box 9300
Minneapolis, MN 55440
(612) 475-7340
- Eric Bunsel, Exec. Vice President
444 West Ocean Blvd., Suite 806
Long Beach, CA 90802
(213) 437-0951
- Philip J. Martin, Western Regional
Manager
- (Cold Rolled, Hot Rolled, Galvanized,
Stainless Plate, HR P & O)
- THYSSEN, INC. (WEST COAST DIV.)
10960 Wilshire Blvd., Suite 836
Los Angeles, CA 90024-3779
(213) 479-7751
- Klaus Abstoss, Sr. Vice President
Adalbert Schmidt, General Manager
A. Malcolm Gill, Manager- Flat
Rolled Dept.
- 375 8th Avenue
Oakland, CA 94606
(415) 832-8191
- Thyssen Metal Service
444 West Ocean Blvd., Suite 1403
Long Beach, CA 90802
(213) 775-8931/435-2461
- Tom Liljegren, General Manager
- (Cold Rolled, Hot Rolled, Galvanized
Plate and Rolled Steel Products,
Angles, Channels, Bars, Pipe and
Tubing)
- TRANSMARK CORPORATION
2691 Richter Avenue, Suite 107
Irvine, CA 92714
(714) 957-5757
- William N. Scott, Chairman
David M. Scott, President
- (Cast Iron Products)
- T.W.W., INC.
1000 West Francisco Street
Torrance, CA 90502
(213) 770-4700/538-9900
- Al Ferrish, Chairman of the Board
Tom Riordan, President
Lou Ribman, Sr. Vice President
- P.O. Box 7504
Fremont, CA 94537
(415) 791-1352
- Wally Peters, District Sales Manager

REGULAR MEMBERS

SUSTAINING MEMBERS

T.W.W., INC. (cont.)

4100 West Glenrosa
Phoenix, AZ 85019
(602) 272-5534

Jack McOffin, Branch Manager

P.O. Box 25
Vancouver, WA 98666
(206) 693-8320

Don Tickner, District Sales Manager

1149 North Marshall Street
El Cajon, CA 92020
(714) 449-8550

Fern Paredes, Branch Manager

5242 Cobble Creek Road, Suite 111
Cerritos, CA 90601
(415) 375-8272

STIL, MODIFIED STEEL PRODUCTS, INC.
94 WEDDIE DRIVE
Cerritos, CA 90601
(415) 375-8272

(Steel Bars, Shapes, Straps, etc.)
Pipe, Tubing, Wire Products, Fasteners,
etc. Products, Plates, Flat Rolled Steel

WEISNER STEEL PRODUCTS, INC.
77 Moraga Way, Suite F
Orinda, CA 94653
(415) 928-8888

(Steel Wire Rope, Anchors, Cables,
Fittings, and Shackles)

OTTO WOLFF AMERICA, INC.
700 Larkspur Landing Circle, Suite 280
Larkspur, CA 94959

10255 Richman Avenue
Houston, TX 77042
(713) 780-2860

Axel Nemits, Vice President

TERMINAL LUMBS FOR SERVICES

BUILDERS FENCE COMPANY, INC.
P.O. Box 125
8937 San Fernando Road
Sun Valley, CA 91352
(213) 768-5900

Marshall Frankel, President

(Pipe, Tubing, Castings, Flat
Bar, and Wire Products)

GALAP HOLDINGS, INC.
Two Palo Alto Square, Suite 120
Palo Alto, CA 94304
(415) 494-2111

William R. Jacobson, President

(Steel Wire Products)

STEEL WIRE PRODUCTS, INC.
2000 North 7th Street
Cerritos, CA 90601
(415) 375-8272

(Steel Bars, Shapes, Straps, etc.)
Pipe, Tubing, Wire Products, Fasteners,
etc. Products, Plates, Flat Rolled Steel

WEISNER STEEL PRODUCTS, INC.
77 Moraga Way, Suite F
Orinda, CA 94653
(415) 928-8888

(Steel Wire Rope, Anchors, Cables,
Fittings, and Shackles)

OTTO WOLFF AMERICA, INC.
700 Larkspur Landing Circle, Suite 280
Larkspur, CA 94959

10255 Richman Avenue
Houston, TX 77042
(713) 780-2860

Axel Nemits, Vice President

TERMINAL LUMBS FOR SERVICES

(Steel Wire Mesh, Cast Iron, and
Non-ferrous Metals)

TERMINAL STEEL CORPORATION
P.O. Box 6218
Garson, CA 90749

(Steel Wire Mesh, Cast Iron, and
Non-ferrous Metals)

OTTO WOLFF AMERICA, INC.
700 Larkspur Landing Circle, Suite 280
Larkspur, CA 94959

10255 Richman Avenue
Houston, TX 77042
(713) 780-2860

Axel Nemits, Vice President

TERMINAL LUMBS FOR SERVICES

automatic logging of that recorded
information that is outside the scope of that recorded
messages text to the activity log. Operators may use this to record
information provided to allow the specific logging of
Handall Pacheco, President, Purchasing
and Planning

(Steel Wire Mesh, Cast Iron, and
Non-ferrous Metals)

ACTIVITY LOG

SUSTAINING MEMBERS

- DAVAL STEEL PRODUCTS
750 Third Avenue
New York, NY 10017
(212) 687-8500
- B. Le Forestier, Vice President-
Commercial
- 10801 National Blvd., Suite 408
Los Angeles, CA 90064
(213) 277-7920
- Al Adler, District Manager
(Wideflange Beams, Plate, Hot
Rolled, Cold Rolled, Galvanized
Pipe, Wire Rod, Sheet PILING,
and Rail RR)
- DONGKUK STEEL MILL COMPANY, INC.
21535 Hawthorne Blvd., Suite 212
Torrance, CA 90503
(213) 540-8511
- Dong Hyun Kim, President
S.J. Yang, Sales Manager
W.J. Kim, Purchasing Manager
Young B. Jung, Asst. Sales Manager
(Rebar, Steel Plate, Flat and Square
Bar, Angle and Channel Bar, and Round
Bar)
- HANWA AMERICAN CORPORATION
624 South Grand Avenue, Suite 2304
Los Angeles, CA 90017
(213) 627-9931
- K. Yokota, General Manager
(All Types of Steel Products, Non-
Ferrous Metals, Scrap Metal and
Machinery)
- HATCH IMPORTS, INC.
P.O. Box 4886
12457-H Gladstone Avenue
Sydney, CA 91342
(213) 875-0803
- Robert J. Hatch, President
William E. Hatch, Vice President
(Nails, Fasteners, Castings, Wire
Stampings, and Die Castings)

SUSTAINING MEMBERS

- A.W. HORTON & COMPANY, INC.
740 East Colorado Blvd.
Pasadena, CA 91011
(213) 444-2721
- A.W. Horton, President
Leticia Horton, Secretary
(Ferrous and Non-Ferrous Pressure
Piping)
- HYUNDAI CORPORATION, USA (WESTERN DIV.)
19401 South Main Street
Gardena, CA 90248
(213) 515-1212/770-2975
- Eel Seon Yoo, Manager
(Steel Pipes and Beams)
- G. ITOH & COMPANY (AMERICA) INC.
515 South Flower Street, Suite 3650
Los Angeles, CA 90071
(213) 617-0500
- Masahiro Echigo
(Structural Steel, Cold and Hot-Rolled,
Galvanized Pipe, Tubing, Coiling, and
Stainless)
- KAWASAKI STEEL CORPORATION
Wells Fargo Bldg.
444 South Flower, Suite 1590
Los Angeles, CA 90017
(213) 680-2488
- Toshihiro Saki, General Manager
(All Types of Steel Products)
- KAWASHO INTERNATIONAL (USA), INC.
333 South Hope Street, Suite 3620
Los Angeles, CA 90017
(213) 620-1104
- Takuo Enomoto, Vice President
Shunichi Amanuma, Manager
Koji Yamanishi, Manager
- 44 Montgomery Street, Suite 1766
San Francisco, CA 94104
(415) 391-7244
- T. Terasawa
(Hot Rolled, Cold Rolled Steel,
Galvanized Sheet, Pipe, Tubing,
Shapes, and Bars)

SUSTAINING MEMBERS

- KOBE STEEL, LTD.
707 Wilshire Blvd., Suite 4300
Los Angeles, CA 90017
(213) 628-8480
Mitsugi Shimizu, General Manager
(Atomized Steel Powder, Pig Iron,
Wire Rod, Steel Bars, Plate, Sheet,
Seamless Tube and Pipe)
- KOREA STEEL PIPE AMERICA, INC.
3600 Wilshire Blvd., Suite 1408
Los Angeles, CA 90010
(213) 383-1279
In Soo Kim, President
Hoo N. Leem, Secretary
(Steel Pipe)
- KUKIE AMERICA CORPORATION
2318 Del Amo Blvd
Compton, CA 90220
(213) 979-3700
H.M. Kim, Manager
(Cold Rolled Steel Sheet, Coil,
Galvanized Iron Sheet and Coil,
A.H.W. Steel Pipe)
- MARUBENI AMERICA CORPORATION
333 South Grand Avenue
Los Angeles, CA 90071
(213) 972-2700
Ron Fujita, Asst. General Manager
650 California Street
San Francisco, CA 94108
(415) 433-4540
T. Kumai
Metals Section
200 Park Avenue
New York, NY 10017
(212) 973-6500
M. Matsui
(All Types of Steel Products)
- METRA STEEL COMPANY
P.O. Box 3154
Portland OR 97208
(503) 285-4611
Keith Miller, President
Robert W. Philip, Vice President
G.W. "Dud" Hershon, Manager-Portland
Duane Bone, Manager

SUSTAINING MEMBERS

- METRA STEEL COMPANY (cont.)
P.O. Box 24265
3844 First Avenue, South (98134)
Seattle, WA 98124
(206) 682-3880
Bob Johnson, Manager
P.O. Box 747
Foot of Adeline Street (94607)
Oakland, CA 94604
(415) 444-3919
Roger Carpenter, Manager
12000 Folsom Blvd.
Rancho Cordova, CA 95670
(916) 985-7155
Tom Morgan, Manager
P.O. Box 2649
110 Seneca Road, North (97402)
Eugene, OR 97402
(503) 689-3525
John Lilyengren, Manager
(Structural Steel, Pipe, Tubing,
Steel Sheet and Plate, Bar Stock,
and Roll Formed Products)
- MITSUI & COMPANY (USA), INC.
611 West Sixth Street, Suite 2000
Los Angeles, CA 90017
(213) 972-2394
T.F. Fields, Dep. General Manager-
Steel Dept.
Masao Sato, Vice President and
General Manager- Steel Dept.
(All Types of Steel Mill Products)
- NIPPON STEEL U.S.A., INC.
611 West Sixth Street, Suite 2900
Los Angeles, CA 90017
(213) 624-4101
T. Kurahashi, Exec. Vice President/
General Manager
- NISSHO- Iwai AMERICAN CORPORATION
700 South Flower, Suite 1900
Los Angeles, CA 90017
(213) 688-0600
Shigeru Ochiai, Manager-Metals Dept.
(All Types of Steel Products and
Special Alloy Tool Steel)

SUSTAINING MEMBERS

- H.K.K. AMERICA, INC.
444 South Flower, Suite 2430
Los Angeles, CA 90017
(213) 624-6651

Toshiaki Yamamoto, Executive Vice
President/ General Manager
- OKURA & COMPANY (AMERICA), INC.
707 S.W. Washington Street, Suite 1310
Portland, OR 97205
(503) 228-1343

N. Hirose, General Manager
(Hot Rolled, Cold Rolled Steel Sheet,
Coil, Structural Steel, Welding Wire,
and PC Strand)
- PHILIPP BROTHERS
9100 Wilshire Blvd.
Beverly Hills, CA 90212
(213) 276-3511

Elis Epstein
(Hot Rolled Plate, Coil, Wide Flange
Beams, Bullets, Rebar, and Tubing)
- POHANG IRON & STEEL COMPANY, INC.
21515 Hawthorne Blvd.
Union Bank Tower, Suite 919
Torrance, CA 90503
(213) 540-2966

J.W. Kim, Manager
- PUSAN PIPE AMERICA, INC.
4030 Palos Verdes Drive, North
Suite 200
Rolling Hills Estates, CA 90274
(213) 377-1161
(PWI Steel Pipe)
- SO CAL COMMERCIAL (COMMERCIAL STEEL CORPORATION)
2444 Baybrook Avenue
Los Angeles, CA 90040
(213) 685-5170

G.C. Conrad, President
Paul Simon, Vice President
(Nails, Hardware Cloth, Aviary Netting,
Welded Wire, Solid Wire and Barbed Wire)

SUSTAINING MEMBERS

- SSANGYONG (USA), INC.
2370 East Del Amo Blvd.
Compton, CA 90221
(213) 537-5859

Y.I. Park, Vice President
Dennis Bever, Manager- Steel Dept.
William Lee, Manager
S.H. Lee, Manager
(Flat Rolled Steel Products and Pipe)
- STAUB METALS CORPORATION
4201 Long Beach Blvd., Suite 204
Long Beach, CA 90807
(213) 979-5603

Kenneth L. Staub
(All Types of Flat Rolled Tinplate
and Non-Ferrous Metals)
- SUMITOMO CORPORATION OF AMERICA
506 South Olive Street
Los Angeles, CA 90014
(213) 627-4781

Susumu Kato, Manager- Rolled Steel
Dept.
David Robinson, Sales Representative
One California Street, Suite 630
San Francisco, CA 94111
(415) 788-5100

Yoshihiro Takemura
800 5th Avenue, Suite 3930
Seattle, WA 98104
(206) 643-5270

Shig Hashimoto
(All Types of Steel Products)
- SUMITOMO METAL AMERICA, INC.
700 South Flower
Los Angeles, CA 90017
(213) 485-0633

S. Chikasawa, General Manager
(All Types of Steel Products)
- T.C.B. STEEL COMPANY, INC.
7847 East Florence, Suite 127
Downey, CA 90241
(213) 806-1816

Charles R. Nesser, President
Dean R. Poremba, Exec. Vice President
(Carbon Coil, Sheet and Plate)

SUSTAINING MEMBERS

- TOYOIENKA (AMERICA), INC.
445 South Figueroa Street
Los Angeles, CA 90017
(213) 624-7581
- Hi. Goda, Manager- Steel Dept.
One Maritime Plaza, Room 2550
Alcoa Building- Golden Gate Center
San Francisco, CA 94111
(415) 788-3400
- K. Isobe, Manager- Metals Dept.
P.O. B. 10136, Pacific Centre
2220-700 Georgia Street
Vancouver, British Columbia, Canada
V7Y 1G6
(604) 682-7436
- WESTERN PLAT ROLLED STEEL COMPANY
7407 Telegraph Road
Montebello, CA 90640
(213) 721-9080
- George Schaeffer, President
(Hot Rolled Steel Products, Cold
Rolled Steel, Galvanized Steel,
and Coil)

• ASSOCIATE MEMBERS

- ARTER, HADDEN & HEMMENDINGER
1919 Pennsylvania Avenue, N.W., Suite
400
Washington, D.C. 20006
(202) 857-0960
Noel Hemmendinger, Partner
(Law Firm)
- BAKER, ANGEL, MORRIS, SPENCER & FRYE
526 Wilshire Blvd., Suite 700
Los Angeles, CA 90017
(213) 624-9201
Mark G. Anceel, Partner
Louis R. Baker, Partner
(Law Firm)
- BELLSLEY & BAKER, A PROFESSIONAL CORPORATION
100 California Street, Suite 460
San Francisco, CA 94111
(415) 421-6703
Jonathan K. Bellsley, President
Steven W. Baker, Vice President
(Law Firm)
- JAMES J. BOYLE & COMPANY
529 Commercial Street
San Francisco, CA 94111
(415) 986-3316
Terry M. Hatada, President
Mark N. Itoh, Vice President
311 South Spring Street
Los Angeles, CA 90013
(213) 628-9173
Dale M.A. Zerda, Vice President
421 S.W. 6th Avenue, Suite 804
Portland, OR 97204
(503) 221-0909
Tom Kosuka, Vice President
618 2nd Avenue, Suite 1111
Seattle, WA 98104
(206) 447-9580
Richard Nakanoto, Import Manager
(Customhouse Broker, Foreign Freight
Forwarder)

ASSOCIATE MEMBERS

- GEORGE S. BUSH & COMPANY, INC.
P.O. Box 8829
520 N.W. Irving Street
Portland, OR 97208
(503) 228-6501

D.L. Patrick, President
C. Thomas Nims, Vice President

(Customhouse Broker)
- GARMICHAEL INTERNATIONAL SERVICE
P.O. Box 54772, Terminal Annex
1282 West Second Street
Los Angeles, CA 90054
(213) 626-7105

Enrico Salvo, President
Steve Seto

(Customhouse Broker, Foreign Freight
Forwarder)
- CASTELAZO & ASSOCIATES
5420 West 104th Street
Los Angeles, CA 90045
(213) 649-3210

A.R. Sundell, President
Gary W. Smith, Vice President
Arthur Litman, Vice President/Secretary

(Customhouse Broker)
- CHASE MANHATTAN BANK, N.A.
1 Chase Manhattan Plaza
New York, NY 10081
(212) 552-0747

Michael K. McShane, Vice President
Hillary Alpert, 2nd. Vice President
Marc Oppenheimer, Asst. Treasurer

(Bank)
- L.E. COPPERSMITH, INC.
350 South Figueroa Street, Suite 956
Los Angeles, CA 90071
(213) 624-1324

L.E. Coppersmith, President
Toshio Nakamura, Vice President

351 California Street
San Francisco, CA 94104
(415) 981-5034

Chris Coppersmith, Vice President

(Customhouse Broker, Foreign Freight
Forwarder)

ASSOCIATE MEMBERS

- CRESCENT WHARF & WAREHOUSE COMPANY
Berth 178
Wilmington, CA 90744
(213) 518-2090

A.B. Herbold, Exec. Vice President
Frank Patallano, Vice President-
Contracts

1521 Buena Vista Avenue
Alameda, CA 94501
(415) 523-1311

Ron Good, Vice President

(Stevedore, Ocean Terminal Operator,
Crane Service, Warehousing)
- DOUDEL TRUCKING COMPANY
P.O. Box 842
San Jose, CA 95106
(408) 263-7300

Arma.d Kunde, Vice President

(Transportation Service throughout
California, Arizona, and Nevada)
- ENCHVAL TERMINALS
1521 Buena Vista Avenue
Alameda, CA 94501
(415) 523-8800

Cheng Ben Wang, President
George J. Richardson, Director of
Marketing

(Ocean Terminal and Storage Operations)
- FIRST INTERSTATE BANK OF CALIFORNIA
International Banking Office
Div. 26-1 (P.O. Box 54191, T.A.)
707 Wilshire Blvd.
Los Angeles, CA 90017
(213) 614-5191

W. Ted Johnson, Vice President
Kathy Conte, Vice President

(Bank)
- GLAD, WHITE & FERGUSON
350 South Figueroa, Suite 460
Los Angeles, CA 90071
(213) 626-8567

T. Randolph Ferguson, Partner
Edward N. Glad, Partner
Robert White, Partner
Steven Lehat

(Law Firm)

ASSOCIATE MEMBERS

- FRANK B. HALL & COMPANY
3200 Wilshire Blvd.
Los Angeles, CA 90010
(213) 386-8553

Cloria Vande Sande, Vice President
Michael J. Gordon, Vice President

(Insurance)
- HARBOR TERMINAL SERVICES
P.O. Box 1140
Long Beach, CA 90801
2400 Dominguez Street
Long Beach, CA 90810
(213) 518-5122/775-6121/ (714) 537-6400

Henry Duimstra, President
Arnold Pantus, Vice President
Carole Wink, Vice President- Sales

(Transportation and Warehousing)
- HOYT, SHEPSTON INC.
P.O. Box 2184
30 Hoteling Place
San Francisco, CA 94026
(415) 392-1794

Olga M. Scampini, Secretary

(Customhouse Broker)
- UWE JAECKEL, INC.
2948 East Anaheim Street
Long Beach, CA 90804
(213) 434-3451

Uwe L. Jaeckel, President

(Marine Surveying, Adjusting, Subrogation)
- JAPAN IRON & STEEL EXPORTERS ASSOCIATION
650 South Grand Avenue, Suite 612
Los Angeles, CA 90017
(213) 622-3332

Y. Nakajima, Representative

(Trade Association)
- JAPAN TRADE CENTER
555 South Flower, 24th Floor
Los Angeles, CA 90071
(213) 626-5700

Satoshi Hashimoto, Research Manager
(Trade Office)

ASSOCIATE MEMBERS

- KEEP ON TRUCKING COMPANY, INC.
P.O. Box 155
Wilmington, CA 90748
607 West "B" Street
Wilmington, CA 90744
(213) 775-7381

Paul J. Bojanower, President

370 8th Avenue
Oakland, CA 94606
(415) 893-6011

Mike Miles, Vice President

(Steel Transportation Services)
- KEY TRANSPORT, INC.
509 Colon Street
Wilmington, CA 90744
(213) 775-3551

Shigehiro Uchida, President
Ryuji Nojima, Vice President
Richard W. Coburn, General Manager-
Steel Division

(Steel Transportation Services)
- PORT OF LOS ANGELES
P.O. Box 151
San Pedro, CA 90733-0151
425 South Palos Verdes Street
San Pedro, CA 90731
(213) 548-1568

Robert D. Kleist, Director of Trade
Development
Steven Resnick, Marketing Executive

(Port)
- MANDEL, KAVELLER & MANPEARL
315 South Beverly Drive, Suite 315
Beverly Hills, CA 90212
(213) 277-2323

Jerry Manpearl, Partner
Stuart Mandel, Partner

(Law Firm)
- MARINE METALS COMPANY, INC.
P.O. Box 20870
Long Beach, CA 90801
(213) 435-5381

George Rickers, General Manager

ASSOCIATE MEMBERS

- MARINE TERMINALS CORPORATION
289 Steuart Street
San Francisco, CA 94105
(415) 986-6576

Capt. John McNeill, Vice President-
Operations
Robert Holloch, Terminal Manager
(Stevadore, Ocean Terminal Operator)
- MARITIME SERVICES INTERNATIONAL
1301 Canal Blvd.
Richmond, CA 94804
(415) 237-5966

David H. Van De Valde, Vice President
Jim Faber, Operations Manager
(Stevadore, Ocean Terminal Operator)
- PORT OF OAKLAND
P.O. Box 2064
Oakland, CA 94604
66 Jack London Square
Oakland, CA 94607
(415) 444-3288

K. Yamada, Marketing Manager- Far East
(Port)
- PANOBULK AMERICA, INC.
110 Pine Avenue, Suite 1204
Long Beach, CA 90802
(213) 436-3211

Koog E. Nahn, General Manager
Roger Bixby, Sales Manager
(Steamship Agency)
- PORT OF PORTLAND
P.O. Box 3529
700 N.E. Multnomah
Portland, CA 97208
(503) 231-5000

Curtis Smith, General Manager- Charter
Cargo Division
(Port)
- TED L. RAUSCH COMPANY
62 Townsend Street
San Francisco, CA 94107
(415) 362-7721

Ted L. Rausch, President
Helmuth Bosck, Vice President- Director
A.R. McKellar, Director- Marketing

ASSOCIATE MEMBERS

- TED L. RAUSCH COMPANY (cont.)

110 West Ocean Blvd., Suite 906
Long Beach, CA 90802
(213) 435-8231

Fred W. Socha, General Manager

1628 N.W. Everett
Portland, OR 97209
(503) 248-1022

Anne Radelet Wood
(Customhouse Broker, Freight Forwarder)
- THE ROANOKE COMPANIES
100 California Street, Suite 1100
San Francisco, CA 94920
(415) 433-6464

Frederick Dunnier, Sr. Vice President
Kevin A. Tattam, Vice President
(Insurance)
- STAR SHIPPING (U.S.W.C.), INC.
425 California Street, 24th Floor
San Francisco, CA 94104
(415) 433-4900

Ole Kalve, Asst. General Manager

555 East Ocean Blvd.
Long Beach, CA 90802
(213) 437-2771

Henry T. Jacobsen, Resident Manager
(Ocean Transportation)
- STEIN, SHOSTAK, SHOSTAK & O'HARA
3435 Wilshire Blvd., Suite 2004
Los Angeles, CA 90010
(213) 389-2105

James F. O'Hara, Partner
(Law Firm)
- GEORGE R. TUTTLE, A PROFESSIONAL
CORPORATION
Three Embarcadero Center, Suite 1260
San Francisco, CA 94111
(415) 986-8780

George R. Tuttle, President
(Law Firm)
- PORT OF VANCOUVER
P.O. Box 1180
Vancouver, WA 98666
(206) 693-3611

Ben Murphy, Executive Director
Alex Tyrpak, Marketing Director
(Port)

Western Steel Market 1978-1982

The western steel market comprises the number of tons shipped by steel mills, both domestic and foreign, to customers in the seven western states of California, Oregon, Washington, Nevada, Arizona, Utah and Idaho.

There are ten steel producing plants in the seven western state market area in January, 1984. These plants are listed in section II.

Notice that Kaiser Steel is not included. In addition, the estimate of finished steel product capacity for seven western states was based upon optimum yield conditions, i.e. 97% for mini mills and 85% for USS-Geneva and Oregon Steel. The total finished steel product capacity of the ten mills is estimated at 4.645 million tons in January, 1984.

1. Western steel market averaged 8.793 million tons annually during the five year period 1978-1982, inclusive.
2. During the same five year period, imports averaged 3.889 million tons or 44% of the western steel market.
3. In January 1984, steel plants within seven western states would account for 53% of western steel market under optimum conditions of production and yield.
4. In-shipments from domestic steel plants outside seven western states would account for the balance or 3% western steel market in January, 1984.

I Seven Western States

California	Arizona
Oregon	Utah
Washington	Idaho
Nevada	

II Steel Plants in Seven Western States

<u>Company-Location</u>	<u>Raw Steel Capacity (Short Tons)</u>	<u>Products</u>
Ameron Steel, Etiwanda, CA	300,000	rebar, merchant bar, rods, welded reinfor- cing mesh, basic wire, annealed wire, tie wire, plating wire, cold heading wire.
Soule Steel Carson, CA	120,000	rebar, fence posts, special bar quality
Judson Steel Emeryville, CA	150,000	rebar, merchant rounds
Cascade Steel McMinnville, Oregon	275,000	rebar, merchant shapes, fence posts.
Oregon Steel Portland, OR	400,000	plates
Bethlehem Steel Seattle, WA	500,000	rebar, merchant bar, rounds
Northwest Steel Rolling Mills, Seattle, WA	240,000	rebar, rounds, angles, channels
Marathon Steel Tempe, AZ	175,000	rebar, shapes
Nucor Plymouth, UT	400,000	rebar, rounds
USS-Geneva Puro, UT	2,600,000	HRCR, Plate, ERW Pipe

APPENDIX B

III Imports to Pacific Coast¹ - total steel mill products

<u>Year</u>	<u>Imports to Pacific Coast (short tons)</u>
1978	4,316,348
1979	3,529,718
1980	3,830,963
1981	4,053,301
1982	3,714,122

IV Seven Western State Market²

<u>Year</u>	<u>Seven Western State Market (short tons)</u>
1978	9,906,000
1979	9,385,000
1980	8,857,100
1981	8,953,400
1982	6,861,600

Information Sources: 1. Annual Statistical Report
American Iron & Steel Institute - 1978-82
2. Kaiser Steel Marketing

V Estimated Finished Steel Product Capacity for Seven Western States using optimum Yield Conditions

<u>Company</u>	<u>Raw Steel Capacity (short tons)</u>	<u>Finished Steel Product Capacity (short tons)</u>
Ameron	300,000	291,000
Soule	120,000	116,400
Judson	150,000	145,500
Cascade	275,000	266,750
Oregon	400,000	340,000
Bethlehem	500,000	485,000
Northwest	240,000	232,800
Marathon	175,000	169,750
Nucor	400,000	388,000
USS	<u>2,600,000</u>	<u>2,210,000</u>
Total	5,160,000	4,645,200

APPENDIX B

**VI Proportion Imports and Finished Steel Product Capacity -
Seven Western States of Seven Western States Steel Market**

Year	Western Steel Market (short tons x 1000)	Imports to Pacific Coast (short tons x 1000)	Percent Imports	Finished Steel Product Capac. Seven Western States (short tons x 1000)
1978	9,906.0	4,316.348	44%	--
1979	9,385.0	3,529.718	38%	--
1980	8,857.1	3,830.963	43%	--
1981	8,953.4	4,053.301	45%	--
1982	6,861.6	3,714.122	54%	--
Jan., 1984	--	--	--	4,645.2
Average	8,792.62	3,888,890	44%	53%*

* Based upon finished steel product capacity in January, 1984.

VII Kaiser Steel Shipments

Product	Short tons x 1000		
	1979	1982	1983
Tinplate	390.	200.	240.
Galvanize	177.	102.	137.
Plate	400.	166.	249.
Hot Rolled	530.	181.	317.
Line Pipe	NA	NA	NA
ERW	NA	NA	NA
Total Shipments	1,497.	649.	943.
X-Western Steel Market	16%	9%	--

Kaiser Steel Marketing Comments:

1. Year 1979 was excellent year for Kaiser Steel shipments.
2. Years 1981 and 1982 were very poor years.
3. Year 1983 shipments were improved due to being more price competitive.
4. Line pipe and ERW shipments "not available" due to Napa and Kaiser Pipe and Casing still operating.

DOW, LOHNES & ALBERTSON

1225 CONNECTICUT AVENUE

WASHINGTON, D. C. 20036

TELEPHONE (202) 862-8000

TELECOPIER (202) 659-0059

CABLE "DOWLA"

TELEX 425546

WRITER'S DIRECT DIAL NO.

(202) 862-8073

June 22, 1984

FAYETTE S. DOR (862-8642) HOMACE L. LOHNES (867-8644)

WILLIAM P. DAVIS
RICHARD L. BRAGINTEAM
JOHN A. RUTLER
JOHN D. MATTHEWS
VINCENT T. WADLIFSKI
B. SMOOT PERRY
DANIEL W. TOOMEY
BERNARD J. LONG, JR.
RALPH W. HARVEY, JR.
MARION H. ALLEN, JR.
ALAN C. CAMPBELL
CHARLES H. HELLM
WERNER H. WATTS-BANDER
JAMES A. TREMPER, III
WERNER H. WATTS-BANDER
BRENT H. RUSHFORTH
J. MICHAEL WHITE
LEONARD J. BATT
JONATHAN B. HILL
PATRICK H. ALLENJ. DOMINIC MOHAMMAD
MARGARET F. BERMAN
RICHARD D. SHARPS
JOHN L. DAVIS
ARNOLD P. LUTZNER
MICHAEL B. GOLDFEIN
JOHN P. FEORE, JR.
LESLIE W. HIRSCHFELDER
MICHAEL J. MCCARTHY
KENNY F. REID
RAYMOND S. BENDER, JR.
WILLIAM A. SILVERMAN
DANIEL P. FLEMING
DOMINA COLLAMAN DREWS
DORIS P. FLEMING
STUART J. BAELEON
MICHAEL A. PRICE
FREDERICA S. COOK, JR.
ALBERT H. TURRUSFRED W. ALBERTSON
THOMAS W. WILSON

OF COUNSEL

THOMAS H. HALL
L. ADRIAN ROBERTS

SUZANNE MEYER PERRY

JOYCE THOMAS ORNDY
HELEN E. CHARNICK
KENNETH D. SALOMON
EDWARD W. LEBOW
EDITH E. MCGILLY
CHRISTOPHER C. BRALLWOOD
JACQUEE A. WISOLE
JOHN C. JOBT
JOHN D. BEARD
CURTIS A. RITTER
TODD D. GRAY
JOHN H. POWERS
MOEL C. R. SUTHTER
JOHN P. SCHULTER
BRUCE BECKER
JULIA A. HAYBOOM
BLAIR S. BUTNER
JOHN T. BYRNE, JR.
LINDA A. FRITTS
DANIEL J. WITTEWITZ

NANCY L. WOLF

JAMES M. MELFORD, JR.
MARGARET S. GARDNER
LAWRENCE O. BRENNER
ROBERT W. FISHER
ROBERT M. BRIDCOE
TIMOTHY J. O'DONNELL
LELA PALMER BRIDCOE
THOMAS J. HUTTON
DAVID S. BIRD
CAROLYN A. SHUBEL
CONSTANCE M. SUTLEY
RONALD R. HORNBERGER
J. CHRISTOPHER REDDING
WILLIAM H. MARSHALL
LAURENCE JO. EROGAN
MICHAEL R. HOUVER
CARRIE A. BRON
EDWARD J. O'CONNELL
MICHAEL D. BRADLE
WILLIAM A. COOPER
PAUL R. LEANE

* MEMBER OF GEORGIA BAR ONLY

BY HAND DELIVERY

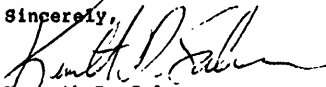
The Honorable John C. Danforth
Chairman, Subcommittee on International Trade
of the Senate Committee on Finance
Room 219
Dirksen Senate Office Building
Washington, D.C. 20510

Re: The Fair Trade In Steel Act of 1984
S. 2380

Dear Mr. Chairman:

On behalf of The Algoma Steel Corporation Limited, Dofasco Inc. and Stelco Inc., the three major integrated steel producers in Canada, I transmit 25 copies of the statement of John D. Allan, President and Chief Executive Officer of Stelco relating to the Fair Trade In Steel Act of 1984. I request that Mr. Allan's statement be included in the record of the International Trade Subcommittee's June 8, 1984 hearing on the problems of the U.S. steel industry.

Sincerely,



Kenneth D. Salomon

KDS:shw

Enclosure

cc w/encl: Mr. Ted Kassinger (BY HAND DELIVERY)

This Statement of John D. Allen is submitted by Dow, Lohnes & Albertson which is duly registered under the Foreign Agents Registration Act of 1938, as amended, as an agent of The Algoma Steel Corporation Limited, Dofasco Inc., Stelco Inc., and Laurel Steel Products Limited.

248 PERIMETER CENTER PARKWAY SUITE 300 ATLANTA, GEORGIA 30346 TELEPHONE (404) 399-2700

TELECOPIER (404) 364-8074 CABLE "DOWLA" TELEX 4998555

80 WEST STREET SUITE 110 ANNAPOLIS, MARYLAND 21401 TELEPHONE (301) 263-0043

STATEMENT OF JOHN D. ALLAN
PRESIDENT AND CHIEF EXECUTIVE OFFICER
OF
STELCO INC.
BEFORE THE SUBCOMMITTEE ON INTERNATIONAL TRADE
OF THE
SENATE COMMITTEE ON FINANCE

JUNE 22, 1984

Mr. Chairman and members of the Subcommittee, my name is John D. Allan. I am President and Chief Executive Officer of Stelco Inc. (The Steel Company of Canada Limited). I am a member of the Board of Directors of the American Iron and Steel Institute and my career has spanned 37 years with Stelco in all facets of the business. My testimony is submitted on behalf of The Algoma Steel Corporation Limited, Dofasco Inc. and Stelco Inc., the three major Canadian integrated steel mills which produce 80% of the raw steel in Canada. (Raw steel production in Canada was 14 million tons in 1983, down from a peak of 17.5 million tons in 1979).

The steel industries in our two countries are very similar and have some degree of integration. We have joint ventures in Canada and the United States for the production of iron ore and metallurgical coal.

Both markets are open to imports. In fact, Canada is the largest and only significant export market for American mills and the United States is the largest export market for Canadian mills. Both industries are privately owned and

profit oriented and raise capital in the financial markets. Both face the same pressures of unfairly traded steel imports from steel producers around the world because of excess capacity. We buy and sell semi-finished steel and conversion services across a border that is unique in the world. We have the same union, The United Steelworkers of America. For these reasons, I ask that the Subcommittee consider my comments as those of a friend and supporter of the domestic mills and as those of a spokesman of an industry that faces precisely the same economic forces as the U.S. domestic mills.

The dominant factor which has impacted on the well-being of the steel industries in both the U.S. and Canada over the past five years in particular has been the decline in steel intensity in North America; i.e., steel consumption divided by real GNP.

A skyscraper next to Stelco's offices in Toronto that is currently under construction uses 17 pounds of steel per square foot while Stelco's building, which has a similar design and height and was built only 14 years ago used 34 pounds per square foot. This reduction in steel is the result of new, lighter steel and improvements in engineering and construction technology.

I could give numerous other examples of declines in steel intensity but the point is U.S. domestic mills, Canadian mills and the AISI all recognize the decline in steel intensity as the dominant force shaping our economic well-being. Both domestic and Canadian mills are striving to meet the challenge of the decline in steel intensity by modernizing facilities and developing lighter, stronger steels that can compete favourably but, at the same time, give added value to our products.

The steel intensity decline, plus the past recession, combined to batter the steel industries in both countries thereby reducing our ability to keep our employees on the job.

Imports, of course, are another factor compounding the problems facing the U.S. and Canadian steel scene. With demand down world-wide and with aggressive expansion of steel producing facilities in developing countries, the open markets of the U.S. and Canada are the focal point for export drives, particularly from government-owned producers. Although the volume of steel imported into Canada is not as high as it is into the United States as a percentage of consumption (currently 11%), nevertheless, we encounter the same types of imported steel products from the same source countries and the same unfair trade practices. In our

experience the real harm of imports stems from dumped and subsidized imports.

Although we in Canada are not always satisfied with the speed, retroactivity or penalties of the Canadian anti-dumping mechanisms, nonetheless, the Canadian steel industry relies on its Federal Government to pursue aggressively the cases of dumping we present. The world steel producers know and understand the vigor and perseverance of Canadian mills and the Government in this regard.

The focus of the U.S. steel industry and the U.S. government, we submit, should be on unfairly traded imports with vigorous enforcement of the trade laws.

The only way to truly test the competitiveness of the Canadian or the U.S. steel industries is to take unfair trade practices off our backs.

Our major concern about the Fair Trade in Steel Act of 1984 is that it penalizes fair traders, such as Canadian mills, for the adverse effects of unfairly traded imports from other countries. However, if Congress decides to proceed with the proposed quota legislation, we in Canada, as fair traders and partners in the North American market, request that Canada be excluded from the quota by an amendment to

the bill. To substantiate that this is not an unreasonable request, let me record some key points:

1. CANADIAN STEEL IS FAIRLY TRADED

The objective of the Fair Trade in Steel Act of 1984 is to remedy the effects of subsidized and dumped steel imports. The April 26, 1984 testimony by House Steel Caucus representatives before the House Ways and Means Trade Subcommittee made that point clear. It is recognized by those knowledgeable in the area that steel from Canada is fairly traded in the United States. As Senator Heinz noted in his statement introducing S.2380, "There are a number of countries that do not dump or subsidize. Canada does not"

Canadian mills opened their books to the U.S. Department of Commerce for preclearance under the Trigger Price Mechanism and were found to be selling at fair prices. Moreover, with the exception of one investigation that ended in a suspension agreement, Canadian steel shipments to the United States have not been subject to anti-dumping or countervailing duty investigations. Because Canadian mills are fair competitors, market forces and existing U.S. trade laws serve as adequate safeguards for the domestic industry. Congress should seek to encourage such fair trading practices. Therefore,

should Congress enact the Fair Trade and Steel Act, the proposed legislation should be amended to exclude Canada as a country that trades fairly in steel and maintains an open market for U.S. steel mill exports.

2. TWO WAY U.S.-CANADA STEEL TRADE

U.S. and Canadian steel production is interrelated, with mutual supply of semi-finished products, joint mineral extraction agreements and technology transfers. Often a U.S. or Canadian steel mill will experience a temporary shortage of raw steel. Steel mills on both sides of our common border make it a practice to supply semi-finished products to assist other companies in meeting such temporary demand surges, as well as temporary shortages due to maintenance requirements or to satisfy longer term demand not sufficient to justify the addition of new melting capacity.

Such major U.S. steel mills as Republic, National, Jones & Laughlin, Lukens, Sharon, Cyclops, Rouge, Empire Detroit and McLouth buy semi-finished steel from Canadian producers. And I might add that, in general, the U.S. mills come to us -- we do not solicit these sales in the United States. In 1983, U.S. mills' semi-finished purchases exceeded 600,000 tons. This trade is bilateral. During the last five years, the flow of

semi-finished steel has often been in favour of the United States rather than Canada. On an annual basis, the net balance of semi-finished shipments varies considerably, depending on changes in product mix and local capacity shortfalls on both sides of the border.

Included in the semi-finished trade are substantial amounts of Canadian semi-finished steel shipped to U.S. mills for "conversion" (i.e., rolling into hot bands) and reshipment to Canada. Conversions averaged approximately 100,000 tons per year during 1981 to 1983. This Canadian steel never enters the U.S. market but employs American workers in domestic mills.

With the exception of semi-finished steel ordered by U.S. producers, the Canadian steel industry's shipments to the United States have remained relatively stable during the last five years. They have ranged between 2.0 percent to 2.5 percent of domestic consumption. The AISI's assertion that Canadian exports increased 29 percent in 1983 is misleading because it includes semi-finished steel and conversion re-exports. Without these factors, imports increased by only 4.8 percent. Thus, there has been no surge of finished Canadian steel to the United States, and any increase in semi-finished steel shipments are to fill orders from U.S. mills.

These mills directly benefit from Canadian shipments rather than incurring any injury as they do from imports of unfairly traded steel. How can domestic mills complain about shipments from Canada when, in fact, they order them and profit from them?

3. U.S. CONTENT IN CANADIAN STEEL

The Canadian steel industry purchases goods and services in the United States, the value of which exceeds the value of Canadian steel exported to the United States. Canadian mills, for example, purchase over 95 percent of their metallurgical coal needs, substantial quantities of iron ore, equipment, refractories and alloying agents from the United States. We estimate that the value of U.S. coal and ore shipments to Canada in 1983 approximated USD 600 million. Algoma, Dofasco and Stelco alone estimate that they expend at least USD 1.25 in the United States for every USD 1.00 of steel sold in this country. Therefore, the U.S. job content in 80% of the raw steel produced in Canada is significant. No other country exporting steel to the United States can make this claim.

For this reason, quotas on Canadian steel would have an adverse effect on the U.S. coal and iron ore industries

as well as on other U.S. suppliers to the Canadian steel industry.

4. UNITED STEELWORKERS UNION IN BOTH THE U.S. AND CANADA

The United Steelworkers of America is comprised of both U.S. and Canadian steelworkers. There are approximately 145,000 members of the United Steelworkers of America in Canada. Approximately 40,000 of these members work in the Canadian steel companies whose producers are covered by this proposed legislation.

