

**FINAL REPORT OF THE ADVISORY COMMISSION
TO STUDY THE CONSUMER PRICE INDEX**

HEARINGS
BEFORE THE
COMMITTEE ON FINANCE
UNITED STATES SENATE
ONE HUNDRED FIFTH CONGRESS
FIRST SESSION

—————
JANUARY 28, AND FEBRUARY 11, 1997
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FINAL REPORT OF THE ADVISORY COMMISSION TO STUDY THE CONSUMER PRICE INDEX

TUESDAY, JANUARY 28, 1997

U.S. SENATE,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 10:10 a.m., in room SD-215, Dirksen Senate Office Building, Hon. William V. Roth, Jr. (chairman of the committee) presiding.

Also present: Senators Chafee, Grassley, Hatch, D'Amato, Nickles, Lott, Jeffords, Mack, Moynihan, Baucus, Rockefeller, Breaux, Conrad, Graham, Bryan, and Kerrey.

OPENING STATEMENT OF HON. WILLIAM V. ROTH, JR., A U.S. SENATOR FROM DELAWARE, CHAIRMAN, COMMITTEE ON FINANCE

The CHAIRMAN. Ladies and gentlemen, it is indeed a great pleasure to welcome each and every one of you here. Let me start out, Pat, by just emphasizing how fortunate I think we have been to have such a distinguished panel before us that have devoted so much time, effort, and expertise to a most serious question.

I just want the public to understand that these individuals have served, basically without pay. They have worked long, hard hours to come up with a unanimous report. We are, indeed, fortunate to have the advice of these individuals on this most important matter.

I frankly think, Pat, it is fitting that we start our committee deliberations with probably the most significant issue that faces Congress this year. The accuracy of the Consumer Price Index is at issue, and today we are receiving what I consider a most critically important report.

Now, one of the roles in Government is to protect American families from inflation. In doing so, it is important that we are able to precisely measure inflation. I cannot emphasize that too greatly because that is what these discussions, it seems to me, are all about, the accurate measurement of inflation. If the index is too high, it overcompensates retirees and others and undertaxes many taxpayers. If it is too low, it undercompensates retirees and overtaxes the taxpayers.

What you and I want, Pat, is fairness to all. That is, by having as accurate an index as is possible. Obviously, as members of the committee and commission know, this is a very, very sensitive item

directly affecting all taxpayers, retirees, as well as wage earners and others.

In the spring of 1995, the Senate Finance Committee had the wisdom to appoint a blue ribbon commission headed by Dr. Michael Boskin to study our methods of computing our current measure of inflation, the CPI.

They were asked to make recommendations to the Finance Committee on their findings. In September 1995, the Boskin Commission produced an interim report which received very widespread attention and comments within the economic field of study.

In their interim report, the Boskin Commission concluded that, "The upward bias, using changes in the Consumer Price Index to estimate changes in the true cost of living, is about 1 percentage point per year."

Dr. Boskin and the other four distinguished commission members have now completed their final report and have concluded that the critical government statistic is not—I emphasize, is not—as accurate as possible, since this report suggests that the Consumer Price Index has an annual upward bias of about 1.1 percent. Clearly, this is a very, very significant finding and must be taken most seriously.

Dr. Boskin and his colleagues have also suggested to the Finance Committee that a new measure of the true cost of living may be needed. Inaccurate government statistics, particularly one as important as the CPI, are unacceptable and steps should be taken to change the procedure so that the measure of CPI is as accurate as possible.

I would like to point out that the Bureau of Labor Statistics has made some changes to the way it calculates the CPI. In January and July of last year, the BLS made some modest corrections to the so-called formula bias, shaving off about 0.24 percent of the bias.

Accordingly, the BLS is scheduled to further revise their computation of the CPI in 1998. In keeping with their internal improvements in the accuracy of the CPI, it is my hope that the BLS will not only seriously consider the recommendations made by the Boskin Commission today, but act upon their findings as swiftly as possible.

I want to stress that any action taken on this report must be broadly and deeply bipartisan. As an example of such bipartisanship, last year, 46 Senators—24 Democrats, 22 Republicans—voted for the bipartisan Chafee-Breaux compromise budget plan which included a significant change in the CPI of 0.5 percent.

We must also have, Pat, the full cooperation of, and leadership by, the Clinton Administration. I hope the President will not miss an opportunity to address this issue in his fiscal year 1998 budget that he submits to Congress next week. Clearly, this reform will not be successful without the President's leadership.

Pat, would you care to make any comments?

**OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN,
A U.S. SENATOR FROM NEW YORK**

Senator MOYNIHAN. I would, Mr. Chairman, only emphasize what you have said. The first and the most important thing, is to

say this has been a bipartisan effort by this committee from the outset.

The Commission members are not political persons, but they all have their own politics, and they are a bipartisan commission.

I have two things I would like to say, and I think the committee might like to know this as well. Just a bit of personal history. Thirty-five years ago, I arrived in this city and I became Assistant Secretary of Labor for Policy, Planning and Research.

In that capacity I had a nominal oversight of the Bureau of Labor Statistics, and we had waiting for us, Mr. Chairman, a report on the price statistics of the Federal Government, review, appraisals, and recommendations. It was a group of most eminent economists. George Stigler was chairman, who would become a Nobel laureate a few years after that.

It had been requested of the National Bureau of Economic Research by the Office of Statistical Standards, of the then Bureau of the Budget, and they were looking at the various indices that we then had, but of course the CPI was the most important.

In their summary they had this statement, which is worth reading.

If a poll were taken of professional economists and statisticians, in all probability they would designate (and by a wide majority) the failure of the price indexes to take full account of quality changes as the most important defect in these indexes. By almost as large a majority, they would believe that this failure introduces a systematic, upward bias in the price indexes that quality changes have on average quality improvements.

That was 35 years ago, sir. I might just take a moment to note that, among the young economists who had papers commissioned by this group, was Dr. Griliches, who compared the price of the three low-price automobiles in the 1950's. I guess that would be Chevy, Ford, and Plymouth. He found that if you took into account the quality changes, the price went down 18 percent, but the CPI had the price going up 31 percent. That is just an inherent problem here. It is one of the reasons, and I think we cannot be too clear on this, that we are not talking about fixing the CPI. The CPI is what it is. It is very good, probably the best in the world, but it is not a cost-of-living index.

The Bureau of Labor Statistics puts out a little pamphlet called, "Understanding the Consumer Price Index: Answers to Some Questions." Question No. 3 is: "Is the CPI a cost-of-living index?" Answer: "No. Although it frequently and mistakenly is called a cost-of-living index, the CPI is an index of price change only."

On that note, I would just like to add one last point, which is that I very much endorse the Chairman's view that this has to be not only bipartisan, but it has to be an effort to get our numbers accurate, to comply with the intention of the laws involved. We need the support of the Administration. We need leadership in the Administration. I very much hope this issue will be addressed in the budget we will be getting next week.

I thank you, again. I think it is very auspicious that we open the year with this eminent body.

The CHAIRMAN. Yes. We are, indeed, pleased to have the panel before us.

Let me turn to the chairman of the CPI Commission, Dr. Michael Boskin, of Stanford, to present the commission's findings.

At the conclusion of his statement, the other four members will make their comments. I would like to recognize these distinguished members of the commission who have worked so tirelessly with Dr. Boskin on the recommendations they will make to us today.

We have Dr. Dale Jorgenson of Harvard University; Dr. Ellen Dulberger, IBM Global Services. Welcome. Dr. Robert Gordon of Northwestern University; and Dr. Griliches, who is with Harvard University. I want to welcome each and every one of you. Thank you again, publicly, for your work well done.

I now call on Dr. Boskin.

STATEMENT OF DR. MICHAEL J. BOSKIN, CHAIRMAN, THE TULLY M. FRIEDMAN PROFESSOR OF ECONOMICS AND SENIOR FELLOW, HOOVER INSTITUTION, STANFORD UNIVERSITY

Dr. BOSKIN. Thank you, Mr. Chairman. Before commencing my remarks, I thought this committee would like to know, and I was asked to relay, a comment from a former colleague.

I saw Senator Simpson Friday night at a book party that a mutual friend had for him in San Francisco, and he asked me to convey his regards to his former colleagues and to tell you, Big Al is out there on the book tour, having a good time. So let me pass that along.

The CHAIRMAN. Smart man.

Dr. BOSKIN. But Chairman Roth, Ranking Member Moynihan, and other distinguished members of the Senate Finance Committee, we are pleased to be here today to present the findings and recommendations of the CPI commission to you.

I want to reiterate a few points of procedure so everyone is clear what we did and how we did it before summarizing, briefly, those findings and recommendations.

First, I want to thank Chairman Roth, Senator Moynihan, and the Finance Committee staff for the thoroughly professional manner in which they have dealt with and assisted the commission throughout its deliberations and the presentation of the report.

I know you like to say this is a bipartisan effort; from our viewpoint, it was a nonpartisan effort. We were asked to render a thoughtful, careful, and professional judgment and there was never the slightest hint that we should do anything other than that. So, for dealing with us in this completely professional manner, we are deeply grateful.

Second, as Senator Moynihan mentioned, the CPI Commission is the first official external expert evaluation of the Nation's price statistics in 35 years. The Stigler Commission report raised some of the same issues and was an important input to the major changes for the better BLS made in 1978.

But, since 1961, there have been numerous important developments that could not have readily been predicted at that time: major theoretical breakthroughs in index number theory, and in methods to adjust for quality change, technological change, such as scanners, and the widespread indexing to the official CPI of the government budget in response to the high inflation of the 1970's.

These developments make the commission's report and the accuracy of the Consumer Price Index both more important, and in our view more feasible, to implement.

Third, contrary to some press reports, the commission had extensive interaction with the Bureau of Labor Statistics. The commission itself had dozens of meetings, in person, electronically, and telephonically.

We examined everything from the mathematics, including the subtle mathematics of the formulas used by the BLS, to the actual price collection procedures. We went out with the price-takers to observe that process and hear their point of view as well.

We had many meetings with the leadership of the BLS, including a meeting at which our recommendations were thoroughly discussed 2 weeks prior to the presentation of the final report.

We appreciate the cooperation we received from the many dedicated, talented people at BLS. Indeed, I think it is fair to say that our findings and recommendations have been heavily influenced by our interaction with BLS.

Fourth, while the widespread indexing of government programs makes the budgetary and programmatic ramifications of our findings quite important, we would make every single finding and every single recommendation of the commission, even if the budget was in surplus and there were no long-run entitlement cost problems on the horizon.

I would also like to mention that these same kinds of problems in the price statistics occur in the price statistics of other nations as well. The BLS is ahead of the statistical agencies in some dimensions from other countries, especially, for example, in sampling procedures; some other countries are ahead in other areas of statistics, e.g. Canada, in dealing with one of the problems we will discuss in a moment.

But, in general, the problem is that the economy is evolving rapidly and dynamically, so we are trying to measure us moving out like this. The BLS is trying to catch up. We are not suggesting the BLS is static. It is making improvements. We think it can do an even better job in catching up part way.

But, as indicated in our report, this is going to take some time and resources. While we believe the statistical agencies should move forward with all deliberate speed, emphasizing both deliberate and speed, they are going to catch up only partially and gradually.

The next thing I would like to mention is that inflation is not an easy thing to measure. It may seem like we hear these statistics quoted all the time and you think inflation is easy to measure, but let me just try to frame this issue very briefly.

Despite the numerous improvements that have been made historically and continue to be made by the statisticians in all countries, with the BLS and the U.S. in the lead in many instances, many of them laboring under inadequate human and financial resource constraints, it is just difficult to keep up with the dynamic change in the economy.

New products are being introduced all the time and existing ones improved, while others leave the market. The relative prices of different goods and services change frequently, for example, in re-

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New products are being introduced all the time and existing ones improved, while others leave the market. The relative prices of different goods and services change frequently, for example, in re-

sponse to technological and other factors affecting cost and quality, which leads consumers to change their buying patterns.

In rich, industrialized modern market economies, there are literally millions of goods, and services produced and sold. A single supermarket may contain 30,000 separate items, and a Wal-Mart, 40,000. As we become richer, demand is increasingly shifted to services away from goods and to characteristics of goods and services, such as enhanced quality, more variety and greater convenience. Technology and entrepreneurship provide them.

But all these factors, plus others, mean a larger fraction of what is produced and consumed in the economy is harder to measure than decades ago, when a larger fraction of economic activity consisted of easier-to-measure items, for example, tons of steel and bushels of wheat.

So how to obtain information on who is buying what, where, when, why, and how in an economy, then to take that information and aggregate it up into one, two, or three measures of price change raises a large number of thorny problems from mathematics to practical implementation.

So we have gone over these issues, we believe, given our time and resource restraints, substantially and comprehensively. We believe that the current CPI, unfortunately, in spite of its many valuable features, is not accurate enough in its change and its measure of inflation to be used for many of the purposes to which, and most of the purposes to which it is used.

We have concluded that it is likely to be biasing the rate of change of the cost of living upward by about 1.1 percentage points, give or take a little bit. We believe in coming to that conclusion we have been prudent and cautious. Every member of the commission believes that is a prudent best estimate. We also believe it is more likely that the bias is even higher than this than it is lower.

There are, roughly speaking, two broad categories of problems. One broad category involves substitution of products, places, times, outlets, and things of that sort and where, what, and when people buy.

The price of Delicious apples goes up, so you might buy Granny Smith apples. The current formulas and methods in the BLS do not account for those sorts of things. Or chicken for beef. If the price of hamburger goes up, you might buy frozen chicken parts, or something of this sort.

We have tried to get an estimate of that. There are numerous studies, some good ones at the BLS, for example. We believe that that contributes about 0.4 percentage points of this bias and we believe that that is a conservative number and there is virtually no disagreement that that is a conservative and reasonable number by anybody, including the BLS.

There has been a fundamental change in the nature of retailing, perhaps most pronounced in the United States. We have discount stores, et cetera. So, in addition to substitution among commodities, more and more people are buying at outlets that sell at lower prices, foregoing some personal services for that. In doing so, since the BLS collects prices within an outlet, it misses the substitution to lower price places, and that is probably another 0.1.

So we have about a half a percentage point that is in this substitution category and we think there is very little disagreement about that.

Slightly more than half is in quality change and new products. It is important to understand that this is an issue that has been around a long time. As you mentioned, Zvi Griliches is perhaps the godfather of measuring quality change. Bob Gordon has continued work in that area, as have Ellen Dulberger and Dale Jorgenson.

These boil down to the net improvement in quality of existing goods, things being faster, more energy efficient, more durable, things of that sort, and the introduction of new products. We think we have been very conservative in how we have dealt with those, and you will hear more about that from Bob Gordon in a few moments.

So when we add all this up, our total is 1.1 percentage points a year. We made a variety of recommendations to form guide posts for statistical agencies to improve the quality of their statistics. The first and most important, is to establish the goal of a cost-of-living index as the fundamental basis of what the entire system is trying to measure.

There may be some reason we are really interested in what it would cost today to buy the same basket of goods and services we bought in 1982, but it is much less likely we will be interested in that than what is reflecting what is going on today in the marketplace, including the thousands of goods and services that did not exist in 1982.

So that is partly a matter of procedures and mathematics, procedures to update things more quickly, and the mathematics of changing the formula. You will hear more about that from Ellen Dulberger in a moment.

We also believe that, although we applaud the changes that will be made in the 1998 decadal revision, the BLS—and other statistical agencies by the way—has to think about getting into a permanent revision/continuous update mode, because that is what the economy is doing.

Now, to be fair, I think one reason they sort of tend to make changes every 10 years, is that is when they feel they can get some additional resources from Congress to do them. You give the Census money every 10 years, you understand that.

So they may need some more resources to be able to permanently adjust for quality change or some flexibility in reallocating resources. But, in any event, it is important that we be able to do that and the specifics are in the report. I am not going to go into detail, but they are basically designed to get more accurate formulas and to get things in more quickly, with greater variety, and to be catching what is going on in the market, what is being purchased, where, when, and so on, more accurately. There are some hopeful developments, technologically, in this area, such as scanner data.

I would say that it is important to understand the BLS has some of these on the drawing board, some of them from the initiative I started when I was CEA chairman, some on their own volition, some part of their decadal revisions. So, again, I want to emphasize they are not static, they are making some improvements.

Of this 1.1 percentage point bias, we believe that about 0.4 from the substitution side could be dealt with in relatively short order in the next year or two by the statistical agencies.

Quality change and new products are harder, but if they get stuff in more quickly, adopt some of the techniques we are suggesting, we believe they will get another couple of tenths, or three tenths, we cannot tell you exactly, and what products when and where over time, but that is a much longer term effort of a 3-, 5-, or 6-year horizon, or so.

There is still going to be an irreducible minimum. They are not going to be there at the time of the product introduction of something that takes off, like fax machines or cellular phones. You can only get at them a little bit earlier, at best.

So, again, I would just end by saying the analytical and statistical research done over recent decades has heightened our understanding of these issues. The time has come, in our opinion, for these problems to be addressed more thoroughly. That involves enhanced support for the BLS to improve the price statistics with all deliberate speed and in a non-politicized manner.

It may well require additional resources. Virtually every major private firm in the world is spending heavily on information technology, hardware, software, and human capital, and we should not expect better statistics from our government agencies without a corresponding investment.

Finally, and most importantly, perhaps, from your standpoint, the President and Congress must decide whether they wish to continue the widespread over-indexing of these government programs. If the purpose of the indexing—as appears to be the case from the legislation and the Congressional history—is to compensate recipients of the indexed programs or taxpayers from changes in the cost of living, no more and no less, they—the President and Congress—should move to wholly or partly adjust the indexing formulas.

Such changes have, as we know, profound ramifications in many other dimensions. These changes should be made, first and foremost, in the interest of accuracy and not just for the budget and other programs, but for the economic information upon which our citizens depend.

I am going to leave it there and turn it to my colleagues. Thank you very much. I think we will start with Ellen Dulberger.

**STATEMENT OF DR. ELLEN R. DULBERGER, DIRECTOR OF
MARKETING STRATEGY, IBM PC COMPANY**

Dr. DULBERGER. Chairman Roth, Ranking Member Moynihan, and other distinguished members of the Senate Finance Committee, I, too, am pleased to be here today to present the findings and recommendations of the CPI Commission to you.

Although employed by IBM, I appear today in a personal capacity as a professional economist and member of the CPI Commission. The views and conclusions contained in this testimony are mine and those of my colleagues on the CPI Commission and are not presented or intended as IBM's.

Specifically, I will address the CPI Commission recommendations to BLS. There are 12 recommendations described in section VIII of our report. As Professor Boskin stated a few moments ago, the

over-arching recommendation is that BLS should establish a cost-of-living index as its objective in measuring consumer prices.

The primary reason for this recommendation is that a cost-of-living index is what is needed for the main purposes for which today's CPI is currently being used.

This recommendation has far-reaching implications and ramifications, ranging from the index formula used to combine price quotes and aggregate components of the index, and how resources should be reallocated to give relatively more attention to analysis and understanding compared with gathering of price quotes and publishing indexes of little or no use, such as geographic CPIs as presently constructed.

All of our recommendations are aimed toward the goal of measuring the cost-of-living. We recommend the development and publication of two indexes. First, which is published on a current, timely basis and is constructed to accommodate the different timing schedules of required information, and a second, which would be updated annually and revised historically to incorporate retroactively the results of new information and research.

If you are interested further in the rationale for two indexes, I have a separate statement that I would be happy to enter into the record.

Two recommendations can, and should, be implemented in the short term. They refer to the formulas used to combine price quotes to form the lowest level indexes and to combine those low-level indexes into higher level aggregates.

We unequivocally believe that BLS should abandon the use of the formula which assumes that consumers do not make substitutions in response to changes in relative prices. We are recommending the use of a formula which assumes moderate substitutions.

The recommendations which we believe can be implemented in the intermediate run center on developing further understanding of key issues, the results of which can be implemented quickly.

The BLS should study the behavior of the individual components of the index to ascertain which components provide the most information on the future longer-term movements in the index and which items have fluctuations which are largely unrelated, and emphasize the former in data collection activities.

For example, currently the BLS collects a large number of price quotes on bananas because they are inexpensive to collect and the prices are quite variable, even though these variations are not related systematically to the underlying trend movements in the CPI.

The BLS should change the CPI sampling procedures to de-emphasize geography. Current geographic price indexes do not permit comparisons in the cost of living across geographic areas, which would be the purpose to which one would expect to use them.

This recommendation centers on the recognition that, for many commodities, there is a national market. Efficiency in estimating a national CPI would be improved if the sample design were to take this view.

The BLS should investigate the impact of classification, that is, item group definition, on the price indexes to improve the ability of the index to fully capture item substitution. In addition, a classi-

fication or grouping rule should be implemented for new products that groups them within the same low-level group as those for which consumers are most likely to substitute for them. On-line news services which compete with newspapers, automobile purchases that compete with leases, and drugs that compete with surgical procedures they replace are examples of products for which direct comparisons are needed so that the full substitution effect can be accounted for. Direct comparisons are made within these lowest-level groupings, and this is why this needs to be done.

There are a number of additional conceptual issues that require attention. The price of durables, such as cars, should be converted to a price of services, along the same lines as the current treatment of the price of owner-occupied housing.

Also, the treatment of insurance should be changed, moving to a consumer price measure rather than the currently used ex-post insurance profits-based measure.

The BLS needs a more permanent mechanism for bringing outside information and research results to it. This commission did not have the resources or the time to investigate all of the various aspects of the CPI in adequate depth, nor would a subsequent similar group if it were assembled in the future.

A more permanent body should be created at the request of BLS, organized by an independent, public, professional entity, such as the American Economic Association or the National Bureau of Economic Research with a significant resource commitment. Such a group could pursue more fundamental research in cooperation with the BLS and provide a framework for experimentation with various alternative data collection and estimation procedures.

It would also provide the BLS with a more permanent channel for access to a range of professional and business opinions on the statistical, economic, and current market issues arising in the normal process of data collection, index number construction, and the implementation of some of the reforms suggested here.

In the longer run, the BLS should develop a research program to look beyond its current market basket framework for the CPI. The big issues are new commodities and new services, as you have heard before, and the changing economic, social, and environmental climate within which the consumer is operating. These amount to looking beyond the scope of the current CPI.

BLS should investigate the ramifications of the embedded assumption of price equilibrium. This assumption, which means that prices or quantities adjust immediately to quality changes or the introduction of substitutes, is fundamental to many of the elements of the methodology and its failure to hold sometimes is at the heart of many of the issues discussed in this report. We recommend that BLS identify the methodological changes required to relax this major assumption.

The BLS should develop a number of new data collection initiatives to make some progress along the lines we have discussed. First and foremost, BLS or a companion agency will need to collect data on detailed time use from a large sample of consumers. We would also need to extend the current health status survey to include more information on the various quality of life issues.

Progress should also be made, perhaps jointly, with the Bureau of Economic Analysis, which is already doing work in this area, such as environmental satellite accounts, on incorporating data from victimization surveys, and from various measures of the status of our physical environment into an experimental set of national satellite social economics accounts, accounts that value not only the market consumption basket, but also the resulting leisure and quality of life experienced by the average individual.