5. CANADA IS AN OPEN MARKET AND THE LARGEST EXPORT MARKET FOR U.S. MILLS

Due to proximity, as well as economic similarities, Canada and the United States are each other's best and largest trading partner. In fact, two-way trade between the United States and the Province of Ontario, Canada, is greater than trade between the United States and Japan. In 1983, Canadian-U.S. trade approached USD 89 billion.

This trading relationship extends to steel, where each country is the other's largest export market. In fact, Canada is virtually the only open market for U.S. steel mill exports. Consequently, American steel exports to Canada, currently running at an annualized rate of 600,000 tons represent a substantial proportion of total

Canadian consumption and nearly 50 percent of all Canadian steel imports. From 1981-1983, the U.S. share of Canadian supply averaged more than 6.4 percent compared with an average of 2.6 percent Canadian share of U.S. supply.

6. CANADIAN STEEL DOES NOT DISRUPT THE U.S. MARKET

Imports to the United States from many third world countries arrive in large, speculative bulk shipments at steel service centers. Notice of the expected arrival of such shipments often severely disrupts the supply pattern and price structure of the U.S. market. Canadian steel arrives in truck or rail car shipments to satisfy specific requirements of U.S. customers, particularly original equipment manufacturers ("OEM's") in the automobile and heavy equipment industries.

7. ANY QUOTA SYSTEM WOULD PENALIZE CANADA AND U.S. MULTINATIONALS CONDUCTING BUSINESS ON BOTH SIDES OF THE BORDER

Because of the size of individual shipments of Canadian steel to the United States, the short notice between order and delivery, and changing production specifications of U.S. original equipment manufacturers such as the automotive companies, the imposition of quotas on

specific categories of steel products from Canada would have a disproportionately disruptive impact on Canadian steel shipments to the United States. If a Canadian producer were required to structure its sales to the United States in accordance with its particular product-by-product share of Canada's quota, the Canadian producer could not respond to the changing product demands of U.S. OEM's and the other U.S. customers in a timely fashion. Quota administration and, where necessary, reallocation would be excessively time-consuming. For this reason, a quota system would delay and disproportionately disrupt Canadian shipments and, as a result, the operations of our U.S. customers.

The same cannot be said for U.S. imports from the offshore countries that consist of boatloads of standard products that are sold by distributors and service centers. While an offshore mill might have one customs entry per month, a Canadian mill might have hundreds of truck load shipments per month. Our experience at the border under the limited specialty steel quota portends massive congestion and dislocation if The Fair Trade in Steel Act is applied to Canada.

It is interesting to note, that while Mr. Lee Iacocca of Chrysler Corporation endorses the steel quota legisla-

tion it has been confirmed to me through Mr. M.J. Closs, President of Chrysler Canada that it is also Chrysler's position that steel quotas should not be applied to Canadian sources.

8. DISCRETION BY THE SECRETARY OF COMMERCE

For the reasons given above, Canadian steel, which is fairly traded, should not be covered by the Fair Trade in Steel Act of 1984. The bill's grant of discretion to the Secretary of Commerce to allocate quotas among countries is insufficient to ensure that U.S.-Canadian steel trade will not be impaired. Moreover, Canadian mills could actually be penalized for having traded fairly during the quota-setting base period leaving Canada with a smaller quota than the countries that are the cause of the U.S. mills' problems. Passage of the proposed steel quota legislation, no matter how much discretion is vested in the Secretary of Commerce, will cause uncertainty and disruption in U.S.-Canadian trade that has been both fair and beneficial to the U.S. steel industry.

9. RETALIATION

One last point should be made and that is retaliation. Ambassador Brock, in his testimony, pointed out that countries like Canada would retaliate if quotas were imposed. We believe our government would retaliate to

alleviate any loss of business imposed by quotas on the Canadian steel industry. One such move might be to curtail U.S. domestic mills' exports to Canada (600,000 tons annually); thus, any domestic "gains" from quotas on Canadian steel would be offset by losses in export sales. In short, quotas will be costly because of retaliation and those costs will be principally borne by supporters of the proposed quota legislation.

In summary, Mr. Chairman, the Canadian situation relative to this issue is unique and warrants serious consideration by Congress. We believe the Fair Trade in Steel Act of 1984 should be amended to exclude Canada because of:

1. Our open market which absorbs a significant amount of U.S. steel;
2. Our acknowledged fair trading in steel; and
3. The high U.S. content in Canadian steel be it for our own domestic use or for export to the United States.

I have always been impressed with the sense of fair play exhibited by the United States and its citizens. I would have thought fair play in this case means if a country plays by the rules, it should not be penalized. If this is not

the case here than a much more honest approach would be to rename the bill.

This statement is submitted by Stelco Inc. which is duly registered under the Foreign Agents Registration Act of 1938, as amended, on behalf of The Algoma Steel Corporation, Ltd., Dofasco Inc. and Stelco Inc.

STATEMENT
BY R.C. SCHNATTERLY
MANAGER-MARKETING SERVICES
COPPERWELD TUBING GROUP
COPPERWELD CORPORATION, PITTSBURGH, PA
BEFORE THE UNITED STATES SENATE
COMMITTEE ON FINANCE
SUBCOMMITTEE ON INTERNATIONAL TRADE

HEARING ON THE STATE OF THE U.S. STEEL INDUSTRY

Friday, June 8, 1984

I appreciate the opportunity to represent Copperweld Corporation and its Tubing Group in these important deliberations by the U.S. Senate, Committee on Finance. The outcome of this hearing could have far-reaching implications on the U.S. balance of trade, employment, and the local economies of America's heartland. I hope that our point of view will prove useful in your review of the current state of the U.S. steel industry.

My messages to your subcommittee are fivefold:

1. Copperweld is different from many of the major integrated steel producers you will hear from during this hearing. We are a specialty steel company. Our profit margins have been historically higher and our ability to fund capital improvements, relative to our size, has been greater than the basic steel industry. Our plants are modern; our technology is current.
2. Despite these financial strengths, we are in the same predicament as basic steel when it comes to imports. Imports are distorting our markets through pricing structures that bear no resemblance to real costs of production. This

has resulted in a work force reduction during the recent recession that ranged from 33 percent to 84 percent among the four plants that make up the Copperweld Tubing Group. Further, we have been forced to abandon expansion plans that would have created new jobs and improved local economies.

3. Although Copperweld has been a Fortune 500 company, we are small by steel industry standards. When you extrapolate the effects of imports on our business to the much larger basic steel industry, the crippling damage that imports are having on one of America's foundation industries is evident.
4. We and others in our industry do not object to competition. We do object to unfair competition -- competition that is subsidized by foreign governments to the extent that foreign producers can sell their products in our markets for less than the cost of production or can dump them here for less than they can sell them at home or elsewhere.
5. We are concerned for the future of the domestic steel industry.

In summary, those five points form the cornerstone of Copperweld's statement. I will examine each in some detail.

I. Background on Copperweld Corporation and Copperweld Tubing Group

Copperweld Corporation is a Pittsburgh-based manufacturer of welded and seamless tubing, bimetallic rod, wire and strand, and specialty carbon and alloy steel bars.

Copperweld's sales in 1983 were \$325,475,000. We employ 3,248 people in eight domestic plants in Illinois, Indiana, Maryland, New York, Ohio and Tennessee and in four overseas plants in Luxembourg, Japan and Brazil.

The company's 8.6 million shares of common stock are traded on the New York Stock Exchange and we are owned by 4,300 shareholders. Copperweld is fortunate to have plants that are modern by both world and domestic standards. We have reinvested more than \$165 million in the business during the past five years, and more than \$265 million during the past ten years.

Throughout the 1970s, and into the early 1980s, Copperweld's capital programs dramatically boosted our productivity and capacity. During that time, we built greenfield facilities near Fayetteville, Tennessee, and in Oswego, New York for our Bimetallics Group. Our Steel Group has spent more than \$75 million to improve efficiency during the past ten years.

In the Tubing Group, we built a new greenfield facility at Shelby, Ohio, next to an existing plant that has been completely modernized during the past two years. Both are now state-of-the art

production facilities for drawn-over-mandrel (DOM) tubing, one of several product lines where we hold a market leadership position.

Copperweld developed and is the world's leading producer of drawn-over-mandrel tubing, and much of it is made at the two Shelby plants. As an interesting aside, the oldest of the two plants dates back to 1890, and is the birthplace of the seamless tubing business in the United States. The plant was built to supply tubes to bicycle manufacturers. The economic rationale for the plant was that imported tubing was too expensive. How times have changed!

During the past few years, Copperweld has also made a number of acquisitions for its Tubing Group and has spent several million dollars upgrading them. These include Regal Tube in Chicago, American Seamless Tubing in Baltimore and Copperweld Tube Finishing in Hamlet, Indiana.

The past decade has also seen a commitment to the export business. We have established a base of operations in Europe, and we normally export about five percent of our tubing production through agents in 75 countries around the world. Our DOM tubing is produced through a proprietary process that is respected worldwide, and foreign buyers turn to Copperweld to receive world class quality for demanding applications.

Our position as a technology leader and as a modern producer sets us apart from many of the larger steel companies, who, despite major investments, are still saddled with antiquated capacity and commodity products.

II. The Impact of Imports on Copperweld

In short, we entered the recession with modern, highly efficient facilities in most of our operations. But despite our advantages, we, too, have been heavily impacted by unfair trade practices. The U.S. recession, magnified in intensity by growing imports, has reduced Copperweld's overall employment by 28.7 percent over the past two years.

Copperweld's sales in 1983 were down 47 percent from 1981 levels. Net income in 1981 was \$37 million; in 1983, we lost \$22 million, about half of which was attributable to plant closings brought about by foreign competition.

In 1981, Copperweld paid \$31.2 million, or 45.6 percent of pre-tax income, to the U.S. Treasury. In 1983, we had an income tax benefit of \$19.6 million. In other words, the swing in lost tax revenue for the U.S. Government was more than \$50 million. And keep in mind that Copperweld is one of the "little guys" in the domestic steel industry.

Our shareholders have seen their dividends cut nearly in half from 1981 levels, to 58 cents a share from \$1.07 a share.

Some portions of our business have been more severely affected by imports than others. The Copperweld Tubing Group, which represents about 38 percent of Copperweld's overall tonnage, had an employment decline of 45 percent between 1981 and 1983.

Within the Tubing Group, direct correlations between imports and employment declines can be drawn. Imports of seamless specialty steel tubing captured 45 percent of the U.S. market in 1982; employment at our American Seamless Tubing operation has been reduced 84 percent. Imports of structural steel tubing reached 24 percent of the U.S. market in 1982; we have had workforce reductions of 37 percent at our Regal Tube Company operation as a result. In the Tubing Group alone, 700 employees are on furlough. Corporate-wide, our work force is down by 1300 from 1981 levels. Our current active employees have all experienced either painful wage freezes or outright pay cuts, along with reduced benefits.

With our modern facilities and non-commodity orientation, Copperweld has begun to improve its performance. We earned a slight profit in the fourth quarter of 1983 and reported a substantial improvement in the first quarter of 1984, when compared to year-ago performance. However, these levels of profitability are inadequate to support any sustained major reinvestment program.

While we are recovering somewhat, we are currently in a position of treading water. By comparison, the basic steel industry is drowning. And we believe a healthy basic steel industry is critical to America's economic stability.

III. The Impact of Imports on the Steel Industry

The domestic steel industry currently is locked in a vicious spiral of decline. Foreign government-subsidized mills have continually sold products in the U.S. market for less than the cost of production. U.S. manufacturers have witnessed erosion of margins and market share as a result. The outcome is miniscule or non-existent profits, and the resulting inability to completely finance necessary modernization. Thus, as the U.S. steelmaking capacity becomes more and more antiquated by world standards, relative cost of production is higher.

Imports began hitting the U.S. market in small quantities after World War II. In the 1950s, imported steel had a market share of slightly more than two percent. A decade later, that percentage increased to 9.3 percent. By the 1970s, imports' market share reached 15.3 percent. But the 1980s have seen a virtual explosion in this trend. In 1982, imports took nearly 22 percent of the U.S. marketplace, and remained above the 20 percent level in 1983. In January of 1984, imports captured 26.1 percent of a depressed U.S. market.

Some arguments have been advanced that the U.S. should allow its "smokestack industries" to die a natural death and that they will be replaced in the arena of international trade by the service sector and high technology. According to Data Resources Incorporated in its Report on U.S. Manufacturing issued in January, 1984, this scenario does not entirely hold water. True, computer exports continue at high levels. However, other industries that were net gainers (exports less imports) last year were tobacco, food, lumber and wood, paper and chemicals. Net losers were apparel, petroleum, leather, steel, electrical machinery and miscellaneous manufacturing. The statistics would suggest that we are reverting to a "colonial" trader, supplying the world with products that are primarily raw materials rather than value-added manufactured goods.

Meanwhile, the rate of steel imports has increased. At the present rate, some 25 million tons of steel will be imported into the U.S. this year. Consider that in 1982, only 16.9 million tons contributed to a U.S. trade deficit in steel of approximately \$8 billion, one quarter of the total deficit that year. In addition to the trade deficit, the 25 million tons equates to 117,500 lost steelworker jobs, and 350,000 lost jobs in related industries. The lost payroll, and tax base, in steel alone is \$2.5 billion.

Imports are costing the U.S. treasury tax dollars from what used to be a gainfully employed work force. But they are also costing the treasury lost corporate taxes. In 1981, the industry's last profitable year, the nation's 16 largest steel firms (representing 80 percent of domestic capacity) reported operating profits on steel totalling \$2.4 billion. Assuming the industry had been healthy and tax loss carryforwards did not exist, corporate taxes would have been approximately \$1 billion.

But in 1982, the industry lost \$2.8 billion, which will later shelter profits from taxes. In other words, the swing between unprofitable and profitable operation in just one year would equate to more than \$2 billion in lost tax revenues -- revenues that could help stem the swelling federal budget deficit.

The flip side of the tax question is higher government costs for unemployment compensation, welfare and other entitlement programs. It is probable that many of the 200,000 steelworkers that have lost jobs between 1979 and 1983 have found other employment. But it's also true that another 100,000 are on layoff or on a short work week. At least one third of the employees in upstream supporting industries such as coal and iron ore mining, railroad, lake and river transportation and refractories are also jobless. And one third of downstream steel distribution and services workers are without work.

In addition to the economic calamity brought upon the United States by imported steel, there are also serious ramifications for the national defense. Skeptics may point to the fact that more than half our imported steel comes from relatively stable allies in Asia and Europe. But a growing portion -- more than one third in 1983 -- comes from developing countries with governments of varying stability. Moreover, steel from our more stable allies, Canada excluded, must still cross an ocean to get to us.

The problems in the steel industry and the ramifications of those problems have received widespread media attention, and have relatively high public awareness. For purposes of these hearings, however, the key question is: How much of the problem is related to foreign steel being unfairly and illegally dumped on America's shores, and how much of the problem is of the industry's own making.

IV. The Root Causes and Impact of Unfair Foreign Competition

To understand the impact of foreign steel on U.S. markets, one must first understand the worldwide economic and socio-political phenomena that have led to today's crisis.

Today, a huge glut of excess steelmaking capacity overhangs world markets. The excess is estimated to be about 200 million tons. To

put that number in perspective, consider that U.S. total domestic capacity is about 136 million tons.

The worldwide glut has developed for a number of reasons. First, about a decade ago, worldwide steel demand was extremely strong and supplies of some steel products were short. But this economic justification for expansion was far exceeded by political justifications, both in developing and in developed countries. Japan and European Economic Community steel producers, for example, added 100 million tons of new steelmaking capacity during the 1960s and 1970s. This amount was far in excess of home market requirements, as evidenced by consumption in these markets during 1981, the last year of strong world steel demand. In 1981, domestic steel consumption was only 52 percent of rated capacity in the EC and only 46 percent in Japan.

Concurrent with the development of excess capacity in the developed world was the growth of steel industries in developing nations, financed in large part through multilateral lending institutions. Easy credit from U.S. commercial banks compounded the problem, thanks to U.S. government guaranteed loans to support new steel plants in developing countries. Today, South Korea supplies the U.S. with more steel than West Germany. In 1983, Brazil and South Korea accounted for about three million tons of steel imported into U.S. markets, compared with about four million from the European Economic Community.

The development of steel capacity representing many times home market requirements has been predicated not on economic realities, but upon political objectives. By insulating their own markets from imports and by providing virtually unlimited state funding, foreign governments in effect are propping up a highly overbuilt industry that is not subject to normal supply/demand pressures of a free market. If these foreign industries had been subject to free market pressures, their industries would have contracted, as the steel industry has done in the U.S. -- from 160 million tons of capacity in 1977 to 134 million tons today.

In the past nine years, Europe's state-owned and managed steel companies have lost more than \$21 billion and have received more than \$25 billion in government support. They are receiving an additional \$20 billion to modernize their existing plants between now and 1985. Roughly half of total EC capacity is under direct state control, and another 20 percent is dependent upon the state for support. These operations function more to assure a lower unemployment rate than to compete in a fair and open market.

European political objectives have been to preserve employment in the face of declining economies, through subsidies to the steel industry, and export of steel products. Japan has operated under a slightly different, but no less damaging, set of political objectives. Throughout the 1950s and into the 1960s, Japan's Ministry of International Trade designated steel as a "chosen" industry,

with the goal of dominating world export markets. As a result, the steel industry received preferential access to capital and tight restrictions against imports into the Japanese market.

Advanced developing countries, too, have used the steel industry as a means to achieve political objectives. Between 68 and 75 percent of steelmaking capacity in Brazil, Mexico and South Korea is state owned. Large, capital intensive integrated steel facilities have been constructed as an expression of national prestige, and despite exceptionally high state support and access to international sources of cheap capital, most of the advanced developing nations' steel plants operate in the red. These industries are also protected against imports in their home countries through high tariffs, import licenses and other obstructions to free market trade.

But there is one country in the world that has a domestic industry that does not have the capacity to meet normal demand, is easy to gain access to, and has a predominantly vibrant and healthy economy. That country is the United States, an ideal target for exports of overbuilt foreign steel companies.

The underlying issue, however, has little to do with imported steel, per se. The issue involves predatory pricing by foreign producers, who must expand exports to keep production levels high at any cost. Steel is capital intensive and a high fixed cost business. As a result, sustained profitability requires relatively

high operating rates. The U.S. solution to obtaining high operating rates has been to shrink capacity. The foreign solution has been to dump steel in the U.S. market at prices that are often below the cost of production, or below the prices charged in the home market or other export markets. Subsidization is another unfair trade practice that is widespread. It occurs whenever a government provides direct cash grants, forgives operating losses, assumes costs or expenses, or provides assistance of money, goods or services at preferential rates.

Both dumping and subsidization distort world trade and undermine free trade principles. They have also resulted in massive damage to the U.S. steel industry, as domestic producers lose production volume. The volume decline creates higher operating costs per ton, because of the high fixed costs. Lower volume and high fixed costs translate into reduced profit margins, the shipment of jobs overseas, and, most important, the loss of cash flow necessary to modernize facilities.

The damage has been occurring for several years now, and it is accelerating. Japanese and European dumping during 1976-1977 cost U.S. steel companies and their employees more than \$4 billion, according to a 1978 study by Putnam, Hayes & Bartlett, Inc., the private economic consulting firm.

For the 1979-1981 period, European government subsidies alone resulted in a drop in domestic shipments of 6.5 million tons and gross revenue losses of \$3.2 billion, according to a report by Dr. Lawrence R. Klein, the Nobel Prize-winning economist.

Theoretically, there are vehicles whereby a U.S. company can obtain relief from injury due to dumped or subsidized products. This relief is supposedly available through U.S. law and GATT, the group of international trade rules and agreements. But time and time again, when U.S. steel producers have sought and proven damages, they have found their claims subordinated to the foreign policy needs of the United States government and the U.S. commercial banking system.

For example, following the failure of the Trigger Price Mechanism to resolve trade disputes, domestic steel producers filed nearly 100 antidumping and countervailing duty petitions against 11 foreign countries. The U.S. Commerce Department found that six EC countries had subsidized their exports to the U.S. at margins of up to 26 percent. Additionally, the Commerce Department found preliminarily that five EC countries and Rumania had dumped steel in the U.S. at margins of up to 41 percent.

At that time, the international political arena consisted of issues such as the Soviet natural gas pipeline, the stationing of new missiles in Europe and a major trade dispute over agriculture.

While the U.S. softened its stance due to these issues, the EC agreed to settle most of the outstanding cases through quantitative restrictions. This solution was better than nothing; but it did not compensate for the injury incurred by the U.S. steel industry.

The subsidy margins of these 1982 cases pale by comparison to what is going on with advanced developing country exports to the U.S. market today. These countries have combined to capture 10 percent of the total U.S. market, and most of this amount is clearly dumped or subsidized. The Commerce Department recently determined, for example, that dumping margins of up to 76 percent existed on Brazilian steel plate and sheet imports. According to Alan F. Holmer, deputy assistant secretary for import administration in the Department of Commerce, 65 percent of the 800,000 tons of Brazilian steel imported into the U.S. last year is now covered by dumping or countervailing duty investigations. Some 75 percent of total Mexican imports and 69 percent of Argentine imports in 1983 are also under investigation.

The Copperweld Tubing Group participated in several suits through our affiliation with the Committee on Pipe and Tube Imports. The committee brought suit against Korea and Taiwan, and the Commerce Department preliminarily found dumping margins of 9.7 percent, 38.5 percent and 43.7 percent on small diameter circular welded tubing.

The net result of attempts to use U.S. and international law to redress grievances to date has not been effective. Despite clear proof of wrong-doing by foreign governments, U.S. steel producers have been unable to obtain fair retribution. Moreover, attempting to obtain redress has been time consuming and costly for both the steel producers and the U.S. government. Consider that the cost to a trade group or company bringing an action can range from more than \$200,000 to well over \$1 million in outside legal fees alone, not counting the hundreds of hours of management time spent on these efforts. Moreover, the Committee on Pipe and Tube Imports cases were filed with the Commerce Department more than one year ago, and has taken a year from filing to final determination. This is typical of the time lapse in these cases.

With the failure of the existing U.S. and international laws to work, we believe it is time for a new approach to the problem -- before the domestic steel industry is lost.

V. Why Copperweld Is Concerned for the Future of the Domestic Steel Industry.

We recognize that the domestic steel industry faces a serious decline, brought about by subsidized and dumped imports capturing a growing share of the U.S. market. Because the domestic share is therefore reduced, domestic producers are unable to operate at the efficient rates of production necessary to create profits needed to modernize and expand

the industry. To date, nothing has alleviated this problem and previous efforts to assure fair trade practices with exporting nations have failed dismally.

It is our hope that this situation will improve in the near future and to that end we both endorse and support the provisions of the Fair Trade in Steel Act, currently being deliberated on the Hill.

In our opinion, the act is fair to the public and fair to the industry. In return for a cap on imports of approximately 15 percent for five years, the industry must invest in modernization programs. We at Copperweld would be more than happy to abide by these reinvestment and modernization requirements, and it also seems to us that these requirements would be relatively easy to enforce. It will be much easier for the Commerce Department to monitor our industry and the extent of reinvestment than it is to study hundreds of dumping actions against imported steel, for instance. And if, at any time, the Commerce Department determines that investment is not made at appropriate levels, it can suspend the quotas.

In closing, I'd like to underscore one major fact surrounding the steel industry's support of quotas. It is a first. Despite the beating the steel industry has taken since the late 1960s, this is the first time we have asked government for a quota system. We are by nature and inclination fair traders. Among domestic producers, we are intensely competitive, and we enjoy a good fight. But we finally

have come to the realization that the dumping and subsidization of import problem has been caused by governments -- foreign governments. The only way to address it is through action by our own government.

At Copperweld, we recognize that we are more fortunate than many in the industry. We have been profitable for two consecutive quarters, although our return on sales has averaged only 2.4 percent, well below the profitability levels for most manufacturing industries. We are a technology leader, and intend to remain in the forefront of specialty steel technology. But, while we may not have suffered as much at the hands of imports as the larger domestic steel producers, we are in support of the steps recommended to address the import issue. Sooner or later, if left unchecked, foreign subsidized industries will take over a larger and larger share of America's basic industrial and manufacturing needs, leaving the U.S. vulnerable and propelling our trade deficit well beyond 1983's record levels. As a company, as individual employees, as managers and as stockholders, we are concerned for the future of the domestic steel industry, and we ask for your support.

STATEMENT SUBMITTED
BY
WILLIAM H. ALEXANDER
CHAIRMAN, COLD FINISHED STEEL BAR INSTITUTE
TO THE SUBCOMMITTEE ON INTERNATIONAL TRADE,
SENATE COMMITTEE ON FINANCE
(Hearing On The American Steel Industry, June 8, 1984)

The Cold Finished Steel Bar Institute appreciates this opportunity to submit a statement to the Subcommittee during its consideration of the health of the American steel industry. The Institute is a trade association of 22 non-integrated producers of cold finished bars. We presently have 28 plants in 13 states. In addition, nine integrated steel producers that supply the raw material for cold finished bars are associate members.

Cold Finished Steel Bars

Cold finished steel bars ("CFSB") are made by processing hot rolled bar or wire rod, usually by drawing the product through a carbide die. The processing imparts four characteristics to the bar: a clean, bright surface, improved strength and machinability, high dimensional accuracy, and exceptional straightness.

CFSB are used in a vast variety of applications, but are generally found either in the form of a bar or as a feedstock for screw machine products. Bar configurations

include shafts for motors and hydraulic systems, structural supports, tools and other applications where a strong, smooth bar shape is required. In the second application, CFSB are fed into screw machines, which cut them to form cogs, gears, fittings, etc. that are used as components in mechanical devices.

It has often been said that CFSB are found in virtually every product with moving parts. They are certainly found in all types of machinery and equipment used by industry and are especially necessary to the production of cars, trucks, motors and machine tools. CFSB are absolutely essential in most items of defense ordnance, especially equipment requiring alloy steels for critical applications.

America's CFSB Industry

Most of America's CFSB producers make no other steel product; these nonintegrated companies account for about two-thirds of domestic production. The industry has facilities in 19 states and normally employs over 10,000 workers. Most producers are relatively small companies, often family owned.

1982 and 1983 were trying years for the American CFSB industry. Shipments fell off to levels not experienced since the Great Depression. Layoffs exceeded 50% of the work force. Monthly production averaged 43% of capacity in 1982, hitting a low of 32% in December of that year. Production increased only to 52% of capacity during 1983. Eight

facilities were permanently closed during that time, one each in California, Texas, Michigan, New Jersey, Alabama and South Carolina, and two in Pennsylvania. All others worked short shifts. A number of companies remain in precarious financial condition.

Despite these problems, the American CFSB industry has not sat on its hands. Wherever capital has been available, it has been plowed into new machinery and equipment. New draw benches, annealing furnaces, straighteners and other equipment have been installed by CFSB producers over the past decade, and these improvements have significantly modernized our industry and reduced our unit costs. My own belief is that investment of this kind has exceeded the industry's operating profits over the last decade.

Imports

The United States Government has long recognized the particular sensitivity of the American CFSB industry to foreign imports. CFSB were the only steel mill product specifically covered in the 1972 Voluntary Restraint Arrangements undertaken by Japan and the EEC. In 1975, the product was found to be "import sensitive" and thus not subject to preferential duties for less developed countries. Finally, in the "Tokyo Round" of Multilateral Trade Negotiations, duties were reduced less for CFSB than for any other steel product included.

In stark contrast to American producers, foreign CFSB suppliers were scarcely fazed by the declining American market in 1982 and 1983. Imports in each of those years exceeded the ten-year average for 1974-1983. As a result, market penetration has been at all time highs, more than twice the historic levels. The domestic market for CFSB has begun to recover, yet imports continue to be a substantial problem. January imports hit 17.8% of apparent domestic consumption, a figure well above the previous high, and foreign shipments through April continue to take a record 16.4% share of our market. Imported CFSB continue to be offered well below the Commerce Department's former trigger prices, i.e., below their ostensible cost of production. This surge of low cost imports has blunted the benefits of the economic recovery.

The figures for penetration of the American market understate the impact of foreign steel on American CFSB producers. Our domestic market for CFSB has been seriously eroded by increased imports of finished products like autos, farm and construction equipment, machine tools and screw machine products. When combined with the direct imports of CFSB, the actual foreign penetration of the domestic market is much greater.

Traditionally, the principal supplier of CFSB to the United States has been Japan. For the years 1976 through 1980, Japan supplied about 60% of total imports. However,

for 1981 through 1983, the Japanese share of total imports declined to a little over one-third. Initially, this decline was due to lower imports from Japan, coupled with a rapid increase in imports from the EEC countries and Spain. More recently, however, Japanese tonnage has increased, while shipments from other traditional suppliers have not significantly abated. A growing share of total imports is coming from nontraditional sources. Countries like Brazil, Spain, Korea and South Africa have entered the market in recent years; often, their products are sold at plainly dumped or subsidized prices.

Thus, from our point of view, the import problem has been growing. We are not asserting, nor have we ever contended, that the U.S. market should be denied to foreign suppliers. But we do believe that American CFSB producers have been victimized by imports during a period of true depression in the industry. Shipments were reduced, unemployment intensified and losses magnified by irresponsible actions of foreign suppliers. Restraint is plainly required.

Before turning to our specific recommendations on steel problems, I should like to make some observations on the state of the other parts of the steel industry.

The American Steel Industry

I should begin by revealing the basic premise of these comments: we believe that a viable American Steel

Industry is essential to a healthy economy and our national security. We in the CFSB industry depend upon the availability of a broad range of steel products domestically sourced. We all remember that in 1974, during a worldwide steel boom, foreign suppliers virtually disappeared from the American market. Other steel users should also be aware that the only truly dependable source of steel is our domestic industry.

Given the fundamental importance of our steel industry to our nation, we find it hard to understand the relationship between the producers and our government over the last 30-odd years. For example, during the 1950's, the government urged the industry to undertake a major expansion of capacity, even though many were skeptical that demand would grow so rapidly. At a great expense of capital, this expansion was carried out and led to substantial overcapacity by the end of the decade. More importantly, the timing of this increased construction led to the installation of many obsolescent open hearth furnaces, instead of the new basic oxygen process.

During the 1960's, the domestic industry confronted the need to update those steel-making facilities and undertook a rapid conversion to the basic oxygen process. These steps were carried out with two serious handicaps: substantial government pressure to keep prices down and increasing import competition. As a result, the capital resources of the industry were seriously depleted by the end of the decade.

The 1970's began with price controls, which were followed by a serious recession in the middle of the decade. Recovery was all too brief, as the industry was confronted with massive imports being sold here at less than their cost of production abroad. As a result, profits were squeezed and internally generated capital was further constricted. All too often, much of the capital that was available was required for pollution control devices, which added to per unit costs. As a result, there was too little capital available for the improvement of productivity through new technologies like continuous casting. Tax incentives were of little use to steel companies enjoying only marginal profits.

The 1980's have offered no relief. In addition to the steel industry depression, highly subsidized imports and a proliferation of foreign suppliers have converged to weaken the industry further.

This is not a happy story for the steel industry, no more for the government. However, there have been positive developments, ones that should be encouraged by national policies:

- A number of outmoded facilities have been closed, and more modern plant and equipment is being consolidated.
- Companies have streamlined their operations substantially.

- Mergers and other ways to rationalize production are being explored.
- Labor costs have been reduced by concessions and, unfortunately, by lay-offs of hourly and salaried employees. These reductions have made a more competitive American industry, but at a cost to the economy at large. For we should not forget that unemployed workers change from taxpayers to revenue recipients.

These developments are all clear plusses. Nonetheless, serious problems and questions remain. The foremost is that the domestic industry continues to suffer from a shortage of capital to modernize further. Given present pricing and profit levels, investors are not certain that steel is the best place to put their capital. A second serious problem is uncertainty in traditional steel markets. The automotive industry will undoubtedly use less steel over the next years, but other markets are even more speculative. For example, the construction industry will be particularly sensitive to interest rates; the farm equipment industry will depend on the relative value of the dollar; and a good deal of the market for steel during the rest of the 1980's will depend on national policies for repairing and rebuilding our highway infrastructure. I might add that one clear problem is the lack of a consistent and clear government policy towards the steel industry. The various views of the

several agencies on merger policy and imports bespeak a lack of direction that is inconsistent with true concern about the health of the American industry.

Overhanging all of these questions and, indeed, a basic issue for the future of the American steel industry is the question of imports. As I remarked earlier, our Institute has never taken the position that the United States market should be closed to foreign steel. We understand the need to balance our own exports with purchases from other countries, and we are aware of the need of many less developed countries to earn the hard currencies critical to their own survival.

At the same time, the hard reality is that the United States is today the only major open market for steel in a world of very substantial excess capacity. This is a fact, and its implications must be confronted. One such implication is that every foreign producer that makes more steel than it can sell at home will think first of the United States as a place to market the excess. Where the foreign industry is in economic difficulty, government subsidies are often extended to assist in the exporting process. Where the foreign producer is in a developing country, it is likely to be pressured to sell abroad at virtually any price, simply to earn the foreign exchange required to meet international debt obligations.

The result of these pressures is more and more steel coming to the United States, very often at prices well below the cost of production.

These imports have been a constant cause of disruption of the American market. First, there is a continuous downward pressure on prices, usually more pervasive than the volume of imports in question. Secondly, because of the extensive import penetration, the capacity utilization rate of American producers is substantially reduced, a process that further cuts into profitability. In short, dumped and subsidized imports coming from numerous sources in ever increasing amounts make it impossible for the United States industry to assemble the capital it needs to become more modern and competitive.

The Responses So Far

Until the present, both the government and the domestic industry have relied on the procedures of the trade laws to deal with the import situation. Our trade laws were designed to protect American industries from unfair trade practices and injurious imports. Not surprisingly, those laws have been employed in a very large number of cases involving steel imports. In fact, according to the Commerce Department, more than 160 actions have been brought by the steel industry in the antidumping and countervailing duty areas alone since January, 1982.

These laws are necessary to deal with certain import practices, and they can and do serve a useful purpose in most situations. However, experience raises serious

questions whether the problems of steel imports can be handled by laws directed at unfair trade practices:

1. Antidumping and countervailing duty suits are expensive and complicated, especially when a variety of suppliers and products is involved. The cost of manning such a case, hiring outside consultants, developing data and presenting it to agencies and tribunals is a heavy economic burden, even for large integrated producers. Those costs are simply beyond the financial capability of most CFSB producers.

2. Even after successfully prosecuting a trade case, securing adequate relief is quite speculative. Relief can be aborted by actions of the Executive Branch or agreement with the foreign countries or producers involved. Those measures have not worked well:

- Dumping cases brought in 1977 were withdrawn with the imposition of the "trigger price mechanism" by the Treasury Department. Within two years, the trigger prices were being evaded on a vast scale. Not long thereafter, the system fell of its own weight.
- CFSB were a product included in the countervailing duty suits brought against European producers in 1982. The settlement of those suits placed limits on the raw material for

CFSB but did not include a specific provision for the end product itself. The agreement created the economic incentive for European producers of hot rolled bar to convert their product into CFSB and send it to the United States without limitation. This serious threat of diversion continues.

- In 1983, the AISI brought an action against Japan under Section 301 of the Trade Act of 1974 for relief from unfair trade practices. To settle that dispute, Japan undertook voluntary restraints in 1983, but without any express limitations or benchmarks. Since that undertaking was made, CFSB imports from Japan have increased sharply, running more than 60% ahead of the 1982 levels. The market penetration of Japanese imports has increased even more rapidly.
- Subsidy charges against Brazil were settled in 1982 by that country's agreement to impose an offsetting tax on its exports of steel. That agreement has not stopped the flow of very low cost imports from Brazil, and the Commerce Department has terminated it. Nonetheless, each successful antidumping action produces additional pressures for settlement agreements.

3. On June 12, 1984, the International Trade Commission ruled on a Section 201 "escape clause" action brought by Bethlehem Steel and the United Steel Workers. The Commission found that imports had increased and were injuring the domestic industry. However, in considering the question whether "substantial" injury was caused by imports (i.e., whether imports were at least as great a cause of injury as any other cause), the Commission disaggregated the steel industry into nine components. One of these components was "bar," an agglomeration of hot rolled bar, pre-stressed bar, concrete reinforcing bar, special sections and cold finished bar. In reaching a negative finding on this bar category, the Commission apparently concluded that the injury due to mini-mill competition was a greater cause of injury than the modest increases in imports of the aggregated bar category.

The Commission's decision lumping cold finished bar into the composite category ignored the fact that producers, markets, import penetration, and other relevant characteristics are quite different for CFSB from other kinds of bar. Only one mini-mill produces cold finished bar, and its importance in the market is insignificant compared to the role of mini-mills in the other bar markets. Moreover, as noted above, import penetration has risen enormously in the cold finished

bar market and is now running more than twice the level of penetration for bars generally.

The Commission's failure to recognize these important distinctions could cause substantial further injury to the domestic cold finished bar industry.

In retrospect, recourse to our trade laws has not been a solution to the import problems. We now have a patchwork of antidumping or countervailing duties, side agreements, escape clause actions, cases in progress and negotiations underway affecting steel trade. This jumble of measures adversely affects domestic producers, foreign suppliers and steel users. No one seems entirely certain which way policies will develop; indeed, there seems to be no guiding policy in this area at all. Instead, the government appears to be headed in several directions at once.

We believe that the present efforts to cope with steel trade issues are directed at the symptoms of the underlying problems -- a subsidy here, dumping there, import surges elsewhere. But these practices represent predictable results of the fundamental problem that I noted above: the United States is the only major open market for steel in a world of excess capacity. Only by addressing that issue on a comprehensive basis can we deal with the root of the problems.

A Comprehensive Approach to our Steel Trade Issues

Presently, the United States steel industry is in the midst of far reaching programs to rationalize and modernize. Plant closings have been widespread, reorganization of facilities has been announced and substantial funds are being poured into new plant and equipment. Both salaried and hourly workers have experienced layoffs, wage reductions and losses of benefits. Carrying on this exercise during the recession was hard enough, but imports have compounded the difficulties, even during the economic recovery. Doubling or tripling the number of antidumping or countervailing duty suits will not sufficiently relieve that additional pressure.

To survive as a critical part of our national economy and defense establishment, the steel industry must have a respite from the market disruption caused by surging imports. That kind of relief can be developed only on a comprehensive basis, and it is for this reason that we applaud the introduction of S. 238^o.

That bill would, for the first time, undertake to deal with all steel products from all sources. Individual product quotas would be established that, overall, would limit imports to about 15% of apparent domestic consumption. In return, the steel industry would be expected to invest each year amounts at least equivalent to its cash flow in plant modernization and development.

We in the CFSB industry would welcome such a bargain with the government. My own estimate is that that amount of investment and more is being made in the CFSB industry.

We understand that the Administration opposes quota legislation, principally because they believe it would result in retaliation by other countries. We do not desire to take actions that would handicap America's export industries. However, we believe that there exists a straightforward solution to the Administration's concern about retaliation.

I refer to the possibility of an international, multilateral agreement on steel exports to the United States. We already have in place a very important element in such an agreement, our arrangement with the European Communities. We believe that the Japanese would be willing to formalize and particularize the "gentlemen's agreement" reached last year. And we also understand that a number of other supplying countries would be happy to undertake similar restraints, which would remove the uncertainties and disruptions caused by the antidumping and countervailing duty suits of the last two years. In fact, South Africa, Mexico and Brazil have already taken the step of imposing unilateral limits on their exports.

In short, we believe that a comprehensive approach to steel import problems is well within reach. Such an agreement could result in the kind of restraints on imports envisaged by S. 238⁰ and could be concluded without concern

about retaliation. The agreement could be entered into under the President's general authority to conduct foreign policy, or it even might be undertaken to resolve the section 201 "escape clause" action brought by Bethlehem Steel and now under consideration by the International Trade Commission.

Some legislation would still be necessary. First, we understand that, for a number of supporters of S. 238⁰, the quid pro quo of industry investment is critical. Legislation could impose a similar requirement on the conclusion and continuation of an international steel agreement. Secondly, there should be some assurance that the restraints embodied in an international agreement reflect the levels considered appropriate by the Congress. Legislation could assure that an agreement not exceed specified levels. Finally, there is a need to assure that negotiations for an agreement are conducted and concluded promptly. Legislation could establish timetables that would assure that, failing successful negotiations for an agreement, legislative quotas would be imposed.

In short, we believe that there is a compromise approach to meet the concerns of the Administration regarding S. 238⁰.

On one point, however, there should be no compromise. We strongly believe that the Congress should insist upon a comprehensive approach to steel imports, one that will give the American industry the necessary respite from dumped,

subsidized and predatory imports and permit the necessary investment and rationalization to allow us to become competitive with all foreign suppliers.

Carbon & Alloy CFSB
Imports - Tonnage (in 000's) and as Percentage of
Apparent Domestic Consumption

<u>Year</u>	<u>Apparent Domestic Consump.</u>	<u>Total</u>		<u>Japan</u>		<u>EEC</u>		<u>Other *</u>	
		<u>Tonnage</u>	<u>% of ADC</u>	<u>Tonnage</u>	<u>% of ADC</u>	<u>Tonnage</u>	<u>% of ADC</u>	<u>Tonnage</u>	<u>% of ADC</u>
1976	1,632	107	6.6	69	4.2	32	2.0	4	--
1977	1,854	180	9.7	124	6.7	38	2.0	15	0.1
1978	2,184	226	10.3	129	5.9	72	3.3	20	0.1
1979	2,281	173	7.6	90	3.9	59	2.6	19	0.1
1980	1,599	135	8.4	78	4.9	34	2.1	15	0.1
1981	1,700	191	11.2	63	3.7	83	4.9	29	1.7
1982	1,098	166	15.1	54	4.9	60	5.5	34	3.1
1983	1,247	160	12.8	64	5.1	41	3.3	32	2.6
1984 (4 mos.)	581	95	16.4	27	4.6	29	5.0	26	4.5

*Excludes Canada



GILMORE STEEL CORPORATION

P.O. BOX 2760 • PORTLAND, OREGON 97208

TELEPHONE (503) 286-9651

TWX. 910 484 1549

Thomas B. Boklund
President

June 6, 1984

Honorable John C. Danforth
Subcommittee on International Trade
Committee on Finance
SD219 Dirksen Senate Office Building
Washington, D.C. 20510

Re: S. 2380 - Steel Quota Bill

Dear Senator Danforth:

Gilmore Steel Corporation, the west coast's only producer of steel plate, opposes S. 2380. Gilmore's steelmaking division, Oregon Steel Mills, Portland, Oregon, has felt the impact of unfairly priced steel along with the rest of the industry. But Gilmore has also felt the additional impact of distortions in the western market resulting from past government programs to cope with steel imports on a national instead of a regional basis. Programs such as the Trigger Price Mechanism (TPM) and the EC-US Steel Arrangement (a mini-quota) have consistently put western steelmakers at a disadvantage relative to both domestic and foreign competition. This bill contains the same flaw.