It will be difficult to integrate these into the main cost-of-living framework, but over time progress on these fronts should provide useful supplementary information to policymakers and the public.

The CHAIRMAN. Because we have a number of Senators that want to ask questions, I would ask that we try to keep comments within 5 minutes, if that is possible.

**STATEMENT OF DR. ROBERT J. GORDON, STANLEY G. HARRIS
PROFESSOR IN THE SOCIAL SCIENCES, NORTHWESTERN
UNIVERSITY, EVANSTON, IL**

Dr. GORDON. Chairman Roth, Ranking Member Moynihan, and members of the committee, I am going to talk about the major section of our report which dealt with quality change in new products. The difficult problems posed by quality change in the estimation of the value of new products has been called the hand-to-hand combat of price measurement.

I am going to, very briefly, describe what we did. But, more importantly, I am going to go beyond our report in several dimensions, addressing some of the criticisms we have received, and also to emphasize that our estimates are quite conservative.

Overall, we divided the CPI into 27 different categories and looked at them individually to see whether there was research, whether we could find outside evidence to come up with an estimate of the potential bias due to quality change in new products. Out of the 27 categories, we found an upward bias, but of widely differing amounts, ranging from a tenth of a percent in one category, to 5.5 percent in another category.

Now, I want to emphasize that we did not assume the CPI makes no adjustments for quality change. Indeed, we did not look at any information about what the CPI actually does in dividing given price changes between the true price increase and quality change.

Rather, we relied on outside evidence, outside research, that collected prices and, with the best academic techniques available, made adjustments for quality change. Some of that research involves automobiles, appliances, consumer electronics, apparel, prescription drugs, and specific medical procedures.

In other areas there was no research to rely on, or very little, and we made very careful and conservative judgments as to whether a particular category was related to another category where there might have been research.

Here I want to emphasize the most previous evaluations of the CPI have just assumed that in these other categories the bias was zero. That is a subjective judgment. We think that using research is a more common sense approach to this problem.

Now, swamping the quality change issue, I think, is the issue of new products and how they are treated in the CPI. I want to take two different aspects from this and divide them up very carefully, because we tried to deal with one, but we did not deal with the second. I think that is the fundamental reason why our estimates are conservative.

Characterizing every product back into the 19th century has been something called the product cycle. A new product is typically introduced at a high price, selling small quantities. Manufacturers learn how to make it better, cheaper, and faster and the price goes down. Sales go up. But much of the price decline happens in the first few years of a new product.

A classic example is the VCR, which was introduced in 1978 with electromechanical controls, very clunky, subject to constant repair needs, very difficult to program, at a price of more than \$1,000. By 1985, almost half of American households were buying VCRs, had them in their homes, the price had fallen to \$200, all of the controls were now electronic, the programming was much easier. As you know, you can now program VCRs on the screen of your TV.

When was the VCR introduced into the CPI? Not until 1987, after half of the Americans had already bought it and benefited from this big drop in prices. The CPI did not get any of that.

Today we have another revolution, the cellular phone. Families are able to keep in touch with loved ones, elderly relatives with children. The single biggest reason, according to Consumer Reports, that families buy cellular phones is security. That is not in the CPI at all. The cellular phone is the example for the 1990's if the VCR was the example of the 1980's of the delay in introducing new products. That is the first part of the new product problem.

The second part, is that the very invention of something like a VCR or a cellular phone creates value, and we did not estimate that at all. Consumers like stereo sound better than mono sound. They like color TV better than black and white. They like the fact that they can watch movies at home without paying for babysitters. They like the convenience of microwave ovens.

They strongly appreciate the increasing availability of new diagnostic medical care tests that are less painful, shorter stays in hospitals, a number of painless procedures in medical care, and, most importantly, a 4-year increase in life expectancy over the last two decades. These are all valuable improvements in the quality of life, and we made no adjustment whatsoever for any of these things.

Now, our report has been criticized on several grounds, and I want to mention a couple of them. First of all, some people say, well, clearly the quality of life has gotten worse. That is not true. We looked specifically at figures on the incidence of crime, the quality of the air, the quality of water. All those things quantitatively have measures, and they have gotten better.

We have been criticized for using elitist examples. But what could be less elitist than a color television set? Ninety-eight percent of American households have color TV sets, and the average American household has 2.2 color TV sets. What could be less elitist than that? VCRs are in 78 percent of American households. Three-quarters of American households have air conditioning; 44 percent

central air conditioning. So our statistics apply broadly and across the board.

In the last three decades, there are many quantitative measures of the improving quality of shelter, the increased number of possessions in the average American household, and yet our official statistics say the median family income is stagnant, real wages have been declining. Can we really believe that?

Now, I want to get into the final point, which are some reasons I think we understated the overall quality change bias. One new finding that goes beyond our report involves television sets. That category in our report—we used some old research of mine that dates back to the 1970's and early 1980's—showed a 4.5 percent bias. But I studied, since the report was finished, Consumer Reports, and I can give you new findings today for the price of television sets ranging over the period of 1984 to 1997, right up to date.

The Consumer Price Index says the price of TV sets dropped at 3 percent a year. I am here to tell you today, the true rate of price decline, according to Consumer Reports for identical television sets was 11 percent per year, the bias for TV sets is truly 8 percent, not the 4.5 that we reported in our report.

There are other hints that we have been too conservative. A broad gap has opened up between the Consumer Price Index and an alternative measure of consumer price inflation created by the Department of Commerce called the deflator for personal consumption expenditures.

That gap is opened up to almost a 1 percent difference, that is, 3 percent inflation according to the CPI, but 2 percent inflation according to the Department of Commerce. Yet, three-quarters of our findings about the CPI carry over to this other Department of Commerce index. If you just add those two numbers together, you come up with, not 1.1, but 1.7.

Our American statistical system is full of anomalies. According to our government statistics, productivity in two-thirds of the economy, outside of manufacturing, has been falling for the last quarter of a century. Have we actually forgotten how to do things? There is a simple solution. If the Consumer Price Index is biased upward, as our commission has concluded, real output and productivity, growth, are biased downward and a number of anomalies are solved.

Thank you.

**STATEMENT OF DR. ZVI GRILICHES, THE PAUL M. WARBURG
PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY**

Dr. GRILICHES. Senator Roth, Senator Moynihan, and members of the committee, I, too, am glad to be here. I want to make three points. No. 1, is that our report is not an attack on the BLS, an agency that has been struggling valiantly in a difficult environment and with limited resources with these very hard questions involved in such an effort. But it can, and should, do better in the future.

As we move into the new century, as the economy gets more complex, the BLS has to re-engineer and reinvent itself. We have made some suggestions in that direction.

The second point that I want to make, is that an index is an average. Because it is an average, there is always the possibility that it is not exactly right for everyone.

Now, we have looked carefully into the claim that the trend in the prices paid by the elderly is somehow different from the rest of the population, and found little merit in this argument. Re-computations of the index using more specific weights showed very little difference. The budgets of the elderly differ primarily in giving more weight to expenditures on health and housing.

The first one, is one of the areas of the great change in quality and largest over-estimation in the current measures. Recent studies document the fact that almost all of the rise in health expenditures during the last decade have come, not from price rises, but from increases in what is done for the benefit of the patients.

In the area of housing, the elderly benefit from a quirk in the construction of the index which does not take into account that almost three-quarters of them own their own houses or apartments, and hence they are protected against the rising real estate prices and need not be compensated again for it.

The elderly, especially the poor elderly, do have a valid complaint, however, not necessarily against the index, but about its use and interpretation. The index is designed to measure the change in the cost of living for an average unaging household in an unchanging environment, but we do age, our health expenditures do go up, and the environment in which we function also changes continuously.

All of that is outside of the scope of the CPI, current or improved. The CPI does not rise in a cold winter, or historically because our population is older now and hence requires a higher level of medical expenditures.

Health costs rise with age and with some improvements in medical technology. These are real drains on the budgets of the elderly and the rest of us. But they would be there also if there was no inflation, and the response to them has nothing to do with indexing, per se.

Many of the complaints about the findings of the commission are really complaints about the inadequate levels of support for the disabled or for some of our elderly, not about the indexation formula. They should be addressed head-on.

Now, the last point, is to make a comment on what Senator Roth said, that one of the tasks of the Congress is to protect American families from inflation. Unless we are careful in defining what we mean by inflation, we may commit ourselves to an impossible task.

Not all changes in prices can be fully compensated. When OPEC raises energy prices, when AIDS appears, we all become poorer. Indexing was developed to protect workers and pensioners from monetary inflation on the assumption that there were gainers from inflation that could be taxed to compensate losers. But many changes in prices and the cost of living occur in contexts where there are no gainers who could be justly taxed. If energy prices rise, why should not all sectors of the society share in this disaster? Because of such considerations, the CPI is ultimately not the right instrument for indexation.

Issues of indexation should not be tied too closely to the CPI as it is currently computed, or even to the one that will be improved and redesigned in the future because the indexation issues and the measurement of the cost of living are not the same thing.

The CHAIRMAN. Thank you.

STATEMENT OF DR. DALE JORGENSON, CHAIRMAN OF THE DEPARTMENT OF ECONOMICS AND THE FREDERIC EATON ABBE PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY

Dr. JORGENSON. Chairman Roth, Senator Moynihan, distinguished members of the Senate Committee on Finance, I would like to, in my testimony, deal with the bottom line. I would like to direct your attention to Recommendation No. 9 in the Executive Summary of our report.

I am going to refer also to the diagrams at the very end of the report. Those of you who brought your copy with you can easily detect these pages, since they are at the end of the report and are in color.

I want to make three points. Historically, over-indexing of the Federal budget has been enormously costly, contributing hundreds of billions of dollars to our National debt.

Point No. 2, is that correcting a bias of the order of magnitude that Dr. Boskin has summarized for you could lead to a major reduction in our Federal deficit. I am talking now about the Federal deficit that we face in the future.

Point No. 3, over the next 10 years, correcting the bias could reduce the national debt by almost \$700 billion. By the year 2008, this would amount to \$1 trillion.

Given the staggering magnitude of these numbers, I think it is very important to focus on the fundamentals of indexing. As Chairman Roth has just emphasized, our assignment was to produce recommendations leading to a more accurate measure of the cost of living.

Needless to say, it is important to understand thoroughly the definition of the idea of the cost of living. A cost-of-living index compares the costs of maintaining a given standard of living. Therefore, it is the ideal instrument that economists have devised for the purpose of indexing government programs, maintaining the standard of living of the beneficiaries of indexed programs.

Over-indexing results from an upward bias in the CPI, which was what we found. Of course, under-indexing would be the complement, that would be the result of a downward bias in the cost-of-living measure.

Now we arrive at the central point which, as Senator Moynihan has emphasized both here and in previous hearings on this subject, the Bureau of Labor Statistics has pointed out in numerous places that the Consumer Price Index, which is used for indexing government programs, is not—I repeat, not—a cost-of-living index. The CPI has a well-developed rationale of a fixed-weight price index as a statistical idea that is unrelated to the goal of measuring the cost of living.

A cost-of-living index would be formulated in such a way as to achieve or to satisfy the definition, which is to maintain the standard of living of the individuals whose living is being indexed.

Now, it is important to understand this point because the Bureau of Labor Statistics also does research on the cost of living, and much of the research that we summarize in our report compares the CPI, which is used for indexing, with alternative measures that accurately reflect the cost of living. However, the main point still remains that the CPI itself is not a cost-of-living index.

Well, we now come to the first point: how important are the biases in the CPI? Two years ago, approximately, I presented testimony before this committee, pointing out an error which the Bureau of Labor Statistics corrected in 1985 was responsible for a major increment in our national debt.

Subsequent to my testimony, the Office of Economic Policy Research in the U.S. Treasury conducted a very careful study of this issue, which is described in our report. They based this on a detailed simulation model and came up with a precise estimate. This is based, now, on historical information on actual Social Security beneficiaries.

The contribution to over-indexing due to this error that was corrected in 1985 has cumulated to \$273 billion. So my first point, is that over-indexing matters. It is something which historically has added a great deal to our National debt.

Now, what about the issue of going forward? If we consider the bias, all of us have advised you is a low estimate of the bias in the CPI as a measure of the cost of living. If we were to correct this bias, we would in 10 years reduce the annual Federal deficit by \$148 billion over the next decade.

How large is \$148 billion? It is larger than the deficit last year. The director of the Congressional Budget Office is testifying as we conduct the proceeding here that the deficit for last year totaled \$107 billion. We are talking about a number which, by itself, would have been big enough to eliminate the deficit last year.

How important is this going forward into the future? Again, looking forward to the year 2002, the number that June O'Neill is going to present today, is that the deficit will mount up to \$158 billion. The reduction in the deficit then turns out to be \$148 billion out of this \$158 billion in the year 2002.

Another way to look at this, is that over-indexing will become the fourth-largest government program after Social Security, health care, and defense, three of the major Federal programs. That is my second point.

My third point, is that correcting a bias of this sort would reduce our National debt by almost \$700 billion over the next 10 years. Over the next 12 years, going out to 2008, the reduction would be \$1 trillion.

Now, it is very important to understand the mechanics here. How do we go from 1.1 percent of 30 percent of the Federal budget, which amounts to \$1.5 trillion, to a cumulative impact on the national debt of \$1 trillion more debt? That requires a very simple point to be understood, and that is the definition of the deficit.

The deficit is the difference between the expenditures of the Government and its revenues, and both of these are very large numbers. The difference is, of course, a very small number, relatively speaking. But both sides of that difference, the revenues and the

expenditures, are affected by indexing. That is what accounts for the impact on the deficit.

When you cumulate the deficit into the national debt, then of course we find that a growing deficit becomes an explosive increase in the national debt.

Well, I have now made my three points. Historically, over-indexing has created large increases in our National debt. Going forward, we have the opportunity to make major reductions in our deficit by eliminating over-indexing.

Finally, if we do not do that, we are going to be facing an explosion in a component of the national debt that is simply due to an error in the way that we treat our price statistics.

I now come to item No. 9 in our recommendations, which are addressed to the President and the Congress. As Chairman Boskin has already pointed out to you, you must decide—this is not something we are going to do for you, or the Bureau of Labor Statistics, or anybody else—whether you wish to continue this over-indexing. If not, you must pass legislation adjusting indexing provisions accordingly. That is our recommendation.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, ladies and gentlemen, for your very important analysis.

Dr. Boskin, let me ask you. We have before us, Pat, five of the most distinguished economists in the area, probably the most pre-eminent. Are you unanimous in your recommendations, the five of you?

Dr. BOSKIN. Completely, absolutely, thoroughly.

The CHAIRMAN. No exceptions.

Dr. BOSKIN. None, whatsoever.

The CHAIRMAN. Let me ask you this. What has been the reaction of the economist community, generally, to your recommendations?

Dr. BOSKIN. Well, Mr. Chairman, I would divide that into two groups. One, is the group of experts who have studied what we have done carefully and are recognized authorities in the field, ranging from some people at the Federal Reserve to the academic experts, and they have made some very strong statements and have written some very strong things.

We presented our findings to the annual meeting of the American Economics Association and we were privileged to have there three of the world's experts on these subjects who are not members of the commission. We received enthusiastic endorsements from all of them. All of them said they thought we were probably slightly low, or maybe even a little more than slightly low.

Erwin Dewert, at the University of British Columbia, who is the world's leading expert on index number theory; Bill Nordhaus at Yale, who was on the Council of Economic Advisors under President Carter, one of the leading experts on quality change and new products; and Jerry Hausman at MIT, the leading expert on new products.

They were using words like, careful, thoughtful, prudent, probably conservative, a little low, the bias is downward bias because it does not account, as Bob Gordon said, for the extra value of the introduction of new products. We have heard similar things. I think the people inside the Fed are around where we are, but also a little

surprised we did not come out with a little higher number, some of them.

There have been, more generally, statements made, and so on, by people, I think, who are not fully aware. They had not read the report and they did not understand the recommendations. Some people, and perhaps some inside the BLS, misconstrued what we were recommending.

Some people, I think, thought we were suggesting to the BLS to take our numbers in the 27 categories of quality change and make some ad hoc adjustments. Of course, we made no such recommendation, we just use this as illustration of how they could, and should, do better. So there was a little bit of confusion we have been trying to clarify on that score.

There also have been a couple of people who have been critical, although I would divide this into two parts. The people who have been most critical, I think—one has written a report for the AARP, so perhaps it is not surprising that it was critical. Joel Popkin and Dean Baker are the two people who have been most critical.

We have examined all of their suggestions. We have had exchanges with one of the two of them, the other one never bothered to relay the findings to us until after they were published.

But, in any event, we have gone over them exhaustively and we think there is little merit in those criticisms. So I think, as a general proposition, the economics community is now getting used to the results, digesting it, and I think they are more or less in line with where we are.

The CHAIRMAN. To borrow a phrase used by my distinguished colleague, is it a fair statement to say that the economists are solidly behind this report?

Dr. BOSKIN. I think the leading experts in academe and the Federal Reserve are. I do not mean to try to be amusing here, but there is this old bromide, you can line economists up and if you have 10 economists, you get 11 answers. So I am sure you will find people with different points of view, but I think the people who have looked at it seriously, carefully, and thoughtful are substantially and solidly behind it, yes.

The CHAIRMAN. Does the panel agree with that?

Anyone disagree?

[No response]

The CHAIRMAN. Dr. Jorgenson, let me go a moment to your testimony. You point out, I think, over 12 years something like \$1 trillion would be saved. I think it is important for the public to understand that, after these corrections are made, we are still going to make corrections for inflation. We are not saying to retirees that you are not going to get a cost-of-living adjustment. Is that correct?

Dr. JORGENSON. That is correct. The task that we set was to explain how best to make that adjustment and to avoid both under-indexing and over-indexing. In other words, we tried to get it just right.

The CHAIRMAN. Would you explain again, for the first year the savings would be how much in 1987?

Dr. JORGENSON. If you focus on 1997, did you mean?

The CHAIRMAN. I am sorry, yes.

Dr. JORGENSEN. 1997. If you look at our chart, again, this is A-1, one of the colored charts there, what you can see is that in 1997 the saving is less than \$10 billion; in 1998 it grows to something like \$25 billion.

The reason for this rapid cumulation is the fact that you have both reductions due to indexing of the revenues, reductions in the deficit due to more tax collections, as well as reduced expenditures. But then you begin to get a factor here that reflects the change in debt service.

After all, if you over-index you create more national debt. You have to pay interest on that, and that cumulates. That is essentially what accounts for the explosive growth of both the deficit, and then of course the national debt, as a result of over-indexing.

The CHAIRMAN. Would you explain why it means more revenue?

Dr. JORGENSEN. Yes. Beginning in 1981 with the Kemp-Roth legislation of that year, the brackets—

Senator MOYNIHAN. Excuse me, sir. It is Roth-Kemp.

Dr. JORGENSEN. Excuse me. I was being alphabetical, Mr. Chairman. Sorry about that.

In any case, both the tax brackets and the individual exemptions have been indexed since that time. If the adjustment is characterized by a bias, obviously that leads to over-indexing of the brackets and the exemption, and therefore to tax collections that are too low, which then add to the deficit.

The CHAIRMAN. I do not think a lot of people understand this aspect of what we are talking about.

Dr. JORGENSEN. That is right.

The CHAIRMAN. Well, my time is up. I will call upon my good friend and colleague, Senator Moynihan.

Senator MOYNIHAN. Mr. Chairman, I have had more than my share of time. I wonder if I could defer to Senator Bryan, whom I believe is next on our side.

Senator BRYAN. Thank you very much, Senator Moynihan, Mr. Chairman. Let me just preface by saying I am delighted to be a member of the committee, and look forward to working with you, Mr. Chairman, the Ranking Member, and other members as we work with some very challenging issues. This morning's subject of discussion is certainly one of those.

Let me go over briefly, if I may, your recommendations which encourage Congress to do several things, some of which seem to be relatively easy. One recommendation is to make sure that information that is currently developed by the Departments of Commerce and Labor can be shared in improving the accuracy and timeliness. This does not strike me as being all that difficult, is it as simple as your recommendation suggests to us?

Dr. BOSKIN. Well, I think that because we have a decentralized statistical system and some of the things the BLS needs are collected by the Census Bureau and we have been very, very strong, as we should, about confidentiality, it seems to take a long time for the data from the Census to get inputted into the BLS's procedures.

Now, I think there is some dispute about exactly why it takes almost 3 years for that to happen; other countries seem to do it in a year. But we think this is one obstacle that could be removed.

Senator BRYAN. It is not a blanket prohibition we are talking about, but a time lag that occurs under the present procedure?

Dr. GRILICHES. No. I think there is sort of the problem of, at what level of confidentiality things are available. Basically, there is a wall on data between different departments. On a statistical side, I think it actually leads to a significant amount of inefficiency.

While it is not within the purview of this commission, I think serious thought some day should be given to unifying all the various statistical agencies so they operate on a consistent basis and they also do not overlap and collect the same things again.

Senator BRYAN. Doctor, I think you pointed out, or one of your distinguished colleagues, that the Department of Commerce's economic model seems to be more accurate in assessing the true impact of inflation on our economy. I believe your testimony indicated that the CPI, as developed by the Bureau of Labor Statistics, is 1 percent higher. Dr. Gordon, if you are the one, excuse me.

Does the model being used by the Department of Commerce, incorporate a number of the suggestions that you are making to us about substitution, quality enhancement, improving the introduction of new products into the index? If not, why is that model more accurate?

Dr. GORDON. There are two main differences between the Department of Commerce measure of consumer prices and the CPI. One, is that the weights are much more up to date, so that the Department of Commerce index corrects the first of our sources of bias, which is the 0.15.

Now, the BLS has actually—I think partly at our suggestion—done a very careful study of this discrepancy between the two indexes. They find that 0.35 actually is due to differences in weights, and those differences in weights are that the Commerce is much more up to date. They are using 1995 or 1996 weights instead of 1982 to 1984, as is done in the CPI.

This is just one of the suggestions, that maybe we are too conservative in our estimate of substitution bias because we have before us another example of how the problem is more serious.

The other difference between the two, is that there are three parts of consumer expenditure where the Department of Commerce uses a different measure of prices. Those are personal computers, airline fares, and by far the most important, medical care. All three of those components have slower rates of price inflation, according to the measures that the Department of Commerce uses.

However, everything else in our report carries over to the Department of Commerce, where the individual low-level price quotations come from the CPI. That is why I suggested, if you look at it that way, we are probably quite conservative in our overall number of 1.1, and 1.5 is really equally plausible, in my view.

Senator BRYAN. If the Finance Committee chooses to craft legislation which seeks to implement the recommendations that the Commission has made, share with us how much of it is a matter of resources. You point out that the Department of Commerce is able to introduce new products into the calculations at an earlier point in time. How much of such legislation needs to be specific and directive in terms of precisely what to do?