Constructed on a "greenfield" site just fifteen years ago, Gilmore's plate mill is technologically advanced and is one of the world's most efficient plate facilities. Gilmore has improved productivity dramatically through capital investment and cost reductions. Gilmore is a cost-competitive, reliable supplier of steel plate for commercial and military applications. Gilmore has competed successfully against fairly priced foreign steel. Injury from imports of unfairly priced steel, however, is a constant threat to the viability of this strategically important facility.

The western regional market is materially different from the rest of the national market and is dominated by imports. The import penetration in the west is over twice the national average as illustrated in Attachment 1. Eastern producers who push this quota scheme say that national import penetration was about 22 percent last year. But if the western market and western imports are taken out of the equation, the real import penetration in the nonwestern regions was about 19 percent. Likewise, a national quota goal of 15% would not limit imports to 15 percent in the east. The bill states that "nothing in this Act is intended to result in material changes in historical

GILMORE STEEL CORPORATION

Honorable John C. Danforth
June 6, 1984
Page Two

patterns with respect to...the national distribution of imports." If imports are limited to 15 percent of the national market, and historical patterns of imports to the west are unchanged, the nonwestern import penetration would really be only 11 or 12 percent. Import penetration in the west would remain at over 50 percent, following "historical patterns."

Implicit in a quota scheme is the proposition that imports within the quota may be sold at any price. This bill does nothing to disclaim that proposition. Under a national quota scheme, efforts to staunch the flow of dumped priced steel in the west by bringing an antidumping or countervailing duty case would be substantially more difficult because of the problem with proving "material injury" to an industry of the United States while a national quota is being complied with. Gilmore has filed and won antidumping cases in the past to combat unfairly priced imports. But if S. 2083 is enacted, this remedy provided by U.S. trade law and GATT agreement would be substantially undermined.

S. 2380 would be complied with even if most of the "national" quota for plate landed in western ports of entry. The bill contains no safeguards against the concentration of imports in the west. It would not limit any import volume to the west coast. No additional measures to deal with regional concerns would be possible under the bill unless and until "material changes in historical patterns with respect to regional distribution" were to occur. Well, the historical patterns of west coast import penetration range from 35 to 60 percent, depending on product. Under S. 2380, imports to the west could persist at those volumes while nonwest import penetration is being rolled back from 19 to 11 percent.

Gilmore's sole product is plate. The west consumes about 13 percent of the national plate market. S. 2380 gives 15 percent of the national plate market to foreign producers, and contains no regional allocation. Therefore, nothing in the bill would prevent, say, two-thirds of the plate quota from being shipped to Gilmore's Portland, Seattle and San Francisco markets at prices that would be immune from dumping investigation.

Past administrative programs dealing with steel imports solely on a national basis have been uniformly unsuccessful in the western market. The TPM forced western steelmakers to compete against lower foreign prices than steelmakers in the east and shifted the sources of west coast imports from Japanese to European and other steelmakers. After over three years of living under the TPM, western steelmakers found themselves bombarded with more imports than before the TPM was

GILMORE STEEL CORPORATION

Honorable John C. Danforth
June 6, 1984
Page Three

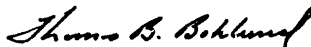
instituted. Import penetration declined in the rest of the country. The EEC Steel Arrangement has likewise failed in the west. Market forecasts used to administer that Arrangement in early 1983 were so generous that European producers cut prices of plate to fill their quotas. This price cutting drove the price of plate imports in 1983 to levels as much as 40 percent below the price previously considered to be "legal" -- the 1981 "trigger" price under TPM. Although the EEC producers were clearly dumping steel in the western steel market, this price undercutting was made safe from dumping duties by the desire of the U.S. government and nonwestern segments of the industry to avoid withdrawal from the Arrangement by the EEC. Gilmore fears that eastern U.S. steelmakers would again benefit at the expense of western producers under the national quota scheme proposed by S. 2380.

Therefore, Gilmore Steel opposes S. 2380 because there would be no volume relief and no price relief for domestic producers in the region most severely impacted by foreign steel. Indeed, there would be a substantial legal setback for western producers since the antidumping and countervailing duty remedies would be made substantially more difficult to obtain. From Gilmore's standpoint, the bill is not meritorious and indeed is misguided in its approach to a matter best dealt with by strict enforcement of tougher unfair trade laws.

We request that this letter of opposition be included in the record of your hearings proposed for June 8, 1984.

Very truly yours,

GILMORE STEEL CORPORATION



Thomas B. Boklund
President,
Chief Operating Officer

GOVERNMENT RELATIONS ASSOCIATES, INC.

855 FIFTEENTH STREET, N.W., SUITE 300

WASHINGTON, DC 20005

(202) 639-4039

JOHN W. FEIST
CHRISTIE K. BOHNER

June 7, 1984

Honorable John C. Danforth
Subcommittee on International Trade
Committee on Finance
SD219 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Danforth:

Enclosed is the original and five copies of Kaiser Steel's letter opposing S. 2380 -- the steel quota bill -- for consideration by the Subcommittee on International Trade in connection with the hearing on steel issues scheduled for June 8, 1984.

Very truly yours,


John W. Feist

JWF/fl

Enclosure

cc: Senator Wilson
Senator Cranston

**KAISER
STEEL**

KAISER STEEL CORPORATION
 EXECUTIVE OFFICES
 9400 CHERRY AVENUE ■ P.O. BOX 5090 ■ FONTANA CALIFORNIA 92335
 (714) 829 3100 ■ CABLE ADDRESS KAISTEEL ■ TELEX 67 6364

June 4, 1984

Hon. John C. Danforth
 Subcommittee on International Trade
 Committee on Finance
 SD219 Dirksen
 Senate Office Building
 Washington, D.C. 20510

Re: S. 2380

Dear Senator Danforth:

Kaiser Steel Corporation opposes S. 2380. Once the tenth largest steelmaker in the country, Kaiser Steel closed its Fontana Works in 1983. Steelmaking ended early in the year and the rolling and finishing mills were idled last November. Earlier this month Kaiser Steel signed a letter of intent with Pacific Steel Corporation covering the possible sale of the steelmaking and finishing facilities at Fontana.

Kaiser Steel continues to produce fabricated products at facilities in Northern and Southern California. These facilities provide the most versatile and complete heavy fabrication, assembly and erection capability on the West Coast, as well as a wide range of tubular steel products. Included in the latter category is large diameter pipe, produced at our Napa, California, fabricating facility, which today represents one of the few remaining domestic sources of pipe for oil, gas, and, potentially, coal slurry transmission. These facilities consume various flat-rolled steel mill products as raw materials for the manufactured and fabricated end products. In total, Kaiser Steel will be the largest consumer of steel products on the West Coast. Because of the varied and complex nature of many of these end products, the steel from which some of the flat-rolled feedstock is made must be poured to special specifications. To fill its requirements for these specifications, Kaiser may purchase semi-finished slabs of the required specification and have the slabs rolled into plate at a domestic rolling mill. Thus, although Kaiser previously relied on the Fontana Works for feedstock for its fabricating facilities, such raw material will now be purchased on the open market, and such purchases may include slabs.

With the closure of Fontana, the only domestic sources of supply in the West for most of these products are U.S. Steel at Geneva, Utah, and Oregon Steel Mills Division of Gilmore Steel in



Portland, Oregon. Each of these producers is an important supplier, but because of certain product and geographic limitations, neither can provide entirely the requirements of Kaiser's fabricating facilities. Accordingly, Kaiser will depend to a significant extent on steel imports to supply its raw material needs.

Kaiser's primary objection to the quota bill is that it fails to make critical distinctions among certain regional and product characteristics. It is a sweeping, all encompassing and simplistic approach to a highly complex industry. The Western steel market has always been materially different from the rest of the national market, and it has undergone further substantial change since 1979--the base year of the bill's base period for quota calculation. The market now relies even more heavily upon imports of all steel mill products than it did during the base period. Increased pressure from imports contributed to Kaiser's decision to close its Fontana mill. Now that the mill is closed, the West Coast has permanently lost the capability of producing raw steel from basic iron ore. The facilities in the West to melt scrap are insufficient to supply the needs for raw steel for the Western market. Any comprehensive scheme to deal with steel trade should recognize and accommodate the fact that domestic steelmakers cannot realistically supply the Western market's requirements.

The bill does not even acknowledge that substantial reduction in steelmaking capacity has occurred on a national basis since the base period. Since 1979, the base year for the quota, America has lost 20 million tons of steelmaking capacity. The first useful products from raw steel are the semi-finished shapes of slabs, blooms and billets. Steel mills--and only steel mills--use these semi-finished products in rolling and finishing the mill products for which there is a general market. Thus, America has lost just slightly less than 20 million tons (allowing for yield loss) of semi-finished slabs, blooms and billets. But S. 2380 would limit imports of semi-finished products to 400,000 tons nationally. If the Fontana finishing mills are reopened under new ownership, its requirements for slabs could exceed in one quarter the annual slab quota for the entire country. Furthermore, with regard to the plate products which are crucial to our fabricating operations, the two remaining domestic mills in the West cannot provide the broad range of specifications required by ourselves and the market. From the standpoint of volume, these two facilities can provide barely 40 percent of the market.

Section 6 of the bill is intended to handle "short supply" problems. But it would create a monstrous "soup kitchen" line of steel consumers at the steps of the Commerce Department seeking vouchers for their raw material needs. The national steel market is incredibly complex, with myriad differentiations in product descriptions and grades, geography, processing options,

and regional market characteristics. The bill brushes all of these complexities aside and instructs the Secretary of Commerce to deal with them--in consultation solely with domestic suppliers. This provision puts the federal bureaucracy in the steel procurement decisionmaking of thousands of steel consumers. It would put America on steel rationing in a world of steel over-capacity!

Unfair steel trade is widely acknowledged and contributed substantially to the capacity reductions since 1979 which have occurred in this country, including the closure of the Kaiser mill at Fontana, California. But this bill cannot put that capacity back. It should not be assumed that the U.S. steel market is the same now as it was in the base period. Kaiser supports strict enforcement of the laws designed to correct injurious and unfair trade. Indeed, we are deeply concerned at the moment regarding the price levels at which imported large diameter pipe is entering the U.S. Those laws contemplate the examination of market conditions in a case by case investigation. This bill would superimpose assumptions of simplicity and uniformity on a real world of complexity and differentiation.

Therefore, Kaiser Steel opposes S.2380 since it fails to address the unique requirements of the Western steel market--from the viewpoints of both suppliers and consumers. We request that this letter of opposition be included in the record of your hearings on the bill.

Very truly yours,

KAISER STEEL CORPORATION


Kenneth L. Gibson
Vice President
Corporate Development

KLG/dj

EMBAJADA DE VENEZUELA
WASHINGTON, D. C.

N°719/N1

June 18, 1984

Roderick A. Dearment, Esq.,
Chief Counsel
Senate Committee on Finance
Senate Dirksen Office Building, Room 221
Washington, D.C. 20510

RE: Hearings on the present status and future
prospects of the U.S. Steel Industry.

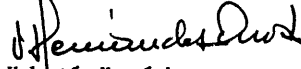
Dear Mr. Dearment:

In connection with the hearings being conducted by the Senate Finance Committee, Subcommittee on International Trade into the present status and future prospects of the U.S. Steel Industry, we have enclosed herewith a statement setting forth certain comments of the Embassy of Venezuela.

We would highly appreciate it if this statement be included in the record of the hearings.

We would also draw to your attention the fact that a separate statement is being submitted on behalf of the largest Venezuelan steel producer, CVG-Siderurgica de Orinoco C.A. - SIDOR, by its Legal Counsel, Briger and Associates.

Sincerely,



Valentín Hernández
Ambassador

VH/cb

BEFORE THE
SENATE COMMITTEE ON FINANCE
SUBCOMMITTEE ON INTERNATIONAL TRADE

HEARINGS ON THE PRESENT STATUS AND
FUTURE PROSPECTS OF THE
UNITED STATES DOMESTIC STEEL INDUSTRY

STATEMENT OF
THE EMBASSY OF VENEZUELA

June 19, 1984

INTRODUCTION

The Embassy of Venezuela appreciates the opportunity to present to the Senate Finance Committee, Subcommittee on International Trade (hereinafter the "Subcommittee") its views on recent developments affecting the United States Steel industry. While the scope of the Subcommittee's investigation is broad and includes the "present status and future prospects" of the domestic industry, this Statement is confined to one specific issue, namely the possible imposition of quotas on imported steel mill products and iron ore. These proposals are embodied in S. 2380, the "Fair Trade in Steel Act of 1984" (hereinafter "S. 2380" or the "Bill") and in similar legislation now before the House of Representatives.

In addition, as the Subcommittee is aware, the United States International Trade Commission (hereinafter the "ITC") presently has before it a petition filed by Bethlehem Steel Corporation and the United Steelworkers of America, seeking relief under section 201 of the Trade Act of 1974 against imported steel. The ITC ruled on June 12, 1984 that imports of four major categories of steel products had not been an important, and substantial cause of serious injury to the domestic industry. The ITC is presently considering what remedies should be imposed with respect to five other categories of steel products as to which affirmative injury determinations were entered.

For the reasons described in this Statement, the Government of Venezuela believes that the imposition of quantitative restrictions on steel imports, or any other measure which similarly would impede the flow of commerce

between the United States and Venezuela, would have serious adverse consequences for both nations. First, far from reducing the United States trade deficit, such measures would likely have precisely the reverse effect, at least as regards trade with Venezuela from which the United States has traditionally benefited to a substantial extent. As is demonstrated in Annex A, in 1982, the most recent year for which final Commerce Department statistics are available, the United States derived a surplus of almost \$2 billion from trade and investment with Venezuela. Second, quotas on steel products could have grave consequences for Venezuelan steel manufacturers for whom access to international markets is essential as a means of generating hard currency to service external indebtedness.

Before addressing these two issues in more detail the Government of Venezuela feels it is important to clarify certain common misconceptions about the government ownership of industries, particularly the steel industry, in developing nations. These misconceptions are particularly acute in the case of Venezuela. We note that Senator Heinz, in introducing S. 2380 on March 1, 1984, advised the Senate that the steel industry in Venezuela is 100 percent government-owned. This is not the case. Although Venezuela's largest producer of steel mill products, CVG Siderurgica del Orinoco, C.A.-SIDOR (hereinafter "SIDOR"), is owned indirectly by the Government of Venezuela, there exists also a substantial private-sector steel industry which accounts for approximately 10 percent of the country's output of finished steel products. Some of the private-sector companies export steel products to the United States, albeit in small quantities.

A second misconception relates to the purpose and effect of government ownership itself. There has arisen a perception that government ownership of industry and unfair trading practices necessarily go hand-in-hand. This perception also is incorrect in the case of Venezuela. Governmental control of certain key industries is a fact of life in many developing nations because it is necessary for the implementation of national planning objectives and the raising of capital for industrial expansion. However, this does not mean that all such enterprises operate unprofitably, target exports toward the United States or engage in unfair trading practices. Contrary to the impression which was created when the Bill was introduced, the expansion of the Venezuelan steel industry was not intended principally to generate substantial export capacity. Rather, it was undertaken with the objective of ensuring national and regional self-sufficiency. Moreover, that expansion has been premised on the basis of a policy on the part of the Venezuelan Government that investment in SIDOR be made strictly in accordance with commercial investment criteria.

More specific information as to the level of sales of steel products to the United States by SIDOR and the other Venezuelan steel manufacturers is contained in the statement which SIDOR has submitted to the Subcommittee in connection with these hearings. As the Subcommittee will conclude upon reviewing SIDOR's statement, the comparatively low levels of exports from Venezuela to the United States illustrate that Venezuela has not sought to target surplus capacity toward the United States. It is clear that steel imports from Venezuela have not been the cause of, nor do they threaten injury to, the domestic industry, as has been affirmed by the United States International Trade Commission in an earlier investigation.

1. The Imposition of Quotas on Imported Steel Mill Products Would Adversely Affect the Flow of Trade and Commerce between the United States and Venezuela

The Government of Venezuela believes that the imposition of quotas on imported steel mill products would represent an arbitrary and damaging obstacle to the free flow of trade and commerce between Venezuela and the United States.

The Government notes that one of the Bill's stated objectives is the reduction in the present United States trade deficit. However, the Bill will likely worsen the trade balance of the United States with Venezuela and other countries with which the United States has generally maintained a favorable trading relationship, both in overall terms and as regards steel products. Past experience indicates that the erection of trade barriers inevitably leads to a general downturn in economic activity for all sectors of the world economy.

In proposing quantitative restrictions on steel imports, the Bill seeks to impose a "solution" for the problems of the domestic steel industry which does not take into account the complexities of international trade and commerce. This is due in part to the misconception, referred to in the Introduction to this Statement, that developing nations, without exception, are targetting exports of products such as steel toward the United States while buying little or nothing from the United States in return. Senator Heinz, for example, in introducing S. 2380 referred specifically to this issue. He noted that while certain specified countries such as Japan,

Canada and the European Community either do not engage in unfair trading practices or had agreed to limit imports, the legislation would focus quantitative restrictions "on the real problem countries, which are, at the this point, all the others". 72 Cong. Rec. at S. 2158. Venezuela does not fit this stereotype. Indeed, nothing could be farther from the truth. Both the United States as a whole, and numerous individual enterprises, continue to profit from trade with, and investment in, Venezuela. Annex A to this Statement contains statistics pertaining to the values and composition of United States-Venezuelan trade in years 1979-1983, while Annex B lists over seventy United States enterprises oing business in Venezuela.

The trade figures illustrate that, between 1979 and 1982 (the last year for which final Commerce Department figures are available), a period in which the United States trade balance with the rest of the world was steadily deteriorating, the balance of trade in goods and services with Venezuela improved in every year. Table A.1 details the overall trade in goods and services between the two countries. These figures reflect that the net contribution to the U.S. economy from Venezuelan sources, as reflected by the balance on current account, for 1982 was almost \$ 2 billion. This compares with an overall deficit on the United States current account of over \$11 billion for the same year.

United States enterprises have derived substantial benefit from trade in merchandise between the United States and Venezuela. Table A.2 shows the composition of United States exports to Venezuela, which aggregated \$21.6 billion during the period 1979-83. Excluding trade in oil and mineral products, the U.S. achieved a surplus on its merchandise trade with Venezuela in each of those years, an aggregate surplus of \$18.9 billion over the entire period, as shown in Table A.3.

This pattern of trade is also reflected in the steel sector. Venezuela has traditionally been a substantial net importer of steel mill products, as is described in the statement submitted by SIDOR. Moreover, the most important component of United States exports to Venezuela is machinery and transportation equipment, both of which consume substantial quantities of steel mill products. Venezuelan purchases of United States-manufactured machinery and transportation equipment during the period 1979-1983 aggregated over \$10.7 billion. In other words, Venezuela purchased substantially more steel goods from the United States than it exported to the United States during the same period. SIDOR itself is a substantial customer of the United States, where it purchases much of the goods and services necessary for its steelmaking activities. The value of SIDOR's purchases in the United States surpass by a considerable extent the value of its sales of steel products. This point is also discussed, in more detail, in the statement submitted to the Subcommittee by SIDOR in connection with these hearings.

In the non-merchandise sector, the balance in favor of the United States is even more marked and equalled \$1.5 billion for 1982. A substantial portion of non-merchandise trade reflects remittances received by United States entities with

direct or indirect investment in Venezuela. A list of United States firms with investments in Venezuela is attached to this Statement as Annex B.

These statistics illustrate amply three important considerations. First, the popular belief that the United States does not benefit from free and open trade with countries such as Venezuela is an incorrect and dangerous assumption. Second, the problems of the steel industry cannot be treated in isolation from the broader aspects of international trade. Third, the problems of the steel industry as well as that of the U.S. trade deficit are not amenable to a simple "quick fix" solution. The Government of Venezuela believes that the imposition of quotas on imported steel products would constitute a seriously retrograde step. Trade is a two way street and, in the event Venezuelan steel producers are arbitrarily denied access to an important international market, it is unrealistic to expect that United States manufacturers who presently supply SIDOR and other Venezuelan enterprises, or who derive substantial service or investment income from Venezuela, will not be harmed as a result. Thus, the effect of quotas on steel products would be to harm other sectors of the United States economy whose business depends substantially upon exporting. This effect would, of course, be felt particularly strongly in industries which are steel consumers, such as machinery and transportation equipment, whose ability to compete in international markets would be adversely affected by the denial of access to competitively-priced steel products.

2. The Imposition of Quotas on Steel Products Would Needlessly Result in Grave Detriment to Venezuela

The Bill's sponsors have alleged that the comprehensive quota framework proposed is necessary to provide relief to the domestic steel industry. However, on June 12, 1984 the ITC ruled, in Investigation TA-201-51, that in four major steel product categories rising imports have not been an important and substantial cause of serious injury to the domestic steel industry. These categories are: (i) pipe and tube; (ii) wire rod; (iii) railroad-type products; and (iv) bars. These categories collectively account for the substantial bulk of Venezuelan steel exports to the United States. As regards the remaining five categories of steel mill products, as to which the ITC entered an affirmative injury finding, it is manifest that Venezuelan imports have played an immaterial and insignificant role in any injury. This point is addressed in more detail in the statement submitted to the Subcommittee by SIDOR.

It is clear as a result that no benefit whatever would accrue to the United States or the domestic steel industry by the imposition of comprehensive quotas on Venezuelan steel products along the lines proposed by the Bill. It is clear, however, that such quotas would have grave adverse consequences not only for SIDOR but for the Venezuelan economy as a whole.

Although Venezuelan steel imports to the United States are not substantial, particularly when compared with imports from other steel producing nations, nonetheless the United States represents an important market for SIDOR and other Venezuelan steel companies. The increase in international

interest rates in recent years has sharply increased the debt service burdens on Venezuelan enterprises. As a result of this rise in interest rates, as well as the austerity measures implemented by the Government of Venezuela which have reduced domestic demand for steel products, it is more important than ever that Venezuelan steel companies have fair and open access to markets such as the United States, just as United States manufacturers enjoy access to the Venezuelan market. The aggregate annual debt service requirement of Venezuelan companies is in the order of \$ 170 million much of that amount being payable to United States banks. The ability of Venezuelan enterprises to comply with these repayment requirements is dependent upon their ability to generate hard currency through exports to countries such as the United States. As has been consistently recognized by senior Administration officials, there exists an undeniable linkage between management of the international debt situation and the elimination of barriers to international trade.

The Government of Venezuela firmly believes that quantitative restrictions of any form would in principle be detrimental to the interests of both Venezuela and the United States. In this instance, the Government of Venezuela believes that the detriment flowing from the enactment of legislative quotas in the form provided for in the Bill would be exacerbated by the procedure for the allocation of quotas among individual countries which is likely to discriminate against Venezuela as compared with other developing countries. As described in this Statement, and the statement submitted by SIDOR, Venezuela has been exporting steel products to the United States for a comparatively short period. Moreover, Venezuela has not "targetted" large scale quantities of steel products toward the United States. As a result, Venezuelan steel producers, notably SIDOR, historically have not achieved

a substantial level of import penetration. Although the Bill accords the Secretary of Commerce discretion in the allocation of quotas on a country-by-country basis, it is likely and, indeed, inevitable that historical import penetration levels will play a major role in the allocation of such quotas. Accordingly, Venezuelan steel producers will likely be severely penalized in the event the Bill is enacted, notwithstanding (i) that trade between the United States and Venezuela in goods and services, including specifically steel products, has consistently resulted in substantial surpluses to the United States; and (ii) that Venezuela has not targetted large quantities of steel toward the United States. The Government of Venezuela trusts the Subcommittee will agree that this result would be arbitrary, absurd and wholly contrary to the purposes of the Bill which purportedly are to counter practices of unfair trade in steel products and to alleviate the present U.S. trade deficit in steel and other areas.

SUMMARY

The Government of Venezuela urges the Subcommittee to give serious consideration to the impact of the Bill upon Venezuela and its future trade relationship with the United States. The Government of Venezuela notes that the Administration has consistently opposed quotas as being contrary to the national interests of the United States and on the basis that quantitative restrictions would not provide any lasting benefit for the United States steel industry. Consequently, the Government of Venezuela urges that, in considering the present status and of future prospects of the domestic steel industry, the Subcommittee firmly reject any purported solution based upon the concept of quantitative restrictions or similar protectionist measures.

ANNEX AUnited States - Venezuela
Trade and Investment StatisticsTable A.1
U.S. Exports to Venezuela
(non-merchandise) by Category
1979-1982 (millions of dollars)

<u>Category</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Transportation	500	646	757	785
Fees and royalties (from affiliates)	15	30	25	21
Fees and royalties (from non-affiliates)	21	310	204	140
Direct investment receipts (net)	256	216	594	708
Other private receipts	576	802	1,168	1,530
U.S. government receipts	9	12	13	17
TOTAL	1,264	4,562	2,464	2,847
Non-merchandise imports (total)	(513)	(690)	(787)	(1,313)
Surplus/(deficit)	751	3,872	1,677	1,534

Source: United States Department of Commerce, Bureau of Economic Analysis, "Survey of Current Business Trends", June 1982 and June 1983.

TABLE A.2
Composition of U.S. Exports to Venezuela
1979-1983 ('000 dollars)

	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Machinery & transportation equipment	2,018,478	2,100,969	2,755,174	2,722,563	1,130,963
Food & live animals	401,729	568,607	722,497	564,322	546,380
Manufactured goods	753,971	918,365	937,743	939,064	358,020
Chemical products	427,381	506,600	496,575	488,258	353,292
Raw materials (not including fuel)	149,092	209,306	181,891	165,877	113,843
Oils and fats (animal & vegetable)	70,304	108,932	159,093	89,113	95,225
Mineral fuels and lubricants	34,219	58,640	53,422	41,564	44,842
Miscellaneous	29,121	36,606	40,432	47,504	24,140
TOTAL	3,899,341	4,512,760	5,367,233	5,086,135	2,758,270

Table A.3
United States-Venezuela Merchandise
Trade, Oil Products Excluded, 1979-1983
 ('000 dollars)

<u>Year</u>	<u>U.S. Exports to Venezuela</u>	<u>U.S. Imports from Venezuela</u>	<u>Surplus/(Deficit) to United States</u>
1979	3,865,122	233,183	3,631,939
1980	4,454,120	241,339	4,212,781
1981	4,328,442	329,786	3,998,656
1982	5,044,570	201,319	4,843,251
1983	2,713,428	488,540	2,224,888

Source: United States Department of Commerce

ANNEX B

United States Enterprises Doing
Business in Venezuela

- ABBOTT LABS** 14 St. & Sheridan Rd., North Chicago, IL 60064
Abbott Labs C.A., Edificio Abbott, Avenida Principal Los Cortijos de Lourdes,
Caracas, Venezuela
(Mfrs. of pharmaceutical products)
- ABEX CORP DIV (DENISON)** 1220 Dublin Rd., Columbus, OH 43216
Ocana C.A., Apartado 93, Anaco, Estado Anzoategui, Venezuela
(Hydraulic motors pumps, valves & transmission, hydraulic presses)
- ACCO INTL INC** 770 S. Acco Plaza, Wheeling, IL 60090
C.A. Acco Mfg., Apartado 30,056, Caracas 103, Venezuela
(Paper fasteners, folders, etc.)
- ADAMS & PORTER INC** 5 World Trade Center, New York, NY 10048
Corredores Internacionales Asociados C.A., Hotel Avila, Avenida Washington,
San Bernardino, Caracas, Venezuela
(Insurance brokers)
- ADDISON-WESLEY PUBLISHING CO** Reading, MA 01867
Fondo Educativo Interamericano, Apartado del Este 62361, Caracas, Venezuela
(Scholastic books, etc.)
- AFIA** (American Foreign Insurance Assn.) 110 William St., New York, NY 10038
AFIA Venezolana C.A., Edificio Luz Electrica, Avenida Urdaneta,
Caracas, Venezuela
(Marine insurance brokers)
- AIR EXPRESS INTL** 151 Harvard Ave., Stamford, CT 06902
Air Express Intl., c/o Taurel & Cia., Sucrs. C.A. Cujia Romualda No. 69,
Edificio Taurel, Piso 5, Apartado 1592, Carmelitas, Caracas, Venezuela
(Air freight forwarding)
- AIRBORNE FREIGHT CORP** 190 Queen Anne Ave., P.O. Box 662, Seattle, WA 98111
H.L. Boulton & Co. S.A., Apartado 929, Caracas, Venezuela
(Freight forwarder)
- ALBERTO-CULVER CO** 2525 Armitage Ave., Melrose Park, IL 60160
Alberto-Culver Americas, Inc., Edificio Crijo, Avenida San Sebastian,
Trinidad, Barua, Estado Miranda, Venezuela
(Mfr. of cosmetic products)
- ALCAN ALUMINUM CORP** 100 Erieview Plaza, Cleveland, OH 44101
Alcan de Venezuela C.A., Edificio Mobil, Avenida Principal La Floresta,
Caracas, Venezuela
(Aluminum sheets, Ingots & cables)
- ALLEN-SHERMAN-HOFF CO** One Country View Rd., Great Valley Center,
Malvern, PA 19355
M.E. Oddrycca, C.A., Caracas, Venezuela
(Materials handling systems - hydraulic & pneumatic)
- ALLERGAN INTL** 2525 DuPont Dr., Irvine, CA 92713
Allergan de Venezuela S.A., Avenida Lisandro Alvarado, Quinta Los Castros,
P.A. Santa Monica, Caracas, Venezuela
(Pharmaceuticals products, etc.)

ALLIED CHEMICAL CO P.O. Box 1087 R, Columbus Rd. & Park Ave.,
Morristown, NJ 07960

Allada Quimica de Venezuela C.A., Edificio Onivas, Oficinas 201 & 202, Calle Real
de Sabana Grande, Esquina Banco Venezolano de Credito, Apartado 61.895,
Caracas, Venezuela
(Chemicals; plastics, fibers, etc.)

AMERICAN AIRLINES INC P.O. Box 61616, Dallas/Ft. Worth Airport, TX 75261

American Airlines Inc., Torre Lincoln, Piso 13, Oficina K, P.O. Box 1613,
Caracas, Venezuela
(Air transportation)

AMERICAN BROADCASTING INTL CO 1330 Avenue of the Americas, New York, NY 100
Venezolana de Television S.A., Avenida La Salle, La Colina, Caracas, Venezuela
(TV station)

AMERICAN BUREAU OF SHIPPING 65 Broadway, New York, NY 10006

American Bureau of Shipping, Edificio El Primero, Oficina 4-B, Calle Paris,
Urbanizacion Las Mercedes, Apartado 61595, Caracas 106, Venezuela
Stationed at: La Guaira, Maracaibo, Puerto Cabello & Puerto Ordaz
(Ships surveys, classification, etc.)

AMERICAN CAN INTL 75 Holly Hill Lane, Greenwich, CT 06830

Envases Venezolanos S.A., Caracas, Venezuela
Envases de Tubos Plasticos C.R.L., Caracas, Venezuela
Vasos Venezolanos S.A., Caracas, Venezuela
Vidrios Domesticos S.A., Caracas, Venezuela
(Metal cans, chemicals, paper containers, etc.)

AMERICAN CHICLE CO 201 Tabor Rd., Morris Plains, NJ 07950

Chicle Adams, Inc., Calle Luis de Camoens, La Trinidad, Baruta, Estado,
Miranda, Venezuela
(Mfr. of chewing gum & candy)

AMERICAN CYANAMID CO 1 Cyanamid Plaza, Wayne, NJ 07470

Cyanamid de Venezuela S.A.; Edificio Principal No. 1, Avenida Principal,
Los Ruicas, Caracas, Venezuela
Dumas Milner de Venezuela S.A., Edificio Principal No. 1, Los Ruicas, Caracas,
Venezuela
(Mfr. of disinfectants & agricultural chemicals, pharmaceuticals, etc.)

AMERICAN EXPRESS CO American Express Plaza, 125 Broad St.,
New York, NY 10004

Turismo Consolidado Turisol C.A., Centro Ciudad Comercial, Caracas, Venezuela
Turismo Consolidado Turisol, Maracaibo, Venezuela
(Travel & financial services, banking)

AMERICAN HOME PRODUCTS CORP 685 Third Ave., New York, NY 10017

Industrias Wyeth S.A., Edificio Wyeth, Avenida Principal Los Ruicas, Caracas,
Venezuela
Also: Las Tejerias, Maracaibo & Valencia
(Drugs, foods & household products)

AMERICAN MOTORS CORP American Center, Franklin Rd., Southfield, MI 48034

A.M.C. De Venezuela C.A., Edificio Gran Avenida, Plaza Venezuela,
Caracas, Venezuela
(Assembler of automobiles)

- PAN AMERICAN WORLD AIRWAYS INC** Pan Am Bldg., New York, NY 10166
Pan American World Airways Inc., Av. Francisco De Miranda, Centro Plaza,
Torre C, Piso 17, Los Palos Grandes, Caracas, Venezuela
Also: Hotel Tamanaco, Las Mercedes, Caracas, Venezuela
(Air transportation)
- PARAMOUNT INTL FILMS INC** 1 Gulf & Western Pl., New York, NY 10023
Paramount Films de Venezuela S.A., Apartado 414, Caracas, Venezuela
(Motion picture distributor)
- PARKE DAVIS & CO** P.O. Box 118, Detroit, MI 48232
Parke-Davis Interamerican Corp., Apartado 4399, Caracas, Venezuela
(Pharmaceuticals)
- PEAT MARWICK MITCHELL & CO** 345 Park Ave., New York, NY 10022
Peat, Marwick, Mitchell & Co., Apartado 9066, Caracas, Venezuela
Also: Edif. Parsa, Piso 5, Plaza La Castellana, Caracas 1010A, Venezuela
(International accountants)
- PENNWALT CORP** 3 Parkway, Philadelphia, PA 19102
Pennwalt-Comanil S.A., Apartado 447, Caracas, Venezuela
(Chemicals, etc.)
- PEPSI CO INC** 700 Andersen Hill Rd., Purchase, NY 10577
Pepsi-Cola Interamericana S.A., Apartado 4352, Caracas, Venezuela
Also: Edif. Xerox Piso 6, Ave. Libertador, Urb. bello Campo, Caracas 1060,
Venezuela
Apartado 60352, Correo del Este, Caracas, Venezuela
(Soft drink syrups, concentrates, bottling)
- PETTY-RAY GEOPHYSICAL DIV (GEOSOURCE INC)** 6909 Southwest Frwy.,
P.O. Box 36306, Houston, TX 77036
Geosource Exploration Co., Quinta La Bolivera No. 33, Avenida Los Jablillos,
La Florida, Caracas, Venezuela
(Geophysical engineering & technology)
- PFIZER INTL INC** 235 E. 42 St., New York, NY 10017
Pfizer Corp., Apartado De Correos 61.289, Caracas, Venezuela
(Pharmaceuticals, cosmetics, etc.)
- PHELPS DODGE CORP** 300 Park Ave., New York, NY 10022
Alambres y Cables Venezolanos C.A., (ALCAVE), Edif. Mena Grande, 7 Piso,
Ave. Francisco de Miranda, Los Palos Grandes, Caracas, Venezuela
Mail: Apartado del Este 62107, Caracas, Venezuela
(Copper cathode, wire bar & ingot bar, precious metals, sulfuric acid,
molybdenum sulfide concentrates)
- PHILADELPHIA NATL BANK** P.O. Box 7618, Philadelphia, PA 19101
Philadelphia Natl. Bank, Centro Comercial Tamanaco, Suite 318 Chuao,
Caracas, Venezuela
(International banking)
- PHILLIPS PETROLEUM CO** Phillips Bldg., Bartlesville, OK 74004
C.A. Venezolana Internacional de Productos Quimicos, Apartado del Este 5522,
Caracas, Venezuela
Venezoil C.A., Apartado 1031, Caracas, Venezuela
(Petroleum & chemical products)

- PILLSBURY CO** MS #0110, Pillsbury Center, Minneapolis, MN 55402
Molinos Caracas Maracaibo MOCAMA, Edif. Teatro Altamira, Sur Plaza,
Altamira, Caracas, Venezuela
(Flour mills)
- PITTSBURGH-DES MOINES CORP** Neville Island, Pittsburgh, PA 15222
AS Hamond Latino Americana S.A., Apartado 43, Judibana, Venezuela
(Structural steel, tanks)
- PRECISION VALVE CORP** P.O. Box 309, Yonkers, NY 10702
Prevalco C.A., Aptdo. 66202, Plaza las Americas, Caracas, Venezuela
(Aerosol valves, etc.)
- PRICE WATERHOUSE & CO** 1251 Avenue of the Americas, New York, NY 10020
Espineira, Sheldon y Asociados, Edif. Dalrio, 7th Floor, Ave. Cafetal, Chuao,
Apartado 1789, Caracas, Venezuela
Also: Torre, Buenos Aires, Office 403, Ave. 5 De Julio, Maracaibo, Venezuela
(Auditing & accounting)
- PROCTER & GAMBLE CO** P.O. Box 599, Cincinnati, OH 45202
Procter & Gamble de Venezuela S.A., Edif. Torre del Este, Avenida Francisco
de Miranda, Chacao, Caracas, Venezuela
Mavasa S.A., Avenida Principal Los Cortijos de Lourdes, Caracas, Venezuela
(Mfr. of margarine & edible oil, detergents, soaps, etc.)
- PROCON INTL INC** (Sub. UOP Inc.) 50 UOP Plaza, Des Plaines, IL 60016
Procon Constructores Intl. S.A., Centro Playo, Torre C, Oficina P, Los
Palos Grandes, Caracas 1082, Venezuela
(Engineering & construction to the petroleum refining, petrochemical, chemical
gas processing, coal conversion & other industries)
- PROTANE CORP** (Sub. Inter North Ind.) 2699 S. Bayshore Dr.,
Coconut Grove, FL 33133
Industrias Ventana S.A., Apartado 1689, Caracas, Venezuela
(Retail, wholesale & industrial sales of LP-gas products)
- PURULATOR INC** 285 Old New Brunswick Rd., Piscataway, NJ 08854
Purulator de Venezuela C.A., Edif. Gallpan C-2-D, Avenida Francisco de
Miranda, Caracas, Venezuela
(Mfr. of oil, gas & air filters)
- QUAKER OATS CO** 345 Merchandise Mart Plaza, Chicago, IL 60654
Productos Quaker C.A., Av. Principal Los Ruices, Apartado 70394, Los Ruices,
Caracas, Venezuela
(Mfr. of oat products, foods, pet foods, toys, chemicals, etc.)
- RCA GLOBAL COMMUNICATIONS INC** 60 Broad St., New York, NY 10004
RCA Communications, Inc., Apartado Chacao 4830, Caracas, Venezuela
(Communications services)
- RAMADA INTL INC** P.O. Box 590, Phoenix, AZ 85001
Ramada Intl. Inc., Apartado 20.164, Caracas 1020A, Venezuela
(Motor hotels, international services, hospitality, etc.)
- RALSTON PURINA CO** 835 S. Eight St., St. Louis, MO 63102
Purina de Venezuela, Av. Gloria, No. 15, Urb. El Bosque, Caracas, Venezuela
Corgon de Venezuela C.A., Edif. Santa Fe, Sur 21, Caracas, Venezuela
Purina de Occidente C.A., Carretera de Perija, Km. 4, Maracaibo, Estado
Zulia, Venezuela
(Cereals & food products; pet, poultry & livestock feeds)

TRANS WORLD AIRLINES 605 Third Ave., New York, NY 10158
 Trans World Airlines, Ave. Lecuna Esq. Velasquez o Miseria, Torre Profesional
 del Central Mezzanine, Caracas, Venezuela
 (Air transportation)

TRANE CO 3600 Pammel Creek Rd., La Crosse, WI 54601
 Trane Western Hemisphere Inc., Andre Narco, Apartado 62015, Chacao,
 Caracas, Venezuela
 (Mfr. air conditioning equipment)

TRANSAMERICA CORP 600 Montgomery St., San Francisco, CA 94111
 Budget Rent a Car, Avenida Venezuela, Esquina con Pichincha, Caracas, Venezuela
 United Artists of Trinidad Inc., Edif. Teatro Las Palmas, 6 Piso, Avenida
 Las Palmas, Los Caobos, Caracas, Venezuela
 (Diversified services, air carrier, automobile rental, business services)

TRUE TEMPER CORP 1623 Euclid Ave., Cleveland, OH 44115
 Industria Nacional de Implementos Agrícolas C.A., Zona Industrial La Hamana,
 Caracas, Venezuela
 (Hand tools, farm & garden implements, shears, sporting goods, etc.)

TUPPERWARE MFG CO INTL (Dart & Kraft Inc.) Drawor D, Woonsocket, RI 02895
 Tupperware Mfg. Co. Intl., P.O. Box 4914, Zona Industrial San Vicente II,
 Parcela D-1, Calle A con cruce Calle G, Maracay, Edo. Aragua, Venezuela
 (Plastic, ware, etc.)

TWENTIETH CENTRY-FOX FILM CORP 10201 W. Pico Blvd., Los Angeles, CA 90035
 Twentieth Centry-Fox Film S.A., Edif. Metropolitano, Esquina Pto.
 Escondido, Caracas, Venezuela
 (Distributor of motion pictures)

WILLIAM UNDERWOOD CO 1 Red Devall Lane, Westwood, MA 02090
 Diabitos Venezolanos C.A., Avenida Abraham Lincoln, Apartado 62023,
 Sabana Grande, Caracas, Venezuela
 (Specialty meat spreads, sardines, etc.)

UNION CARBIDE CORP Old Ridgebury Rd., Danbury, CT 06817
 Union Carbide de Venezuela C.A., Apartado 5363, Caracas, 101, Venezuela
 (Mfr. of dry cell batteries, chemicals, etc.)

UNITED MERCHANTS & MFRS INC 1407 Broadway, New York, NY 10018
 Sudamtex de Venezuela C.A., Apartado 3025, Caracas, Venezuela
 Sudaseta C.A., Edif. Karam, Avenida Urdaneta, Caracas, Venezuela
 (Acetate fibers & yarns, etc.)