Dr. GORDON. One thing that we have not emphasized yet so far is that we recommend that there be two indexes. The current monthly CPI is handicapped because it has to come out every month and it can never be revised, because it is used in certain legal contracts. We recommend a second index be implemented that, like our GDP statistics, can be revised on the basis of the best research and can incorporate the appropriate weights when they become available.

I think to properly develop the second index the BLS will need a larger research department and one that is differently designed than its current one.

On the other hand, as Ellen said, they are spending too many resources collecting the prices of bananas, and I think there are areas of efficiency that we have emphasized as well.

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

The CHAIRMAN. Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman. I want to extend my thanks to every member of the panel. You have been very, very patient and have worked on this for months, and it is very, very valuable.

Now, I am not suggesting that I understand all this. As a matter of fact, I have got to have a little schooling on the statement that everybody seems to agree with, that the CPI is not a cost-of-living index. I know Senator Moynihan has a book here explaining why it is not, but I fell off the merry-go-round somewhere here and have to catch up on that.

But, Dr. Boskin, did you say that the BLS does not take into account substitution? Somebody said that.

Dr. BOSKIN. Yes, that is correct. In the formulas that they use—

Senator CHAFEE. Yes, they do not take them into account.

Dr. BOSKIN. Yes, they do not. The formulas they use assume no substitution. They assume when the price of Granny Smith apples goes up you do not substitute Delicious apples; when the price of hamburger goes up, you don't buy chicken parts or macaroni.

Senator CHAFEE. But that seems so—

Dr. BOSKIN. That is one of the two fundamental reasons it is not a cost-of-living index.

Senator CHAFEE. All right. Maybe that explains it. What is it for then, the CPI? I mean, you say they cannot take substitution into account. I guess Dr. Gordon said that because so many contracts are dependent upon this, you just work with—not you, but the BLS—a fixed market basket.

Dr. BOSKIN. No, I think that was not what he intended to say, and let me try to summarize this. We did not say they cannot, we said they do not. Indeed, they can, and our recommendation is that they do.

The reason we recommend two indexes is because, in the implementation and the daily operation of collecting the information and processing it, it may be hard, on a timely, monthly basis to do some of these things that is easier to do annually or revise episodically. So that is why we said they are going to have to have two indexes to get this information.

The reason it is not a cost-of-living index—and again there has been some misunderstanding of this—if you buy a lot of hamburger and the price of hamburger goes up, you are worse off. Imagine a world where you were not able to substitute anything, you could not buy more macaroni or more chicken parts, and you were forced to buy more hamburger and therefore less of a lot of other things with the same income.

So we are seeing consumers naturally cross the income spectrum. Consumers naturally act in a way, partially—and I emphasize partially—to insulate themselves from the price increases of goods that go up more rapidly in price.

It is that we are trying to get accurate formulas to represent. We are not saying they are not worse off if the price of something they buy goes up. They are, but they are not as badly off as if they were unable to substitute at all, which is what the current formulas estimate.

Senator CHAFEE. Now, the next thing you can help me on is the arguments of the elderly against what you folks have done. It seems to me, and obviously this is going to be a big factor. You mentioned Senator Simpson. One of his favorite organizations was the AARP. They have views on what we are discussing here today, obviously.

What the elderly will say is that we, the elderly, have higher medical costs. Set aside the housing. I think the statement you gave, and when we met before you gave the same statement, the elderly—what is it, 75 percent own their own homes or apartments, did you say? That is an extraordinary statistic. Compared to other age brackets of what percent? Let us say the age bracket 40–50, roughly, how many of them would own their home?

Dr. GRILICHES. About 50 percent.

Senator CHAFEE. Fifty percent of them would own their own home. So there is a dramatic difference.

But the health care, could somebody go through that again for me? Let me just say in connection with this, there is more health care given. Maybe once upon a time cataracts were not treated, but now they are treated and that is an expense. I should not answer my own question, or should not try to answer it. Doctor?

Dr. GRILICHES. Well, more cataracts are being treated today. That is a new good that is now available. That is not an increase in the price of medical services, that is an increase in the quantity of medical services. That is the basic difference.

Your cost of living did not go up because cataract surgery is now available or because the machines that are going to blast kidney stones are available but were not available yesterday. If we are going to treat that as a price increase, we are going to essentially take an item from the credit side and put it on the debit side.

Senator CHAFEE. I get it. Thank you.

The CHAIRMAN. Senator Breaux.

Senator BREAUX. Thank you, Mr. Chairman. Once again, I would add to the appreciation of everybody on the committee for the work that you all have done. I know this has not been something that has been easy. You have made a great contribution for bringing on this discussion.

Sometimes I think that if you had not come on the scene and the Bureau of Labor Statistics had just made this decision in a very dull, technical press release and we had all these people at the tables writing furiously about how CPI adjustments are going to kill us all politically, it would never have occurred.

If they had just made a decision that they have come up with a more accurate way of assessing what a Consumer Price Index figure would be which affects a third of the total Federal budget, and done it quietly, then no one would have really paid a great deal of attention to it. But, because it has been elevated by Congress, looking at a problem and trying to correct it, all of a sudden now it is a huge national issue.

The so-called Chafee-Breaux group that so many of us on this committee really worked with in the last Congress has a 0.5 percent adjustment in the Consumer Price Index, and 46 Senators, both parties, voted for that. Everybody who did that is still back who wanted to come back in this Congress.

The interesting thing about that 0.5 percent adjustment, in the charts that we had, the average Social Security recipient, without the adjustment, using the wrong formula, would have had a \$20 a month increase in Social Security benefits.

With the 0.5 percent adjustment, they would have gotten a \$16 a month increase in their monthly benefits. I really think if we had just done this quietly, I guess, through the Bureau of Labor Statistics, it would have been accepted and would not have been added to the political battles that we have to fight with.

The AARP does say that the right way to adjust CPI is to allow the experts at the BLS to continue doing their job and keep politics out of it. Anybody have any thoughts about why we should be doing it, or should we be doing it, and why should we be involved in something that is basically a statistical determination? Mike.

Dr. BOSKIN. Well, let me start by saying we all strongly believe the statistical agencies should be independent and non-politicized. If we were back at the Stigler Commission before the indexing of the budget, this would be a much different issue.

The statistical agencies have their procedures and I think they are making some improvements. Hopefully, as a result of our recommendations, they will be making more, and some more rapidly.

But the fact is, if it were not for this and you do nothing, they are going to make some adjustments gradually over time that may deal with part of this issue that may or may not even get into the official CPI, but may be in experimental indexes.

So the fact of the matter is, this has to be on two tracks. You have to decide what you think is right for indexed government programs. The BLS has to make improvements in the statistics. That is going to take some time. They will be able to make some improvements in the next couple of years, others down the road. You need a procedure to be kept informed about what those are. If you decide to make your 0.5 percent adjustment and then a few years from now the BLS does something, you want to know about it. You might want to adjust your 0.5 percent.

Senator BREAUX. Well, I guess the short-term answer then is that when Congress becomes aware of a mistake that an agency of the Government is making by using incorrect figures or inaccurate

figures to determine something, that it really is incumbent upon us to come in and do what is necessary to correct that mistake.

Dr. BOSKIN. Well, I think that is right, although I would be careful about using the term "mistake." I think there are several different purposes. They do a good job; they can, and should, do better.

The use to which the number is put is not the use to which the number was originally designed to be put. Indexing came along six decades after the CPI was developed as a fixed-weight index around World War I, and similar things.

So the fact is, back then not a lot of attention was paid to this potential bias. But, as more and more has become indexed, as we have added the Tax Code, as the debt and deficit have become bigger issues, the amounts are just very, very large. You should always be interested in accuracy. The BLS, I think, is interested in accuracy, but they have their pace and their ability to do some things, and not others.

Senator BREAUX. My final point and question is, I think it is the coalition in the House that suggested that in order to make sure that any changes in the CPI adjustment is not unduly harmful to those who are in the lower bracket of Federal benefits, say a Social Security recipient, that what they would suggest was that any adjustment would be given across the board with the same dollar figure, regardless of the income category that the person is in.

That is, a person that has \$1,000 of income under Social Security retirement would get the same dollar increase as a person with maybe only \$500 a month in order to protect lower income recipients of benefits from being unduly affected. I guess that is not something that affects anything that you would do. Could you comment on that concept?

Dr. BOSKIN. I would make a couple of quick comments. One, is if the purpose of the indexing is to compensate for inflation—subject to the proviso Dr. Griliches mentioned; if there is another oil shock we may not want to compensate fully—you want an accurate measure.

If you also have a concern about some people, elderly widows with very low incomes, for example, that is a discussion of the structure of the program. You might want to adjust that as well. A mechanical way to do that would be to exempt SSI, for example. You dollar-for-dollar automatically adjust. But I, myself, think the purpose of indexing is to index, not to redistribute income.

We already have lots of features of Social Security, of the Tax Code, et cetera. We have progressive rates in the Tax Code, we have progressive benefit formulas in Social Security. If you want to open up all those cans of worms, you are raising a lot of other big issues on which opinions differ a lot.

The CHAIRMAN. Senator Rockefeller.

Senator ROCKEFELLER. Dr. Boskin, you just indicated that we are not trying to redistribute income. Yet, I think at the beginning it was pointed out, or at least maybe just in the material or perhaps in my briefing, that seniors are afraid that they are going to get less. That is, not less actual money, but less of an increase.

On the other hand, it was indicated that others will be paying more. I would like to hear a little bit more, that is, if we do not

make a change, about who it is, what kinds of people will be penalized, in a sense, if we do not adjust the CPI.

Dr. BOSKIN. I will start, and then ask Dale and Bob if they want to add to that. First of all, accurately, what would happen if you made an adjustment is that, as Senator Roth and others have mentioned, there will still be a cost-of-living adjustment. The annual amount would still go up. It would go up accurately so there would be actually no real cut, no inflation-adjusted cut. What you would be doing is correcting an automatic, real, 1.1 percent increase.

Senator ROCKEFELLER. I do understand that. I am just talking about—

Dr. BOSKIN. About a third of this is on the tax side, so there would be some additional taxes paid relative to doing nothing, but it would be an accurate, real tax adjustment. You would make the inflation indexing of the brackets accurate rather than over-adjusting the tax brackets.

But, most importantly, you have this trillion dollars Professor Jorgenson mentioned. So there is \$1 trillion in the next 12 years that will be left to future taxpayers, middle aged, or younger people whose tax burden will go up a lot more. That includes people of all income groups. Payroll taxes, income taxes and other things will have to go up to deal with that eventually.

Maybe it can get postponed for a while. I would hope that it does not get postponed for very long. I hope we would deal with these expeditiously. But the fact is, that is who would wind up footing the bill.

Dr. JORGENSEN. Let me just focus on the issue of tax collection. This is a point that we made before, but it is very important to underline this. There would be additional tax collections. That is your question, really. Who would pay? Taxpayers.

Who are the taxpayers? This committee and the corresponding committee in the House and the Congress have exempted large portions of our population from the income tax. So we are talking about the portion of the people who now pay the income tax.

We retain, as Mike Boskin just pointed out, a progressive rate structure that has been made more progressive in 1990, and again in 1993. So the burden would obviously fall differentially on the rich. That is the short version of the story.

Dr. GORDON. Let me make two points. If we talk about the trillion and ask who is going to be paying, if Congress does nothing, for that extra unfair expenditure and essentially unfair reductions in real taxes if you do nothing, not just the average taxpayer is going to be paying the bill, you also have the fact that you are under great pressure to cut the Government budget deficit toward zero in the year 2002, and you are going to be cutting out some programs. Some of those programs help the poor. You are under less pressure to cut out programs that help the poor if you take the cost-of-living approach and try to make a fair adjustment.