UNITED STATES LEASING INTL INC P.O. Box 3985, San Francisco, CA 94119
 Arrendaclma C.A., Caracas, Venezuela
 (Diversified equipment leasing organization)

UNITED TECHNOLOGIES CORP United Technologies Bldg., 1 Financial Plaza,
 Hartford, CT 06101
 Ascensores Otis de Venezuela C.A., Edif. Mene Grande, Piso 3, Avenida
 Francisco de Miranda, Los Palos Grandes, Caracas 106, Venezuela
 (Elevators, escalators)

UPJOHN CO 7000 Portage Rd., Kalamazoo, MI 49001
 Laboratorios Upjohn C.A., Edificio Oficina, Calle Los Laboratorios, Los Ruices,
 Caracas, Venezuela
 (Mfr. of pharmaceutical products)

- U S ELECTRICAL MOTORS DIV (EMERSON ELECTRIC CO)** 125 Old Gate Lane,
Milford, CT 06460
Emerson Electric C.A., Apartado 75.748, Caracas Z.P. 107, Venezuela
(Electric motors, etc.)
- U S LIFE INSURANCE CO** 125 Malden Lane, New York, NY 10038
Seguros Venezolana C.A., Edif. Luz Electrica, Avenida Urdaneta, Caracas,
Venezuela
(Insurance company)
- VIKING PUMP DIV (HOUDAILLE INDUSTRIES INC)** 406 State St., Cedar Falls, IA 5061
Bombas Viking S.R.L., Apartado 76374, El Marques 1070A, Caracas, Venezuela
(Industrial rotary gear pumps)
- WACKENHUT CORP** 3280 Ponce de Leon Blvd., Coral Gables, FL 33134
Venezolana De Seguridad Y Vigilancia C.A., Calle Madrid 107-1306,
Qta. Gloria entre Calles Monterrey y Mucuchies, Las Mercedes,
Municipio Barute, Distrito Sucre, Estado Miranda, Venezuela
(Security systems & services)
- SAM P WALLACE CO INC** P.O. Box 35828, Dallas, TX 75235
Wallace Alvarez C.A., Quinta Abita, Calle Taborda, Sector San Roman,
Urb. las Mercedes, Caracas 160, Venezuela
(Mechanical contractor)
- WARNER-LAMBERT INTL** 201 Tabor Rd., Morris Plains, NJ 07950
Laboratorios Substancia C.A., Avenida Principal Los Ruices, Caracas 1010A,
Venezuela
(Pharmaceutical products)
- WESTERN GEOPHYSICAL** P.O. Box 2469, Houston, TX 77001
Western Geophysical, Calle 73 No. 13A-92, Apartado Postal 1236,
Maracalbo, Venezuela
(Geophysical services)
- WESTINGHOUSE ELECTRIC CORP** 2040 Ardmore Blvd., Pittsburgh, PA 15221
Westinghouse de Venezuela S.A., Apartado 1889, Caracas 101, Venezuela
(Electrical equipment & components)
- J G WHITE ENGINEERING CORP** 1212 Avenue of the Americas, New York, NY 10036
White Weld & Co., Edif. Roman, Santa Capilla a Mijares 24, Caracas, Venezuela
(Investment & stock brokers)
- WILBUR-ELLIS CO** 320 California St., San Francisco, CA 94104
Connell Bros. Co., Ltd., Apartado 6665, Caracas, Venezuela
(General merchandise)
- WIRE ROPE CORP OF AMERICA** 609 N. Second St., P.O. Box 288, St. Joseph, MO 64501
Wireco Venezolana C.A., Caracas, Venezuela
(Wire rope)
- WORLD COURIER INC** 19 Rector St., New York, NY 10006
World Courier de Venezuela, Transportes Urgentes Transur, S.A., Av. el
Bosque, Qta. Los Indragos No. 7-13, La Florida, Caracas, Venezuela
(International couriers)
- YORK INTL DIV (BORG-WARNER CORP)** P.O. Box 1592, York, PA 17405
Refrigeracion York S.A., Apartado 61681, Chacao, Caracas 106, Venezuela
(Air conditioning & refrigeration)

SMITHKLINE CORP P.O. Box 7929, Philadelphia, PA 19101

SmithKline & French C.A., Aptdo 768, Caracas 1010, Venezuela
(Mfr. of pharmaceutical products)

FOSTER D SNELL INC 66 Hanover Rd., Florham Park, NJ 07932

Foster D. Snell de Venezuela S.A., 4ta. Avenida entre 5ta. y 6ta. Transversal
Los Palos Grandes, Caracas, Venezuela
(Chemical lab)

E R SQUIBB INTL INC P.O. Box 4000, Princeton, NJ 08540

E.R. Squibb & Sons Inter-American Corp., Calle Bernardette, Los Cortijos de
Lourdes, Caracas, Venezuela
(Pharmaceutical products)

SPERRY CORP 1290 Avenue of the Americas, New York, NY 10104

Sperry Vickers, Sperry Rand Venezuela C.A., Edif. Los Cortijos P.B., 2da.
Avds. con 4ta. Transversal, Los Cortijos de Lourdes, Caracas 1071, Venezuela
(Hydraulic components & systems)

SPERRY RAND CORP 1401 Crooks Rd., Troy, MI 48084

Sperry Rand de Venezuela C.A., Edif. Brion, Puente Brion, Avenida Universidad,
Caracas, Venezuela
(Office equipment & computers)

SONOCO PRODUCTS CO N. Second St., Hartsville, SC 29550

Sonoco de Venezuela C.A., Apartado de Correos 329, Caracas 101, Venezuela
Sonopro C.A., Apartado de Correos 62361, Caracas, Venezuela
(Paper, Industrial packaging products)

STANLEY INTL 195 Lake St., New Britain, CT 06050

Stanley Venezolana S.R.l., Apartado de Correos 80657, Caracas 108, Venezuela
(Strip steel, hand tools, etc.)

STERLING DRUG INC 90 Park Ave., New York, NY 10016

Sydney Ross Co., Primera Calle Los Cortijos de Lourdes, Caracas, Venezuela
(Pharmaceutical products & toilet preparations)

STOKES PENNWALT CORP 5500 Tabor Rd., Philadelphia, PA 19120

Pennwalt Inter-Americana S.A., Caracas, Venezuela
(Equipment, chemicals, health products)

STORAGE TECHNOLOGY CORP 2270 S. 88 St., Lawisville, CO 80027

C.S.R., Torre BB Piso 12 El Marques, Edif. Bazar Bolivar, Caracas, Venezuela
(Lenses, computer peripheral equipment, electronic parts, etc.)

SULLAIR CORP 3700 E. Michigan Blvd., Michigan, IN 46360

Sullair Venezolana Inc., 5210 Foresthaven, Houston, TX 77066
(Mfr. air compressors, Industrial refrigerations, etc.)

SUNBEAM MANAGEMENT SERVICES LTD 2001 S. York Rd., Oak Brook, IL 60521

Sunbeam de Venezuela S.A., Edif. Principal, Tercera Transversal, Los Ruices,
Caracas, Venezuela
John Oster de Venezuela S.A., Apartado 61.300, Caracas, 1060A, Venezuela
(Assembler & importer of electrical appliances)

SUN CHEMICAL CORP 200 Park Ave., New York, NY 10017

222 Bridge Plaza S. Fort Lee, NJ 07424
Fuchs & Lang Sun Chemicals de Venezuela S.A., Urb. Industrial Priunca Darceza 3,
Aptdo. Valencia 1445, Guacara, Carabobo, Venezuela
(Textile chemicals, pigments, paints, etc.)

SUPERIOR OIL CO First City Natl. Bank Bldg., P.O. Box 1521, Houston, TX 77001
 Superior Oil Co. de Venezuela, Apartado 5250, Caracas, Venezuela
 (Crude oil, natural gas, etc.)

SYBRON CORP DIV (TAYLOR INSTRUMENT) 1100 Midtown Tower, Rochester, NY 14604
 Taylor Instrument C.A., Apartado Postal 697, Valencia Edo. Carabobo, Venezuela
 (Health lab products, chemicals, process equipment, etc.)

TRW CO 23555 Euclid Ave., Cleveland, OH 44117
 COVENDISA, Apartado No. 1653, Valencia, Venezuela
 (Electronics, communications, information services)

APPAN INTL Tappan Park, Mansfield, OH 44901
 Cimmar C.A., Apartado 75208, El Marques, Caracas 107, Venezuela
 (Gas, electric appliances, etc.)

TEKTRONIX INC P.O. Box 500, Beaverton, OR 97075
 Equilib C.A., Torre KLM, 6o Piso, Avda. Romulo Gallegos, Santa Eduvigis,
 Apartado 60497, Caracas 106, Venezuela
 (Mfr. electronic display & measurement equipment)

TEXAS COMMERCE BANK P.O. Box 2558, Houston, TX 77001
 Texas Commerce Bank, Edif. ABA 4o Piso, Calle Veracruz, Urb. Las Mercedes,
 Caracas, Venezuela
 As well as several other locations throughout Venezuela
 (International banking)

3M CO 3M Center, St. Paul, MN 55144
 3M Venezuela S.A., Apartado 2083, Caracas 101, Venezuela
 (Adhesives, adhesives, etc.)

J WALTER THOMPSON CO 420 Lexington Ave., New York, NY 10017
 J. Walter Thompson de Venezuela C.A., Centro Banaven, Torre C, Caracas,
 Venezuela
 (Advertising agency)

TIDEWATER P.O. Box 61117, New Orleans, LA 70161
 Tidewater Marine Service, Edif. Upama, Calle 76 No. 11-84, Maracalbo,
 Estado Zulia, Venezuela
 Also: Tidewater Caribe C.A., Equipo Zulia C.A.
 (Marine service & equipment to energy-related industries)

TOPFLIGHT CORP 200 E. 9th Ave., P.O. Box 472, York, PA 17405
 Tovenca, Apartado 61.487, Chacao, Caracas, Venezuela
 (Adhesive materials, printed pressure sensitive materials, tape labels, etc.)

TOUCHE ROSS & CO 1633 Broadway, New York, NY 10019
 Mail: P.O. Box 778, Radio City Sta., New York, NY 10019
 Cano Perez & Asociados, Edif. Selemar, Piso 9, Calle Real de Sabana Grande,
 Apartado 51.133, Caracas 105, Venezuela
 As well as many other locations throughout Venezuela
 (Accounting & auditing, tax & management services)

TOWERS PERRIN FORSTER & CROSBY 600 Third Ave., New York, NY 10016
 Towers, Perrin, Forster & Crosby, Apartado No. 50247, Sabana Grande,
 Caracas 105, Venezuela
 (Management consultants)

RAYBESTOS-MANHATTAN INC 100 Oakview Dr., Trumbull, CT 06611

MAMUSA (Mfrs. Múltiples S.A.) Aptdo. Postal 62.185 Chacao,
Edif. Juguetelandia, Avda. Francisco Miranda, Caracas 106, Venezuela
(Friction materials, brake linings, disc brake pads, clutch facings &
replacement products, lined brake shoes, brake blocks, etc.)

RAYMOND INTL INC 2801 S. Post Oak Rd., Houston, TX 77027

Kaiser Engineers & Constructors Inc., Apdo. 1629, Caracas 101, Venezuela
(Construction, contractors)

RAYTHEON CO 141 Spring St., Lexington, MA 02173

Badger Pan America Inc., c/o Alexander Bratt Associates, Edif. La
Estancia, Piso II, Ciudad Comercial Tamanaco, P.O. Box 60193,
Caracas 106, Venezuela
(Electronic equipment, aviation, appliances, energy, construction & publishing)

READER'S DIGEST ASSOCIATION INC P.O. Box 235, Pleasantville, NY 10570

The Reader's Digest de Venezuela C.A., Edif. Valderay, Avenida El Parque,
San Bernardino, Caracas, Venezuela
(Magazines, books, phonograph records, etc.)

REVLON INC 767 Fifth Ave., New York, NY 10153

Revlon Overseas Corp., Apartado 5733, Caracas, Venezuela
(Cosmetics, etc.)

REYNOLDS METALS CO P.O. Box 27003, Richmond, VA 23261

Aluminio Reynolds de Venezuela S.A., Calle Las Mercedes 37, Chacao,
Caracas, Venezuela

As well as many other locations throughout Venezuela
(Aluminum extruder, etc.)

A H ROBINS CO INC 1407 Cummings Fr., Richmond, VA 23220

Laboratorios Ergos S.A., 2da. Transversal No. 8, Urb. Buena Vista, Petare,
Estado Miranda, Venezuela
(Mfr. of pharmaceutical products)

ROBINSON LUMBER CO 512 S. Peter St., Suite 202, New Orleans, LA 70130

Venezuela Lumber C.A., Edif. Las Tres Rosas, Apartado 5, Avenida Minerva,
Las Acacias, Caracas, Venezuela
(Lumber products)

ROHM & HAAS CO Independence Mall West, Philadelphia, PA 19105

Rohm & Haas Latin America Inc., Apartado Del Este 62403, Caracas 106, Venezuela
(Chemicals, etc.)

SGS CONTROL SERVICES INC 42 Broadway, New York, NY 10004

SGS Venezuela S.A., Edif. Galerías Miranda, Avenida Francisco de Miranda,
2º Piso, P.O. B. 61257 Chacao, Caracas 1060A, Venezuela

As well as several other locations throughout Venezuela
(Full range of quality & quantity control checks & related technical
services)

SANTA FE INTL CORP P.O. Box 4000, Alhambra, CA 91802

C.F. Braun & Co., Edif. Torreón, Piso 6, Calle Veracruz, Las Mercedes,
Caracas 101, Venezuela

Santa Fe Drilling Co. of Venezuela C.A., Terminales Maracaibo, Las Mercedes,
Caracas 101, Venezuela

Mall: P.O. Box 62416, Chacao 1060, Venezuela
(Contract drilling for oil & gas, etc.)

E W SAYBOLT & CO INC 400 Swenson Dr., Kenilworth, NJ 07033
 Saybolt & Co., Puerto La Cruz, Estado Anzoategui, Venezuela
 (Petroleum inspectors)

SCHLUMBERGER LTD 277 Park Ave., New York, NY 10172
 Dowell Schlumberger Western S.A., Edif. Torre del Este, Avenida Francisco
 de Miranda, Caracas, Venezuela
 Schlumberger Suranco S.A., Edif. Callpan, Avenida Francisco de Miranda,
 Caracas, Venezuela
 Schlumberger Service Co., El Tigre, Estado Anzoategui, Venezuela
 (Oilfield services, electronic components & equipment)

SCHRADER BELLOWS DIV (SCOVILL) 200 W. Exchange St., Akron, OH 44309
 Stubbins C.A., Apartado 7, Caracas 101, Venezuela
 Re.Be.Ka. S.R.L., Apartado 1036, El Trigal, Valencia, Venezuela
 (Pneumatic & hydraulic valves & cylinders, accessories, etc.)

SCHERING-PLOUGH CORP Galloping Hill Rd., Kenilworth, NJ 07033
 Schering de Venezuela S.A., Apartado 2395, Caracas 101, Venezuela
 Productos Farmaceuticos de Venezuela S.A., Apartado 1120, Maracalbo, Venezuela
 (Pharmaceutical & name-brand consumer products, etc.)

SEARLE CO PHARMACEUTICAL/CONSUMER PRODUCTS GROUP
 P.O. Box 1045, Skokie, IL 60076
 Searle Venezuela C.A., Apartado 75-737, Caracas 107, Venezuela
 (Pharmaceuticals)

SEARS ROEBUCK & CO Sears Tower, Chicago, IL 60684
 Sears, Roebuck de Venezuela S.A., Edif. Soars, Avenida Principal Colinas de
 Bello Monte, Caracas, Venezuela
 Also: Apartado 1509, Caracas, Venezuela
 (Mfr. of metal furniture, washing machines, etc.)

SHERATON CORP 60 State St., Boston, MA 02109
 Sheraton de Venezuela, Torre Delta, 1 Piso, Ave. Francisco de Miranda,
 Altamira, Caracas, Venezuela
 (Hotels, office operations)

SHERWIN WILLIAMS CO P.O. Box 6027, Cleveland, OH 44101
 C.A. Venezolana de Pinturas, Apartado de Correos 3422, Caracas 107, Venezuela
 C.A. Venezolana de Pinturas, Apartado de Correos 94, Valencia, Venezuela
 C.A. Venezolana de Pigmentos (CAVENPI), Apartado de Correos 1125,
 Valencia, Venezuela
 (Architectural & industrial coatings & finishes, wall & floor coverings, spray
 equipment)

SHULTON INC (Sub. American Cyanamid Co.) 1 Cyanamid Plaza, Wayne, NJ 07470
 Shulton de Venezuela S.A., Edif. Centro Industrial, Los Cortijos de Lourdes,
 Apartado 61539, Caracas, Venezuela
 (Mfr. of toilet preparations)

SIGNETICS CORP 811 E. Arques Ave., P.O. Box 409, Sunnyvale, CA 94066
 Industrias Venezolanas Phillips S.A., Caracas, Venezuela
 (Solid state circuits)

SIMMONS INTL LTD 1 Gulf Western Plaza, New York, NY 10023
 Simmons de Venezuela C.A., Apto. 70090, Caracas 107, Venezuela
 (Metal furniture, bed & seating springs, etc.)

AMERICAN INTL UNDERWRITERS DIV (AMERICAN INTL GROUP INC)

70 Pine St., New York, NY 10270
 American Intl. Underwriters C.A., Apartado Del Este 61323 Chacao,
 Avenida Francisco De Miranda, Caracas, Venezuela
 Also: P.O. Box 1018, Calle 77, 5 De Julio, Entre Esquinas De Avenidas 15 Y 16,
 Edificio Calban, 2 Piso, Ofic. 2A, Maracalbo, Estado Zulia, Venezuela
 La Federacion Compania de Seguros C.A., Centro Plaza, Bloque D, Piso 17,
 Avds. Francisco de Miranda/Los Palos Grandes, Caracas, Venezuela
 (Insurance brokers)

ARTHUR ANDERSEN & CO 69 W. Washington St., Chicago, IL 60602

Arthur Andersen & Co., Caracas 1080, Venezuela
 Arthur Andersen & Co., Avenida La Estancia 10, Ciudad Comercial Tamanaco,
 Caracas, Venezuela
 Arthur Andersen & Co., Apartado 7, Maracalbo, Venezuela
 (Auditors & accountants)

ARBOR ACRES FARM INC Marlborough Rd., Glastonbury, CT 06033

DIACA C.A., Arbor Acres de Venezuela; Apartado 359, Valencia, Venezuela
 Las Clavellinas C.A., Agricola Las Clavellinas, Apartado 83, Valencia,
 Carabobo, Venezuela
 (Poultry breeders)

ELIZABETH ARDEN SALES CORP 55 E. 52 St., New York, NY 10022

Elizabeth Arden de Venezuela S.A., Edificio Centro Industrial 1, Avenida
 Principal Los Rulces, Caracas, Venezuela
 (Cosmetics, etc.)

ARMCO INTL DIV Middletown, OH 45042

C.A. Armco-Venezolana, Calle Norte-Sur No. 1, Los Cortijos de Lourdes,
 Apartado 368, Caracas 101, Caracas 107, Venezuela
 C.A. Tubos Armco, Carretera Panamericana, Entrada Corralito, No. 5,
 Apartado 70870-Los Rulces, Caracas 107, Carrizal, Estado Miranda, Venezuela
 Bundy Venezolana C.A., Transversal 9, Lote 7-A, Urbanizacion Industrial
 Carabobo, Apartado 708, Valencia, Estado Carabobo, Venezuela
 (International mfr. steel products & services)

ARO CORP 1 Aro Center, Bryan, OH 43508

Aro de Venezuela C.A., Apartado del Este 60207, Caracas 1080, Venezuela
 (Tools, lubricating equipment)

ASHLAND OIL INC 1401 Winchester Ave., Ashland, KY 41101

Valvoline Oil Co. de Venezuela C.A., Avenida San Martin No. 215,
 Caracas, Venezuela
 (Distri. of lubricants)

ASSOCIATED PRESS 80 Rockefeller Plaza, New York, NY 10020

Associated Press, Edificio El Nacional, Puerto Escondido a Puente Nuevo,
 Caracas, Venezuela
 (News gathering, etc.)

AVCO INTL SERVICES DIV 12011 Mosteller Rd., P.O. Box 41300, Cincinnati, OH 45241

Corporacion Avco, Oficina 425, Piso 2, Redoma Prados del Este, Caracas, Venezuela
 (Electronic equipment, airport services, training, logistics services,
 technical services, operation & maintenance of airports, etc.)

AVIS INC 900 Old Country Rd., Garden City, NY 11530

Fiestas Car Rentals de Venezuela, Edificio Gallpan, Avenida Francisco de Miranda,
 Caracas, Venezuela
 (Automobile rental services)

- AVON PRODUCTS INC** 9 W. 57 St., New York, NY 10019
Avon Cosmetics S.A., Edificio Avon, Avenida Sanatorio, Urbanizacion Industrial
Boleita, Venezuela
(Mfr. of cosmetic products)
- AYERST LABS** 685 Third Ave., New York, NY 10017
Ayerst Labs., Apartado del Este 5599, Caracas, Venezuela
(Pharmaceuticals; biological products)
- B J HUGHES INC** 4150 Long Beach Blvd., Long Beach, CA 90801
Pacemaker Service C.A., Apartado 434, El Tigre, Venezuela
(Pumps, oil wells equipment, etc.)
- BADGER AMERICA INC** One Broadway, Cambridge, MA 02142
Badger Pan America Inc., P.O. Box 60193, Caracas 106, Venezuela
(Design, engineering & construction)
- BAKER PRODUCTION SERVICES** 500 City Parkway W., Orange, CA 92668
Baker Eastern S.A., Apt. 2-A, Piso 5, Edificio Cachamay Torre B,
Avenida Alberto Rangel, Puerto La Cruz, Venezuela
As well as many other locations throughout Venezuela
(Oil tools, oilfield tools & supplies)
- BANK OF AMERICA NATL TRUST & SAVINGS ASSN'** 555 California St.,
San Francisco, CA 94137
Bank of American Natl Trust Savings Assn., Edificio Torre Cavendes, Piso 2,
Avenida Francisco de Miranda, Los Palos Grandes, Apartado Aereo 5768,
Caracas 1010A, Venezuela
(International banking)
- BANKERS TRUST CO NY** 280 Park Ave., New York, NY 10017
Mail: P.O. Box 318, Church St. Station, New York, NY 10015
Bankers Trust Co., Edificio Cavendes, Piso 8, Oficina 802,
Avenida Francisco de Miranda, Los Palos Grandes, Caracas, Venezuela
Mail: Apartado 61028, Chacao, Caracas 106, Venezuela
(International banking)
- BARDAHL** P.O. Box 70607, Seattle, WA 98107
Parma Lub. C.A., Apartado 68268 Altamira, Caracas, Venezuela
(Lubricating oil, etc.)
- BASF WYANDOTTE CORP** 100 Cherry Hill Rd., Parsippany, NJ 07054
Wyandotte de Venezuela C.A., Edificio Blandin, Plaza Chacaito, Caracas, Venezuela
(Mfr. of detergents, etc.)
- TED BATES & CO INC** 1515 Broadway, New York, NY 10036
Chersy/Quintero-Ted Bates Int. C.A., Centro Ciudad Comercial Tamanaco,
Piso 5, #504, Caracas, Venezuela
(Advertising agency)
- BAXTER TRAVENOL LABS INC** 1 Baxter Pkwy., Deerfield, IL 60015
Laboratorios Baxter C.A., Apartado de Correos 68739, Caracas, 1062-A, Venezuela
(Labs)
- BEATRICE FOODS CO** 2 N. La Salle St., Chicago, IL 60603
Industrias Anite C.A., Edificio Anite, Calle Vargas, Boleita, Estado Miranda,
Venezuela
Marlon S.A., Edificio Marlon, Avenida Sanatorio Avila, Boleita, Estado Miranda,
Venezuela
C.A. Savoy Candy, Avenida Intercomunal El Valle, Caracas, Venezuela
(Dairy & food products)

BEHRING INTL INC 10700 Northwest Frwy., P.O. Box 52800, Houston, TX 77052
 Behring Overseas Corp., Calle C, Residencias La Blanquilla, Piso 7,
 Apto 7D, Santa Rosa de Lima, Caracas 106, Venezuela
 (International freight forwarding, customs house brokerage, etc.)

BENDIX CORP Bendix Center, P.O. Box 5060, Southfield, MI 48037
 Fram de Venezuela S.A., Apartado 1267, Caracas, Venezuela
 (Automotive, aerospace, electronics, etc.)

BEROL CORP Eagle Rd., Danbury, CT 06810
 Eagle Pencil Co. de Venezuela S.A., Avenida Lamas, Avenida San Martín,
 Caracas, Venezuela
 (Mfr. of pencils & ballpoint pens)

BESSEMER SECURITIES CORP 245 Park Ave., New York, NY 10017
 Continental de Créditos Mercantiles C.A., CREMERCA, Edificio Icauca,
 Punceres a Pelota, Avenida Urdaneta, Caracas, Venezuela
 (Consumer goods, retail financing)

BIG DUTCHMAN INC P.O. Box 888347, Atlanta, GA 30338
 Protinal C.A., Apartado 83, Valencia, Venezuela
 (Automation equipment)

BLACK & DECKER MFG CO 701 East Joppa Rd., Towson, MD 21204
 Black & Decker de Venezuela C.A., Apartado de Este 61860, Calle Pantín,
 Edificio Nefer, Chacao, Caracas, Venezuela
 (Power tools, etc.)

BORDEN INC INTL 420 Lexington Ave., New York, NY 10017
 Helados Club S.A., Apartado 1615, Caracas, Venezuela
 (Chemicals, dairy products, etc.)

BORG-WARNER CORP 200 S. Michigan Ave., Chicago, IL 60601
 Refrigeration York S.A., Apartado 61881, Chacao, Caracas 106, Venezuela
 Borg & Deck de Venezuela S.A., c/o CAREN, Quebrada Honda, Caracas, Venezuela
 (International air conditioning & refrigeration operations & marketing)

BOYDEN CORP Suite 2000, 260 Madison Ave., New York, NY 10016
 Management Consultants, Apartado 51077, Caracas 1050A, Venezuela
 (Management consultants)

BRISTOL BABCOCK INC 40 Bristol St., Waterbury, CT 06708
 Automatización C.A., Apartado 47023, Caracas 1041A, Venezuela
 (Electronic & digital process control instrumentation, microprocess controllers,
 computer based systems)

BRISTOL LABS P.O. Box 657, Syracuse, NY 13201
 Clafrol de Venezuela C.A., Edificio Danpar, Calle Sanatorio del Avila, Boleíta
 Norte, Estado Miranda, Venezuela
 Industrial Bristol C.A., Edificio Principal No. 1, Avenida Principal Los Ruices,
 Caracas, Venezuela
 (Mfr. of pharmaceutical & cosmetic products)

BROWN & ROOT INC 4100 Clinton Dr., Houston, TX 77020
 Brown & Root S.A., Calle 80 No. 3-C-43, Maracaibo, Estado Zulia, Venezuela
 (Engineering & construction contractors)

- BRUNSWICK CORP** 1 Brunswick Plaza, Skokie, IL 60076
Brunswick Intl. C.A., Baker & McKenzie, Edificio Aldemo Piso 6,
Avenida Venezuela, Urbanizacion Elrosal, Apdo 1286, Caracas, Venezuela
(Bowling equipment)
- LEO BURNETT CO INC** Prudential Plaza, Chicago, IL 60601
Leo Burnett Venezuela C.A., Centro Plaza, Torre B. Nivel 8, Avenida Francisco
Miranda, Los Palos Grandes, Apartado de Corroos 6931, Caracas, Venezuela
(Advertising)
- BURROUGHS CORP** Burroughs Place, P.O. Box 418, Detroit, MI 48232
Burroughs de Venezuela S.A., Edificio Urapal, Esquina Urapal,
Avenida Urdaneta, Venezuela
Burroughs Compania Anonima, Apartado 70116 Los Ruices, Caracas, Venezuela
(Data processing systems, electronic components, etc.)
- CBI INDUSTRIES INC** 800 Jorie Blvd., Oak Brook, IL 60521
CBI De Venezuela C.A., Circunvalacion No. 2 y Ave. 19C, Apartado 518,
Maracalbo, Venezuela
CBI De Venezuela S.A., 2 Transversal, Edificio, Rosa Blanca, La Campina,
Caracas, Venezuela
(Metal plate fabricating & construction)
- CBS EDUCATIONAL & PROFESSIONAL PUBLISHING DIV (CBS INC)**
383 Madison Ave., New York, NY 10017
Editorial Interamerica de Venezuela C.A., 2A Calle de bello Monte Entre,
Avenida Casanova, Caracas 105, Venezuela
(Book publishing)
- CBS RECORDS GROUP DIV (CBS INC)** 51 W. 52 St., New York, NY 10019
CBS Columbia C.A., Apartado 70.169, Los Ruices, Caracas, Venezuela
(Records)
- CPC INTL INC** International Plaza, Englewood Cliffs, NJ 07632
Allven S.A., Edificio Centro Altamira, Avda San Juan Bosco, Piso 12 y 13,
Urbanizacion Altamira, Caracas, Venezuela
Mail: Apartado 60306, Caracas, Venezuela
(Grocery products & products of corn wet milling)
- CTS CORP** 905 N. West Blvd., Elkhart, IN 46514
Idelec S.A., Apartado 2018, Caracas, Venezuela
(Electronic components, etc.)
- CALCOMP INTL** (California Computer Products, Inc.) 5425 East.,
La Palma Ave., Box 3250, Anaheim, CA 92803
Compania Nacional de Computacion S.A., Apartado 50026, Caracas, Venezuela
(Computer graphics, peripheral equipment)
- CALGON CORP** Calgon Center, Box 1346, Pittsburgh, PA 15230
Calgon Interamerica Corp., Apartado 68213, Caracas, Venezuela
(Activated carbon, water treatment consultants, etc.)
- CALORIC CORP** Topton, PA 19562
Venezolana de Esmaltes S.A., Carretera Potare-Guaremas Km 14, Estado
Miranda, Venezuela
(Gas kitchen ranges)
- CAMCO INC** 7010 Ardmore St., Houston, TX 77021
Camco Wire Line C.A., Carretera Nacional, Las Morochas, Estado Zulia, Venezuela
(Oilfield equipment)

CANADA DRY INTL 100 Park Ave., New York, NY 10017

C.A. Embotelladora Orange Crush de Caracas, Apartado 1669, Caracas, Venezuela
(Soft drinks extract, etc.)

CARBORUNDUM CO Carborundum Center, Niagara Falls, NY 14302

Venezuela C.A., Apartado Los Ruices 70379, Torre Bazar Bolivar, Piso 7,
Av. Francisco de Miranda, El Marques, Caracas 107, Venezuela
Carborundum C.A., Apartado 4740, Puerto La Cruz, Edo. Anzoategui 401,
Venezuela S.A.
(Abrasives, machines, etc.)

GELANEE 1211 Avenue of the Americas, New York, NY 10036

Celanese Venezolana S.A., c/o Viscosa Venezolana, Edificio Parsa, Piso 2,
Plaza la Castellana, Caracas, Venezuela
(Chemicals, fibers & plastics & specialties)

CHASE MANHATTAN BANK NA 1 Chase Manhattan Plaza, New York, NY 10081

Chase Manhattan Bank, N.A., Torre Phelps, Piso 26, Plaza Venezuela;
Apartado 6559, Caracas, Venezuela
(International banking)

CHAMPION SPARK PLUG CO 900 Upton Ave., P.O. Box 910, Toledo, OH 43661

Bujias-Champino de Venezuela S.A., Apartado 114, Valencia, Estado Carabobo,
Venezuela
(Ceramic spark plug Insulators)

CHEMETRON CORP 111 E. Wacker Dr., Chicago, IL 60601

Gases Industriales de Venezuela C.A., Apartado 5148, Caracas, Venezuela
(Chemicals, gases, etc.)

CHEMICAL BANK NY TRUST CO 277 Park Ave., New York, NY 10172

Chemical Bank NY Trust Co., Edificio-Torreón, Urbanización, Las Mercedes,
Caracas, Venezuela
(International banking)

CHEMTEX INC 850 Third Ave., New York, NY 10022

Chemtex de Venezuela S.A., Apartado de Correos 80.320, Prados del Esté-ZP. 108,
Caracas, Venezuela
(Engineering organization for plants to produce man-made fibers & films,
paints, coatings & pet bottles)

CHESEBROUGH-POND'S INC 33 Benedict Place, Greenwich, CT 06830

Chesebrough-Pond's C.A., Apartado 5897, Carmelitas, Caracas 101, Venezuela
(Mfr. of cosmetics & toilet preparations)

A E CHEW & CO INC 1 World Trade Center, New York, NY 10048

Chew & Cis. de Venezuela C.A., Edificio La Luna, Calle La Quinta, Quinta
Crespo, Venezuela
(Distri. of foods)

CHRISTENSEN INTL DIAMOND PRODUCTS CO 1937 S. West St., Salt Lake City, UT 84115

Christensen Diamond Products de Venezuela C.A., Apartado 463, Maracaibo,
Venezuela
(Diamond drills, etc.)

CHUBB & SON INC 51 John F. Kennedy Pkwy., Short Hills, NJ 07078

La Federacion Cia. de Seguros C.A., Centro Plaza, Apartado 6748, D. Piso 17,
Avds. Francisco de Miranda/Los Pinos Grandes, Caracas, Venezuela
(Insurance)

- CITIBANK NA** 399 Park Ave., New York, NY 10043
Citicbank, N.A., Carmelitas a Altagracia 25 y 27, Caracas, Venezuela
Mall: Apartado 1289, Caracas 1010, Caracas, Venezuela
(International banking)
- COLGATE-PALMOLIVE CO** 300 Park Ave., New York, NY 10022
Colgate-Palmolive C.A., Edificio Atlantic, Avenida Andres Bello, Los Palos
Grandes, Venezuela
(Mfr. of detergents, soaps, etc.)
- COLUMBIA PICTURES INDUSTRIES INC** 711 Fifth Ave., New York, NY 10022
Columbia Pictures de Venezuela Inc., Ave. Las Palmas, Edificio Teamo Las Palmas,
Piso 4, Caracas, Venezuela
Mall: Apartado 5648, Carmelitas, Caracas, Venezuela
(Motion picture distributor)
- COMBUSTION ENGINEERING INC** 900 Long Ridge Rd., Stamford, CT 06902
Gray Tool Co. de Venezuela C.A., Apartado 1994, Maracalbo, Venezuela
Crest Venezuela Inc., Maracalbo, Edo., Zulia, Apartado 2331, Venezuela
Lumus Company Venezuela C.A., Centro Plaza, Torrea, Ave. Francisco de
Miranda, Los Palos Grandes, Caracas, Venezuela
(Design, engineering, procurement, project & construction management services,
onshore & offshore for processing pollutions control, world-wide oil & gas
production, etc.)
- COMPTON INTL** 625 Madison Ave., New York, NY 10022
ACP-MC Publicidad S.A., Central Comercial, Los Almendros, y Ave. Ppal.
Los Ruices con Ave., Romula Gallegos, Mezzanina - of. No. 8,
Caracas, Venezuela
(Advertising)
- CONNELL BROS CO LTD** 320 California St., San Francisco, CA 94104
Connell Bros Co., Edificio Galipan A-3-B Avenida Francisco de Miranda,
El Rosal, Caracas, Venezuela
(Agricultural chemicals, fresh fruit, food products)
- CONSTRUCTION AGGREGATES CORP** 120 S. La Salle St., Chicago, IL 60603
Construction Aggregates de Venezuela C.A., Apartado 3031, Caracas, Venezuela
(Construction, gravel, sand, etc.)
- CONTAINER CORP OF AMERICA** 1 First Natl. Plaza, Chicago, IL 60603
Carton de Venezuela S.A., Edificio La Estancia, Ciudad Comercial Tamanaco,
Caracas, Venezuela
As well as many other locations throughout Venezuela
(Paperboard, printer & mfr. of packaging materials, etc.)
- CONTINENTAL BANK** 231 S. La Salle St., Chicago, IL 60693
Edificio Centro Altamira, Piso 5, Oficina 2, Avenida San Juan Bosco,
Urbanizacion Altamira, Caracas, Venezuela
(Banking)
- CONTINENTAL-EMSCO CO** 1810 Commerce St., Dallas, TX 75201
Continental Supply Co., Apartado 39, Estado Anzoategui, Venezuela
(Oilfield supplies & tools)
- CONTROL DATA CORP** 8100 34 Ave. S., Minneapolis, MN 55440
Servicios Cybermat de Venezuela S.A., Oficina 216, Centro Ciudad Comercial
Tamanaco Chuao 106, Caracas, Venezuela
(Data processing, advisory & consulting services & related activities)

- COOK CHEMICAL CO** 2500 Summit St., Kansas City, MO 64108
Real Intl. C.A., c/o Tamayo & Cia., Edificio Tamayo, Avenida Nueva Granada,
Caracas, Venezuela
(Mfr. of Insecticides)
- COOPER-ENERGY SERVICES LTD** N. Sandusky St., Mt. Vernon, OH 43050
Cooper-Bessemer S.A., Edificio Gallpan, Avenida Francisco de Miranda,
El Rosal, Caracas, Venezuela
(Heavy industrial equipment)
- COOPER LABS INC** (Sub. Cooper Core Inc.) 3145 Porter Dr., Palo Alto, CA 94304
Cooper Med., S.A., Edificio IASA, Piso 4, Oficina 401-B, Plaza La Castellana,
Caracas 106, Venezuela
(Mfg. prescription & over the counter medical devices, medical products, etc.)
- COOPERS & LYBRAND** 1251 Avenue of the Americas, New York, NY 10020
Lara; Rodriguez & Asociados, Apartado 6365, Caracas, 1010 A,
Edificio Folgana, 2 Piso, Calle Alameda, El Rosal, Caracas 1060, Venezuela
(International planning, accounting & auditing, management consulting
services, etc.)
- CORNING INTL CORP** Houghton Park, P.O. Box 2000, Corning, NY 14831
Corning Venezolana S.A., Apartado 60661, Caracas 106, Venezuela
(Glass, ceramic materials, etc.)
- CORE LABS INC** P.O. Box 47547, Dallas, TX 57247
Core Labs Intl. C.A., Carretera Negra, Anaco, Estado Anzoategui, E. Venezuela
Also at Maracaibo, Venezuela
(Oil well surveyors & consulting labs)
- CRANE PACKING CO** (Intl. Div.) 6400 Oakton St., Morton Grove, IL 60053
John Crane de Venezuela S.A., Avenida Terepaima-Quinta Penelope
Colinas del Turbio, Barquisimeto, Venezuela
(Seals, lapping machines, packings)
- CROCKER BANK INTL NY** 299 Park Ave., New York, NY 10017
CNB-Venezuela, Torre KLM, Penthouse A, Ave. Romulo Gallegos
Urb. Sta. Eduvigis, Venezuela
(International banking services)
- CRUSH INTL INC** 2201 Main St., Evanston, IL 60202
Crush S.A., Avenida 17 No. 117-28, Maracaibo, Venezuela
(Syrups & concentrates, soft drinks)
- CUMMINS SALES & SERVICE INC** 600 Watson Rd., P.O. Box 900, Arlington, TX 76010
Cummins Sales & Service de Venezuela S.A., Edificio Nuevo, La Quebradita,
San Martin, Caracas, Venezuela
(Diesel engines, spare parts, etc.)
- DME CO DIV (VSI CORP)** 29111 Stephenson Hwy., Madison Heights, MI 48071
Productos Humar C.A., Apdo. 60.900, Caracas 1060A, Venezuela
(Basic tooling for plastics molding & die casting)
- DAVIS AIRCRAFT PRODUCTS** Woodbine & Scudder Aves., Northport, NY 11768
Productos de Seguridad C.A., Edificio Gallpan, Avenida Francisco de Miranda,
Caracas, Venezuela
(Mfr. of safety belts)

- DELOITTE HASKINS & SELLS INTL** 1114 Avenue of the Americas, New York, NY 10036
 Deloitte Haskins & Sells Intl., Edificio Cavendes, Piso 14, Avenida Francisco de Miranda, Caracas, Venezuela
 Mail: Apartado Altamira 68052, Caracas 106, Venezuela
 (International accounting & auditing & management advisory services)
- DELTA DRILLING CO** Delta Bldg., P.O. Box 2012, Tyler, TX 75710
 Perforaciones Delta C.A., Apartado 9138, Caracas, Venezuela
 (Petroleum exploration)
- DINERS CLUB INC** 575 Lexington Ave., New York, NY 10043
 Diners Club de Venezuela S.A., Edificio Nuevo Centro, Avenida Libertador, Chacao, Caracas, Venezuela
 Also: Apartado 5283, Caracas 1010, Venezuela
 (Credit cards, travel agency)
- DIAMOND SHAMROCK CORP** 1100 Superior Ave., Cleveland, OH 44114
 Diamond Shamrock Venezolana S.A., Edificio Askain, Oficina No. 4, Plaza Chacalto, Caracas, Venezuela
 (Organic & inorganic chemicals & specialties, agricultural chemicals)
- DIVERSEY CORP** 1532 Biddle Ave., Wyandotte, MI 48192
 Diversey Venezuela S.A., Apartado 5060, Caracas 101, Venezuela
 (Industrial detergents, brake fluids, aerosols)
- DOW CHEMICAL CO** 2030 Dow Center, Midland, MI 48640
 Dow Química de Venezuela C.A., Edificio Citibank, Caracas, Venezuela
 (Plastics, chemicals, etc.)
- DOW CORNING CORP** P.O. Box 592, Midland, MI 48640
 Dow Corning, Calle Nueva York, Edificio Fern, Ofic. 32, Piso 3, Las Mercedes-Caracas 1060, Venezuela
 Also: P.O. Box Apartado 70458, Caracas 1071A, Venezuela
 (Silicones, etc.)
- DRAVO CORP** Neville Island, Pittsburgh, PA 15225
 J.D. Sarria, Regional V.P. Apartado 70612, Los Ruices, Caracas 107, Venezuela
 (Material handling equipment)
- DRESSER INDUSTRIES** Dresser Bldg., 1505 Elm, Dallas, TX 75201
 Ceramica Caravovo C.A., Torre Capriles, Piso 16, Plaza Venezuela, Apartado 2080, Caracas, Venezuela
 As well as many other locations throughout Venezuela
 (Petroleum oilfield & marketing operations, energy processing, refractories & minerals, construction & mining equipment & industrial specialty products)
- DUBOIS CHEMICALS INTL** P.O. Box 99477, Cincinnati, OH 46201
 Dubois Syntesia S.A., Edificio General de Seguros, Piso 5, Ciudad Comercial, Tamanaco, Chuao, Caracas, Venezuela
 (Institutional & industrial detergents & dispensers)
- E I DU PONT DE NEMOURS & CO** Du Pont Bldg., 1007 Market St.,
 Wilmington, DE 19898
 DuPont de Venezuela C.A., Edificio La Estancia, Ciudad Comercial Tamanaco, Caracas, Venezuela
 (Chemicals, plastics, man-made fibers, etc.)
- DURAMETALLIC CORP** 2104 Factory St., Kalamazoo, MI 49001
 United Industrial Supply C.A., Calle 76, No. 3C-51, Apdo. 367, Maracalbo, Venezuela
 (Metals, mechanical parts)

- E G & G INC** 45 William St., Waltham, MA 02181
 Saalol S.A., Apartado 818, Maracaibo, Venezuela
 (Research, development, mfg. electronic nucleonic systems, biomedical
 research environmental sciences, etc.)
- E G & G PRINCETON APPLIED RESEARCH** P.O. Box 2565, Princeton, NJ 08540
 COASIN S.A., Apartado 50939, Sabana Grande No. 1, Caracas 105, Venezuela
 (Analytical, scientific & electro-optical instrumentation)
- EASTMAN KODAK CO** 343 State St., Rochester, NY 14650
 Kodak Venezuela S.A., Avenida Principal Colinas de Bello Monte, Caracas,
 Venezuela
 (Photo equipment & material, copying equipment, etc.)
- EATON CORP** 100 Erieview Plaza, Cleveland, OH 44114
 Ejevan S.A., Valencia, Venezuela
 (Mfr. of advanced technology products, etc.)
- EBERHARD FABER INC** Crestwood Industrial Park, Wilkes-Barre, PA 18773
 Eberhard Faber de Venezuela C.A., c/o R. Pardo e Hijos C.A., Cruz Verde e
 Velazquez, Caracas, Venezuela
 (Mfr. of ballpoint pens & pencils)
- EKCO INTL** 9234 W. Belmont Ave., Franklin Park, IL 60131
 Ekco de Venezuela S.A., Apartado Postal 76, Guacara, Estado de Carabobo,
 Venezuela
 (Housewares products)
- EMERY AIR FREIGHT CORP** Old Danbury Rd., Wilton, CT 06897
 Emery Worldwide, Altamira, Caracas, Venezuela
 (Air freight forwarder, etc.)
- EMHART CORP** Colt Hwy., Farmington, CT
 Mail: P.O. Box 2730, Hartford, CT 06101
 Fijaclones Industriales Tucker C.A., Ave. Andres Bello-Parcela NR 42,
 Las Tejerías-Edo. Aragua, Venezuela
 USM Andes, S.r.l., Edif. Roraima 3-C, Ave. Francisco de Miranda,
 Sector Camp Alegre, Caracas 106, Venezuela
 (Blind rivets & setting tools, shoe machinery, components & materials)
- ESSELTE PENDAFLEX CORP** 71 Clinton Rd., Garden City, NY 11530
 Oxford Venezuela C.A., Cruz Verde Ala Velazquez 83, Edificio Rafael Pardo E
 Hips C.A., Caracas 101, Venezuela
 (Mfr. of filling equipment & supplies)
- EXQUISITE FORM INDUSTRIES INC** 16 E. 40 St., New York, NY 10016
 Exquisite Form Brassiere de Venezuela S.A., Edificio Centro Industrial No. 1,
 Los Cortijos de Lourdes, Caracas, Venezuela
 (Mfr. of ladies' underwear)
- EXXON CORP** 1251 Avenue of the Americas, New York, NY 10020
 Creole Petroleum Corp., Apartado 889, Edificio Creole, Los Chaguaramos,
 Caracas, Venezuela
 (Petroleum & petroleum products)
- E-SYSTEMS** P.O. Box 226030, Dallas, TX 75266
 E-Systems, Apartado 17474, Caracas, Venezuela
 (Electronic systems, etc.)