But, to the extent that you actually allow a CPI adjustment to filter through toward reduction of the deficit, that has all the benefits that lead people to be interested in a balanced budget in the first place. That is, faster economic growth, a healthier economy.

So that is another aspect of the rainbow at the end of the 12 years, some combination that you do not have to cut expenditures

as much, you do not have to raise taxes as much, and you may get some extra economic growth out of the story.

Senator ROCKEFELLER. My final question is, I understand that the BLS is now looking at kind of a senior-oriented CPI. Can you explain what that is?

Dr. GRILICHES. Well, basically what you have, is they collect prices. The prices are not distinguished by who pays for them. They do collect also, annually, expenditures. The basket of what seniors are buying is somewhat different from what the average person buys. But, I think it is not all that different. You can take these common prices changes and re-weight them using the weights of the seniors rather than the average weights. That turns out not to make much of a difference.

Senator ROCKEFELLER. Not to be much in what respect?

Dr. GRILICHES. Not making much of a difference in the adjustment, because basically the weights do not differ that much and they get averaged out.

Senator ROCKEFELLER. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Grassley.

Senator GRASSLEY. Thank you. One point before I ask a couple of questions, and that is in regard to people who are arguing that we should ignore your recommendations, or at least move very slowly, on those. That is, if you were coming forth with a report that said the cost-of-living index or the CPI was understated by 1.1 percent, it seems to me we would have a tremendous outcry on the part of people from the grass roots and their advocates in town here to rapidly embrace your recommendations because of the unfairness that would come as a result of that.

So I think we ought to be non-political and encourage government to move as rapidly as we can. But it still is essential that we look at this as dispassionately, and realize that, from the other side, if we were understating, we would be asked to move very quickly. There ought to be a certain amount of discipline on advocates who would be telling a different story if we were understating the CPI.

Dr. Gordon, you spoke eloquently about this quality item and the criticisms that are related to quality and to new products. I would just State a proposition here. It seems to me we are never able to keep up with changes in goods and services, and that we need to be cautious because some of the changes may hurt vulnerable populations.

In other words, since quality adjustments seem to boil down to judgment calls and probably always will, should quality adjustments not always be very conservative?

Dr. GORDON. Quality adjustments should be correct, whether that leads to larger or smaller numbers. I would like to emphasize something that Ellen touched on. In order to adjust more fully for quality I think the Consumer Price Index data collection effort needs to be reorganized.

We need to divide the market basket between national goods which are essentially sold in a similar fashion all over the country and estimate their prices and qualities in something like the way the *Consumer Reports* does in their monthly issues. In this second index that we call the annual or research-based index, go back and

compare the prices over long periods of time, just as the best research in academics is done.

For other goods which are quite different between communities and metropolitan areas, specifically personal services like hair cuts, rent, for instance, perhaps produce which is sold in a very different way in, say, California than it is in Maine, you would want to keep the current method of going out into the field in each of a number of different metropolitan areas.

But I think the BLS is spending far too much of its resources in collecting prices of these national goods, like VCRs, in a very fragmented way. They are looking at a different model of a VCR in New York than they are in California.

It means we cannot compare the cost of living between New York and California. If we did that sort of more in-house, more in a *Consumer Reports* framework, I think we could get a real handle on some of the quality change issues.

Dr. GRILICHES. I think I want to add, briefly, there are two parts to your question. First, is that the BLS can do much better by expanding its data collection effort, moving, for example, to scanner data. If you move to scanner data in many contexts you have a much wider range of commodities, you have it in faster, you have it in real time, and you can catch the decline in prices of some of the new goods much faster.

The second part, is that there are these really new goods which are difficult to value, including, for example, the valuation of the medical progress. Because of that, there will be a piece that you cannot expect the BLS actually to do in a bureaucratic, consistent sort of way on a routine basis. That is why I think you are left with this residual.

Well, we are telling you the BLS can do so much, and if you want really to do something else, then you really have to do it. You have to do more beyond whatever the BLS will get around to doing.

Senator GRASSLEY. I do not object to you substituting the word correct for conservative. All I was trying to do was make the point that it is somewhat impossible, is it not, to keep up with every new item that is coming out.

Dr. BOSKIN. You are exactly right, Senator.

Senator GRASSLEY. There is always going to be some lag.

Dr. GORDON. That is why I think our recommendations say that there is part of our 1.1 that the BLS can feasibly fix within a horizon of the next 2 or 3 years. There is another part they may not be able to fix over the foreseeable horizon, and that leaves it up to you, knowing that it is there, to do something about it.

Dr. GRILICHES. But there is also the issue of a revised index. Some of the stuff that cannot be done on a timely basis can be done a year or two, or three, or four, later.

That is why we need the two indices, where the second index goes back and actually reconsiders things. It does not carve it in stone and say, well, that is the best we could do then and, therefore, we never look back.

Dr. BOSKIN. I need to clarify one thing, lest there be a misconception. In my opening remarks I said there were two broad categories, the substitution kinds of things and getting the quality adjusted prices of new and improving goods.

Some people have said, well, maybe the CPI understates inflation rather than overstates it. It is mathematically impossible. This is arithmetic. It is complex arithmetic, but it is mathematically impossible for the substitution side to be anything other than an overstatement. They assume you do zero substitution. You cannot do less than zero. So that part, there is very little disagreement about. There may be some issue about how fast they can do things and what they ought to do, but that part has to be overstated.

It is our view that it is inconceivable that the quality change in new products is understated at all, let alone by enough to compensate. So this notion that some people say, well, maybe it is minus one rather than plus one, we think people are just illiterate who are saying that.

Senator MOYNIHAN. Mr. Chairman, could I just point out that there are two CPIs; one—CPI-W—is used to index benefits, the other—CPI-U—is used to index the Tax Code in case we have the feeling that there is some sacral presence there that we might be interfering with. They are rarely the same.

The CHAIRMAN. Senator Graham.

Senator GRAHAM. Thank you, Mr. Chairman. I would also like to add my words of congratulations to the commission for the very significant contribution that they have made to our understanding and the upcoming debate on this issue. I come to the defense of the Bureau of Labor Statistics. The reality is, it is Congress which has mandated that the CPI be used as the basis of cost-of-living adjustments.

I would refer, as an example, to section 215 of the Social Security Act, in which we statutorily direct the use of this specific statistical method as the means of making adjustment.

We have done the same thing in the Armed Services Retirement, Earned Income Tax Credit, Federal Employee Retirement, Veterans Benefits, the Internal Revenue Code, and other areas in which the Congress has made a political judgment to direct that this particular methodology be utilized to determine cost-of-living changes.

Second, I will assume that the Congress was unaware of the deficiencies in the use of the CPI for the purpose of the cost-of-living index when it made such directives. We are no longer unaware or ignorant, because of your work.

Thus, we come to the consequences of two American philosophers. First, is Pogo, who stated, "We have met the enemy, and the enemy is us." We here are the enemy. Second, the theologian Harvey Cox, who said, "Not to decide is to decide."

Now that we are no longer ignorant but are aware, the continuation of ignorance is our special responsibility and it is a decision that we make each day, shall we continue ignorance or shall we move to enlightenment? Our failure to move to enlightenment is a statement of equal strength that we will continue ignorance. I would hope that we would decide to move to enlightenment.

That brings me to my question, which is essentially a statement of maybe my own ignorance. It seems to me we have two approaches. One approach, which I would describe as the "reform CPI" approach, which would say we ought to continue with the language that is in the statutes in all of these different areas, but direct the Bureau of Labor Statistics to "reform" the CPI.

From the BLS's own printed document, it would seem that we are asking the Bureau of Labor Statistics to do what is intellectually error. It would be like directing that we would use a thermometer as our method of measuring distance. A thermometer serves a perfectly legitimate purpose, but it is not to measure distance. The CPI serves some perfectly legitimate purposes, but it is not to measure cost-of-living changes.

So the second alternative is for the Congress to go through the statute books and weed out these inappropriate directives and insert some new directive as the means of arriving at cost of living.

The question is, if we were to take the latter approach, weed out the ignorant and insert wisdom, what would you recommend that we insert into the statutes in terms of accomplishing this objective, taking into account the necessity to leave latitude for flexibility in the accommodation of future wisdom that will be beyond that which we have today, as well as the need to make a graceful transition from the past and the present to the future.

Dr. BOSKIN. Senator Graham, I think those remarks were excellent, and I very much appreciated your defense of the BLS. I tried to say earlier, in response to a previous question, that I objected to calling the difference a mistake. They are trying to catch up. They can do better, and they need resources to do better, but there will always be this irreducible minimum. So I think that we need to be clear about that.

Our recommendation has deliberately been set up on two tracks. We think what you should do, recognizing exactly your second philosopher, that doing nothing is a decision to continue widespread, systematic over-indexing with all the consequences that have been discussed here, including \$1 trillion of additional debt down the road.

We think you should move to something like CPI minus X, where if you think you ought to adjust fully it would be our 1.1 or 1.0 percent, in round terms. If you think you want to be exceedingly cautious, take our lower bound of 0.8, or do a partial adjustment. That is why we said wholly or fully.

Second, the BLS will be making some improvements. It is important that you be kept informed of that. You do not want to put something into the law that stays forever, and then the BLS changes their procedures. If they decide 3 years from now to change something and it gets into the CPI and it reduces the growth of the CPI by 0.3, you are going to be able to accommodate that in whatever your CPI minus X was. You are going to want to be able to adjust that downward for what they do.

So we said you need a body that can interpret that for you and adjust that. So, if you wanted something a little more complex, CPI minus X adjusted for changes the BLS makes, with an independent source to do that.

Dr. DULBERGER. I would like to comment on this as well. I think a view from the private sector might be helpful here. In the many contract clauses that I have seen in the private sector that used the CPI as the escalator, it is often recognized that the CPI does not have the meaning that would be required to serve the intent of the clause, and yet it is chosen for other reasons: convenience, it is published in the Wall Street Journal every month and everybody

can read it, it is not revised, although sometimes people erroneously think that it is not revised because it would not benefit from revision.

In any event, I have seen a number of ways of dealing with this. Sometimes there is an adjustment, like knocking off a percentage point or so. Other times it is taking some portion of the increase of the CPI. In most clauses that I have seen, there is a provision for renegotiating the adjustment factor when there are significant changes to the way the CPI is constructed.

So I think there will be some analogies with what you are trying to do. Obviously, there is not another side who is negotiating with you, but the general principle of making some adjustment to more closely reflect what would best serve the intent of the clause and providing for a way to change that adjustment when there are improvements made to the CPI is something that is consistent with what we have said, and what you have suggested.

Dr. GORDON. I want to make a practical suggestion which I think merges together two of our recommendations. We are saying there is a 1.1 percent error, but we are saying that the BLS may, and indeed probably will, change things maybe 3 years from now, and you need to establish some other commission or body to advise you 3 years from now as to what the appropriate number is, whether it has gone down from 1.1 to 0.9.

Given the amount of legislation that you have referred to, it is a very complex task to go and rewrite it all repeatedly every 2 or 3 years.

So why not merge together these two ideas and in the legislation say that indexation will be by a factor to be determined by some body the Congress then establishes permanently to advise you once a year on the number?

That could start out being a group like this, or some more mixed group of academics and representatives of different interest groups. But you would have a body, and the legislation would refer to that body rather than a particular number and, therefore, would not have to be changed all the time.

Senator GRAHAM. If I could just take a moment to summarize, because I think I agree with what Dr. Gordon has just said. My concern is that if we write into the statute CPI plus or minus any number, that becomes a political statement which is going to lack public credibility and confidence.

My own sense is that, while we might have to do something such as that on a transitional basis because we do not have an alternative, that we ought to try to move to a different construct than CPI and give it a new name and to attempt to professionalize it so that it is what we all are seeking, which is a number which reflects reality, neither above or below reality, but is as close as good men and women with a common objective can accomplish. That should be what we should attempt to put into the statutes rather than a specific methodology.

Dr. BOSKIN. We tried to give you that leeway and those kinds of options in the way we structured our recommendations. There is the second index, called a cost-of-living index, which the BLS will be putting out, at least on an experimental basis, in the next couple of years. Then we thought that you should have a permanent

body of experts that rotated that could tell you what the number or approximate what the number would be relative to the official price statistics. So you could do this on an ongoing basis.

If you did CPI minus one and 3 years from now they fix 0.3, and 7 years from now they fix another 0.2, you would want to obviously know that 0.7 and 0.5 were what the relevant numbers were at the time.

So, you need something flexible to deal with that because the BLS will be making some improvements. It is not at all clear yet that they will be put into the CPI as currently constructed. They often publish things called experimental indexes alongside the CPI.

The CHAIRMAN. Senator Conrad.

Senator CONRAD. Thank you, Mr. Chairman. I want to also add my word of thanks to this panel. I think you have made a very significant contribution to an important debate, and I am sure you have weathered some of the brick bats as a result. But we appreciate, really, the outstanding effort of this group.

I also want to recognize the leadership of Senator Moynihan, who had been pointing out this problem for an extended period before this commission came back with their findings. I think Senator Moynihan's leadership ought to be recognized.

The Bureau of Labor Statistics, as Senator Moynihan has pointed out, many times themselves have said the Consumer Price Index is not a cost-of-living index. They say that in their own publications. What we are left with as a result of your conclusions is that the Consumer Price Index, being used as a surrogate to establish a cost of living, overstates that cost of living by 1.1 percent.

That sounds like a small amount, but if we look at it a different way it really represents about one-third of what the cost of living is telling us in terms of changes in any 1 year, or the Consumer Price Index is telling us about changes in cost of living in any 1 year.

Still, those are relatively small errors. Again, error is not being made by BLS, it is really our error. It is Congress' error because we are the ones who have ordered, as Senator Graham has indicated, that we are going to use the CPI to adjust for the cost of living. But, still, those small errors make a big difference over time, \$1 trillion, as Dr. Jorgenson indicated, over just 12 years. That is a staggering amount of money. We are left with the question of, how do we correct this circumstance? How do we fix it?

One suggestion, is we have the BLS construct a cost-of-living index. I would ask, how long would it take for that to be done?

Dr. GRILICHES. We are asking that, you should ask that. They are actually trying, partly, to do that. It is going to take them, in steps, a long time and it will never be perfect. So, in a sense, you will never get out of this other problem. I think our best estimate is, give or take, that within 4 or 5 years with goodwill, willingness to move, and with additional resources, they will whittle down something on the order of half of our estimated bias.

The other half comes, as Senator Chafee, or somebody else said earlier, from the fact that there is almost continuous change in the economy and it is very difficult to catch it sort of on the fly. New things happen all along.

Senator CONRAD. So 4 or 5 years before they could construct a new cost-of-living index.

Dr. GRILICHES. Well, no. I think within a year or two they can do quite a bit, which will take off somewhere on the order of 0.3 to 0.4 of this bias. The other reforms which deal with bringing in goods faster, bringing in new information, getting scanner data, getting the scanner data set up so that it fits the index framework, things of that kind, that takes time and that takes resources. I would give them another 2 years or so on that.

Senator CONRAD. The reason I ask, is as I see it, I am on this committee and I have some significant responsibility for the long-term fiscal health of the country. It seems to me it is very clear we have got a ticking time bomb. That time bomb is the baby boom generation.

When they start retiring, there is going to be no forgiving the catastrophic consequences of a failure to deal with our long-term fiscal imbalances. We are going to face then either a massive tax increase or a massive cut in benefits. Those really are the options that will be presented to the American people and to the Congress at that point.

So, obviously, we have got a window of opportunity here to address this problem and the sooner we do it the less pain we will inflict on the American people by way either of a massive tax increase, or a massive cut in benefits, or some combination.

Dr. BOSKIN. You are exactly right about that. Thinking of doing this is sort of reducing the dimensionality of that problem, depending on how much of an adjustment you would make from something that would put us to European-level tax rates and perhaps European unemployment and other consequences to something that is much more manageable, although still a difficulty.

Senator CONRAD. Can I just follow up, Mr. Chairman?

I am very glad you made that point. I have just had a gentleman back in my home State write a letter to the editor of the papers in the State attacking me for my endorsement of a correction for the cost of living because the CPI clearly does not measure it accurately. He, in his attack, is saying, well, Senator Conrad is cutting benefits and raising taxes. That is the gist of his attack. How would you respond to that kind of attack?

Dr. BOSKIN. Well, the question is, if you define everything in real terms, inflation-adjusted terms, this is neither a tax increase nor a benefit cut, it is just getting it right. It is eliminating or partially correcting for, depending on what you may do, an over-adjustment, an automatic real benefit rise that exists now inadvertently and an automatic real tax cut that exists now inadvertently. So I would say it is neither.

Senator CONRAD. Thank you very much.

I thank the Chairman.

Dr. GORDON. Could I add something just on this issue?

The CHAIRMAN. Please, Dr. Gordon.

Dr. GORDON. The \$1 trillion, Senator Conrad, is contingent on doing something this year. Now, let us say there is a big political debate and you put it off until 1999. You lose probably \$300 billion of the \$1 trillion just by delaying 2 years. It is the compounding

that is the whole power of this, and the compounding means do it now at the beginning of a congressional term.

The CHAIRMAN. Let me again thank the panel. I would say to my colleagues, I think one of the things we are going to have to look at is providing some additional funds, maybe, to BLS to try to help address this problem. It seems to me that is going to be an important factor.

To you, I would say thank you for educating members of this committee, with some exceptions like Pat Moynihan, who is an expert in his own right. But I think we are going to need your continued help and support in developing a consensus as to the need for taking the steps to ensure as accurate as possible a measure of inflation. I cannot thank you too much for your great contribution already. But, like all politicians, I am not thanking you for what you did yesterday, we need your help tomorrow.

Dr. BOSKIN. Thank you, Mr. Chairman.

Mr. CHAIRMAN. Thank you very much, members of the commission.

[Whereupon, at 12:22 p.m., the hearing was concluded.]

FINAL REPORT OF THE ADVISORY COMMISSION TO STUDY THE CONSUMER PRICE INDEX

TUESDAY, FEBRUARY 11, 1997

U.S. SENATE,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 10:08 a.m., in room SD-215, Dirksen Senate Office Building, Hon. William V. Roth, Jr. (chairman of the committee) presiding.

Also present: Senators Chafee, Grassley, D'Amato, Mack, Moynihan, Rockefeller, Breaux, Conrad, Graham, and Bryan.

OPENING STATEMENT OF HON. WILLIAM V. ROTH, JR., A U.S. SENATOR FROM DELAWARE, CHAIRMAN, COMMITTEE ON FINANCE

The CHAIRMAN. The committee will please be in order. Today we will hear testimony once again on the issue of the accuracy of the Consumer Price Index. Clearly, the importance of this issue dictates our spending these first few weeks of hearings exploring all aspects of the accuracy of the CPI. Since we have seven witnesses this morning, let me just say a few words of introduction, and then I will turn to our first witness.

I want to welcome all of our panelists this morning, but particularly Dr. Katherine Abraham, Commissioner of the Bureau of Labor Statistics. Clearly, her job over the past few years has not been easy. Widespread attention questioning the accuracy of one of our most important economic statistics in government today was not anticipated by anyone.

Let me be clear that, while the accuracy of the CPI is in question, in no way is your agency's professionalism in question. In fact, Chairman Greenspan and others are correct in urging that more funds be made available for implementing new techniques at BLS, as recommended by the Boskin Commission report.

Last week, Senator Moynihan and I introduced a sense of the senate resolution regarding the accuracy of the Consumer Price Index. This resolution does not attempt to make changes in the CPI, but instead recognizes the importance of its accuracy.

As we proceed to correct the CPI in the coming months, we think it is critically important that we all understand that a lower CPI will ordinarily translate into a continued cost-of-living adjustment for Social Security recipients, but at a lower amount.

Clearly, this resolution is the first step toward an accurate measure of inflation. We truly believe that this is an important issue and it should be acted upon, Pat, in a thoughtful, nonpartisan manner. We believe any action taken to correct the CPI should be broadly, deeply bipartisan. I would encourage all of our colleagues to join our efforts by their co-sponsorship of this resolution.

Now, let me turn, if I may, to our first witness, Dr. Katherine Abraham, Commissioner of the Bureau of Labor Statistics. Dr. Abraham and her staff at the BLS have made progress in improving the data collection and data analysis techniques over the past few years.

I want you to know we truly appreciate your openness and willingness to work together to improve further upon the accuracy of all government figures. So it is a great pleasure to welcome you here today and we look forward to your testimony.

Senator Moynihan, would you care to make a comment?

**OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN,
A U.S. SENATOR FROM NEW YORK**

Senator MOYNIHAN. Just to welcome Dr. Abraham and our other guests. I think I can claim to have known each commissioner since Ewan Claque, which goes back a very long while.

I would make the point, Mr. Chairman, that the resolution that you drafted, and I had the honor to co-sponsor, simply states that all cost-of-living adjustments required by statute should accurately reflect the best available estimates of changes in cost of living.

The first and only thing I would say here at the outset, is we will never get anywhere in this conversation if we keep insisting on correcting the Consumer Price Index. The Consumer Price Index is not a cost-of-living index. Who so sayeth? The Department of Labor.

They have put out a pamphlet called, "Understanding the Consumer Price Index: Answers to Some Questions." Question No. 3 is: "Is the CPI a cost-of-living index?" Answer: "No, although it frequently and mistakenly is called a cost-of-living index. The CPI is an index of price change only."

Now, if the Bureau of Labor Statistics and the Department of Labor wishes to change this pamphlet, fine. We can hear why. But, in the meantime, I would hope we would stop hearing this constant complaint that we must not interfere with the calculation of the Consumer Price Index. No one has any intention of doing that. We simply question, to what degree can we produce a cost-of-living index that more accurately reflects changes in the cost of living as against price changes.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Moynihan.

Dr. Abraham, we look forward to your statement.

**STATEMENT OF HON. KATHARINE G. ABRAHAM, PH.D., COM-
MISSIONER, BUREAU OF LABOR STATISTICS, U.S. DEPART-
MENT OF LABOR, WASHINGTON, DC**

Dr. ABRAHAM. Thank you very much, Mr. Chairman, members of the committee. I do have a formal statement that I would like to have submitted for the record.

The CHAIRMAN. It will be included in the record.

[The prepared statement of Commissioner Abraham appears in the appendix.]

Dr. ABRAHAM. Thank you. In that event, I would like to make only a few brief comments regarding the issues raised in the final report of the Advisory Commission to Study the Consumer Price Index.

That report begins by recommending that the Bureau of Labor Statistics establish a cost-of-living index as its objective in measuring consumer prices. This is, I believe, consistent with the long-stated position of the BLS, that measuring the cost of living is our objective, though not what we would say we actually do—I am referring to the pamphlet that Senator Moynihan was quoting from. There may be however, some disagreement about how far it is possible to move in this direction.

The report notes that the CPI does not account for the fact that consumers change their purchasing patterns when confronted with changes in relative prices, and, thus, tends to overstate the impact of rising prices. The commission believes that this problem, called substitution bias, arises at two distinct stages of index calculation and recommends steps to address it at both stages.

Most of the empirical research on substitution bias, I might note, has come from the Bureau of Labor Statistics and we are actively investigating ways to deal with that problem.