- FMC CORP** 200 E. Randolph Dr., Chicago, IL 60601
 Tripoliven C.A., Caracas, Venezuela
 (Material handling & processing equipment, agricultural machinery, chemicals, etc.)
- FAHNESTOCK & CO** 110 Wall St., New York, NY 10005
 Fahnestock C.A., Edificio Gallpan A-0-3, Avenida Francisco de Miranda,
 Caracas, Venezuela
 Also: Edificio Seguros, Venezuela
 (Stock brokers)
- FEDERAL INSURANCE CO** 100 William St., New York, NY 10038
 La Federación Compañía de Seguros C.A., Edificio La Seguridad, Ibarra &
 Maturlin, Caracas, Venezuela
 (Insurance company)
- FEDERAL-MOGUL CORP** P.O. Box 1966, Detroit, MI 48235
 Federal-Mogul de Venezuela C.A., Carretera Los Guayos, Guacara, Estado de
 Carabobo, Venezuela
 Federal-Mogul de Venezuela C.A., Apartado de Correo 62336, Chucao 106,
 Caracas, Venezuela
 Federal-Mogul de Venezuela C.A., Edificio Blandin, Plaza Chacalito,
 Caracas, Venezuela
 (Automotive parts)
- FELTON INTL INC** 599 Johnson Ave., Brooklyn, NY 11237
 Felton Intl., Apartado 66190, Caracas 1061-A, Venezuela
 (Aromatic, chemicals essential oil, truefruit extracts, perfume materials,
 flavor materials)
- FERRO CORP** 1 Erieview Plaza, Cleveland, OH 44114
 Ferro Corp., Apartado 304, Valencia/Edo. Carabobo, Venezuela
 (Porcelain & ceramic products)
- FIRST NATL BANK OF BOSTON** 100 Federal St., Boston, MA 02110
 First Natl. Bank of Boston, Caracas, Venezuela
 Also: Torre La Previsora, 17th Floor, Apartado 51.973, Caracas 105, Venezuela
 (Banking)
- FIRST NATL BANK OF CHICAGO** 1 First Natl. Plaza, Chicago, IL 60670
 First Natl. Bank of Chicago, Apartado Postal 51115, Torre La Previsora Bldg.,
 Piso 23, Avenida Abraham Lincoln, Sabana Grande, Caracas 105, Venezuela
 (Banking)
- FIRESTONE TIRE & RUBBER CO** 1200 Firestone Pkwy., Akron, OH 44317
 Firestone Interamericana S.A., Carretera Valencia-Los Guayos, Valencia,
 Apartado 194, Estado Carabobo, Venezuela
 (Mfr. of automobile tires)
- FLORIDA INTL FORWARDERS (FIF)** P.O. Box 522085, Miami, FL 33152
 Total Cargo Intl. C.A., Calle Real de Sabana Grande, Piso 5, No. 54,
 Caracas, Venezuela
 (Ocean cargo service, complete forwarding capabilities & warehousing)
- FORD MOTOR CO** The American Rd., Dearborn, MI 48121
 Ford Motor Co. Venezuela S.A., Edificio La Estancia, Ciudad Comercial,
 Tamanaco, Caracas, Venezuela
 (Automobiles & trucks)

FOXBORO CO Foxboro, MA 02035

Equipex S.A., Apartado 80070, Caracas, Venezuela
 Equipex S.A., Apartado 1192, Maracalbó, Edo. Zulia, Venezuela
 Equipex S.A., Apartado 207, Puerto Ordaz, Venezuela
 (Industrial Instruments)

FRAM CORP 105 Pawtucket Ave., E. Providence, RI 02916

Fram de Venezuela C.A., Calle del Arsenal, La Trinidad, Baruta, Estado de
 Miranda, Apartado 1267, Venezuela
 (Filters & cartridges, etc.)

FRITZSCHE DODGE & OLCOTT INC 76 Ninth Ave., New York, NY 10011

Dismatica Industrial C.A., Edificio Club, Calle Las Mercedes, Chacao,
 Caracas, Venezuela
 (Mfr. of food flavors)

G K TECHNOLOGIES 500 W. Putnam Ave., Greenwich, CT 06830

Conductores de Aluminio del Caroni C.A., Venezuela
 Industria Venezolana de Cables Electricos C.A., Venezuela
 General Coat de Venezuela C.A., Venezuela
 (Automation Industries)

GARDNER-DENVER CO (Sub. Cooper Industries) 8585 Stemmons Fwy.,

Dallas, TX 75247

Gardner-Denver Co., Edif. Milan, Urb. La California Sur, Caracas, Venezuela
 (Pneumatic rock drills, hydraulic rock drills, portable air compressors)

GATES RUBBER CO 999 S. Broadway, P.O. Box 5887, Denver, CO 80217

Gates Venezuela S.A., Apartado 690, Valencia, Estado Carabobo, Venezuela
 (Rubber products, etc.)

GENERAL ELECTRIC CO 3135 Easton Tnpk., Fairfield, CT 06431

General Electric de Venezuela S.A., Edificio General Electric, Avenida
 Abraham Lincoln, Sabana Grande, Apartado 1666, Caracas, Venezuela
 (Development & mfr. of diversified electrical products & systems)

GENERAL FOODS CORP 250 North St., White Plains, NY 10605

La India C.A., Calle Colombia, Nueva Caracas, Caracas, Venezuela
 (Chocolate products, biscuits, cereals)

GENERAL MILLS INC 9200 Wayzata Blvd., P.O. Box 1113, Minneapolis, MN 55440

General Mills de Venezuela S.A., Apartado 60630, Caracas, Venezuela
 (Chemicals, food products, etc.)

GENERAL MOTORS ACCEPTANCE CORP 3044 W. Grand Blvd., Detroit, MI 48202

General Motors Acceptance Corp., Caracas, Venezuela
 Also: Edificio Cars, Paseo de Los Ilustres, Los Chaguaramos, Apartado 50981,
 Caracas 105 DF, Venezuela
 (Financing, etc.)

GENERAL MOTORS CORP 767 Fifth Ave., New York, NY 10022

General Motors de Venezuela C.A., Apartado 660, Caracas, Venezuela
 (Automobiles, appliances, etc.)

GENERAL TELEPHONE & ELECTRONICS CORP 1 Stamford Forum, Stamford, CT 06904

General Telephone & Electronics de Venezuela C.A., Apartado 11624, Chacao,
 Caracas, Venezuela

Sylvania Venezolana C.A., Urb. Colinas de Los Ruices, Caracas, Venezuela
 GTE Electronica Andina C.A., Caracas, Venezuela
 (TV picture tubes, assemblers of TV sets, radios, radio-phonographs)

- GENERAL TIRE & RUBBER CO** 1 General St., Akron, OH 44329
 C.A. Nacional Manufacturera de Cauchos y Neumaticos General, Edificio Cam...
 General C.A., Avenida Libertador, Chacao, Caracas, Venezuela
 As well as many other localions throughout Venezuela
 (Tires & other rubber products)
- GEOSOURCE INC** 2700 Post Oak Blvd., Suite 2000, Houston, TX 77056
 Geosource Exploration Co., Quinta La Bolivera No. 33, Avenida Los Jaballos,
 La Florida, Caracas, Venezuela
 (Products & services essential to discovery, development, processing &
 distribution of natural resources)
- GILLETTE CO** Prudential Tower Bldg., Boston, MA 02199
 Compania Gillette De Venezuela S.A., Carretera Panamericana, Km. 22,
 Club Hípico, Distribudor Los Cerritos, Los Teques, Edo. Miranda, Venezu...
 (General trading, blades, etc.)
- GLOBAL INTL** 1 Global Way, Anahelm, CA 92803
 Global Transports C.A., Calle G. Boleita Norte, Caracas, Venezuela
 Mail: P.O. Box 51554
 (Communications)
- GOODYEAR INTL CORP** 1144 E. Market St., Akron, OH 44316
 Compania Anonima Goodyear de Venezuela, Edificio Oficentro, Urb. Los Ruicos,
 Caracas, ZP 1061A, Venezuela
 (Tires, rubber products, etc.)
- W R GRACE & CO** 1114 Avenue of the Americas, New York, NY 10036
 Productos Dorex C.A., Edificio Lex, Avenida Libertador, El Rosal,
 Caracas, Venezuela
 Also: Apartado 61136, Chacao, Caracas 1060, Venezuela
 (Chemicals, vinyl upholstery materials & leather, etc.)
- GRANT THORNTON INTL** 3900 Prudential Plaza, Chicago, IL 60601
 Grant Thornton Intl., Edificio Torre Lincoln, Avda. A. Lincoln Esq. Las Acacias,
 Piso 8, Oficinas G-H-I, Apartado 51470, Caracas 105, Venezuela
 (International accounting)
- GRAPHIC CONTROL CORP** 180 Van Rensselaer St., Box 1277, Buffalo, NY 14240
 Controles Graficos CGV S.A., Apartado 14147, Candelaria, Ave. Andres Billo,
 Edif. Olimpo, Mezzanino, Caracas, Venezuela
 (Instruments, recording charts, etc.)
- A P GREEN REFRACTORIES CO** (Sub. U.S. Gypsum Co.) Mexico, MI 48265
 A.P. Green De Venezuela S.A., Apartado 509, Puerto Ordaz, Venezuela
 (Refractories)
- GREY ADVERTISING INC** 777 Third Ave., New York, NY 10017
 Klttay-Grey Advertising C.A., Edificio del Rio, Avenida Cafetal, Chuao,
 Caracas, Venezuela
 Also: Apartado 5985, Carmelitas, Caracas 106, Venezuela
 (Advertising agency)
- GRIFFITH LABS** 12200 S. Central Ave., Alsip, IL 60658
 Griffith de Venezuela C.A., Apartado 76.231, El Marques, Caracas 107, Venezuela
 (Seasonings, food products, food chemicals)

- GROLIER INC Old Sherman Tnpk., Danbury, CT 06816
Grolier de Venezuela C.A., Edificio Continental, Avda. Abraham Lincoln,
Esquina Los Jaballos 7, Sabana Grande, Caracas, Venezuela
Also: Apartado 50930, Zona 5, Caracas, Venezuela
(Distributor of books)
- GULF OIL CO Gulf Oil Bldg., P.O. Box 1166, Pittsburgh, PA 15230
Gulf Oil Services, Inc., Caracas, Venezuela
(Technical services to the petroleum industry)
- HALLIBURTON CO 2600 Southland Center, Dallas, TX 75201
Halliburton Co., Anaco, Estado Anzoategui, Venezuela
Halliburton de Cementacion y Fomento C.A., Avenida 17 No. 108-129,
Maracaibo, Estado Zulia, Venezuela
(Oil well cementing contractor)
- HARBISON-WALKER REFRACTORIES CO 2 Gateway Center, Pittsburgh, PA 15222
Ceramica Carabobo, Apartado 71, Caracas, Venezuela
(Refractories, etc.)
- HARPER GROUP 545 Sansome St., San Francisco, CA 94111
P.O. Box 26029, San Francisco, CA 94120
Circle Freight Venezuela S.A., Centro Banaven, Nucleo B, Piso 2, Oficina 22, Chuao,
P.O. Box 815, Caracas 1010, Venezuela
Circle Freight Venezuela S.A., Av. Soubllette, Edif. Canara de Comercio,
P.H. Aptdo. 320, La Gualra, Caracas, Venezuela
(International freight forwarding & customs brokerage)
- PRC HARRIS INC 300 E. 42 St., New York, NY 10017
PRC Harris S.A., Apartado 61248, Caracas, Venezuela
(Engineering consultants, etc.)
- H J HEINZ CO 1062 Progress St., P.O. Box 57, Pittsburgh, PA 15230
Alimentos Heinz de Venezuela C.A., San Joaquin, Estado Carabobo, Venezuela
(Fruit & vegetable products, mfr. of baby foods)
- HELENA RUBINSTEIN INC 30 Park Ave., New York, NY 10022
Helena Rubinstein Interamerican, Edificio Ofinca, Calle Los Laboratorios,
Los Ruices, Caracas, Venezuela
(Cosmetics, etc.)
- HELMERICH & PAYNE INC 1579 E. Utica at 21st, Tulsa, OK 74114
Helmerich & Payne, Inc., Anaco, Estado Anzoategui, Venezuela
(Oil well drilling equipment)
- HEMPHILL SCHOOLS 1743 Vermont Ave., S. Los Angeles, CA 90006
Hemphill Schools, Edificio Rivero, Avenida Urdaneta, Caracas, Venezuela
(Correspondence school)
- HERMAN MILLER INC 8500 Byron Rd., Zeeland, MI 49464
Decodibo S.A., Caracas, Venezuela
Furniture systems for office, industrial & institutional use)
- HEWLETT PACKARD CO 1501 Page Mill Rd., Palo Alto, CA 94304
Hewlett-Packard de Venezuela C.A., 3A Transversal Los Ruices Norte, Ldf. Segre
Caracas, Venezuela
(Industrial controls & instruments)

- HILTON INTL CO** 605 Third Ave., New York, NY 10158
Caracas Hilton, El Condo. Caracas, Venezuela
Hilton Internacional de Venezuela S.A., Caracas, Venezuela
(Hotel administration)
- HOLIDAY INNS INC** 3742 Lamar Ave., Memphis, TN 38195
Holiday Inn., HICAR, Avenida Principal Las Mercedes, Maiquetia Intl. Airport,
Caracas, Venezuela
Also: Alberto Carrevall Airport, Merida, Venezuela
(Hotels)
- HONEYWELL INC** 2701 Fourth Ave. S., Honeywell Plaza, Minneapolis, MN 55408
Honeywell C.A., Esquina Avenidas Santa Ana y Avila, Bello Campo,
Caracas, Venezuela
(Industrial Instruments & controls)
- HORWARTH & HORWARTH INTL** 919 Third Ave., New York, NY 10022
Juan Self & Asociados, Apartado P.O. Box 60300, Edificio Galipan, Av. Fco.
Miranda, Caracas 106, Venezuela
(Public accountants & auditors)
- J M HUBER CORP** P.O. Box 277, Rumson, NJ 07760
J.M. Huber de Venezuela C.A., Calle 3 Urb. Industrial, Carapa,
Caracas, Venezuela
(Mfr. of printing inks)
- HUGHES TOOL CO** 5425 Polk Ave., Houston, TX 77023
Hughes Tool Co. S.A., Avenida 66 No. 62609, Zona Ind. Maracaibo, Apartado 1346,
Maracaibo, Venezuela
Hughes-Pacemalcar Service C.A., Apartado 434, El Tigre, Anzoategui, Venezuela
(Oilfield equipment)
- I C INDUSTRIES** 1 Illinois Center, 111 E. Wacker Dr., Chicago, IL 60601
Hussmann Refrigerator Co., Tecno Congeladores Venezolanos C.A.,
Caracas, Venezuela
(Mfr. self-contained equipment)
- ITT WORLD COMMUNICATIONS INC** 67 Broad St., New York, NY 10004
All American Cables & Radio, Inc., Santa Capilla a Miljares 26, Caracas, Venezuela
(Communication services)
- ILLINOIS TOOL WORKS INC** 8501 W. Higgins Rd., Chicago, IL 60631
Militipak de Venezuela C.A., Caracas, Venezuela
(Metal cutting tools)
- INA INTL CORP** 1600 Arch St., Philadelphia, PA 19101
Interamericana de Ajustes C.A., Torre A Veroes, Edificio Santa Maria,
2do Piso, Oficina No. 2, Caracas, Venezuela
Also: Avila, Cia. Anonima de Seguros, Apartado 1007, Caracas, Venezuela
(General Insurance)
- INCO ELECTRO ENERGY CORP** P.O. Box 8109, Philadelphia, PA 19101
Energia Integral S.A., Apartado 449, Valencia, Venezuela
Energia Integral S.A., Carr. Nacional 1, Guacara, Estado Carabobo, Venezuela
(Wet & dry cell batteries, electronics, chargers, emergency lighting, etc.)

- INMONT CORP** 1255 Broad St., Clifton, NJ 07015
 Inmont de Venezuela C.A., Ave. Paez, Callejonlozoya, Edif. B, El Par. . .
 Caracas, Venezuela
 Inmont Corp., Ave. Anton Philips, Apartado 62174, Maracaibo, Venezuela
 (Mfr. of printing inks)
- INTER-CONTINENTAL HOTELS CORP** 200 Park Ave., New York, NY 10017
 Hotu. Tamanaco, Calle Juan Ulsar, Valencia, Venezuela
 (Hotel operations)
- INTL BOATEL COS INC** 477 Madison Ave., New York, NY 10022
 Bostel do Venezuela C.A., Centro Plaza, Torre C, PH. D1, Avenida Francisco
 de Miranda, Los Palos Grandes, 1060 Caracas, Venezuela
 (Catering, etc.)
- INTL FLAVORS & FRAGRANCES INC** 521 W. 57 St., New York, NY 10019
 Intl. Flavors & Fragrances de Venezuela S.A., Apartado 17269, Los Ruices,
 Caracas, Venezuela
 (Mfr. of flavors & essences)
- INTL ENGINEERING CO INC** 180 Howard St., San Francisco, CA 94105
 Intl. Engineering Co., Inc., Apartado 68307, Caracas 106, Venezuela
 (Engineering services, design, consultation)
- INTL GENERAL ELECTRIC CO** 570 Lexington Ave., New York, NY 10022
 General Electric de Venezuela S.A., Apartado 1666, Caracas, Venezuela
 Industrias Gevensa S.A., Zona Industrial del Sur, Valencia, Estado Carabobo,
 Venezuela
 Venelozana de Compresores y Motores S.A., Zona Industrial del Sur, Venezuela
 (Mfrs. of light buibs, TV sets & refrigerators)
- INTL HARVESTER CO** 401 N. Michigan Ave., Chicago, IL 60601
 Industria Venezolana de Maquinarias S.A., (INDEMACA), Caracas, Venezuela
 (Farm machinery, trucks, etc.)
- INTL MULTIFOODS CORP** 1200 Multifoods Bldg., Minneapolis, MN 55402
 Molinos Nacionales C.A., Monaca, Avenida Puntin 30, Chacao, Caracas, Venezuela
 (Flour milling)
- INTL RESEARCH ASSOCIATES INC** 566 E. Boston Post Rd., Mamaroneck, NY 10543
 Intl. Research Associates, Apartado 5138, Caracas, Venezuela
 (Marketing, opinion research, etc.)
- INTL STANDARD ELECTRIC CORP** 320 Park Ave., New York, NY 10022
 ITT Standard Electric de Venezuela C.A., Avenida Tamanaco, Quinta ITT,
 El Rosal, Caracas, Venezuela
 Standard Telecommunications C.A., Quinta ITT, Avenida Tamanaco, El Rosal,
 Caracas, Venezuela
 (Telecommunications equipment, etc.)
- INTL STAPLE & MACHINE CO** E. Butler Rd., Butler, PA 16001
 Clips C.A., Apartado 6608, Caracas, Venezuela
 (Stapling machines, etc.)
- INTL WATER CORP** 5655 Bryant St., Pittsburgh, PA 15206
 Layne Venezuela C.A., Edificio Galpan, Avenida Francisco de Miranda,
 Caracas, Venezuela
 (Water well drilling)

- IRVING TRUST CO** 1 Wall St., New York, NY 10015
 Sociedad Financiera del Centro C.A., Edificio Torre California, Avenida
 San Francisco, Urb. Colinas de la California, Caracas, Venezuela
 Also: Edificio Plaza El Venezolano, Chorro a Dr. Paul, Piso 6 Oficina B,
 Caracas, Venezuela
 (International banking)
- HENRY R JAHN & SON INC** 140 Cedar St., New York, NY 10006
 John de Venezuela C.A., Edificio Gallpan, Galería, Avenida Francisco de
 Miranda, Caracas, Venezuela
 (Distributor of agricultural & industrial machinery)
- JEEP CORP** (Sub. American Motors Corp.) 27777 Franklin Rd., Southfield, MI 48034
 Constructora Venezolana de Vehiculos C.A., Marlara, Venezuela
 Jeep de Venezuela S.A., Tejerías, Venezuela
 (Utility trucks, automobiles, etc.)
- JOHNSON & HIGGINS** 95 Wall St., New York, NY 10005
 Johnson & Higgins de Venezuela C.A., Edif. Banco Exterior, Apdo. 14139,
 Caracas, Venezuela
 Also: Centro Comercial Icuma, Ave. 5 De Julio, Maracalbo, Edo. Zulia, 4001,
 Venezuela
 (Insurance brokers)
- JOHNSON & JOHNSON** 501 George St., New Brunswick, NJ 08903
 Johnson & Johnson de Venezuela S.A., Edificio Edifica, Ave. Sorocalma con
 Avenida Libertador, El Rosal, Caracas, Venezuela
 (Toilet preparations, baby products, sanitary pads, etc.)
- JOHNS-MANVILLE CORP** Ken-Caryl Ranch, Denver, CO 80217
 Fibras Aislantes S.A., Edif. Edison, Calle Edison, Los Chaguaramos,
 Apartado 50220, Caracas, Venezuela
 Manufacturas Múltiples S.A., Edificio Easo, Avenida Francisco de Miranda,
 Chacaito, Caracas, Venezuela
 (Mfr. of thermic & acoustic insulating materials, etc.)
- S C JOHNSON & SON INC** 1525 Howe St., Racine, WI 53403
 S.C. Johnson & Son de Venezuela C.A., Apartado 40.041, Los Ruicás,
 Caracas 1071, Venezuela
 (Mfr. of household cleaning compounds)
- JONATHAN LOGAN INC** 50 Terminal Rd., Secaucus, NJ 07094
 Telmartex C.A., Zona Industrial, Maracay, Estado Aragua, Venezuela
 (Weaving & finishing plant)
- JOSTEN'S CO** 5501 Norman Center Dr., Minneapolis, MN 55437
 Josten's Co., Calles Esorid-Edif Luxor, Apartado Postal 40359, Los Alcázares,
 Caracas 1049, Venezuela
 (Graduation rings, etc.)
- KAISER ENGINEERS** (Kaiser Industries Corp.) 300 Lakeside Dr., Oakland, CA 94623
 Kaiser Engineers & Constructors, Inc., Edif. Atlantic, Avenida Andres Bello,
 Los Palos Grandes, Caracas, Venezuela
 (Engineering & construction contractors)
- KELLOGG CO** 235 Porter St., Battle Creek, MI 49016
 Alimentos Kellogg S.A., Final Avenida Bolívar Este, Maracay, Estado Aragua,
 Venezuela
 (Mfr. of cereals, etc.)

- KELSEY-HAYES CO 38481 Huron River Dr., Romulus, MI 48174
Ruedas de Venezuela S.A., Zona Industrial, La Victoria, Estado Aragua,
Caracas, Venezuela
(Mfr. of automobile wheels)
- KEYNON & ECKHARDT ADVERTISING INC 200 Park Ave., New York, NY 10017
LPE Novas-Criswell Venezuela C.A., Edif. Atlantic, Avenida Andres Bello,
Los Palos Grandes, Caracas, Venezuela
(Advertising agency)
- KEPNER-TREGOE INC P.O. Box 704, Research Rd., Princeton, NJ .08540
Kepner-Tregoe Asociados C.A., Apartado 50699, Zona 1050 A, Caracas, Venezuela
Office Location, Centro Capriles, Piso 3o.-Oficina 311, Plaza Venezuela,
Caracas, Venezuela
(Organizational development & management training)
- KEYES FIBRE CO 3003 Summer St., Stamford, CT 06905
MOLANCA (Moldeados Andinos C.A., Valencia, Venezuela
(Molded containers)
- WALTER KIDDE & CO INC 9 Brighton Rd., Clifton, NJ 07015
Nissen de Venezuela, Apartado 51.132, Caracas, Venezuela
(Hydraulic components for construction, etc.)
- KIMBERLY-CLARK CORP Neenah, WI 54956
Kimberly Clark Intl. S.A., Caracas, Venezuela
(Mfr. of fiberbased products for personal care, consumer & service, etc.)
- KING RANCH INC Kingsville, TX 78363
Cla. Venezolana De Ganaderia Inc., (or Rio Yaracuy C.A.) Centro Comercial
Ave. Bolivar, Piso No. 9, Valencia, Venezuela
Mail: P.O. Box 1756, Valencia, Venezuela
(Livestock, petroleum & petroleum products. etc.)
- KRAFT INC Kraft Court, Glenview, IL 60025
Alimentos Kraft de Venezuela C.A., Apartado 450, Valencia, Venezuela
(Processor, marketer & distributor of packaged processed food products)
- KULJIAN 3624 Science Center, Philadelphia, PA 19104
Development Consultants Intl., P.O. Box 123, Puerto Ordaz, Estado Bolivar,
Venezuela
(Studies, design, engineering, construction management)
- L & A WATER TREATMENT DIV (CHROMALLOY AMERICAN CORP)
17400 E. Chestnut St., City of Industry, CA 91743
Proyectos Erecciones y Maquinarias C.A., Apartado 4163, Caracas, Venezuela
(Water treatment equipment, etc.)
- LANMAN & KEMP-BARCLAY & CO INC 25 Goodland Ave., P.O. Box 421,
Westwood, NJ 07675
Lanman, Kemp-Barclay & Co. de Venezuela S.A., Avenida 6, Catia, Caracas,
Venezuela
(Mfr. of perfumery & toilet preparations)
- ELI LILLY & CO 307 E. McCarty St., P.O. Box 32, Indianapolis, IN 46206
Eli Lilly de Venezuela S.A., Multicentro Empresarial Del Este, Torre C.
Tercer Piso, Oficinas C-32, C33 Av. Libertador, Chacao, Apartado 1060A,
(Pharmaceuticals, agricultural & cosmetic products)

- LIQUID CARBONIC CORP** 135 S. La Salle St., Chicago, IL 60603
 Concentrados Líquid S.A., Parate Bueno, Carretera de Antimano, Venezuela
 Líquid Carbonic de Venezuela S.A., Carretera de Antimano, Parate Bueno,
 Caracas, Venezuela
 Tecnia Envasadora C.A., Carretera de Antimano, Parate Bueno, Caracas,
 Venezuela
 (Carbon dioxide, dry ice, soft drinks, etc.)
- LITTON INDUSTRIES INC** 360 N. Crescent Dr., Beverly Hills, CA 90210
 Monroe Venezolana, Apartado Postal 6678, Zona 101, Caracas, Venezuela
 (Advanced electronic systems, business systems equipment, electronic
 & electrical products, etc.)
- LOFFLAND BROS INC** P.O. Box 2847, Tulsa, OK 74101
 Loffland Bros de Venezuela C.A., Apartado 605, Edif. Hansi 1A, Planta Ave.,
 28 No. 17C-105, Maracaibo, Edo. De Zulia, Venezuela
 (Oil well drilling contractors)
- LUFKIN RULE CO** P.O. Box 728, Apex, NC 27502
 Luffkin Foundry & Machine So., Anaco, Estado Anzoategui, Venezuela
 (Oilfield pumping equipment, gas engines, etc.)
- LUMMUS CO** 1515 Broad St., Bloomfield, NJ 07003
 Lummus Co. Venezuela C.A., Centro Plaza Torrea, Avda. Fco. Miranda,
 Los Palos Grandes, Caracas, Venezuela
 (Industrial engineering & construction)
- MACK TRUCKS INC** 2100 Mack Blvd., Allentown, PA 18105
 Mack de Venezuela C.A., Edif. Auto-Agro, Puente Soublette, Caracas, Venezuela
 (Assembler of trucks & utility vehicles)
- MACMILLAN INC** 866 Third Ave., New York, NY 10022
 Berlitz Schools of Languages, Caracas, Maracaibo & Valencia, Venezuela
 (Publishing, instruction, distribution, printing, etc.)
- MANHATTAN INDUSTRIES INC** 1271 Avenue of the Americas, New York, NY 10020
 Manhattan de Venezuela S.A., Edif. Manhattan, 3ra. Transversal Los Cortijos
 de Lourdes, Caracas, Venezuela
 (Wearing apparel)
- MANUFACTURERS HANOVER TRUST CO** 350 Park Ave., New York, NY 10022
 Manufacturers Hanover Trust Co., Edif. Edoval, Esquina de Mijares,
 Caracas, Apartado 6558, Venezuela
 (Banking representatives)
- MAREMONT CORP** 200 E. Randolph Dr., Chicago, IL 60601
 Gabriel de Venezuela C.A., Apartado 208, Valencia, Venezuela
 (Automotive parts, etc.)
- MANPOWER INC** 5301 N. Ironwood Rd., Milwaukee, WI 53201
 Manpower de Venezuela C.A., Centro Comercial Cediaz, Torre Oeste-Oficina
 141, Avenida Casanova, Sabanagrande, Apartado 51557, Zona 105,
 Caracas, Venezuela
 (Temporary help)

- MEYERCORD CO 365 E. North Ave., Carol Stream, Wheaton, IL 60187
Meyercord de Venezuela S.A., Edif. Metropolitano, El Silencio, Caracas, Venezuela
(Decals & printed labels)
- MID-CONTINENT SUPPLY CO Mid-Continent Bldg., P.O. Box 189,
Fort Worth, TX 76102
Mid-Continent Supply Western Hemisphere Co., Edif. Polar, Plaza Venezuela,
Caracas, Venezuela
(Oilfield supplies)
- MILLER INDUSTRIES INC P.O. Box 157, Reed City, MI 49677
C.A. Industrias Miller de Venezuela, Apartado 2225, Caracas, Venezuela
(Aluminum doors)
- MILES LABS INC P.O. Box 40, Elkhart, IN 46515
Miles Overseas, Inc., Avenida Gonzalez Rincones, La Trinidad, Baruta, Estado
Miranda, Venezuela
(Mfr. of pharmaceutical products)
- MOBIL OIL CO 670 White Plains Rd., Scarsdale, NY 10583
Mobil Oil Co. de Venezuela, Apartado 60167, Caracas 106, Venezuela
Mobil de Desarrollo C.A., Edif. Sucre, La Floresta, Caracas 106, Venezuela
(Petroleum & petroleum products)
- MONSANTO CO 800 N. Lindbergh Blvd., St. Louis, MO 63166
Monsanto Venezuela C.A., Edif. Luz Electrica, Avenida Urdaneta, Apartado de
Correos 6477, Caracas 101, Venezuela
(Office for chemical products)
- MOONEY AIRCRAFT CORP P.O. Box 72, Kerrville, TX 78028
Silvio Guedes R., Apartado Aereo 854, Barquisimeto, Venezuela
(Mfr. of single engine high performance aircraft)
- MORGAN GUARANTY TRUST CO OF NY 23 Wall St., New York, NY 10005
Morgan Guaranty Trust Co., Edif. Centro Altamira, Piso 5, Ave. San Juan Bosco,
Altamira 106, Caracas, Venezuela
(International banking)
- MORTON NORWICH INC 110 North Wacker Dr., Chicago, IL 60606
Navex C.A., Caracas, Venezuela
Norwich de Venezuela C.A., Avenida Romulo Gallegos 402, 4o Piso B,
Urb. Dos Caminos, Caracas 118, Venezuela
(Pharmaceuticals, etc.)
- NABISCO BRANDS INC River Rd. & De Forest Ave., E. Hanover, NJ 07936
Nabisco La Favorita, Apartado No. 3113, Caracas, Venezuela
Royal Productos Alimenticios C.A., Apartado del Este 62.016,
Caracas 1060 A, Codigo Postal 1060A, Venezuela
(Biscuits, cosmetics, toys, games, etc.)
- NALCO CHEMICAL CO 2901 Butterfield Rd., Oak Brook, IL 60521
Nalco de Venezuela C.A., Apartado 62.176, Chacao, Venezuela
(Mfr. of water & petroleum treatment compounds)
- NATL CAR RENTAL SYSTEM INC 7700 Franco Ave., S., Minneapolis, MN 55435
Natl. Car Rental System Inc., Apartado Postal 51959, Caracas 105, Venezuela
(Car rental service)

MARINE MIDLAND BANK NA 1 Marine Midland Center, Buffalo, NY 14290
 Marine Midland Bank N.A., Torre la Previsora, 17th Floor, intersection de Ave.
 las Acacias, Valparaiso y Bolivar de la Urb. Los Caobos, Apartado Postal
 51944, Caracas 105, Venezuela
 (Banking service)

MARSH & McLENNAN INC 1221 Avenue of the Americas, New York, NY 10020
 Marsh & McLennan de Venezuela C.A., Edif. La Estancia, Ciudad Comercial,
 Tamanaco, Chuao, Caracas, Venezuela
 (Insurance brokers)

MATERIAL RESEARCH CORP Orangeburg, NY 10962
 Coasin C.A., Apartado 50939-Sabana Grande 1, Caracas 105, Venezuela
 (Vacuum equipment, etc.)

OSCAR MAYER & CO 910 Mayer Ave., Madison, WI 53701
 Venezolana Empacadora C.A., Apartado del Este 11446, Caracas, Venezuela
 (Food packaging equipment)

McCANN-ERICKSON INC 485 Lexington Ave., New York, NY 10017
 ABC/McCann Publicidad S.A., Apartado Postal 50.163, Caracas, Venezuela
 (Advertising agency)

McDERMOTT INC 1010 Common St., New Orleans, LA 70160
 J. Ray McDermott Venezuela C.A., Apartado 559, Maracalbo, Venezuela
 (General contractors)

MEAD CORP Courthouse Plaza NE., Dayton, OH 45463
 Servicios y Suministros Industriales C.A., Quinta Bsonquita Avenida, II Entre
 6 y 7, Transversal Altamira, Caracas, Venezuela
 (Precision castings, school & social stationery)

MENNEN CO Morristown, NJ 07960
 Mennen Venezolana C.A., Apartado 3990, Caracas 101, Venezuela
 (Consumer packaged goods, primarily health & beauty aids)

MEMOREX CORP San Tomas at Central Expwy., Santa Clara, CA 95052
 Memorex Inter-America C.A., Avenida Principal de Chuao, Residencias Don Julian,
 5 Piso, Caracas, Apartado Postal 51523, Venezuela
 (Magnetic recording tapes, etc.)

MERCK SHARP & DOHME INTL CORP 126 E. Lincoln Ave., P.O. Box 2000,
 Rahway, NJ 07065
 Merck, Sharp & Dohme de Venezuela C.A., Edif. Merck, Sharp & Dohme,
 Ave. Principal De Los Rulcas, Los Dos Caminos, Edo. Miranda,
 Caracas, Venezuela
 (Pharmaceuticals, chemicals, etc.)

MERRILL LYNCH & CO INC 1 Liberty Plaza, 165 Broadway, New York, NY 10080
 Merrill Lynch & Co., Inc., Centro Plaza, Torre B-Piso 18, Apartado 5136,
 Los Palos Grandes, Caracas 101, Venezuela
 (Retail/institutional securities, commodities, etc.)

METRO-GOLDWYN-MAYER INC 10202 W. Washington Blvd., Culver City, CA 90230
 Metro-Goldwyn-Mayer de Venezuela, Edif. Metro., El Silencio, Caracas, Venezuela
 (Motion picture distributor)

NATL CHEMSEARCH CORP 2727 Chemsearch Blvd., Irving, TX 75062
 Natl. Chemsearch S.A., Quinta Marla, Este 10 bis 74, El Conde,
 Caracas, Venezuela
 (Distributor of janitor supplies)

NATL SEMICONDUCTOR CORP 2900 Semiconductor Dr., Santa Clara, CA 95051
 Microtel Electronica S.A., Crucetilla a Porvenir, Edif. Alba, Mezzanina 2,
 Caracas 101, Venezuela
 (Semiconductors, devices, PCM computers & point of sale equipment)

NATL STARCH & CHEMICAL CORP 10 FINDERNE Ave., Bridgewater, NJ 08807
 Adhesivos y Comas de Venezuela, C.A., Caracas, Venezuela
 (Starches, adhesives, resins)

NO-SAG SPRING DIV 3500 W. 11 Mile Rd., Berkley, MI 48072
 No-Sag Spring Co. de Venezuela C.A., Empedrado a Matadero No. 5, San Martin,
 Caracas, Venezuela
 (Mfr. of coil springs & automobile seating)

NORTON CO Worcester, MA 01606
 Christensen Diamond Products de Venezuela C.A., Apartado 463, Maracaibo,
 Venezuela
 (Abrasives, diamond drill bits & other equipment for petroleum & mining
 industries, industrial ceramics, etc.)

NORTHERN NATURAL GAS CO 2223 Didge St., Omaha, NE 68102
 Manufacturas de Aparatos Domesticos S.A., MADOSA, Edif. Vivel, Avenida
 Principal Collins de Bollo Monte, Caracas, Venezuela
 As well as many other locations throughout Venezuela
 (Distributor of industrial equipment)

NORWICH-EATON PHARMACEUTICALS 17 Eaton Ave., Norwich, NY 13815
 Norwich de Venezuela, Avenida Romulo Gallegos 402, 40 Piso B, Urb. Dos Caminos,
 Caracas 118, Venezuela
 (Mfr. & marketer of prescription pharmaceuticals & consumer health products)

NUS CORP 4 Research Place, Rockville, MD 20850
 Oswaldo Morales, c/o Halliburton Services, Avenida Jalisco, Edif. Las Colonias,
 Piso 3, Urb. Las Mercedes, Apartado 61229 Chacao, Caracas 1060, Venezuela
 (Management & technical consulting in the fields of energy, etc.)

OAKITE PRODUCTS 50 Valley Rd., Berkeley Heights, NJ 07922
 Oakite de Venezuela C.A., Apartado 627, Valencia, Estado Carabobo, Venezuela
 (Mfr. of industrial cleaning & maintenances compounds)

OCCIDENTAL PETROLEUM CORP 10889 Wilshire Blvd., Los Angeles, CA 90024
 Plasticos y Derivados Compania Anonima (PLAYDECA), Final Calle Paez,
 Baruta, Edo. Miranda, Caracas 1060A, Venezuela
 Occidental de Hidrocarburos Inc., Centro Plaza, Avenida Francisco Miranda
 Torres A, Nivel 19, Oficina 6, Los Palos, Grandes, Caracas 1206, Venezuela
 (Exploration, development & production of natural resources)

OFFSHORE CO P.O. Box 2765, Houston, TX 77001
 Offshore Venezuela C.A., Apartado 1139, Maracaibo, Venezuela
 (Oil well drilling)

OGILVY & MATHER 2 E. 48 St., New York, NY 10017
 Corpa C.A., Torre Phelps, Plaza Venezuela, Caracas, Venezuela
 As well as many other locations throughout Venezuela
 (Advertising agency)

- OLIN CORP 120 Long Ridge Rd., Stamford, CT 06904
Olin Quimica S.A., Callpan Bldg., Piso 2, Entrance C, Ave. Francisco Miranda,
Apartado 3781, Caracas, Venezuela
(Chemicals, etc.)
- ONAN INTL POWER PRODUCTS DIV 1400 73 Ave. NE., Minneapolis, MN 55432
Ferre Sanchez C.A., Av. Roosevelt-Prado de Marla, Apartado 1006,
Caracas 101, Venezuela
Ferreteria Caroni S.A., Ave. Sucre (al lado Autocine del Este) Sebucañ,
Apartado 164, Las Carmelitas, Caracas, Venezuela
(Electric generators, Industrial engines & controls)
- OSCAR MAYER & CO P.O. Box 7188, Madison, WI 53707
Ven Packers Inc., Apartado 62296, Caracas, Venezuela
(Meats packer & food process)
- OTIS ELEVATOR CO (Sub. United Technologies Corp.) 10 Farm Springs,
Farmington, CT 06032
Mail: P.O. Box 363, Farmington, CT 06032
Ascensores Otis de Venezuela C.A., Edif. Mane Grande, Piso 3,
Ave. Francisco de Miranda, Los Palos Grandes, Caracas 106, Venezuela
Mail: Apartado 2308, Caracas 1010A, Venezuela
(Design, develops, mfrs. high technology products for the aerospace, automotive,
electrical, construction & other industries, elevators, escalators)
- OTIS ENGINEERING CORP P.O. Box 34380, Dallas, TX 75234
Otis Engineering Intl. C.A., c/o S.A., Ven-Mex, Apartado 776, Maracalbo,
Venezuela
Otis Engineering Intl., Apartado 53, Anaco y Las Morochas, Venezuela
Otis Pressure Co., Anaco, Estado Anzoategui, Venezuela
(Oil field equipment, etc.)
- OTIS McALLISTER EXPORT CORP 100 California St., San Francisco, CA 94111
Agencias Caribe C.A., Edif. Guanare, Tracabordo a Puente Yanes, Caracas,
Venezuela
(Importers of food products)
- OWENS-ILLINOIS INC P.O. Box 1035, Toledo, OH 43666
Manufacturera de Vidrio Plano C.A., Zona Industrial, La Victoria, Estado
Aragua, Venezuela
(Mfr. of sheet glass)
- PLT ENGINEERING INC 14141 Southwest Frwy., P.O. Box 4559, Houston, TX 77210
Quinta Nenena, Av. Caullmare, Colinas De Bello Monte, Caracas 751-23, Venezuela
(Engineering, O & M services, Integrated graphics, technical services &
energy storage)
- PPG INDUSTRIES INC 1 Gateway Center, Pittsburgh, PA 15222
Inveca Pittsburgh C.A., Urb. Industrial Valles de Tejerias, Las Tejerias,
Estado Aragua, Venezuela
(Mfr. of safety glass)
- PAN-AMERICAN LIFE INSURANCE CO Pan American Life Center, New Orleans, LA 70130
Pan-American de Venezuela, Compania de Seguros C.A., Edif. PANAVEN,
Ave. San Juan Bosco, Cruce con 3a, Transversal, Altamira, Caracas, Venezuela
(Life & health insurance)
- ARTHUR YOUNG & CO 277 Park Ave., New York, NY 10172
Arilla, Baez & Rodriguez, Apartado 50796, Sabana Grande, Caracas 1050, Venezuela
(International accountants)

Briger & Associates
*Attorneys-at-Law**805 Third Avenue
New York, N.Y. 10022**(212) 758-4000**Cable Address Brigrin**Tele. No. 237613*LONDON OFFICE
STANBROOK HOUSE
25 OLD BOND STREET
LONDON W1X 3TB ENGLAND
TELEPHONE 01-499 4822
CABLE ADDRESS BRIGER LONDON W1
TELEX NO 200280RIO DE JANEIRO OFFICE
EDIFICIO CENTRO CANDIDO MENDES
RUA DA ASSEMBLEIA 109 2720
2008 RIO DE JANEIRO RJ
BRAZIL
TELEPHONE 242 1783-242 1726
TELEX NO 21 31810BUENOS AIRES OFFICE
FEIJOO-GARCIA TEJERA
LAVALLE 1717 PISO
BUENOS AIRES ARGENTINA
TELEPHONE 35 28497H
CABLE ADDRESS FEORTE
TELEX NO 17740 FECAET

June 18, 1984

Roderick A. DeArment, Esq., Chief Counsel
Senate Committee on Finance
Senate Dirksen Office Building, Room 221
Washington, D.C. 20510Re: Hearings on the Present Status and Future
Prospects of the United States Steel Industry

Dear Mr. DeArment:

We act as legal counsel to the Venezuelan steel producer CVG-Siderurgica del Orinoco C.A. - SIDOR on whose behalf we hereby submit the enclosed statement for consideration by the Senate Finance Committee, Subcommittee on International Trade in connection with the above-referenced hearings. Please note that the Embassy of Venezuela is also submitting a statement on this matter under separate cover.

Since, due to time limitations, SIDOR was not afforded the opportunity to present oral testimony at the June 9, 1984 public hearing, we request that the enclosed statement be incorporated into the record.

If you have any questions in connection with the foregoing, please do not hesitate to contact me.

Sincerely,


Andrew W. Sheldrick
AWS/es
Enclosure

BEFORE THE
SENATE COMMITTEE ON FINANCE
SUBCOMMITTEE ON INTERNATIONAL TRADE

HEARINGS ON THE PRESENT STATUS AND
FUTURE PROSPECTS OF THE
UNITED STATES DOMESTIC STEEL INDUSTRY

STATEMENT OF
CVG-SIDERURGICA DEL ORINOCO, C.A.-SIDOR

June 19, 1984

Briger & Associates

INTRODUCTION

CVG Siderurgica del Orinoco, C.A.-SIDOR ("SIDOR") welcomes this opportunity to present to the United States Senate Committee on Finance, Subcommittee on International Trade (hereinafter the "Subcommittee") its views on the current status and future prospects of the domestic steel industry and, specifically, to express its opposition to S. 2380, the "Fair Trade in Steel Act of 1984" (hereinafter "S. 2380" or the "Bill").

SIDOR is the largest producer of steel mill products in Venezuela and accounts for approximately 90 percent of the country's domestic production. Similarly, it is the largest Venezuelan exporter of steel mill products to the United States. However, in absolute terms, Venezuela's penetration level of the United States market is very low, less than 0.2 percent for 1983, representing sales of only 157,684 net tons of all iron and steel products. Figures concerning imports of steel mill products from Venezuela for the period 1979-83 are attached hereto as Annex A.

The problems which in recent years have been encountered by certain sectors of the domestic steel industry have generated considerable demands in various quarters for the imposition of measures which would, in one form or another, seek to protect the domestic industry from import competition by the erection of trade barriers. S. 2380 is one such purported solution. Furthermore, as the Subcommittee is aware, in addition to seeking legislatively imposed quotas, integrated

steel producers have also sought relief under section 201 of the Trade Act of 1974, the so-called "escape clause". The United States International Trade Commission (hereinafter the "ITC") ruled June 12, 1984 that increased imports of steel have not injured the domestic industry in four major product areas, namely: (i) wire rod; (ii) pipe and tube; (iii) railway-type products; and (iv) bars. In five other categories, namely: (i) ingots, blooms, billets, slabs and sheet bars; (ii) sheet and strip; (iii) wire and wire products; (iv) structural shapes and units; and (v) plate, affirmative injury determinations were entered and the ITC is presently considering what form of relief it should recommend to the President. As in the case of the Bill, the petitioners, Bethlehem Steel Corporation and the United Steelworkers of America, have sought wide-ranging quotas designed to limit imports of steel to pre-1979 levels.

At the outset, SIDOR believes that, in view of the pending ITC "escape clause" investigation, S. 2380 is unnecessary and inappropriate. More fundamentally, however, SIDOR believes that the imposition of arbitrary quotas is a development which should, in principle, be strongly opposed. SIDOR recognizes the problems facing the integrated domestic steel manufacturers in the United States but believes that the "remedy" proposed by S. 2380 in reality is no remedy at all. In SIDOR's view, it proceeds from certain misconceptions and over-simplifications about the causes of the condition of the domestic industry and, particularly, the role of imported steel. This is particularly true as regards the four product categories referred to above as to which the ITC has entered a negative "injury" determination. Moreover, for reasons which are explained in the following sections of this Statement, SIDOR believes that the imposition of "across-the-board" quotas

on steel imports, particularly quotas legislatively imposed, would prejudice not only the interests of Venezuela but also those of the United States, without creating any corresponding sustainable benefit for the industry they are designed to protect. Specifically, SIDOR believes that the passage of S. 2380 in its present form and the resultant imposition of quotas would:

1. Adversely affect the flow of trade and commerce between the United States and Venezuela and threaten a balance which traditionally has favored the United States;
2. Unfairly and needlessly prejudice SIDOR and the Venezuelan economy; and
3. Fail to provide any genuine solution to the problems facing the domestic steel industry in the United States.

These concerns are elaborated in the discussion that follows.

DISCUSSION

1. The Imposition of Quotas Would Adversely Affect the Flow of Trade and Commerce Between the United States and Venezuela

SIDOR respectfully submits that S. 2380 is conceptually deficient because it seeks to isolate one sector of the domestic economy, namely steel manufacturing, and treat it in isolation from the other areas which combine to form the complex structure of international trade and commerce. However, it is clear that restrictions which arbitrarily affect trade in one area inevitably cause repercussions in other areas. For every apparent benefit which is created for one industry by the granting of protectionist relief, another industry must pay the price.

S. 2380 apparently proceeds from the assumption that one of the causes of the present U.S. trade deficit is the "targetting" of steel products by developing countries towards the United States, often through the use of unfair trading practices. Section 2(e) of the Bill recites that one of the objectives of the quotas which it would impose is to "alleviate United States balance-of-payments problems" through restricting the quantity of steel imported into the United States. As applied to Venezuela, however, it is virtually inevitable that the imposition of quotas would exacerbate, not alleviate, the present overall U.S. deficit in trade, investment and services.

Notwithstanding the incorrect assumption from which the Bill proceeds that developing steel-producing countries flood the U.S. market with their products and take little in return, the United States has traditionally benefited substantially from trade with Venezuela in general and SIDOR in particular.

As set forth in Annex A, Tables A.1 and A.2, during the period 1979-83, imports of Venezuelan steel aggregated under 400,000 net tons, approximately 0.46 percent of imports and 0.08 percent of total domestic consumption. By contrast SIDOR is a substantial purchaser of goods and services from the United States. The value of its purchases have traditionally exceeded by a large margin the value of its sales of steel products. For instance, SIDOR presently purchases from U.S. sources over one-third of the electrodes used in its steel manufacturing operations and overall, in 1983, bought goods and services from the United States valued at over B.334 million (equivalent to almost U.S. \$78 million at the prevailing official exchange rate). By comparison, based upon statistics

published by the United States Department of Commerce, U.S. sales of iron and steel products by all Venezuelan companies amounted to \$50.6 million. Thus, excluding debt service and other remittances, the Venezuelan steel industry had a net trading deficit with the United States in excess of \$27 million.

The United States also benefits substantially from trade with Venezuela as a whole. This aspect is discussed at greater length in the statement submitted to the Subcommittee in connection with these hearings by the Venezuelan Embassy in Washington, D.C. As described in that statement and the tables which accompany it, when trade in mineral oil and lubricants is excluded, the United States enjoyed a trade surplus with Venezuela in the period 1979-1983 totalling \$18.9 billion. The same pattern pertains in the steel sector itself. Venezuela has historically been a substantial net importer of steel from the United States. Over the period 1979-1983, the value of iron and steel exports from the United States to Venezuela exceeded imports from Venezuela by a margin of \$441.5 million. See Annex A, Table A.3. In addition, the most important category of U.S. exports to Venezuela has traditionally been machinery and transportation equipment, industries which are among the principal consumers of steel mill products in the U.S. During the period 1979-1983, sales of U.S.-manufactured machinery and transportation equipment totalled \$10.7 billion. It is clear that the U.S. machinery manufacturing industry would bear the brunt of any "protection" afforded to the domestic steel industry because the denial of access to competitively priced steel would make it unable to compete in the international market.

Equally, important, however, is the principle that trade is a two-way street. In the event of the enactment of quotas the effect of which would be to restrict SIDOR's access to an important market, it is unrealistic to expect that Venezuela in general, and SIDOR in particular would be in a position to continue as such a strong customer of U.S. goods.

2. The Imposition of Legislated Quotas Would Unfairly and Needlessly Prejudice SIDOR and the Venezuelan Economy

SIDOR believes strongly that quotas of any kind would be harmful to the flow of goods and services between the United States and Venezuela and therefore opposes such restrictions from a conceptual standpoint. In addition, SIDOR believes that, as a practical matter, the quota arrangements proposed by S. 2380 could not be implemented without giving rise to unfair, arbitrary and discriminatory consequences against individual countries such as Venezuela.

SIDOR believes that the subjection of its exports to quotas is unwarranted and unfair because it has not injured, and does not pose a threat of injury to, the domestic steel industry. Moreover, as described in section 1, the United States has traditionally benefited, and continues to benefit, from trade with Venezuela in general and SIDOR in particular. The case of Venezuela illustrates a fundamental misconception underlying S. 2380 which, like its companion Bill in the House of Representatives, H.R. 5081, treats developing steel-producing nations as a homogenous group exhibiting similar characteristics and traits in steelmaking policy. For example, SIDOR notes that section 2(b) of the Bill ("Findings,

Purposes, and Policy") refers to the "addition of massive new steelmaking facilities in the developing nations with capacity well in excess of their domestic requirements." In the case of Venezuela, this statement simply is not correct. SIDOR's steel production facilities were designed to fulfill Venezuela's domestic requirements and to service the regional market which also includes Colombia. However, under the Bill, SIDOR would be likely to suffer undue and disproportionate prejudice precisely because it does not fit the "developing country producer" stereotype assumed by the Bill.

As the Subcommittee is aware, section 4(a) of the Bill establishes a comprehensive global quota framework for steel products on a product-by-product basis. Section 4(c) delegates to the Secretary of Commerce the task of allocating quotas along country-by-country or regional lines. Although section 4(c) provides that the Secretary shall be "guided" by such considerations as he deems appropriate, including specifically the EEC restraint agreement of October 21, 1982 and prior findings of unfair trading practices in steel trade, SIDOR believes that the tenor of the S. 2380 envisages that the allocation of quotas will be determined to a substantial extent by relative import penetration levels of foreign producers in past years. Thus, the effect of the Bill would be to "freeze" the composition of imports according to recent historical patterns which bear little resemblance to present supply and demand. This would clearly discriminate sharply against SIDOR which established and developed a steel export capacity more recently than other steel producing countries and, unlike some other foreign producers, has not targetted sales of steel to the United States. Since SIDOR has not established a historical pattern of sales of the United States it believes it

would, in effect, be penalized in the allocation of quotas. It is ironic that, while S. 2380 points to export targetting and unfair trading practices as the principal factors giving rise to the need for quotas, it is entirely conceivable that such quotas would "reward" the very practices complained of by guaranteeing the countries concerned a relatively larger share of the United States market, to the detriment of producers such as SIDOR.

3. The Imposition of Quotas Would Fail to Remedy the Problems Facing the Domestic Steel Industry

The principal concern of SIDOR in relation to developments in the steel sector are the repercussions of the possible enactment of quota legislation. However, since the Subcommittee has invited representations on the wider issue of the "present condition and future prospects" of the domestic steel industry, SIDOR feels it is appropriate to comment briefly on this general area.

As the Committee is aware, the ITC is presently conducting an investigation under section 201 of the Trade Act of 1974 to determine whether rising imports have been an important and substantial cause of serious injury to the domestic industry. On June 12, 1984, the ITC rendered affirmative injury determinations in 5 of the 9 product categories into which the industry had been divided.

It is noteworthy that much of the evidence submitted by the petitioners in the "section 201" proceeding in fact concerns the question of unfairly traded imports of steel products, rather than of rising imports per se. Similarly, section 2(a) of the Bill indicates the Congressional "finding" that unfair trade practices have caused substantial injury to the domestic industry, as manifested by reduced employment, shutdown of facilities and under utilization of steelmaking capacity. Clearly, however, quotas would not address the specific problems of unfairly traded imports, but would impact upon all trade, unfair and fair alike. SIDOR believe such far-reaching relief is wholly unnecessary.

Employment and capability utilization within the steel industry have historically been the subject of cyclical variation and the current situation in domestic industry belies the need for wide-ranging relief, particularly relief of so far reaching a nature as the legislative imposition of quotas. SIDOR notes that capability utilization in raw steel production is currently in excess of 80 percent, a dramatic turnaround from the nadir of 34 percent experienced in 1982. Similarly, the integrated steel producers and independent analysts are generally predicting a return to profitability for 1984. See. Paine Webber, Steel: First Quarter Break-Even Analysis (April 30, 1984). The industry's first quarter performance confirms this prediction. This improvement in profitability and capability utilization, which has been achieved without quotas, is attributable in part to the economic recovery in the United States, to modernization measures implemented by the domestic industry and by the success shown by domestic producers in the use of existing legislation to counter unfair trading

practices. Steel executives agree that the persistent problem of unemployment will not be improved by the imposition of quotas. Mr. David Roderick, Chairman of U.S. Steel Corporation, recently noted that no more than half of the 100,000 presently unemployed steelworkers will ever return to their jobs. See, Wall Street Journal, June 14, 1984, page 4 col. 2. The President, however, has authority under the Trade Act to implement relief in the form of adjustment assistance which would effectively target aid at this continuing facet of the injury found to have been sustained by the domestic industry without impeding the flow of trade and commerce between the United States and such countries as Venezuela.

SIDOR believes that the imposition of quotas at this time is not only unnecessary but would tend to hinder, rather than foster, the process of recovery. In addition, it would give rise to potential anticompetitive forces in the U.S. market. SIDOR notes that numerous senior Administration spokesmen, including President Reagan, Secretary Baldrige and Ambassador Brock, have denounced quota legislation both in public statements and, in the case of Secretary Baldrige and Ambassador Brock, testimony before Senate and House Committees. All have noted that protection breeds inefficiency and benefits neither the consumer nor the industry it is intended to assist. For example, Secretary Baldrige, in recent testimony before the House Ways and Means Committee, explained as follows:

"The most effective response available to U.S. steel producers is through modernization and rationalization. The Government can help ensure that the industry doesn't face unnecessary or unfair impediments to achieving this goal. But we must also be careful to avoid self-defeating policies that would give only illusory and "quick fix" assistance to the steel industry at the expense of our broader economic interests.

Enactment of H.R. 5081 would be just such a self-defeating measure. For one thing, it would have a debilitating effect on economic recovery in the United States. At a time when domestic demand for steel is improving, quotas would abruptly restrict the supply of foreign-produced steel. This would artificially squeeze supply and demand, and lead to an exaggerated increase in the price of domestic steel well beyond any that will result from improving demand alone.

Global steel quotas would also limit consumer choice. This has significance far greater than merely depriving consumers of varied sources of supply. Many steel-consuming firms have specific supply requirements that are being met solely or primarily by foreign producers. Now, the domestic steel industry simply isn't able to meet our economy's total steel requirements at a competitive price, or in a consistent and reliable supply.

Global steel quotas would force up costs of production for all industries that consume steel. The metal-working industries of our economy employ 20 times more people and account for almost 10 times more of the GNP than the steel industry. They would be hit with a one-two punch of inflated raw material prices and increased import competition as our trading partners moved their export mix into products fabricated from steel. Because many of these industries are already import-sensitive, enacting steel quotas would generate strong pressures for protecting a vast array of downstream industries.

* * *

Worst of all, quotas would give the industry a false sense of security against efficient competitors abroad. As such, they would discourage critical adjustments to structural changes in the international market. Broadly restricting consumer access to foreign supply would artificially maintain certain U.S. steelmaking facilities that are obsolete by any reasonable measurement of international competitiveness.

Real progress toward modernization and increased productivity would be delayed for one simple reason. Quotas mean less competition -- and in our market, competition is what keeps industries and workers efficient. If blanket protection is provided our steelmakers for a minimum of five years, what can we expect when the quotas are due to expire? Domestic producers will be unprepared to meet the competition or to catch up with changes that have occurred in the marketplace. The truth of the matter is 'temporary' quotas could easily evolve into permanent protection for a chronically uncompetitive American steel industry.

Lastly, global steel quotas would severely damage the international trade and economic interests of the United States. There could be no more blatant a contradiction of our Government's repeated pledges to resist and roll back protectionist measures."

In addition, SIDOR believes that the imposition of quotas, which would artificially restrict access to the U.S. market and almost certainly result in further price rises, would have grave anticompetitive consequences, especially in view of the process of merger and consolidation evidenced by the recent merger of Republic Steel Corporation and LTV Corporation. The Federal Trade Commission, in testimony presented to the ITC in connection within the pending "section 201" investigation, concluded that the imposition of quotas would cost domestic consumers \$750 million per year. Another

estimate indicated that the cost would be as high as \$4 billion. New York Times, June 15, 1984, page A26. This cost could be even higher in the event of a surge in demand. Although the Bill contains "short supply" provisions it is believed that these would be unable to respond effectively to large increases in the demand for steel products and prove insufficient to prevent further inflationary price rises, given that the domestic industry is now operating at around 80 percent capacity.

CONCLUSION

SIDOR submits in conclusion that, to the extent the domestic steel industry legitimately feels it has been injured by increased or unfairly traded imports, it can obtain adequate relief through the utilization of existing remedies. These remedies include the "escape clause" procedure which has already been invoked by the domestic industry. Many of the "findings of fact" contained in the Bill have been determined by the ITC to be invalid as regards a substantial sector of the industry. As to the rest, the ITC is in the process of determining which remedy is most appropriate. In these circumstances, the enactment of legislation in the form of S. 2380 is unnecessary at best.

In the case of SIDOR and Venezuela, the imposition of steel quotas would be purposeless and prejudicial and could harm a trade balance presently favorable to the United States. This underscores the misconception and misunderstanding, apparent in S. 2380, as to the role of trade with developing nations in the U.S. trade deficit. Moreover, SIDOR submits

that the imposition of quantitative limitations on imported steel products would cause grave hardship for other sectors of the U.S. economy, without conferring any sustainable benefit for the domestic steel industry.

For these reasons, SIDOR urges the Committee to reject the imposition of quotas as a means of assisting an industry which manifestly neither warrants nor requires this form of assistance. Instead, SIDOR believes that, to the extent thought necessary, the Subcommittee should encourage the development and use of more purposeful and effective forms of remedy, such as adjustment assistance, and reject the resort to harmful and damaging trade sanctions.

ANNEX ATABLE A.1Imports of Steel Mills Products from
Venezuela, 1979-83 in Net Tons

<u>Product</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>TOTAL</u>
Ingots, blooms, billets, slabs, etc.	-	-	-	837	-	837
Wire rods	-	4,460	25,444	-	-	29,904
Plates	-	577	25,690	4,378	31	30,676
Reinforcing bars	-	-	-	-	15,861	15,861
Pipe and tubing	10,098	67,310	60,335	12,949	26,697	177,389
Wire & wire products	-	-	-	-	13	13
Sheet (hot rolled)	-	-	12,429	13,973	66,106	92,508
Sheet (cold rolled)	-	250	-1,872	104	41,047	43,272
Sheet (coated, incl. galvanized)	-	-	-	6	7,258	7,264
Strip (hot rolled)	-	-	-	-	348	348
Strip (cold rolled)	10	-	-	-	117	117
Tin free steel	-	-	-	-	135	135
<u>TOTAL</u>	10,108	72,597	125,771	32,247	157,684	398,407

Source: American Iron & Steel Institute

TABLE A.2

Imports of Steel Mill Products from
Venezuela, 1979-83, as Percentage of Total Imports
and Domestic Consumption

	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>TOTAL</u>
Venezuelan Imports (Net Tons)	10,108	72,597	125,771	32,247	157,684	398,407
Total Imports (Net Tons)	17,513,133	15,491,271	19,898,340	16,662,532	17,069,895	86,635,171
Domestic Consumption (Net Tons)	114,962,329	95,243,166	104,008,641	76,387,567	83,454,845	474,056,548
Venezuelan Imports as percentage of total Imports (%)	.0577166	.4686316	.6320678	.19353	.9237549	.4598675
Venezuelan Imports as percentage of domestic consumption (%)	.0887924	.0762227	.1209236	.0422149	.1889452	.084042

*Priggen & Associates*TABLE A.3United States-Venezuelan Trade in Iron and Steel
Mill Products, 1979-83 ('000 dollars)

	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>TOTAL</u>
Venezuelan sales to United States	12,803	26,956	54,281	12,475	50,570	157,085
United States sales to Venezuela	108,728	102,817	80,878	113,565	35,509	441,497
Surplus/(Deficit) to United States	95,925	75,861	26,597	101,090	(15,061)	284,412

COMMITTEE ON FINANCE
SUBCOMMITTEE ON INTERNATIONAL TRADE

Hearing on the State of the U.S. Steel Industry

Friday, June 8, 1984, 9:30 a.m.
Room SD-215 Dirksen Senate Office Building

WITNESS LIST

The Honorable William E. Brock, United States Trade Representative

The Honorable Lionel Olmer, Under Secretary for International Trade, Department of Commerce

A panel consisting of:

Mr. Donald H. Trautlein, Chairman, American Iron and Steel Institute, Chairman and CEO of Bethlehem Steel Corporation, Bethlehem, Pa.; accompanied by:

Mr. David N. Roderick, Chairman, U.S. Steel, Pittsburgh, Pa.;

Mr. James E. Chenault, President and CEO, Lone Star Steel Company, Dallas, Tex.;

~~Mr. Roger R. Regelbrugge~~, President, Georgetown Industries, Charlotte, N.C.; and

Dr. Adolph J. Lena, Chairman, Al Tech Specialty Steel Corporation, Dunkirk, N.Y.

A panel consisting of:

Mr. Lynn R. Williams, President, United Steel Workers of America, Pittsburgh, Pa.; accompanied by

Mr. Leon Lynch, Vice President, United Steel Workers, Pittsburgh, Pa.

A panel consisting of:

- Mr. Ed McNew, Vice President, Davis Walker Corporation, Los Angeles, Calif.; on behalf of the West Coast Ad Hoc Steel Wire Producers Committee
- Mr. Howard Wilkinson, Vice President, Pacific Steel Corporation, Long Beach, Calif.
- Mr. F. A. George, Manager of Steel Commodities, Caterpillar Tractor Company, Peoria, Ill.
- Mr. Daniel M. Lannes, President, Hoyt Heater Company, Reno, Nev.

W/L 84-142

TESTIMONY

OF

RICHARD S. CALIGUIRI

MAYOR OF THE CITY OF PITTSBURGH, PENNSYLVANIA

AND

ACTING CHAIRMAN

LOCAL OFFICIALS FOR FAIR TRADE

SUBMITTED TO THE
SUBCOMMITTEE ON INTERNATIONAL TRADE
OF THE SENATE FINANCE COMMITTEE

JUNE 8, 1984

Mr. Chairman, my name is Richard S. Caliguiri, and I serve as Mayor of the City of Pittsburgh, Pennsylvania. Thank you for this opportunity to submit testimony as part of your official record on S. 2380, the Fair Trade in Steel Act.

This testimony is also submitted on behalf of LOCAL OFFICIALS FOR FAIR TRADE (LOFT), of which I am Acting Chairman.

LOCAL OFFICIALS FOR FAIR TRADE is a non-partisan organization of local officials who have joined together to urge action at the national level against unfair trade practices of foreign governments and their companies which have had a significant economic impact on our local American communities.

As local officials, we are among the first to witness the high price the United States pays for unfair trade. Plant closings, job lay-offs, economic dislocation -- each is felt by local officials, along with the associated cost to government in loss of tax revenues and higher outlays for local efforts to help those who have been hurt by unfair trade.

At our April 18 meeting in Pittsburgh, LOFT adopted a resolution attached to this testimony urging the Congress to promptly enact H.R. 5081/S. 2380. We believe that unfair trade in steel through illegal subsidies, dumping, and targeting practices is the single most serious threat to the survival of a healthy steel industry in the United States.

Other witnesses will provide you with numbers and statistics to support the urgent need for passage of S. 2380, and their numbers are indeed dramatic. It should be clear that the decision you reach will have a material impact upon an industry which has lost some \$6 billion over the last two years, while capacity utilization has dropped 25% and unemployment among steelworkers has risen to above 50%.

As a representative of local elected officials from steelmaking communities in this country, I can tell you that the statistic which we find most disturbing is the one which shows that steel imports now capture more than one fourth of the domestic market.

We find the present situation frustrating because many of us over the last six to seven years have petitioned the Congress and various agencies of the federal government for relief from the injury to our communities caused by unfair steel imports. Allow me to describe for you the chronology of our petitions.

In 1977 and 1978 steel imports accounted for roughly 18% of the domestic market and mills closed in areas such as Youngstown, Johnstown and Lackawanna. At that time I joined with local officials from other steel communities to petition for import relief from Washington, as did industry and labor groups. Our answer was the conception of the ineffective Trigger Price Mechanism, which was designed to control unfair imports through pricing regulation. Although many (including the steel communities) were

critical of TPM's intended effectiveness from the outset, it was accepted by the industry in general as a good faith effort by Washington to control unfair imports. If nothing else, the initiation of TPM did reflect a recognition of steel's import problems.

By 1981 TPM had proven its impotency, but its critics were hard-pressed to claim a victory. Unemployment in the Pittsburgh area had reached 7.4%. Once again I found myself joining with other steel community officials in a plea for fair and effective relief, as industry and labor groups filed formal complaints against unfair trade practices. These complaints were withdrawn upon the administration's promise to monitor imports more effectively through TPM. Meanwhile, steel imports claimed 19% of the domestic market and additional thousands of workers were unemployed.

In 1982 we again found ourselves in Washington to urge for effective control of unfair imports, this time focusing upon complaints brought before the U.S. International Trade Commission against European steel producers. Unemployment in the Pittsburgh area had reached 12.3%. The City of Pittsburgh joined with steel areas across the country in providing the ITC with evidence of injury to our communities as a result of unfair steel imports, which by that time had captured 22% of the domestic market.

The outcome of that petition was the orderly marketing agreement which limits imports from EEC countries to 5.4% of the domestic market. A similar agreement was subsequently negotiated by the U.S. Trade Representative with Japanese producers.

It took domestic producers with moral support from the injured communities, well over a year to accomplish these two arrangements at a cost of millions of dollars in bringing the case against subsidized European and Japanese imports before the federal agencies responsible for investigating trade complaints. The investment of time, effort and monies appeared productive at the time, since European and Japanese imports then accounted for two-thirds of all steel shipped to this country.

The results have been exasperating, however, as producers in other countries have pushed to fill the vacuum created by negotiated restrictions. The net effect has been a surge in imports, primarily from producers in South America and Southeast Asia, over the last several months which brought total imports to a level of 26% of the domestic market in January of this year.

Thus, domestic producers and the steel making municipalities and regions with them have found themselves involved in a marathon case-by-case process to achieve fair and equitable relief from unfair imports. The unemployment rate in the Pittsburgh area last year was 15.1%. I find it inconceivable that an industry which collectively lost some \$6 billion over the last two years has had to devote such resources to petition its own government officials for fair and equitable relief. I find it irresponsible that the pleas from an industry whose prosperity or problems affect so dramatically so many communities across the country in terms of jobs and local revenues -- an industry which is so vital to our national defense -- have gone without satisfactory action from our elected leaders in Washington.

Nonetheless, as a result, I find myself again offering testimony. I am again entering a plea on behalf of local officials for effective relief from the injury to our communities resulting from unfair imports.

This time I am offering testimony in behalf of mayors and commissioners who met in Pittsburgh on April 18th of this year to form an organization known as "LOCAL OFFICIALS FOR FAIR TRADE", or LOFT. We offer this testimony in behalf of our communities, which have experienced more than 200 steel related plant closings since we began our petitions in 1977, and in behalf of the more than 200,000 steelworkers who have lost their jobs since then. We offer this testimony in the hope that elected officials here in Washington will recognize the injury to people and communities that results from inequitable trade policies.

Attached to my testimony you will find a list of the communities which have participated in founding the LOCAL OFFICIALS FOR FAIR TRADE organization, as well as a list of communities which offered their support for the LOFT position taken in favor of the import quotas sought through S. 2380.

It is our contention that the economic problems our communities have experienced and continue to confront every day as a result of unfair imports are more than just regional problems. They are national problems in at least two ways: First, they are making us less secure as a nation, more vulnerable to economic dislocations because of the increased potential for disruption in the supply of a basic commodity -- steel -- that is an essential input to thousands of

other products. Second, they are national problems because of the impact upon the national economy of the dislocation of large numbers of workers. These dislocations bring associated costs in unemployment benefits, welfare, food stamps, loss of productive capacity, loss of labor force, crises in local government and school district financing, all of which are costly to the national economy. Such national problems call for national attention by the Congress.

Senators, LOCAL OFFICIALS FOR FAIR TRADE respectfully urges you to approve the Fair Trade in Steel Act. We urge you to establish a five year quota plan which would limit steel imports to an average of 15% of the domestic market while requiring the industry to direct all profits to modernization of existing facilities.

We recognize that the position we are taking runs counter to the position advanced by key spokesmen for the Administration recently. They maintain that the steel industry must learn to survive, alone, on its own, in the face of worldwide competition.

As LOFT organizers we recognize that the steel industry, which is so vital to our communities, is facing foreign competition which is supported in whole or in part by foreign government policy and assistance. While foreign governments provide this support as a means for maintaining an export base and jobs, some of our officials applaud closings and lay-offs as necessary effects of free market economics. In fact, if true capitalism and free trade were operating, in the absence of massive foreign government subsidies of

foreign steel industries, plant closings and lay-offs would never have reached the levels we have suffered.

Japan guarantees loans to their steel industries; Germany supplies its steel industry with inexpensive, government-owned coal and coke; France, Italy, Austria, Sweden and many other nations own their steel industries outright and subsidize them heavily.

In the view of such circumstances, our national government must act as aggressively in the interest of the United States citizens and communities that are suffering as those foreign nations do. Our country has a long and honorable tradition of compassion for the downtrodden and afflicted. That compassion should now move us to restrain the unfairly advantaged competitor and give our own industry the room to upgrade and compete on fairer terms.

The United States has become perhaps the one nation in the world which clings to the idealistic tenet of "Free Trade". Adam Smith talked of an invisible hand that indicates the rules of supply through comparative advantage and efficiencies of operation; yet today we find American producers being pushed out of their own markets by very aggressive governmental policies abroad which encourage overcapacity and exportation as a means of maintaining their employment.

Senators, if there truly is an invisible hand operating in the market place, then I suggest that our own ineffective trade policy has been that hand placed firmly on the throats of our communities, our workers, and our industries.


RICHARD S. CALIGURI *Mayor*

City of Pittsburgh

Acting Chairman, LOCAL OFFICIALS FOR FAIR TRADE

RESOLUTION NO. 2 - 84

WHEREAS, the domestic steel industry is of vital importance to many communities represented under the Local Officials for Fair Trade organization; and

WHEREAS, the domestic steel industry is an important part of local and regional economies, providing employment for hundreds of thousands of workers; and

WHEREAS, the steel industry in the United States provides stability, tax revenue, employment and support to local communities throughout the nation; and

WHEREAS, the American steel industry is being devastated by foreign steel imports which now account for more than 25% of the steel consumed in the United States; and

WHEREAS, most steel entering the United States is unfairly traded because it is dumped, subsidized or the beneficiary of targeted foreign government development assistance; and

WHEREAS, the United States has lost over 200,000 steelworker jobs since 1977 and over 175 steel facilities have been closed during the past five years; and

WHEREAS, unfair trade in steel is the single most serious threat to the survival of a healthy steel industry in the United States.

NOW, THEREFORE BE IT RESOLVED that the Local Officials for Fair Trade Board of Directors urges Congress to promptly enact H.R. 5081, the Fair Trade in Steel Act, which will limit imports of foreign steel to not more than 15% of American steel consumption for a period of at least five years, and mandates the reinvestment of steel profits in modernization of domestic facilities, and further restricts imports of iron ore shipments; and

BE IT FURTHER RESOLVED that the Board of Directors of LOFT authorizes Mayor Richard Caliguiri of Pittsburgh, Pennsylvania, and other representatives from the LOFT organization to deliver testimony in support of H.R. 5081 at public hearings being scheduled by the House Ways & Means Trade Subcommittee.

BE IT FURTHER RESOLVED, that a copy of this resolution be sent to the President and Vice President of the United States; Members of the U.S. House of Representatives; Ways & Means Trade Subcommittee; the Secretary of the U.S. Department of Commerce and the U.S. Trade Representative.

THIS TESTIMONY IS SUPPORTED BY THE ENTIRE ORGANIZING COMMITTEE OF LOCAL OFFICIALS FOR FAIR TRADE, AS WELL AS DOZENS OF OTHER ELECTED OFFICIALS THROUGHOUT THE COUNTRY.

LOFT Organizing Committee:

Mayor Richard Arrington, Jr.	Birmingham, Alabama
Mayor Allen Cannon	Baytown, Texas
Mayor James E. Ferguson	Provo, Utah
Comm. Tom Foerster	Allegheny County, Pennsylvania
Mayor James D. Griffin	Buffalo, New York
Mayor Richard Hatcher	Gary, Indiana
Mayor Paul M. Marcincin	Bethlehem, Pennsylvania
Comm. John E. Minnich	Dauphin County, Pennsylvania
Mayor William Muegge	Wheeling, West Virginia
Mayor Johnny T. Nichols	Fairfield, Alabama
Mayor Ron Rives	Pittsburg, California
County Exec. Edward J. Rutkowski	Erie County, New York
Mayor William D. Schaefer	Baltimore, Maryland
Comm. N. Atterson Spann, Jr.	Lake County, Indiana
Mayor George D. Voinovich	Cleveland, Ohio
Mayor Joseph J. Zahorec	Lorain, Ohio

Additional Officials Indicating Support*

Mayor Mary Anderson	Kinney, Minnesota
Mayor Clifford D. Arnold	Michigan City, Indiana
Mayor Saul Beck	East Chicago Heights, Illinois
Mayor Gerard Bibeau	Ely, Minnesota
Pres. Common Council, George W. Carlson	Hammond, Indiana
Mayor Francis Carr	Alliance, Ohio
Mayor Frank Cerksenik	Mt. Iron, Minnesota
Mayor Don Cole	Babbitt, Minnesota
Mayor Tom Coogan	Melvindale, Michigan
Mayor John Craig	Grand Rapids, Minnesota
Mayor Stephen J. Daily	Kokomo, Indiana
Mayor Delbert Demmer	Massillon, Ohio
Mayor James Doig, Jr.	River Rouge, Michigan
Clerk Treas. Town Brd. Paul Douherty	Highland, Indiana
Mayor Thomas G. Dunn	Elizabeth, New Jersey
Mayor James Forsythe	Crown Point, Indiana
Mayor Frank Furlan	Chisholm, Minnesota
Pres. Council, Richard Galambos	Lake County, Indiana
Mayor Robert E. Goin	Portage, Indiana
Mayor Joseph Granchuk	Whiting, Indiana
County Exec. Eugene R. Hartzell	Northampton County, Pennsylvania
Mayor Harry Helmer	Hoyt Lakes, Minnesota
Comm. Donald P. Hutchison	Baltimore County, Maryland
Mayor H. J. Elmer Johnson	Virinia, Minnesota
Mayor Dennis Kealy	Buhl, Minnesota
Mayor Frank Keesler	East Alton, Illinois
Mayor Robert Kind	Silver Bay, Minnesota

Mayor Frank Lada	Downriver Community Confer., Michigan
Mayor Louis L. LaMourie	Lansing, Illinois
Mayor Paul Lenz	Alton, Illinois
Mayor Norman M. McKay	Dolton, Illinois
Mayor Mary Mellin	Gibraltar, Michigan
Mayor John Niemi	Aurora, Minnesota
Mayor Dick Nordvall	Hibbing, Minnesota
Mayor Charles Panici	Chicago Heights, Illinois
Mayor Robert Pastrick	East Chicago, Indiana
Mayor Herbert Pfuhl	Johnstown, Pennsylvania
Mayor Sam Purses	Canton, Ohio
Mayor Thomas Radich	Lackawanna, New York
Mayor Stephen R. Reed	Harrisburg, Pennsylvania
Mayor Eugene Riek	Westmont, Pennsylvania
Comm. Chrm. Joseph P. Roberts	Cambria County, Pennsylvania
Mayor Mike Sasyk	Madison, Illinois
Mayor Dr. Martin Schneider	Lebanon, Pennsylvania
Mayor Paul Schuler	Granite City, Illinois
Mayor Kenneth Slifka	Ecorse, Michigan
Mayor Joseph Smaron	Posen, Illinois
Mayor Lon Smith	Wood River, Illinois
Mayor William A. Sparger	Markham, Illinois
Mayor Robert Stefanik	Calumet City, Illinois
Mayor Elmer Sundquist	Marble, Minnesota
Mayor Pat Ungard	Youngstown, Ohio
Mayor James Wagner	Wyandotte, Michigan
Mayor Robert Williams	Nashwauk, Minnesota
Mayor Robert Woods	Biwabik, Minnesota

* As of June 1, 1984. Additional support is being solicited, and responses shall be furnished to the Subcommittee.

LOCAL OFFICIALS FOR FAIR TRADE

LL 101 Fort Pitt Commons
445 Fort Pitt Boulevard
Pittsburgh, PA 15219
412/355-7263

LOFTFOR IMMEDIATE RELEASE

June 8, 1984

Mayor Richard S. Caliguiri
Pittsburgh, Pennsylvania
Acting Chairman

Mayor Richard Arrington, Jr.
Birmingham, Alabama

Mayor Allen Cannon
Baytown, Texas

Mayor James E. Ferguson
Provo, Utah

Comm Tom Foerster
Allegheny County, Pennsylvania

Mayor James D. Griffin
Buffalo, New York

Mayor Richard Hatcher
Gary, Indiana

Mayor Paul M. Marcincin
Bethlehem, Pennsylvania

Comm John E. Minnich
Dauphin County, Pennsylvania

Mayor William Muegge
Wheeling, West Virginia

Mayor Johnny T. Nichols
Fairfield, Alabama

Mayor Ron Rives
Pittsburg, California

County Exec. Edward J. Rutkowski
Erie County, Pennsylvania

Mayor William D. Schaefer
Baltimore, Maryland

Comm. N. Atterson Spear, Jr.
Lake County, Indiana

Mayor George D. Voinovich
Cleveland, Ohio

Mayor Joseph J. Zahorec
Lorain, Ohio

Kevin J. O'Neill
Acting Executive Director

**70 LOCAL OFFICIALS URGE PASSAGE OF
STEEL QUOTA BILL**

Washington, D.C. -- Seventy local officials from 14 states across the nation today urged the Senate Finance Committee to approve the Fair Trade in Steel Act (S. 2380) and "end the economic havoc caused by unfair steel imports in our local communities."

"If there truly is an invisible hand operating in the marketplace, then our own ineffective trade policy has been that hand firmly placed on the throats of our communities," Pittsburgh Mayor Richard S. Caliguiri said today in testimony submitted to the Senate Finance Committee's Subcommittee on International Trade.

Caliguiri, acting chairman of LOCAL OFFICIALS FOR FAIR TRADE, urged the Senate to approve legislation which would restrict foreign steel imports to 15% of the market tied to a requirement that American steel companies use their cash flow exclusively to modernize existing steel facilities.

"As local officials, we are the first to witness the high price the United States pays for unfair trade," Caliguiri said. "Plant closings, job lay-offs, economic dislocation -- each is felt by local officials, along with the added cost to local government in loss of tax revenues and higher outlays for programs to help those hurt by unfair trade."

Caliguiri said the last six to seven years have been "frustrating" because repeated petitions to the Congress and the White House have "failed to get us the help we need."

"I find it irresponsible that the pleas from an industry whose prosperity and problems affect so dramatically so many communities across the nation in terms of jobs and local revenues



-- an industry vital to our national defense -- have gone without satisfactory action from our elected leaders in Washington," the Pittsburgh mayor said.

"Japan guarantees loans to their steel industries. Germany supplies its steel industry with inexpensive, government-owned coal and coke. France, Italy, Austria, Sweden, and many other nations own their own steel industries outright and subsidize them heavily," Caliguiri noted. "When will our own American government act aggressively in the interest of American communities and American jobs?"

The local officials criticized statements of key Reagan Administration spokesmen who have, thus far, opposed the Fair Trade in Steel Act.

"These people seem to think our steel industry must learn to survive alone, on its own, in the face of worldwide competition from illegal unfair foreign government-sponsored subsidies, dumping, and targeting of the American market," the LOFT acting chairman said.

"While foreign governments act to unemploy Americans, some of our own officials applaud plant closings and lay-offs as necessary effects of free market economics," Caliguiri. "Well, there is no free trade in the steel industry, only unfair trade which allows illegal foreign competitors to freely steal American jobs and destroy American communities."

"If true capitalism and free trade were operating in the world, in the absence of massive foreign government subsidies, plant closings and lay-offs would have never reached the record levels we have suffered," the Pittsburgh mayor noted.

LOFT officials urging support for the Fair Trade in Steel Act include mayors and elected officials from Alabama, California, Illinois, Indiana, Maryland, Michigan, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Texas, Utah, and West Virginia.

"These states represent 55% of the American people," Caliguiri emphasized.

THIS TESTIMONY IS SUPPORTED BY THE ENTIRE ORGANIZING COMMITTEE OF LOCAL OFFICIALS FOR FAIR TRADE, AS WELL AS DOZENS OF OTHER ELECTED OFFICIALS THROUGHOUT THE COUNTRY.

LOFT Organizing Committee:

Mayor Richard Arrington, Jr.	Birmingham, Alabama
Mayor Allen Cannon	Baytown, Texas
Mayor James E. Ferguson	Provo, Utah
Comm. Tom Foerster	Allegheny County, Pennsylvania
Mayor James D. Griffin	Buffalo, New York
Mayor Richard Hatcher	Gary, Indiana
Mayor Paul M. Marcincin	Bethlehem, Pennsylvania
Comm. John E. Minnich	Dauphin County, Pennsylvania
Mayor William Muegge	Wheeling, West Virginia
Mayor Johnny T. Nichols	Fairfield, Alabama
Mayor Ron Rives	Pittsburg, California
County Exec. Edward J. Rutkowski	Erie County, New York
Mayor William D. Schaefer	Baltimore, Maryland
Comm. N. Atterson Spann, Jr.	Lake County, Indiana
Mayor George D. Voinovich	Cleveland, Ohio
Mayor Joseph J. Zahorec	Lorain, Ohio

Additional Officials Indicating Support*

Mayor Mary Anderson	Kinney, Minnesota
Mayor Clifford D. Arnold	Michigan City, Indiana
Mayor Saul Beck	East Chicago Heights, Illinois
Mayor Gerard Bibeau	Ely, Minnesota
Pres. Common Council, George W. Carlson	Hammond, Indiana
Mayor Francis Carr	Alliance, Ohio
Mayor Frank Cerkdenik	Mt. Iron, Minnesota
Mayor Don Cole	Babbitt, Minnesota
Mayor Tom Coogan	Melvindale, Michigan
Mayor John Craig	Grand Rapids, Minnesota
Mayor Stephen J. Daily	Kokomo, Indiana
Mayor Delbert Demmer	Massillon, Ohio
Mayor James Doig, Jr.	River Rouge, Michigan
Clerk Treas. Town Brd. Paul Douherty	Highland, Indiana
Mayor Thomas G. Dunn	Elizabeth, New Jersey
Mayor James Forsythe	Crown Point, Indiana
Mayor Frank Furlan	Chisholm, Minnesota
Pres. Council, Richard Galambos	Lake County, Indiana
Mayor Robert E. Goin	Portage, Indiana
Mayor Joseph Granchuk	Whiting, Indiana
County Exec. Eugene R. Hartzell	Northampton County, Pennsylvania
Mayor Harry Helmer	Hoyt Lakes, Minnesota
Comm. Donald P. Hutchison	Baltimore County, Maryland
Mayor H. J. Elmer Johnson	Virinia, Minnesota
Mayor Dennis Kealy	Buhl, Minnesota
Mayor Frank Keesler	East Alton, Illinois
Mayor Robert Kind	Silver Bay, Minnesota

Mayor Frank Lada	Downriver Community Confer., Michigan
Mayor Louis L. LaMourie	Lansing, Illinois
Mayor Paul Lenz	Alton, Illinois
Mayor Norman M. McKay	Dolton, Illinois
Mayor Mary Mellin	Gibraltar, Michigan
Mayor John Niemi	Aurora, Minnesota
Mayor Dick Nordvall	Hibbing, Minnesota
Mayor Charles Panici	Chicago Heights, Illinois
Mayor Robert Pastrick	East Chicago, Indiana
Mayor Herbert Pfuhl	Johnstown, Pennsylvania
Mayor Sam Purses	Canton, Ohio
Mayor Thomas Radich	Lackawanna, New York
Mayor Stephen R. Reed	Harrisburg, Pennsylvania
Mayor Eugene Riek	Westmont, Pennsylvania
Comm. Chrm. Joseph P. Roberts	Cambria County, Pennsylvania
Mayor Mike Sasyk	Madison, Illinois
Mayor Dr. Martin Schneider	Lebanon, Pennsylvania
Mayor Paul Schuler	Granite City, Illinois
Mayor Kenneth Slifka	Ecorse, Michigan
Mayor Joseph Smaron	Posen, Illinois
Mayor Lon Smith	Wood River, Illinois
Mayor William A. Sparger	Markham, Illinois
Mayor Robert Stefanik	Calumet City, Illinois
Mayor Elmer Sundquist	Marble, Minnesota
Mayor Pat Ungard	Youngstown, Ohio
Mayor James Wagner	Wyandotte, Michigan
Mayor Robert Williams	Nashwauk, Minnesota
Mayor Robert Woods	Biwabik, Minnesota

* As of June 1, 1984. Additional support is being solicited, and responses shall be furnished to the Subcommittee.

**SUBMITTED STATEMENT OF THE
AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS
TO THE SUBCOMMITTEE ON TRADE, COMMITTEE ON FINANCE
UNITED STATES SENATE
ON S. 2380, THE FAIR TRADE IN STEEL ACT OF 1984**

June 8, 1984

Mr. Chairman, the AFL-CIO strongly supports S. 2380, the Fair Trade in Steel Act of 1984. This legislation introduced by Senator John Heinz and a bipartisan group of eighteen other Senators will establish quantitative restrictions on steel imports of approximately 15 percent of apparent domestic supply for a period of five years while requiring the industry to utilize substantially all cash flow from the steel sector for reinvestment in, and modernization of that sector. In addition, it would limit the importation of iron ore and require the government to carefully monitor and, if necessary, restrict the importation of fabricated steel mill products.

This bill, if enacted will allow the industry and its workers the time they need to appropriately revitalize this basic industry. They have already shown their willingness to make a start, but they need enough time to finish their modernization activities. They have already begun to improve efficiency, lower costs, and modernize production facilities. If Congress fails to act, thousands more workers will join their brothers and sisters on the unemployment line, already depressed communities and regions will suffer additional and perhaps fatal harm, and the strength of the U.S as a whole will be endangered. This industry is central to the nation's economic well being and national security.

The existence of serious injury to the steel industry and its workers is evident, and clearly imports are a substantial cause of this injury.

The impact of imports on the domestic economy of the United States has been devastating. Once thriving steel communities have become virtual ghost towns, as plant after plant has shut down. The litany of cities and towns suffering this economic devastation has become an all too familiar item in the nation's press, and now serves as a metaphor for the deindustrialization of the United States. In 1983 alone, the industry's production capability, overwhelmed by imports was reduced by more than 14 million tons.

These plant closures have created tremendous hardship for thousands of once proud, productive men and women. These workers, who have spent their lives in an industry that has literally built America are not comforted by explanations that try to brush under the table the real damage from imports.

Employment in the steel industry is down by more than 200,000 since 1977. Even a number this large cannot describe the human and social costs associated with joblessness. High unemployment raises death rates and infant mortality. It increases the incidence of cardiovascular and kidney diseases, cirrhosis of the liver, suicides, homicides, admissions to mental hospitals, child abuse, family breakdowns, drug addiction, crime, and imprisonment. The National Council on Economic Opportunity has examined these issues in detail and noted, "losing a job can set in motion a vicious cycle of other personal catastrophes that are much more difficult to handle for people who lack both the material and the emotional resources that a decent, stable job provides."

Ten years ago imports made up 13.4 percent of the U.S. market. Today, import penetration exceeds 25 percent. During this time, ample evidence of specific unfair trade practices, such as government subsidy of this industry abroad and the dumping of steel products in the U.S. led to various partial and short-term responses in the form of countervailing and anti-dumping duties, orderly market and voluntary restraint agreements, and the establishment of policies like the trigger-price mechanism. These measures were inadequate and can only be described as ad hoc trade policy. As problems were solved in one product line or geographic area, they immediately appeared elsewhere. For example, as the U.S. market share in steel for Japan and the European Community declined in 1983 due to voluntary restraint in the first case, and a negotiated agreement in the second, imports from the developing world shot up dramatically. Led by South Korea and Brazil, imports from developing countries increased from four million tons in 1982, to 6.3 million tons last year. In 1983, shipments from the developing world represented 7.6 percent of the domestic market. It is virtually impossible to effectively cope with this kind of situation on a product-by-product or country-by-country basis.

The steelmaking facilities in most other nations are either government-owned or government-supported. In the European Community, policies are in place governing production, price, imports, and capacity. Their current program of restructuring is taking place with the clear and positive assistance of the governments involved.

In the developing world, the continuing expansion of steelmaking capacity, in no way related to their own needs, is directed by governments and supported by favorable financing terms.

The United States, by relying on the illusory free market, and failing to adopt a coherent steel policy of its own is victimized by these foreign governmental directed steel policies.

The capability to produce steel is central to the strength of the United States. From both a national security and overall economic perspective, steel production provides the necessary foundation for a strong and growing America. There must be careful consideration concerning the degree the United States allows itself to become dependent on foreign production. If steps are not immediately taken, the dismantling of the steel industry will accelerate, and the United States, by default, will be at the mercy of foreign suppliers.

S. 2380 recognizes the realities of international trade in steel products, and provides a positive solution for U.S. workers and industry. It is an appropriate way to restore and strengthen the industrial base of our country. The workers in this industry are not seeking special favors. They are only seeking hard work. S. 2380 would give them that opportunity.

Canadian Embassy



Ambassade du Canada

1746 Massachusetts Ave., N.W.
Washington, D.C. 20036

07 June 1984

The Honourable
John C. Danforth
Chairman, Subcommittee on
International Trade
United States Senate
219 Senate Dirksen
Office Building
Washington, D.C.

Dear Senator Danforth,

In connection with the hearings which your Trade Subcommittee will be holding on June 8th on the state of the USA steel industry, I am writing to provide you with Canadian views on S. 2380, The Fair Trade in Steel Act of 1984. If the bill were passed into law, the restrictions on imports from all countries of steel and iron ore would, in our view, severely affect the imports from Canada of these commodities.

As you know, the U.S. and Canadian steel industries, as a result of their proximity to each other and a number of structural similarities, have often been collectively recognized as an integrated North American steel industry. For example, Canadian and U.S. steel producers purchase a considerable amount of steel products from each other. U.S. steel mills have interests in Canadian iron mines; and Canadian mills obtain most of their coal and substantial amounts of iron ore from U.S. sources. Canadian steel producers also purchase equipment, refractory materials and alloying elements from the United States. For certain major Canadian steel companies, these purchases in the United States have been estimated at one dollar and twenty five cents for each dollar of finished steel exported to the United States.

Canada and the United States are also each other's most important steel export markets. Imports from Canada in 1982 accounted for about 2.6 percent of U.S. apparent consumption while imports from the United States accounted for some 5 percent of Canadian consumption. There is considerable trade in semi-finished steel products between U.S. and Canadian steel mills: in recent years shipments to the United States have assisted U.S. mills in maintaining a certain degree of rolling capacity utilization despite the fact that their own steel demand was too low to allow them to economically supply their finishing operations. There is also a significant amount of Canadian steel which is shipped to the United States for conversion and re-export to Canada, thereby providing jobs for U.S. workers.

The relationship between the two steel industries is further strengthened by a number of factors: there are numerous technical exchanges between the two industries; there are joint ventures for the development and production of iron ore and coal; cross-border investments have led to a rationalization of production facilities which has in turn resulted in a considerable amount of inter-corporate trade in finished and semi-finished steel products; finally, unionized steel workers in both countries belong predominantly to the same union.

Most of the U.S. customers of the Canadian steel industry are longstanding and are regionally concentrated along the Canadian border. Their decision to source in Canada is not solely determined by price but also by considerations of reliability of delivery, quality of service and proximity.

For all the above reasons, it is the Canadian Government's view that across the board trade restrictions which by their very nature would apply to Canada are not justified. Steel from Canada is fairly traded in the United States. With the exception of one small investigation some years ago that ended in a suspension agreement, Canadian steel shipments to the

United States have not been subject to antidumping or countervailing duty findings. Canada, like the United States, has been the target of unfair trade practices by countries intent on increasing employment and generating foreign exchange at the expense of the North American steel industry.

Furthermore if S. 2380 were passed into law it would, in our judgement, impair rights and benefits accruing to Canada (and other countries) under the General Agreement on Tariffs and Trade. You will recall that U.S. action on specialty steel last year prompted the affected exporting countries to take action against U.S. exports of stainless and alloy tool steel as well as other commodities. The stakes would of course be much higher in this instance.

I trust these comments will be helpful in your consideration of the issue. Please do not hesitate to call me if I can be of further assistance.

Yours sincerely,

A handwritten signature in cursive script that reads "Allan Gottlieb".

Allan Gottlieb
Ambassador

Testimony Submitted on Behalf of
Berg Steel Pipe Corp.
To the Subcommittee on International Trade,
Senate Committee on Finance

July, 1984

Of Counsel
Lewis E. Leibowitz
Arent, Fox, Kintner,
Plotkin & Kahn
1050 Connecticut Avenue, N. W.
Washington, D. C. 20036-5339

Testimony Submitted on Behalf of
Berg Steel Pipe Corp.
To the Subcommittee on International Trade,
Senate Committee on Finance

July, 1984

This testimony is for inclusion in the record of the International Trade Subcommittee hearing of June 8, 1984 on problems of the U.S. steel industry.

Berg Steel Pipe Corp. ("Berg"), a manufacturer of submerged arc-welded large diameter steel pipe in Panama City, Florida has a vital stake in maintenance of open channels of trade in carbon steel plate, the product which Berg uses to manufacture pipe. Quotas on steel products distort the natural operation of the market place, encourage diversion of imports from lower-valued to higher-valued products, and tend to mis-allocate resources in favor of inefficient industries at the expense of efficient ones. Accordingly, Berg opposes the imposition of quotas as proposed in the Fair Trade in Steel Act.

Moreover, should trade restraints be imposed by this legislation or by any other means, it is imperative that consideration be given to the situation of downstream users of restricted products. Any inconsistent treatment between plate and pipe is intolerable to Berg.

A. Introduction.

Berg's headquarters and production facility are located in Panama City, Florida. Berg is a manufacturer of large diameter welded steel pipe (24 inches through 64 inches in outside diameter) made from hot rolled carbon steel plates. The pipe is most often used in pipelines for transportation of gas, oil or water, but has other uses as well, such as pipe for piling or for construction of drilling platforms.

Berg's Florida facility is the only one of its kind in the United States, in that it uses a pyramid rolling process, rather than the "U and O" process used by other pipe manufacturers in this country. The pyramid process allows for size changes in far less time than does the "U and O" method, which in turn means that Berg can handle relatively small orders more profitably. Berg is also competitive for large orders; its facility can produce approximately 150,000 tons per year of pipe products. Berg has welding and testing equipment to manufacture pipe for the most demanding applications, including "Arctic" grades.

Hot rolled carbon steel plates are available in many different grades and specifications. Some of these are available from domestic plate producers, while others are not. In the market for plates that are used to make large diameter pipe, the tendency is that as grades become higher and specifications more exacting, domestic plate sources tend to become less available.

The highest grades of plate for line pipe applications are the "X" grades ("X" denotes high-strength API line pipe). X-grade plates are specified for line pipe where corrosion in service would be a particular problem. They must be exactly uniform in dimension (no thin or thick spots), and have the proper tensile strength specifications. The latter specification must be maintained within a narrow range, so that the plate is "hard" enough to perform well in service as a pipe, but "soft" enough so that it can be formed into a pipe.

Large diameter pipe is usually sold on a competitive bid basis. In order to sell pipe, the price of plate is a critical consideration, because plate cost is about 70-80% of the cost of producing pipe. Berg cannot afford to pay significant price premiums for guaranteed specifications, because such premiums would simply make Berg's pipe bids uncompetitive. Significantly, several foreign mills offer these extras at nominal premiums, because their modern production and testing equipment permits guaranteed specifications with little or no change in productivity. Domestic mills which lack such modern equipment will lose productivity through rejection of significant percentages of their production of high-specification plate, which drives up their cost and prices.

Berg has purchased plates from several domestic suppliers. However, because plates are required in varying

sizes, grades, and delivery requirements, Berg must purchase supplies from several sources, domestic and foreign. If Berg is limited by artificial trade restraints, such as those proposed by the Fair Trade in Steel Act, serious dislocations will result. For example:

1. For very large pipe sizes, Berg needs wide plate. A pipe over 48 inches in diameter, for example, requires a plate in excess of 150 inches wide. Plate that wide is available to Berg from only one domestic mill, U.S. Steel Corp./ Gary, Indiana.^{1/} When Berg has asked for quotes from that mill for wide plate, the price has been incredibly high (over \$600 per ton in recent months), making it impossible to use U.S. Steel's plate. U.S. Steel is also a competitor of Berg's in the line pipe market, which may help explain its plate pricing. Berg has had to go to foreign sources for plate over 150 inches wide.

2. The highest grades of plate for line pipe applications are the "X" grades ("X" denotes plate for high-strength API line pipe, Grade 5LX). X-grade plates are specified for line pipe where corrosion in service will be a particular problem. They must be exactly uniform in dimension (no thin or thick spots), and have the proper tensile strength

^{1/} Lukens Steel also makes plate over 150 inches wide, but it is not an approved supplier of Berg's.

specifications. The latter specifications must be maintained within a narrow range, so that the plate is "hard" enough to perform well in service, but "soft" enough so that it can be formed into a pipe.

(a) In one recent instance, Berg purchased X-grade plates for a large pipe order from Republic Steel/ Gadsden, Alabama. The plates from Republic Steel were of very poor quality, containing numerous physical defects. Berg had to reject nearly one-quarter of the plates provided by Republic.^{2/} As a result of the poor quality, the line pipe order was completed two and a half months behind schedule, in spite of the fact that Berg had agreed to pay Republic a price premium to guarantee on-time delivery of the plates.

(b) Berg purchased plates from United States Steel Corp. to fill a pipe order from an important new customer. The plate was X-60 grade, requiring a minimum yield strength of 66,000 psi. As part of Berg's specifications, the plate had to pass a Charpy V-notch test at 25 foot-pounds, a minimum test for X-grade plates. The plates failed the Charpy test and new plates had to be made. The delay occasioned by the quality

^{2/} The rejection rate on foreign plate has been no more than 1-2 percent.

failure of U.S. Steel was over two months,^{3/} and threw off Berg's customer's timetable for pipe-laying. That customer told Berg that the delivery performance was the worst in their experience. Berg's reputation has therefore suffered at the hands of U.S. Steel.

3. The above examples are by no means isolated ones. For instance:

(a) A U.S. Steel order, promised April 1, is still incomplete;

(b) A 500-ton U.S. Steel order for X-60 plate, also promised April 1, was completed on June 11. U.S. Steel had a 34% rejection rate on this order; and

(c) Seven other pending U.S. Steel plate orders are also late, including five X-grade and two "Grade B" orders. USS sales personnel informed Berg that the delay was occasioned by (1) rejections of plate as sub-standard in USS's mill, and (2) USS's not being prepared for sharp increases in plate demand, due to economic recovery and the closure of Armco's Houston plate mill in January 1984, which have taxed the USS Baytown plate mill's capacity. By contrast, X-grade plate rejections from foreign mills, other than for damage in

^{3/} The plates were promised for delivery the week of March 4, 1984. The final shipment actually arrived May 15, 1984.

transit, have been virtually nonexistent since Berg started operations in 1980.

4. Domestic mills cannot guarantee to meet "yield strength" tolerances required by Berg. The tolerances are necessary to enable Berg to form plates into pipe and weld them securely. If yield strength is too great, the plate cannot be formed into a pipe and it must be scrapped or further processed. Berg often requires yield strength tolerances of -0 to +10,000 psi. While a number of foreign producers guarantee to meet this standard, domestic mills will not do so. They will agree only to -0 to +20,000 psi, and "aim to" meet the more stringent standards. When the tolerance is outside the +10,000 psi limit, Berg may have trouble shaping the plate into a pipe, causing the plate to be rejected.

5. Berg's location in Florida, and its state-of-the-art facilities, enable it to participate actively in the international market for large diameter pipe. It is impossible for Berg to compete for export business using domestic plate, because of its high cost. Domestic plate prices usually exceed international pipe prices. In 1982, before the advent of the U.S.-EC Steel Arrangement, Berg exported over 40% of its shipments. Since that time, exports have fallen nearly to zero, due to Berg's inability to obtain plate for reexport as pipe at world-competitive prices. This inability is due to an anomaly in the U.S.-EC Steel Arrangement, which counts against

EC quotas even plate which is destined for reexport after transformation.

B. Berg Opposes the Fair Trade in Steel Act.

Berg opposes the Fair Trade in Steel Act in general, because it would use the money of steel consumers, through higher prices, to fund a modernization program allegedly to be undertaken by steel producers. The bill ignores the sweeping changes which are occurring in the industry without government involvement. Indeed, enactment of quota legislation would stifle many of the forward-looking developments now taking place in the United States steel industry. For Berg's part, a significant investment in pipe making facilities in Panama City, Florida would be seriously jeopardized by the enactment of steel quotas on plate.

In any event, any bill affecting steel plate, the product which Berg needs in order to manufacture pipe, must treat imported pipe consistently. Otherwise, imported plate could enter this country in the form of pipe, further reducing U.S. price levels for pipe and putting Berg in a squeeze of intolerable proportions.

1. The Bill Does Not Take Account of the Development of Non-Integrated Producers.

In recent years, a number of companies have built or acquired facilities which are not vertically integrated.

In other words, these facilities use either finished steel mill products (such as plate) or semi-finished products (such as slabs) to manufacture products for sale in the general market place. Berg is a part of this development. In 1980, before Berg commenced operations, there were four manufacturers of large diameter line pipe in the United States, all of whom were integrated producers (i.e., each manufactured plate for use in pipe-making). The four members of the industry then were U.S. Steel, Armco, Bethlehem and Kaiser.

At present, the members of the industry include Berg, U.S. Steel, Bethlehem and a newly "dis-integrated" Kaiser. Armco closed its Houston pipe facilities in January, 1984. Kaiser has sold its plate-making facility in Fontana, California to California Steel Industries, and is no longer vertically integrated. Berg Steel began operations in 1980, and has never been vertically integrated.

Other segments of the steel industry similarly have moved away from vertical integration in favor of manufacturing specialized products using raw materials acquired from others. In many instances, domestic steel producers are unable or unwilling to meet the demand for these raw materials. This is both because old facilities operated by the integrated producers are unable to make many of the highly specialized products demanded in today's market, and also because the integrated producers often produce finished products in

competition with non-integrated makers of the same product. It is clearly inadvisable for a non-integrated producer to rely for raw material supplies exclusively on a competitor. For these reasons, among others, non-integrated members of the steel industry have turned to foreign suppliers for some of their raw material needs.

The steel quota bill makes no allowance for this phenomenon, which has tended to replace older and less efficient operations with newer, smaller and more efficient facilities. Quotas on steel imports will displace at least as many American workers from these newer, non-integrated plants as would be put back to work at the old integrated mills.

2. The Distorting Effects on Patterns of Trade
Must Be Considered Before Any Quota Bill
Is Acted Upon.

The Committee must consider the distortions which steel import quotas would introduce into steel-using sectors, including the large diameter pipe industry. Domestic integrated producers are attempting to have it both ways, arguing before the U.S. International Trade Commission that steel import quotas will increase prices and thereby allow the producers to accumulate funds for modernization. By contrast, they have also asserted in their campaign in favor of the Fair Trade in Steel Act that import quotas will not raise steel prices to consumers significantly. See Exhibit A, attached. This disingenuous

assertion, if true, would make import relief for the steel industry totally ineffective in its stated objective, and, in point of fact, cannot be right.

The fact is that import quotas on steel products would restrict supplies and increase prices to steel users. The increase in prices would introduce a host of distorting effects throughout the United States. Increased prices can be expected to reduce demand for steel products in some sectors, as consumers of those products (including, for example, pipe lines) defer or cancel projects which they might otherwise have undertaken due to the excessive cost involved. In other sectors, steel users may accelerate the substitution of non-steel products in their manufacturing processes. To the extent either of these distorting effects occurs, domestic steel producers will benefit not one iota from steel quotas.

Quota-induced price increases in steel products would also benefit foreign producers. As was the case with automobile quotas, it is entirely possible that foreign producers will actually be better off economically selling fewer tons of steel at higher unit prices than they would be if a free market were maintained. Thus, the Fair Trade in Steel Act could have the ironic effect of strengthening foreign competition for domestic producers.

In summary, steel quotas are a blunt instrument which will help domestic producers much less than it will hurt steel

users. There is no evidence in support of this bill which indicates that the domestic integrated steel industry is more deserving of protection or financial aid than are the metal-working or fabricating industries from whom those funds would come under this bill. The plight of unemployed steel workers is indeed troublesome. However, as terrible as their plight may be, it will result in no social good to replace them with unemployed workers in steel-using sectors.

3. In Any Remedy, Plate and Pipe Must Be Treated Equally.

In the recent Section 201 investigation, the U.S. International Trade Commission found that imports are a substantial cause of serious injury to the domestic steel plate industry. However, they did not so rule with respect to pipe and tube products. The rationale for this split decision is a mystery at the moment. One Commissioner out of the five who voted in the case ruled inconsistently with respect to plate and pipe. The other four Commissioners were consistent in their votes, either for or against an injury determination with respect to both plate and pipe.

The potential for inconsistent treatment between plate and pipe evidenced by the injury vote by the Section 201 investigation presents Berg with a potentially disastrous possibility that its raw material will be subject to import restrictions and become even more expensive, while its finished

product will be open to free international trade and lower prices. The resulting squeeze could well be fatal for non-integrated pipe producers such as Berg. In addition, there is every reason to believe that the two remaining integrated pipe producers, U.S. Steel and Bethlehem, would quickly find that declining pipe prices present an unattractive outlet for their plate production. It is thus entirely possible that inconsistent relief could result in the collapse of the domestic large diameter pipe industry.

The currently effective U.S./EC Steel Arrangement, negotiated in October, 1982, presents evidence of the distorting effects of protecting flat rolled products but not pipe and tube. There has been diversion of European steel products from those covered by the Arrangement to those not covered. Berg's performance within the domestic market has suffered because of the price squeeze imposed by quotas on EC plate without similar restrictions on pipe.

Berg believes that quotas on neither plate nor pipe are a preferable solution to placing quotas on both products. However, it is absolutely imperative, above all, that plate and pipe be treated in a consistent manner. Lynn Williams said as much in his testimony before the Subcommittee on June 8. See Mr. Williams' prepared testimony at 11:

An example of the vulnerability which results when a product line is left uncovered is provided by pipe and tubing and the EC Arrangement. Pipe and tubing was not included in the quantitative

limitations under that Arrangement. As a consequence, imports of this product increased dramatically after the Arrangement, causing serious injury to this sector of the industry, and the shut-down of plants.

Whatever course is taken, Congress must not repeat the mistake of treating plate and pipe inconsistently.

4. Any Legislative Remedy Should Minimize Market Place Distortions and Should Attempt to Promote Exports of Steel Products.

The U.S./EC Steel Arrangement illustrates the serious distortions which can result from artificial trade restraints. The Arrangement contains a provision, Article 4(b), which counts against EC quota amounts Arrangement products which are imported into the United States, transformed into another product and then reexported. Thus, the inflated prices inherent in a quota regime for products restricted artificially, applies not only to products which are destined for U.S. commerce, but also to products which are to be reexported. This means that Berg cannot effectively export large diameter pipe at prices which would be competitive in the world market place.

This situation does not help the domestic industry producing carbon steel plates. Those plates are priced so high as to make their use impossible in reexport applications. The world price of pipe is lower than domestic plate prices, thereby insuring a lost sale by Berg for any export order which

has to use domestic plate. The consequence of the anomaly in the U.S./EC Steel Arrangement is to prevent Berg from exporting, to the benefit of foreign pipe producers who remain active in international markets. Domestic producers do not benefit from this restriction at all.

Conclusion

Any comprehensive remedy adopted by Congress must take account of the distortions which quotas will cause to steel users such as Berg. There must be provision for exemption from quotas of products not available domestically or for which quotas would not materially assist the domestic steel industry.

The "short supply" section of S. 2380 is totally inadequate. The "short supply" provision requires an examination by the Secretary of Commerce of claims by affected steel consumers that there is a short supply situation with respect to "articles" within the restricted product categories. The Secretary must also consult with domestic steel producers in an effort to determine whether a short supply situation actually exists. By the time this process runs its course, whatever sale may be in the balance will almost certainly have been lost. American business cannot operate in this fashion and hope to remain competitive with international producers unfettered by such restraints.

Berg is a part of, and remains committed to, the continuation of a viable domestic steel industry. However,

the Fair Trade in Steel Act would not accomplish any legitimate objective of the domestic steel producers, and would harm the interests of users of steel mill products, such as Berg. The increased prices and tight supplies in the midst of world-over capacity in steel would benefit foreign producers of downstream products, foreign producers of steel products through higher prices, and producers of substitutes for steel, leaving precious little benefit for traditional domestic integrated producers. These benefits would almost certainly be insufficient to accomplish the fundamental restructuring and consolidation of the industry which needs to be done before the steel industry returns to health.

Respectfully submitted,



Lewis E. Leibowitz
Arent, Fox, Kintner,
Plotkin & Kahn
1050 Connecticut Avenue, N. W.
Washington, D. C. 20036-5339
Telephone: (202) 857-6231

Counsel to Berg Steel Pipe Corp.

Cadwalader, Wickersham & Taft

A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

1333 New Hampshire Ave., N.W.

Washington, D.C. 20036

Telephone: (802) 293-6300

TWX: 710-888-1934

RAPIFAX: (802) 293-6280

XEROX: (802) 297-1417

June 6, 1984

ONE WALL STREET
NEW YORK, N.Y. 10008
(212) 908-7000
CABLE LABELLUM
TELEF. 109148/687488249 NOTAL PALM WAY
PALM BEACH, FLA. 33480
(305) 858-8900
TWX. 910-558-7688

Mr. Frederick A. DeArment
Chief Counsel
Committee on Finance
Room SD-219
Dirksen Senate Office Building
Washington, D.C. 20510

Re: Hearing on the State of the U.S.
Steel Industry, June 8, 1984

Dear Mr. DeArment:

On behalf of the American Wire Producers Association ("AWPA"), I am submitting the original and five copies of the statement by Leo F. Buckley, Managing Director of N-S Export Corporation and a member of the AWPA Board of Directors, for inclusion in the printed record of the referenced hearing before the Subcommittee on International Trade.

The AWPA is a national trade association which represents independent American manufacturers of carbon, alloy and stainless steel wire and wire products. AWPA members operate plants in more than 25 states and employ over 9,000 American workers. In 1983 members of the AWPA purchased 1.7 million tons of steel wire rod and manufactured products with a total value of 1.1 billion dollars. Together with other independent wire producers, the members of the AWPA supply approximately 60% of all wire and wire products consumed in the United States -- more than domestic integrated steel producers and importers combined.

Nevertheless, our part of the steel industry is often overlooked by the Administration, the Congress and the media when issues involving national steel policy and the domestic industry are considered. The AWPA had seen the Subcommittee's hearing as an opportunity to advise the Senate about the non-integrated steel companies which make a vital contribution to the continued growth and prosperity of the U.S. economy. This is the message which the AWPA gave to the House Trade Subcommittee during its recent hearings on the steel industry and to the International Trade Commission during the current section 201 investigation of steel products.

I am also enclosing six copies of an AWPA publication which describes the Association's objectives and provides a list of the active and associate members of the organization.

The AWPA appreciates this opportunity to provide its views to the Subcommittee and to have its statement included in the printed record of the hearing.

Sincerely yours,

A handwritten signature in cursive script that reads "Frederick P. Waite". The signature is written in dark ink and includes a stylized flourish at the end of the name.

Frederick P. Waite

Enclosures

871

STATEMENT
OF
LEO F. BUCKLEY

MANAGING DIRECTOR
N-S EXPORT CORPORATION
NATIONAL-STANDARD COMPANY

AND

MEMBER OF THE BOARD OF DIRECTORS
AMERICAN WIRE PRODUCERS ASSOCIATION

BEFORE

SUBCOMMITTEE ON INTERNATIONAL TRADE
COMMITTEE ON FINANCE
UNITED STATES SENATE

HEARING ON THE STATE OF THE
UNITED STATES STEEL INDUSTRY

June 8, 1984

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

My name is Leo F. Buckley, and I am Managing Director of N-S Export Corporation, a subsidiary of National-Standard Company. National-Standard is one of the largest manufacturers of carbon, alloy and stainless wire and wire products in the United States today.

I am also a member of the Board of Directors of the American Wire Producers Association ("AWPA"), a national trade organization with over 55 active and associate members in the wire industry.

Mr. Chairman, I am speaking to you today on behalf of both my company -- National-Standard -- and the American Wire Producers Association on matters of great concern to the future of the wire industry in our country.

The members of the AWPA, including National-Standard, purchase steel wire rod and manufacture wire and wire products. We have plants located in more than 25 states, and we employ thousands of productive American workers. We manufacture hundreds of different types of steel wire and wire products which are used in every segment of the U.S. economy. Our products range from coat hangers and chain-link fence to precision wire used in automotive brake cables and springs.

We are an important part of the American steel industry. In fact, the independent wire drawers supply about 60 percent of the domestic wire market -- far surpassing the integrated steel producers and imports. In 1983, independent wire drawers shipped almost 3.7 million tons of wire and wire products. By comparison, the integrated mills shipped 1.3 million tons, and imports accounted for another 1.6 million.

Nevertheless our part of the industry tends to be overlooked by the decision-makers here in Washington. In the current section 201 investigation of steel, the International Trade Commission ("ITC") prepared detailed statistical tables on U.S. shipments, imports, exports and consumption of steel products. In the case of wire and wire products, however, the tables were completely wrong. It appears that the ITC calculated domestic shipments of wire and wire products on the basis of shipments by the integrated producers alone. The ITC figure for 1983 shipments was only 1.3 million tons. As I have just explained, independent wire drawers shipped 3.7 million tons of these products last year -- almost three times the tonnage shipped by the integrated producers. It is crucial that our Government understands the primary role we independent producers play in the wire industry, and one of the reasons for my appearance before you today is to invite the Subcommittee's attention to our part of the steel industry.

Mr. Chairman, our Association is opposed to any quotas or other restrictions on the importation of steel wire rod -- the basic raw material of our industry. Wire rod is the largest single component in the cost of making wire. To our members the price paid for wire rod is anywhere between 40 and 75 percent of the selling value of the finished wire or wire product. This cost is greater than wages, depreciation, taxes or energy.

As rod prices increase -- and they will surely increase dramatically if there are restraints on imported rod -- so will the prices of our wire and wire products. We, as an industry, will face decreased margins and reduced volume of sales. We believe that domestic wire drawers are as efficient, or better, than foreign producers. If, however, our raw material costs increase as the result of non-market forces, then we will find ourselves in a position where we can no longer compete with the foreign wire producers.

Quotas will also result in artificial limitations on the availability of rod -- both in terms of quality and quantity. Our members have different needs in terms of size, quality and other specifications for rod, some of which are not produced domestically in sufficient quantities to meet demand. Import barriers will create further damaging shortages of supply.

Another effect of quotas will be the "downstreaming" of products by foreign producers. Instead of shipping wire rod to the United States, they will ship wire and eventually the finished product itself, whether it is a spring, coat hanger or automotive cable. Our industry will then be hammered by a devastating cost/price squeeze -- in which our raw material prices are increasing, while our foreign competitors will be selling finished wire and wire products made from rod obtained at world-market prices.

Mr. Chairman, my company -- National-Standard -- has already experienced the damage that can be caused by quotas on our raw materials. This damage has occurred in the case of quotas on imported stainless steel wire rods. In 1983 stainless rod prices rose from an average of 75 cents per pound to approximately \$1.00 per pound, while finished wire prices held steady at \$1.50 per pound. National-Standard Company has experienced shortages of raw materials and disruptions in our stainless steel wire business due to these rod quotas and an ill-fated, unenforced trigger price mechanism (T.P.M.). Our company has painfully restructured its operations over the past four years to achieve lower operating costs and a chance for survival. We must expect continued similar effort by domestic rod suppliers instead of quotas to protect inefficiencies. We believe that the failure by government agencies to enforce current laws designed to prevent unfair trade practices has contributed greatly to steel industry problems.

National-Standard Company endorses the concept that the marketplace, and not government-imposed quotas, should determine the availability of wire rod. Quotas would significantly rearrange the North American market, making it very difficult to exist with our largest trading partner, Canada. Imposition of quotas on carbon steel rod would, in our opinion, create great hardships for our customers, employees and stockholders.

In conclusion, Mr. Chairman, my company joins the AWPA in opposing any artificial barriers to the importation of wire rod. Such measures are only temporary "band-aid" remedies which have not worked in the past. We as an industry are willing to let the market decide and to take our chances in a free enterprise system unencumbered by quotas, restraints or other barriers to trade.

On behalf of National-Standard and the AWPA, I want to thank you for giving me the opportunity to tell you of our industry.

WALTER ADAMS AND JAMES W. BROCK

Countervailing or coalescing power? the problem of labor/management coalitions

The performance of four major American industries is examined in order to test the thesis that restraints on market power are imposed—not on the same side of the market via competition—but from the opposite side of the market through the exercise of countervailing power. The authors find that tacit vertical collusion between management and labor in noncompetitive industries transforms countervailing into coalescing power and, in the process, vitiates good micro- and macroeconomic performance. The authors conclude that the promotion of effective competition in product markets by antitrust action is an indispensable component of a sound industrial policy.

In his classic, *American Capitalism*, John Kenneth Galbraith argued that concentrations of economic power are not the social evil that antitrust advocates had traditionally believed them to be. Countervailing power, not classical competition, he said, was the instrument for keeping concentrated power in check (Galbraith, 1952, pp. 118 ff).

In its pristine form, of course, countervailing power is nothing more than a species of bilateral monopoly. This type of market structure, according to pure economic theory, is characterized by what Henrich von Stackelberg called *Gleichgewichtslosigkeit*—an incapacity to achieve a stable equilibrium. The inherent and irreconcilable conflict between the bilateral monopolists can be rationally resolved (in the best interest of both parties) only if they agree to enter into a vertical combination or conspiracy. Such coalescence, of course, represents a compromise—a case of mutual forbearance—in order to achieve joint

Walter Adams is R. J. Reynolds Visiting Professor of Economics, Wake Forest University (1983), and Distinguished University Professor (Economics) and Past President, Michigan State University; James W. Brock is Assistant Professor of Economics, Miami University (Ohio).

profit maximization. And, says Stackelberg, profits will be maximized for the bilateral monopolists if—in labor-management confrontations, for example—the employer (a monopsonist in the labor market) enjoys a monopoly in the sale of his product (Stackelberg, 1934, p. 100). In other words, market control or market dominance in the product market serves not only the best interests of management but also the best interests of labor. Hence, rationality in a bilateral monopoly situation militates toward coalescence of power between management and labor, not antagonism or countervailance of power.

Not surprisingly, this insight (which is neither profound nor esoteric) was used by the exponents of industrial cartels as a prime argument to persuade workers that cartels were in labor's best interests. Robert Liefmann, for example, pointed out:

Where the firms are in a cartel, they are more inclined to concede the workers higher wages than in a state of free competition, because they find it easier to pass the increased costs on to their customers by charging higher prices. The workers will therefore, generally speaking, find it easier to impose higher wages upon organized firms, and it is in their power, at least if they can form strong trade unions, to demand wages increasing with the cartel's prices, i.e., a "sliding wage-scale." (Liefmann, 1927, p. 80)

Thus, said Liefmann, market dominance and market control (i.e., cartels and monopolies) were in the best interests of labor as well as management, because the greater the market control the more ample the fruits to be shared through a system of vertical cooperation.

The consequence of such cooperation from the viewpoint of the public interest is, of course, another matter. Thus, in a prescient article published in 1890, Alfred Marshall observed that traditionally the public was protected by labor-management antagonism. Employers and employed "have seldom worked together systematically to sacrifice the interests of the public to their own, by lessening the supply of their services or goods, and thus raising their price artificially. But," Marshall added,

there are signs of a desire to arrange firm compacts between combinations of employers on the one side and of employees on the other to restrict production. Such compacts may become a grievous danger to the public in those trades in which there is little effective competition from foreign producers; a danger so great that . . . they may have to be broken up by public force. (Pigou, 1956, pp. 288-89)

In short, the absence of effective competition in product markets, when

combined with vertical collusion between management and labor—whether tacit or overt—poses a central problem for public policy. Put differently, countervailing power is not a suitable substitute for antitrust policy, because countervailing power tends to be subverted by coalescing power and thus makes the problem of controlling market power more intractable than ever.

The virulence with which management and labor in recent years have fought for protectionism in the public as well as private sector (Adams and Brock, 1983) affords a striking illustration of tacit vertical collusion and coalescing power in action. It also reflects the common perception by both management and labor that immunity from competition confers private benefits on both groups and that, therefore, government protection from competition is in their rational—albeit, short-run—mutual self-interest. In the longer run, however, as we shall indicate, the exercise of coalescing power constitutes a tacit mutual suicide pact between management and labor. It tends to exacerbate delinquent industrial performance and to undermine the implementation of an effective macro-stabilization policy.

In this article, we shall review some effects of coalescing power in four major industries—two in the regulated, and two in the private, sectors of the American economy. We shall then sketch some implications for both micro- and macroeconomic policy which, we submit, run counter to the newly emerging, currently fashionable precepts of "neoliberalism."

I. The regulated sector

Airline industry

In the airline industry, for example, CAB regulation has given management protection against competitive entry and competitive price cutting (Kennedy Report, 1975, pp. 77-141). While that protection did not yield abnormal profits (because carrier energy was diverted into costlier service such as more flights, more planes, and more frills) (*ibid.*, p. 3), it did give management the freedom to lead the quiet life and the discretion to charge exorbitant fares. This is underscored by a comparison of fares and service in California and Texas—where entry is possible and price competition permitted—with CAB-controlled rates on interstate flights. Thus, Table 1 shows that in 1976 a traveler between Los Angeles and San Francisco (an intrastate, unregulated route) could fly 338 miles for \$18.75 while a traveler between Chicago

Table 1

Comparison between interstate and intrastate fares

City-pair	Fare	Miles	Passengers transported	Block time
*Los Angeles-San Francisco \$	18.75	338	7,483,419	:55
Chicago-Minneapolis	38.89	339	1,424,621	1:08
New York-Pittsburg	37.96	335	975,344	1:05
*Los Angeles-San Diego	10.10	109	2,518,701	:30
*San Francisco-Sacramento	9.73	86	505,148	:30
Portland-Seattle	22.22	129	1,217,381	:35
*Los Angeles-Sacramento	20.47	373	915,077	1:00
Boston-Washington	41.67	399	981,456	1:07
Cleveland-New York	43.52	418	910,270	1:25
Chicago-Kansas City	37.96	404	813,235	1:10
Chicago-Pittsburg	41.67	413	972,543	1:23
*San Francisco-San Diego	26.21	456	399,639	1:05
Detroit-Philadelphia	45.37	454	313,439	1:25
Dallas/Fort Worth-New Orleans	44.44	442	522,223	1:15
New York-Raleigh/Durham	44.44	423	267,272	1:15
Columbus-New York	47.22	478	294,682	1:18
*Dallas/Fort Worth-Houston	23.15/13.89	239	1,620,000	:50
*Dallas/Forth Worth-San Antonio	23.15/13.89	248	980,000	:50
Las Vegas-Los Angeles	28.70	236	1,181,466	:50
Chicago-St. Louis	29.63	258	953,604	:50
*Houston-San Antonio	23.15/13.89	191	490,000	:40
Boston-New York	24.07	191	2,493,882	:50
Reno-San Francisco	25.93	192	312,811	:46
Miami-Orlando	25.93	193	514,475	:40

Source: Kennedy Report, 1975, p. 41.

*Intrastate market.

and Minneapolis (a CAB-regulated route) had to pay \$38.89 for roughly the same distance. Similarly, a traveler between Dallas and Houston (an intrastate, unregulated route) had to pay a maximum of \$23.15 for 239 miles while a traveler between Las Vegas and Los Angeles paid \$28.70 for 236 miles.

As Table 1 shows, fares charged in Texas and California in the absence of regulation were approximately 50 to 70 percent of the CAB-controlled fares for similar distances and kinds of routes. As the Senate Subcommittee on Administrative Practices and Procedures observes, "Experience in California and Texas suggests that less regulation and more open competition would bring about safe air service with substantially lower fares, more frequent flights, and fewer frills"

Table 2

Level and trends in domestic airline wages

Average annual salary	All workers*	All airline employees	Pilots and copilots	Mechanics
1963	\$ 4,625	\$ 7,781	\$18,272	\$ 7,434
1976	10,027	21,500	49,000	23,600
Increase, 1963-1976	117%	176%	168%	217%

Sources: *Economic Report of the President*, 1982, pp. 256, 268 (all workers). *Statistical Abstract of the United States*, 1965, 1978 (airline data).

*Total wage income divided by total employment.

(Kennedy Report, 1975, p. 40). Obviously airline management saw that prospect as a threat to its vested interests.

So did organized labor, which found security under the protective umbrella that CAB regulation provided for the airlines. Regulation permitted the carriers not only to charge exorbitant fares but to accede to persistent wage escalation for various categories of airline employees represented by the Airline Pilots Association, the Transport Workers Union, and the Machinists. In 1963, as Table 2 shows, airline employees as a group received an average salary of \$7,781, i.e., 1.7 times more than the \$4,625 average earned by all workers in the economy. By 1976, the average salary for airline employees had risen to \$21,500, or more than double the level of workers generally. The rate of increase over the 1963-76 period ranged from 168 to 217 percent for airline workers in contrast to 117 percent for workers generally. Clearly, collective bargaining in a government-regulated industry, protected from "unbridled" competition, yielded succulent fruits for labor (as well as for management).

Trucking industry

In trucking, the same pattern is observable. ICC regulation has given management protection against competitive entry and competitive price cutting. As a rule, the ICC granted new operating authority only where the proposed service would not divert traffic from existing carriers (Kennedy Report, 1980, pp. 13-43). Also, the ICC permitted (and, indeed, encouraged) trucking firms to join rate bureaus to fix

rates on particular shipments and frequently suspended the lower rates filed by independent truckers (*ibid.*, pp. 45-88). Not surprisingly, the net effect of ICC regulation has been to raise rates above the level which would prevail in the absence of regulation.

A number of recent studies document this conclusion. One study, for example, found that average revenue per ton-mile was 6.73 percent lower in "unregulated" Canadian provinces than in regulated provinces and in the United States (Sloss, 1970). Another study—in what can be considered a controlled "before and after" experiment—compared trucking rates for frozen fruits and vegetables when they were classified as "regulated" commodities and after they became "exempt" commodities (as a result of a series of court decisions). Deregulating the carriage of these commodities resulted in a dramatic price decline: 12 to 59 percent in particular markets for fresh and frozen poultry (Snitzler and Byrne, 1958) and a weighted average of 19 percent for frozen fruits and vegetables (Snitzler and Byrne, 1959). Yet a third study, based on a survey by the National Broiler Council, compared the rates on fresh poultry shipped by exempt carriers with rates on cooked poultry shipped by regulated carriers. Over the same routes between the same points, the unregulated rates were found to be some 33 percent less than the regulated rates (Transportation Hearings, 1972, p. 1434). In short, cartelization under the aegis of government regulation had predictable results.

Also predictable was the impact of trucking regulation on organized

Table 3

Average annual employees compensation in regulated and unregulated trucking (1972)

	Regulated	Unregulated	Percentage of regulated over unregulated
All Class I Property	\$12,299	\$8,504	44.6
Class I Property (Revenue \$1 million- \$5 billion)	11,099	8,504	30.5
Class II Property	10,033	7,566	32.6

Source: Thomas G. Moore, "The Beneficiaries of Trucking Regulation," *Journal of Law and Economics*, October 1978, Vol. 21, p. 333. Reprinted with permission of the University of Chicago Press. Copyright ©1978 by the University of Chicago. All rights reserved.

labor. Aside from the benefits derived by drivers from the additional mileage covered as a result of "deadhead" hauls and circuitous routes, regulation-unionization seems to have resulted in significant wage increases in the industry. Thus, according to one study, summarized in Table 3, regulated carriers were paying compensation to their drivers more than 30 percent higher than their unregulated counterparts. In 1973, according to another study, a typical owner-operator (unregulated and not represented by a union) would earn about \$11,125 for a 250-day work year—in contrast to the \$17,249 average compensation of a unionized driver for a regulated Class I intercity hauler of general freight (Wyckoff and Maister, 1975, p. 36). After surveying these and other studies, Thomas G. Moore concludes:

A conservative estimate of the impact regulation-unionization has on wages of truckers, helpers, and platform workers would therefore be about 50 per cent. Some of the evidence suggests the gain could be as large as 55 per cent; the most conservative estimate is 37 per cent. This implies that the gains to Teamster members would have been between \$1 billion and \$1.3 billion in 1972. (Moore, 1978, p. 339)

When this is added to the "rents" received by the owners of ICC certificates and permits (\$1.5 to \$2 billion in 1972), the stake that management and labor had in continued regulation of trucking was obviously substantial. It meant excess revenues for the industry of about \$3.4 billion in 1972, of which, according to Moore, between 74 and 97 percent constituted "rents" accruing to capital and labor (Moore, 1978, p. 342).

II. The private sector

Automobiles

Since the end of World War II, automobile prices have followed a typical oligopoly pattern—their outstanding characteristics being uniformity and upward rigidity (Adams, 1982, pp. 153-57, 173-74). As Table 4 shows, the average retail price of new cars (including imports) increased from \$3,200 in 1967 to \$9,750 in the first eight months of 1982, or more than 200 percent. Apparently management was loath to abandon its policy of persistent price escalation in spite of the 1974/75 recession, the 1980/82 depression, and the 200 percent increase of the import share in the U.S. domestic market. If foreign competition was a threat to its market control, management seemed to believe, the most

Table 4

New car prices, import penetration in the U.S. automobile market, and consumer price index

Year	Average yearly retail prices (dollars)*	Index of average retail prices for new cars	Market share of imported cars (percent)
1967	\$ 3,200	100.0	9.3
68	3,240	101.3	10.3
69	3,400	106.3	11.6
70	3,430	107.3	15.2
71	3,730	116.6	15.3
72	3,690	115.3	14.8
73	3,930	122.8	15.4
74	4,390	137.2	15.9
75	4,750	148.4	18.3
76	5,470	170.9	14.8
77	6,120	191.3	18.6
78	6,470	202.2	17.7
79	6,950	217.2	21.9
80	7,530	235.3	26.7
81	8,850	276.6	27.3
82	9,750**	304.7	28.1***

Source: Price statistics from National Automobile Dealers Association; import statistics from Ward's Automotive reports.

*Includes price of imported cars.

**Average for first 8 months.

***Average for first 10 months.

efficacious cure for that problem was mandatory or "voluntary" import quotas negotiated under the protective benevolence of the federal government. In other words, the preferred solution was protection in the form of governmental restraints on competition.

Organized labor's compensation policy during this period affords an uncanny parallel to management's pricing policy. Between 1967 and 1980, as Table 5 shows, hourly compensation in the motor vehicle industry increased 214 percent compared to a 179 percent in manufacturing as a whole; output per worker increased 39 percent compared to 35 percent in manufacturing; unit labor costs increased 127 percent compared to 107 percent in manufacturing. As Charles L. Schultze, a former Chairman of the President's Council of Economic Advisers, sums up the implications of this wage escalation record:

Table 5

Indices of hourly labor compensation, output per employee, and unit labor cost in the motor vehicles industry and in all manufacturing in the United States (1967 = 100)

Year	Compensation		Output per worker		Unit labor cost	
	Motor vehicles	All manufacturing	Motor vehicles	All manufacturing	Motor vehicles	All manufacturing
1967	100	100	100	100	100	100
1968	107	107	106	104	101	103
1969	113	115	105	105	108	109
1970	122	122	103	105	119	117
1971	139	130	117	112	119	117
1972	148	137	120	117	12	117
1973	159	147	122	123	130	119
1974	178	162	121	121	148	135
1975	200	182	128	124	156	147
1976	218	196	134	129	162	151
1977	243	212	143	133	170	160
1978	265	230	142	134	187	172
1979	284	252	139	135	205	187
1980	314	279	139	135	227	207

Source: Brazer, 1982, p. 170.

In the mid-1960s hourly employment costs (wages and fringe benefits) in the major auto companies were about 20% above the average for manufacturing industries. Every three years since, the labor contract negotiated between industry and the union has widened the gap. By 1978 wages and fringes at the major auto companies had risen to almost 50% above the all-manufacturing average. Those extra costs were passed on in higher prices.

Finally, in 1979—faced with mounting interest rates, an incipient recession, sharply higher gasoline prices, growing resistance to large American cars and increased imports from Japan—what did the industry do? It negotiated a contract that by 1980 put auto wages and fringes about 60% above the manufacturing average. (Schultze, 1981)

Obviously, the exercise of coalescing power brought consistent short-run gains to both management and labor. But, as one might have predicted, these gains were tenable in the long run only so long as

effective competition could be successfully restrained in the final product market. Hence, as Schultze ruefully observes,

Now the UAW and the auto industry, calling attention to what is undoubtedly a serious problem of import penetration, are urging the government to validate these gains, and to make possible the price increases necessary to pay for them, with import protection. (Schultze, 1981)

In short, price/wage escalation, effectuated through the exercise of coalescing power, is possible only in protected markets artificially shielded from the impact of competition.

Steel

Prior to the long steel strike of 1959, and the burgeoning of steel imports during the 1960s, the domestic steel industry used its formidable oligopoly power to engineer a persistent increase in steel prices (Adams, 1982, pp. 92-98). According to the Council of Economic Advisers, these price increases were a principal feature of successive cost-push inflations in the post-World War II period:

Steel prices played an important role in the general price increases of the 1950s. Between 1947 and 1951, the average increase in the price of basic steel products was 9 per cent per year, twice the average increase of all wholesale prices. The unique behavior of steel prices was most pronounced in the mid-1950s. While the wholesale price index was falling an average of 0.9 per cent annually from 1951 to 1955, the price index for steel was rising an average of 4.8 per cent per year. From 1955 to 1958, steel prices were increasing 7.1 per cent annually, or almost three times as fast as wholesale prices generally. No other major sector shows a similar record. (Steel Report, 1965, pp. 8-9)

During the 1960s, largely because of significantly intensifying import competition, the upward pressure of steel prices was somewhat attenuated. Between January 1960 and December 1968, a period of 9 years, the composite steel price index increased 4.1 points—or 0.45 points per year (Comptroller General, 1974, p. 23). Starting in January 1969, however, after the State Department had successfully persuaded the Europeans and Japanese to accept “voluntary” quotas on their sales to the United States (that is, to enter into an informal international steel cartel), imports were cut back drastically and the domestic steel prices resumed their pre-1960 climb. In the four years between January 1969 and December 1972, the steel price index rose 26.7 points—or 6.67 points per year (*ibid.*). Put differently, steel prices increased at an

annual rate 14 times greater since the import quotas went into effect than in the 9 years prior thereto. Protectionism had its predictable effects—at an estimated annual cost to the U.S. economy variously estimated between \$338 million and \$1 billion (Magee, 1972, pp. 645-701; Comptroller General, 1974, p. 23).

The Trigger Price Mechanism had similar consequences. Its quantitative impact was substantial. On December 7, 1977, one day after the concept of trigger pricing was announced by President Carter, a steel company executive stated that United States steel prices would be increased in the first quarter of 1978. Shortly thereafter, a 5.5 percent increase—reduced from an original 10.5 percent increase—in the domestic price of basic steel products was posted. This was followed by a further price rise of 1.1 percent in April 1978 (*Federal Register*, 1977, p. 65214, and *Federal Register*, 1978, p. 1964).

On May 10, 1978, the Treasury announced that it was raising trigger prices by 5.5 percent on sheet, plate, wire, and cold-finished bars; 13.9 percent on angles, 14 percent on reinforcing bars, and 14.5 percent on flat bars. On August 2, the Treasury raised the trigger prices by another 4.86 percent, effective October 1, 1978; trigger price increases for calendar year 1978 totaled 10.6 percent (*Federal Register*, 1978, pp. 20020 and 33993).

While domestic steelmakers had raised their list prices by some 9.5 percent as of October 1, 1978, steel buyers reported that the prices they actually had to pay increased by as much as 15 percent because, as the *Wall Street Journal* noted, "last fall's widespread discounting has evaporated" (September 26, 1978).

The inflationary impact on the United States economy was, of course, profound. Considering only the original trigger prices announced by the Treasury in January 1978, the Federal Trade Commission, for instance, estimated the direct cost increase to steel consumers at \$1 billion (Federal Trade Commission, 1977, pp. 559-65). An official of the Brookings Institute estimated that the direct price effect could be as much as \$1.25 billion (*Wall Street Journal*, Sept. 26, 1978). Kurt Orban, a steel importer and international expert on steel markets, found that the trigger price system had resulted in a veritable price explosion and estimated the increased steel costs to consumers at \$4 billion (*American Metal Market*, March 29, 1978). Finally, if the domestic steel industry is to be believed in its claim that imports have caused transaction prices to be \$60 per ton below list prices, then estimates of increased steel costs could range up to \$6 billion. (These estimates, it should be noted, were based on the trigger prices of

January 1978 and do not, therefore, take account of their 10.63 percent increase the following year.)

Organized labor, of course, derived short-run gains from this protectionism, which permitted the steel industry to play its price escalation game with virtual impunity. Between 1964 and 1980, as Table 6 shows, hourly compensation in iron and steel increased by 282 percent compared to 212 percent in manufacturing as a whole; output per hour increased 19 percent and 40 percent, respectively; and unit labor cost increased 221 percent and 123 percent, respectively (Brazer, 1982, p. 166). As in automobiles, the gap between hourly employment costs in the steel industry and manufacturing as a whole widened. The gap, according to Charles Schultze, rose from 25 percent in the mid-1960s to 60 percent in 1980 (Schultze, 1981). This record, when superimposed on constantly escalating prices, meant declining competitiveness for the steel industry, and militated toward protectionism. It necessitated governmental restraints on foreign competition—a relief from the self-inflicted injury wrought by the exercise of coalescing power.

Table 6

Indices of labor compensation, productivity, and unit labor cost in iron and steel and all manufacturing for 1972-1980 (1964 = 100) in the United States

Year	Hourly compensation		Output per hour		Unit labor cost	
	Iron and steel	All manufacturing	Iron and steel	All manufacturing	Iron and steel	All manufacturing
1964	100	100	100	100	100	100
1972	161	153	116	122	138	125
1973	176	165	121	129	145	128
1974	202	182	124	126	163	145
1975	239	204	116	129	206	157
1976	257	220	120	134	215	163
1977	277	238	116	138	239	172
1978	308	258	125	139	246	185
1979	341	283	124	141	276	201
1980	382	312	119	140	321	223

Source: Brazer, 1982, p. 166.

III. Conclusion

The foregoing analysis of four major American industries reveals a pattern of coalescing, not countervailing, power—a confluence of the economic power wielded by producers in monopolistic output markets with the power of organized labor in input markets. Evidence of this process is most clearly provided by an examination of such recent, key policy issues as deregulation of airlines and trucking, and foreign competition in automobile and steel production. In each of these cases, big management and big labor adopted strikingly similar, anticompetitive positions utilizing remarkably parallel arguments—arguments which, on a number of occasions and in a number of forums, were well-nigh indistinguishable. That such tacit vertical collusion exists is beyond doubt. More importantly, the economic consequences of this phenomenon are significant and have both micro- and macroeconomic implications for public policy.

The microeconomic implications may be briefly summarized: Tacit vertical collusion between management and labor has amounted to a mutual suicide pact for afflicted industries. In the case of certificated trunkline air carriers, for example, average revenue passenger load factors steadily deteriorated from 64 percent in the 1950s to 55 percent in the 1960s and, in 1969 and 1970, fell below 50 percent (Kennedy Report, 1975, p. 107); alternative use of general aviation aircraft (including executive and business use) grew at a rate more than triple that of certificated route carriers over the 1970s (*Statistical Abstract*, 1981); “‘value of time’ studies suggest that all except the highest paid executives would prefer lower fares even if they were accompanied by a significant reduction in the number of flights flown” (Kennedy Report, 1975, p. 4); perverse price increases during economic downturns, according to at least one financial analyst, were a “principal reason for the disappointing growth in [air] travel since 1969” (*ibid.*, p. 128)—while the entry of low-fare, high-load factor carriers into unregulated intrastate markets “led to greatly increased demand for air travel with a resulting increase in scheduled flights” (*ibid.*, p. 4).

For trucking, private and exempt carriage provided by firms for themselves has, as the Senate Judiciary Committee found in 1980, “increased dramatically in recent years” with private carriers “out-numbering regulated carriers by more than nine to one” (Kennedy Report, 1980, p. 14); more than 60 percent of total motor freight traffic across the nation, according to the chairman of the ICC, is *not* hauled

by regulated carriers and, instead, is carried privately or as exempt agricultural commodities (Oversight Hearings, 1977, p. 70); and, according to the Special Counsel for the American Trucking Associations' own Private Carrier Conference, regulation itself was the primary factor underlying this substantial shift of traffic away from regulated carriers and teamsters:

Why the shift to private carriage? The universal answer is dollars—dollars in terms of direct reductions in costs compared to common carrier rates or dollars in terms of service which may be described as keeping the customer. *Service and economics vie as the only reasons for this growing movement toward private carriage and away from regulated carriage.* Most observers conclude that this shift is symptomatic, that there is something wrong with the way the regulated carriers conduct their business and with the way they are regulated by State and Federal agencies.

Most companies do not want to go into private carriage. They are in it because they have to be. They would prefer to rely, to the extent reasonably possible, on regulated carriers to handle their traffic. Transportation is an alien business to them, one they must learn in terms of diversification from the normal primary businesses with which they are familiar that do not involve transportation considerations. (Kennedy Report, 1980, p. 15)

This deplorable performance record was not confined to the "regulated" sector of the American economy. In the "private" sector, the U.S. automobile industry recorded a total loss of \$4.2 billion in 1980, a development that *Business Week* termed "the worst one-year performance in history of any U.S. industry" (November 9, 1981, p. 106); production levels have since dropped to their lowest annual rates in twenty years (*Wall Street Journal*, January 5, 1982, p. 4); total employment fell 40 percent between 1978 and 1982 and, by April of the ~~latter~~ year, more than 213,000 U.S. auto workers had been laid off indefinitely. Nor, it is important to add, can this wretched record be ascribed merely to depressionary macroeconomic conditions; after all, despite selling in the same market and with the additional burden of "voluntary" restraints, foreign-built automobiles succeeded in capturing a record 28 percent share of the U.S. market in 1982 (*New York Times*, January 6, 1983, p. 33).

The integrated U.S. steel oligopoly presents an equally depressing picture: return on invested capital in steel production, according to the Congressional Budget Office, "is between 3 and 6 percent, compared with a cost of capital of 15-18 percent"; their "combined annual real income after taxes, from 1975 through 1980, has been about 50 percent

of what it was during the decade of 1965 to 1975 (House Oversight Committee, 1982, pp. 32, 35); capacity utilization rates of 40 percent and less are at their worst levels since the Depression (*Wall Street Journal*, June 8, 1982, p. 2); employment in the industry has contracted at a rate of 4 percent annually since 1974 (House Oversight Committee, 1982, p. 35); and nearly one-half of the nation's steelworkers had been laid off by the end of 1982 (*New York Times*, December 28, 1982, p. D3). Moreover, with foreign steel competitors successful in increasing their share of the U.S. market from 15 percent in 1979 to 23 percent in the first nine months of 1982 (Adams, 1982, p. 82; *New York Times*, November 28, 1982, sec. 3, p. 17), the bulk of the blame in steel, as in automobiles, must be laid squarely at the domestic industry's doorstep and *not* the depressed macroeconomy.

The coalescence of structural economic power in each of these industries, in other words, has led to and fostered noncompetitive conduct. Noncompetitive structure and conduct, in turn, have together resulted in deplorable economic performance—performance which management and labor subsequently sought to have sanctioned and validated as a matter of public policy.

The macroeconomic consequences of coalescing power are equally profound, perhaps more so since, by convention, they are attributed to other causes. For more than two decades, economists have been engaged in a passionate debate over macro-stabilization policy. Their disputes have centered on (1) the optimum balance between inflation and unemployment, and (2) the proper mix of monetary policy to achieve that optimum balance. Monetarists and Keynesians each had a policy to deal with inflation *or* unemployment. Neither had a policy to deal with stagflation, i.e., the simultaneous occurrence of inflation *and* unemployment. Neither group seemed to recognize that structural imperfections in the economy could undermine the effectiveness of monetary and/or fiscal policy in achieving macroeconomic stabilization.

One exception was Paul A. Samuelson, a Nobel laureate and a past president of the American Economic Association. In an article published some twenty years ago and largely ignored by his mainstream colleagues, he observed that aggregate demand analysis is only a partial, not a general, guide to understanding macroeconomic phenomena. He pointed out that "there is good reason to fear that America may, along with other lands, suffer from an institutional problem of cost-push. I mean by this," said Samuelson, "that at levels below those corresponding to reasonably full employment, our institutions of wage

bargaining and price setting may be such as to lead to a price and wage creep, a creep which can be lessened by conventional depressing of demand by monetary and fiscal policy measures but only at the cost of creating greater unemployment and excess capacity" (Samuelson, 1964, p. 339). Looking ahead to the decade of the 1960s, he estimated that a 3 percent unemployment rate could be obtained at the cost of a 4.5 percent annual inflation rate—a trade-off which by current standards seems absurdly cheap and eminently tolerable (Samuelson and Solow, 1960, pp. 177-94). In the 1980s, economists are wont to assume an "underlying" or "embedded" inflation rate of roughly 10 percent, accompanied by near double-digit unemployment—a somewhat less than spectacular triumph of modern policy making.

Another exception was Gottfried Haberler, an avowed Monetarist and also a past president of the American Economic Association. In 1975, he confessed that "stagflation, the coexistence of inflation and recession, is an economic disease which, to my knowledge, has never before existed, at least not as long and as severely as in the 1970s" (Haberler, 1976, p. 4). He noted that, in most industrialized countries, "stagflation could not have become such an intractable problem if our market economy were more competitive than it is, [i.e.,] if it were not hamstrung and hobbled by so many restrictions and rigidities, due especially . . . to government intervention designed to keep certain prices and incomes high and by labor unions which have made money wages completely rigid in a downward direction and push them up even in the face of heavy unemployment and slack" (ibid., p. 5). Haberler argued that government toleration, protection, and promotion of private monopolies, combined with the restrictionist pressures of organized vested interest groups in the private sector, created what the Germans call *Anspruchs-Inflation*—a pernicious type of cost-push or "entitlements" inflation. It creates a persistent upward pressure on the general price level, because "the sum of the shares claimed by the various pressure groups exceeds the available social product" and because the government feels constrained to validate these excessive claims by a constant increase in the money supply.

What, then, are the implications for public policy? First, competition in product markets may be a crucial—if not indispensable—ingredient of a sound microeconomic policy. Second, a sound microeconomic policy, based on competition, may be a crucial—if not indispensable—ingredient of an effective macroeconomic anti-inflation policy. If this be so, the neo-liberal apostles of industrial policy *à la japonaise* are on the wrong track. It is time, at last, not to emasculate the antitrust laws, but to enforce them.

REFERENCES

- Adams, Walter (ed.). *The Structure of American Industry*. 6th ed. New York: Macmillan, 1982.
- Adams, Walter, and Brock, James W. "Tacit Vertical Collusion and the Labor-Industrial Complex." *Nebraska Law Review*, Fall 1983.
- American Metal Market*, various dates.
- Brazer, Harvey E. (ed.). *Michigan's Fiscal and Economic Structure*. Ann Arbor: University of Michigan Press, 1982.
- Business Week*, various dates.
- Comptroller General of the United States. *Economic and Foreign Policy Effects of Voluntary Restraint Agreements on Textiles and Steel*. Report B-179342. Washington, 1974.
- Council of Economic Advisers. *Report to the President on Steel Prices*, Washington, April 1965 [cited as Steel Report].
- Federal Register*, various dates.
- Federal Trade Commission. *The United States Steel Industry and Its International Rivals*. Washington: U.S. Government Printing Office, 1977.
- Galbraith, John K. *American Capitalism: A Theory of Countervailing Power*. Boston: Houghton-Mifflin, 1952.
- Haberler, Gottfried. *The Challenge to the Free Market Economy*. Washington, D.C.: American Enterprise Institute, 1976.
- House Oversight Committee. See U.S., House Committee on Oversight and Investigations.
- Kennedy Report, 1975. See U.S., Senate Subcommittee on Administrative Practices and Procedures.
- Kennedy Report, 1980. See U.S., Senate Judiciary Committee.
- Liefmann, Robert. *Cartels, Concerns, and Trusts*. New York: E. P. Dutton, 1927.
- Magee, Stephen P. "The Welfare Effects of Restrictions on U.S. Trade." *Brookings Papers on Economic Activity*, 1972, 3, 645-707.
- Moore, Thomas G. *Trucking Regulation: Lessons from Europe*. Stanford: American Enterprise Institute/Hoover Policy Studies, 1975.
- _____. "The Beneficiaries of Trucking Regulation." *The Journal of Law and Economics*, October 1978, 21, 327-343.
- _____. "Deregulation and Re-Regulation of Transportation." *Cato Policy Analysis*, July 8, 1982.
- New York Times*, various dates.
- Oversight Hearings. See U.S., Senate Subcommittee on Antitrust and Monopoly.
- Pigou, A. C. (ed.). *Memorials of Alfred Marshall*. New York: Kelley and Millman, Inc., 1956.
- Samuelson, Paul A. "A Brief Post-Keynesian Survey." In *Keynes' General Theory: Reports of Three Decades*, edited by Robert Lekachman. New York: St. Martin's Press, 1964.
- Samuelson, Paul A., and Solow, Robert. "Analytical Aspects of Anti-Inflation Policy." *American Economic Review*, May 1960, 50, 177-194.
- Schultze, Charles L. "Against Auto Import Protection." *The Wall Street Journal*, March 20, 1981.
- Sloss, James. "Regulation of Motor Freight Transportation: A Quantitative Evaluation of Policy." *Bell Journal of Economics and Management Science*, 1970, 1, 32-100.

Snitzler, James R., and Byrne, Robert J. "Interstate Trucking of Fresh and Frozen Poultry under Agricultural Exemption." *U.S.D.A. Marketing Research Report No. 224*, Washington, 1958.

_____. "Interstate Trucking of Frozen Fruits and Vegetables under Agricultural Exemption." *U.S.D.A. Marketing Research Report No. 316*, Washington, 1959.

Stackelberg, Heinrich von, *Marktform und Gleichgewicht*. Vienna: Julius Springer, 1934.

Statistical Abstract of the United States, various years.

Steel Report. See Council of Economic Advisers.

Transportation Hearings. See U.S., House Subcommittee on Transportation.

U.S., House Committee on Oversight and Investigations. *Crisis in the Steel Industry*, Report, 97th Congress, 2nd session, 1982 [cited as House Oversight Committee].

U.S., House Subcommittee on Transportation, Committee on Interstate and Foreign Commerce. *Hearings on H.R. 11824, H.R. 11826, and H.R. 11207*, 92nd Congress, 2nd session, 1972 [cited as Transportation Hearings].

U.S., Senate Committee on Commerce, Science, and Transportation. *Economic Regulation of the Trucking Industry*, Hearings, 96th Congress, 1st session, 1979.

U.S., Senate Judiciary Committee, *Federal Restraints on Competition in the Trucking Industry: Antitrust Immunity and Economic Regulation*, Report, 96th Congress, 2nd session, 1980 [cited as Kennedy Report, 1980].

U.S., Senate Subcommittee on Administrative Practices and Procedures, Senate Judiciary Committee. *Civil Aeronautics Board Practices and Procedures*, Report, 94th Congress, 1st session, 1975 [cited as Kennedy Report, 1975].

U.S., Senate Subcommittee on Antitrust and Monopoly, Judiciary Committee. *Oversight of Freight Rate Competition in the Motor Carrier Industry*, Hearings, 95th Congress, 1st and 2nd sessions, 1977-1978 [cited as Oversight Hearings].

Wall Street Journal, various dates.

Wyckoff, D. Daryl, and Maister, David H. *The Owner-Operator: Independent Trucker*. Lexington, Mass.: Lexington Books, 1975.

STATEMENT OF
PETER NIXON
PRESIDENT and CHIEF OPERATING OFFICER
of
THE ALGOMA STEEL CORPORATION, LIMITED
BEFORE THE
SUBCOMMITTEE ON INTERNATIONAL TRADE
OF THE
SENATE COMMITTEE ON FINANCE
June 8, 1984

Mr. Chairman and Members of the Subcommittee, my name is Peter Nixon. I am President and Chief Operating Officer of The Algoma Steel Corporation Limited. I am appearing today on behalf of Algoma, Dofasco Inc. and Stelco Inc., the three major Canadian integrated steel mills. I appreciate this opportunity to participate in your consideration of the state of the U.S. steel industry.

The U.S. and Canadian steel industries are closely integrated. The Canadian steel industry is a mirror of yours, characterized by private ownership. We have numerous joint ventures with U.S. mills covering, for example, technology development and mineral extraction. Canadian mills are members of the American Iron and Steel Institute and tens of thousands of our employees are members of the United Steelworkers of America. Our market is completely open to foreign steel imports. As a result, Canada, like the United States, has been the target of unfair steel trade practices by countries intent on increasing employment and generating foreign exchange at the expense of the North American steel industry.

Canadian mills, accordingly, are well situated to speak about the common problems both we and the U.S. mills face. And make no mistake, the problems are real and they are severe. We differ, however, from that portion of the U.S. industry that sees a solution in the Fair Trade in Steel Act of 1984, S. 2380, rather than reliance on existing and internationally sanctioned trade remedies.

We oppose S. 2380 because it is bad trade policy and because it will disproportionately harm Canadian mills, which are not the cause of the U.S. industry's problem. Leaving aside questions of GATT illegality, we believe that S. 2380 is a disincentive to fair trading in steel if it is not amended to exempt countries that have historically traded fairly and responsibly in steel in the U.S.

1. CANADIAN STEEL IS FAIRLY TRADED.

The objective of the Fair Trade in Steel Act of 1984 is to remedy the effects of subsidized and dumped steel imports. The April 26, 1984 testimony by House Steel Caucus representatives before the House Ways and Means Trade Subcommittee made that point clear. So has Senator Heinz. Steel from Canada is fairly traded in the U.S. As Senator Heinz noted in his statement introducing S. 2380, "There are a number of countries that do not dump or subsidize. Canada does not...."

Canadian mills opened their books to the U.S. Department of Commerce for preclearance under the Trigger

Price Mechanism and were found to be selling at fair prices. Moreover, with the exception of one small investigation that ended in a suspension agreement, Canadian steel shipments to the U.S. have not been subject to antidumping or countervailing duty orders. Because Canadian mills are fair competitors, market forces and existing U.S. trade laws serve as adequate safeguards for the domestic industry. Congress should seek to encourage such fair trading practices.

Therefore, should Congress enact S. 2380, the proposed legislation should be amended to include a mechanism that exempts countries that trade fairly in steel and maintain open markets for U.S. steel mill exports while restraining only those countries from which protection is required. As Secretary of Commerce Malcolm Fairbridge stated in his opposition to the Bethlehem-United Steelworkers Section 201 petition to the International Trade Commission, quotas would "corral the herd to catch a few strays."

2. U.S. MILLS BUY CANADIAN STEEL.

U.S. and Canadian steel production is interrelated, with mutual supply of semi-finished products, joint mineral extraction arrangements and technology transfers. Often a U.S. or Canadian steel mill will experience a surge in demand from local customers that will cause a temporary shortage of raw steel. Steel mills on both sides of our common border

make it a practice to supply semi-finished products to assist other companies in meeting such temporary demand surges, as well as temporary supply shortages due to maintenance requirements or to satisfy longer term demand not sufficient to justify the addition of new melting capacity.

Such major U.S. steel mills as Republic, National, Jones and Laughlin, Lukens, Sharon, Cyclops, Rouge, Empire Detroit and McLouth buy substantial quantities of semi-finished steel from Canadian producers, both for shipment to U.S. end users and for re-export to Canada. And I might add that the U.S. mills come to us; we do not solicit these sales in the U.S. In 1983, semi-finished purchases exceeded 600,000 tons. This trade is bilateral. During the last five years, the flow of semi-finished steel has often been in favor of the U.S. rather than Canada. On an annual basis, the net balance of semi-finished shipments varies considerably, depending on changes in product mix and local capacity shortfalls on both sides of the border.

Included in the semi-finished trade are substantial amounts of Canadian semi-finished steel shipped to U.S. mills for "conversion" (i.e., rolling into hot bands) and reshipment to Canada. Conversions averaged approximately 100,000 tons per year during 1981 to 1983. This Canadian steel never enters the U.S. market but assists U.S. mills to maintain their rolling capacity.

With the exception of semi-finished steel ordered by U.S. producers, the Canadian steel industry's shipments to the U.S. have remained relatively stable during the last five years. Contrary to AISI's assertion that Canadian exports increased 29 percent in 1983, exclusion of semi-finished and conversion shipments reflects an increase of only 4.8 percent. Thus, there has been no surge of finished Canadian steel to the U.S., and any increase in semi-finished steel shipments are to fill orders from U.S. mills. Thus, U.S. mills directly benefit from Canadian shipments rather than incurring any injury as they do from imports of unfairly traded steel. How can domestic mills complain about shipments from Canada when, in fact, they order them and profit from them?

3. U.S. COAL AND IRON ORE IN CANADIAN STEEL.

The Canadian steel industry purchases goods and services in the U.S., the value of which exceeds the value of Canadian steel exported to the U.S. Canadian mills, for example, purchase over 95 percent of their metallurgical coal needs, substantial quantities of iron ore, equipment, refractories and alloying agents from the U.S. We estimate the value of 1983 U.S. coal and ore shipments to Canada at more than \$750 million compared to the \$212 million worth of Canadian coal and ore exports to the U.S during the same period. Algoma, Dofasco and Stelco alone estimate that they

expend at least \$1.25 in the U.S. for every \$1.00 of steel sold in this country. For this reason, quotas on Canadian steel would have an adverse effect on the U.S. coal and iron ore industries as well as on other U.S. suppliers to the Canadian steel industry.

4. UNITED STEELWORKERS UNION IN BOTH THE U.S. AND CANADA.

The United Steelworkers of America is comprised of both U.S. and Canadian steelworkers. There are approximately 145,000 members of the United Steelworkers of America in Canada. Approximately 40,000 of these members work in the Canadian steel industry.

5. CANADA IS AN OPEN MARKET AND THE LARGEST EXPORT MARKET FOR U.S. MILLS.

Due to proximity, as well as political, social and economic similarities, Canada and the U.S. are each other's best and largest trading partner. In fact, two-way trade between the U.S. and the province of Ontario, Canada is greater than trade between the U.S. and Japan. In 1983, Canadian-U.S. trade approached \$89 billion.

This trading relationship extends to steel, where each country is the other's largest export market. In fact, Canada is virtually the only open market for U.S. steel mill exports. Consequently, American steel exports to Canada represent a substantial proportion of total Canadian consumption and nearly 50 percent of all Canadian steel

imports. From 1981-1983, the U.S. share of Canadian supply averaged more than 6.4 percent compared with an average 2.6 percent Canadian share of U.S. supply.

6. CANADIAN STEEL DOES NOT DISRUPT THE U.S. MARKET.

Imports to the U.S. from many Third World countries arrive in large, speculative bulk shipments at steel service centers. Notice of the expected arrival of such shipments often severely disrupts the supply pattern and price structure of the U.S. market. By contrast, steel from Canada is produced to specific U.S. customer orders and does not overhang the U.S. market. Canadian steel arrives in small truck or rail car shipments to satisfy specific requirements of U.S. customers, particularly original equipment manufacturers ("OEM's") in the automobile and heavy equipment industries.

7. ANY QUOTA SYSTEM WOULD PENALIZE CANADA.

Because of the small size of individual shipments of Canadian steel to the U.S., the short notice between order and delivery, and changing production specifications of U.S. OEM's such as General Motors and Caterpillar, the imposition of quotas on specific categories of steel products from Canada would have a disproportionately disruptive impact on Canadian steel shipments to the U.S. If a Canadian producer were required to structure its sales to the U.S. in accordance with its particular product-by-product share of

Canada's quota, the Canadian producer could not respond to the changing product demands of U.S. OEM's and other U.S. customers in a timely fashion. Quota administration and, where necessary, reallocation would be excessively time consuming. For this reason, a quota system would delay and disproportionately disrupt Canadian shipments and, as a result, the operations of our U.S. customers. The same cannot be said for U.S. imports from the Third World countries that consist of boatloads of standard products that are sold by distributors and service centers. While a Third World mill might have one customs entry per month, a Canadian mill might have dozens of truck load shipments per month. And experience at the border under the specialty steel quota guarantees massive congestion and dislocation if S.2380 is applied to Canada.

8. DISCRETION AT DOC IS NOT SUFFICIENT.

For the reasons given above, Canadian steel, which is fairly traded, should not be covered by the Fair Trade in Steel Act of 1984. The bill's grant of discretion to the Secretary of Commerce to allocate quotas among countries is insufficient to ensure that U.S.-Canadian steel trade will not be impaired. Moreover, Canadian mills could actually be penalized for having traded fairly during the quota-setting base period leaving Canada with a smaller quota than the countries that are the cause of the U.S. mills' problems.

The passage of steel quota legislation, no matter how much discretion is vested in the Secretary of Commerce, will cause uncertainty and disruption in U.S.-Canadian trade that has been not only fair, but also beneficial to the U.S. steel industry.

Mr. Chairman, I urge that the Fair Trade in Steel Act of 1984 be amended to recognize fair steel trading practices of countries like Canada.

Thank you, Mr. Chairman.