First, we are evaluating adoption of an alternative formula called the geometric mean for aggregating individual price quotations to form the CPI sub-indexes. This formula allows for a degree of substitutability across items within individual item categories, and may be more appropriate for many—probably not all, but many—item categories than the present formula, which allows for no substitutability across items.

Were it possible to aggregate the monthly CPI sub-indexes in a way that addressed the substitution bias at the second stage, we would do that as well. Unfortunately, the expenditure information needed to produce those measures is available only with a substantial lag.

We began several years ago to produce indexes, annually and on an experimental basis, that account for substitution bias at this stage. We also have proposed producing such measures, albeit still with a lag, as an addition to the set of official statistics that we produce.

Nearly two-thirds of the 1.1 percentage points by which the commission believes the CPI overstates annual growth in the cost of living is attributed to problems in the treatment of change in item quality and in the treatment of new goods and services.

As the report recognizes, the BLS already has procedures in place designed to account for changes in item quality. Although these procedures certainly are not perfect, they do have a very substantial effect on the rate of price change the BLS reports.

We also have established procedures for bringing new items and outlets into the index. In fact, the entire sample of specific items that are priced is updated on a 5-year cycle.

From our perspective, the most important question about quality and related biases is how they might be addressed operationally.

The report's estimates of quality and new goods bias in various index components generally are not based on a comparison of the current CPI sub-indexes with measures the commission believes to be more nearly correct.

Instead, these estimated biases represent judgments based on sketchy evidence, and in some cases no direct evidence at all. In certain cases where interesting new evidence is reported, I would quarrel with the commission's interpretation of it. The conclusions regarding the automobile, apparel, and rent components of the CPI are, in my view, especially problematic. In addition, I believe the report could have explored possible negative biases more systematically than was done.

About half of the bias judged to exist in the quality and new goods arena arises in just two item categories: medical care and high-tech consumer goods. Although I cannot say whether the commission's estimates of bias in these areas are correct, the measurement of price change in these index components clearly poses particularly severe challenges.

We have taken steps to improve the CPI hospital price measure, and will be modifying our procedures so that new high-tech goods can be brought into the CPI more promptly. At the risk of sounding overly pessimistic, however, I do not believe that quality and new goods problems ever will be fully addressed in our official statistics. Increased variety in the choice of goods on grocery store shelves, for example, certainly has value to consumers, but techniques available for measuring that value are in their infancy and may never prove operationally implementable in the Consumer Price Index.

Improvements in medical care that enable patients to lead more active lives, to take another example, have undoubted value. But I do not believe that value can be measured objectively enough to be reflected in our official data series.

In conclusion, I would like to mention that the President's fiscal year 1998 budget includes a request for an enhancement to the CPI program. If approved, this enhancement will enable us to take several important steps toward improving the accuracy of the current Consumer Price Index, as well as toward providing new supplementary measures of price change that address the substitution bias issue.

I would be happy, of course, to describe these steps more fully and to answer any other questions that members of the committee might wish to raise. I appreciate the opportunity to be here this morning.

The CHAIRMAN. Thank you, Dr. Abraham. I think we all agree that the government's policy to adjust Federal programs and the Income Tax Code by changes in the index is a correct policy. Would you agree with that?

Dr. ABRAHAM. That is not a matter on which I have an institutional view.

The CHAIRMAN. Let me ask this. You would agree that it is important that the index we use for such purposes be as accurate as possible.

Dr. ABRAHAM. Our responsibility, as you well know, is to produce accurate data and to describe what we have produced as clearly as

possible. There are a whole range of questions regarding whether, and how, those data ought to be used, for indexation purposes, for example, that are really beyond my purview.

The CHAIRMAN. A few days ago our committee heard testimony from Dr. Alan Greenspan, who of course is chairman of the Federal Reserve Board of Governors. He presented this committee with internal research at the fed, showing an upward bias of 0.5 percent to 1.5 percent. Clearly, this range is very similar to the Boskin Commission report of 0.8 percent to 1.6 percent.

Do you have any comment on the Federal Reserve findings?

Dr. ABRAHAM. I have had a chance to look at the study that Chairman Greenspan was referring to in that testimony. It is my view that one really cannot look to that study as providing independent corroboration of the Boskin Commission's estimates. The study was looking at productivity data. There is a well-known puzzle in the productivity statistics: aggregate productivity has been rising and manufacturing productivity has been rising, but you take those two and back out what is going on in the non-manufacturing part of the economy, the implication is that productivity there has been stagnant.

That is the basic fact, and it is a puzzle. But the explanation for that fact could have to do with problems in the measurement of nominal output, or it could have to do with the price deflators used to convert nominal output to real output in some of the non-manufacturing industries that are not derived from the CPI at all. In my opinion, the jury is still out as to what conclusion one should draw from that study.

The CHAIRMAN. Now, I understand that at the American Economics Association annual meeting last month, the Boskin Commission report was very positively received by their colleagues in the economics field. Can you comment on any of these discussions that occurred, and your response to these discussions?

Dr. ABRAHAM. There was a quite interesting session at which the members of the Boskin Commission—the so-called Boskin Commission, I guess the Commission's formal name is rather long and cumbersome—reported on their findings. There were other people, including myself, who spoke.

I do not know that I had a clear enough sense of the group present at the session to say whether there was a consensus and, if so, what it was. I know that there were any number of people who spoke to me afterwards and who said that they had questions about various aspects of the report, but where most people present came out, I cannot say.

The CHAIRMAN. It was my understanding that, in general, the reaction was favorable. Would you disagree with that?

Dr. ABRAHAM. I really have no way of assessing that, given the nature of the forum. There was not a lot of opportunity for give and take with the audience. I do know that people who came up and spoke to me indicated they had various questions about the report, but I do not know that people who spoke to me were a representative sample of those who attended.

The CHAIRMAN. Let me turn to this. Could you explain how new products, such as cellular telephones, come into the CPI calculation, as now is the practice in BLS? Could you comment on how

the Boskin report recommends to change the current method of collecting data on new products?

Dr. ABRAHAM. Let me try to answer that by indicating, first, what the issues are with respect to new products. There are really two separate issues with respect to new products.

First off, it seems to be the case that when new products come on the market their price often starts out high and then drops rapidly. If we do not pick the new products up quickly, we miss that initial price drop in constructing the index. There is also a separate issue about how you take into account the value to consumers of having new options that did not exist before.

The former problem is one that we can address. There have been times in the past—and I am afraid cellular phones is a case in point—when we have been slower than we should have been about bringing new products into the index.

That is something we are already taking steps to address, so I think we will do better on that in the future. The budget proposal that I mentioned includes funds that would allow us to target new goods aggressively to ensure that they are brought into the index promptly. I think that would be consistent with what the members of the advisory commission think we should be doing.

The other problem is more difficult and we have, unfortunately, no good way of dealing with it, nor did the advisory commission have a recommendation in that regard.

The CHAIRMAN. My time is up.

Senator Moynihan.

Senator MOYNIHAN. Well, thank you, Mr. Chairman.

I would like to say to the Commissioner, with great respect, that if you keep talking about the CPI you are getting in the way of what the administration has been trying to do, what we are trying to do, which is to get to a better judgment of cost of living. The range of estimate here is surprisingly consistent.

Our esteemed chairman noted that Alan Greenspan, sitting where you were a week ago, said the Federal Reserve Board estimates that the CPI itself overstates cost of living by 0.5 to 1.5 percent. The commission we are talking about used the range 0.8 to 1.0 percent.

Now, just about 2½ years ago, Alice Rivlin, then director of Budget, in a memorandum preparing for the 104th Congress, said the CPI overstates inflation by 0.4 to 1.5 percent. These are all exactly in the same range. We are trying to do something responsible here.

I have a feeling we keep running up against the Bureau of Labor Statistics saying, do not mess with the CPI. We are not. We want you to do your job and take your time. I know it does take time. I was Assistant Secretary of Labor for Policy, Planning and Research in the Kennedy Administration in 1962, when we received a report by, we will call it, the Stigler Commission. The Bureau of the Budget had asked for it. It was a study of the price indexes, the price statistics of the Federal Government. George Stigler, later a Nobel laureate in Economics made a number of estimates. They said these statistics are all upward biased. In part the report stated that:

If a poll were taken of professional economists and statisticians, in all probability they would designate, and by a wide majority, the failure of the price indexes to take full account of quality changes as the most important defect in these indexes."

That is just inherent in this beast. They were talking not just about the CPI, they were talking about the prices paid by farmers, and some other indexes that I do not think exist any longer.

They proposed a wider CPI for its own purposes. We have two CPIs. No one ever wants to talk about that. There is not one, but there are two. This is not an atomic weight and we are not measuring the speed of light. The Stigler Commission, in 1961, suggested that the BLS produce a second CPI, and you did. But it took 18 years. That is a long time, given the consensus that seems to be around on this subject.

Can you just reassure this committee that this committee is not talking about adjusting this precious Consumer Price Index or interfering with your professional independence? We are not. Do you understand that, Commissioner?

Dr. ABRAHAM. I think that I understand that. Perhaps I could begin with a point of clarification regarding your opening comments. In the booklet that you have on a number of occasions quoted from, in which we talk about the Consumer Price Index not being a cost-of-living measure, what we are really talking about is the fact that it does not take into account a consumer's ability to substitute from one item to another when relative prices change.

Senator MOYNIHAN. Yes.

Dr. ABRAHAM. That, of course, is only a part of what the advisory commission is talking about when it comes up with its estimate of bias in the CPI.

Senator MOYNIHAN. The other matter being changes in quality, and things such as you mentioned. Yes, we know this. It is perfectly all right. We are not putting the bureau in any professional jeopardy by saying, let us take your own word for the things. If we look for a cost-of-living index, either create one, or, as the chairman of the Federal Reserve Board said, have a commission that once a year makes an adjustment.

Dr. ABRAHAM. Just on that subject, it is clear that, no matter how hard we work at this, even beyond the substitution effect there are going to be some things that we can take account of and some things that we cannot.

Senator MOYNIHAN. Always.

Dr. ABRAHAM. My views on how the CPI gets used may have been misunderstood. I have no objection, no problem, with you, as policymakers, looking at what we are able to produce, recognizing what it is and what it is not, and making your own judgment about what it is appropriate to do with it.

Senator MOYNIHAN. Thank you.

Dr. ABRAHAM. So, on that point I believe we are in agreement.

Senator MOYNIHAN. Wonderful. On that note, I cannot think of another question to ask or word to say.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Grassley.

Senator GRASSLEY. I was glad to hear what you just said, because based on newspaper reports, it seems like there is a defensive posture that they want to paint of you that would be normal, bureaucratic turf protection. I think you have cleared that up very well, now. Very well, now. I appreciate that.

Dr. ABRAHAM. We did not ask, to begin with, to have the CPI used for all these purposes, and we have no objection to changes in how it is used.

Senator GRASSLEY. But I think it makes it a lot easier for all of us in working with you then to have heard you say this. By the way, I am proud to admit that you are an Iowan.

Dr. ABRAHAM. Oh, yes.

Senator GRASSLEY. Thank you.

Dr. ABRAHAM. I am proud to be an Iowan, too.

Senator GRASSLEY. And you can understand why she is doing such good work. Now you know.

Can I ask you something that deals with the resources that you have to work with?

Dr. ABRAHAM. Certainly.

Senator GRASSLEY. The commission that reported to us has recommended targeting more resources to improving the CPI. The President's budget has recommended additional funding for the BLS to update the market basket more frequently, and probably more resources can be found. But, on the other hand, maybe it is not limitless what we can do.

Maybe to some extent, at the time we have restricted resources, we could ask you to look at what we have demanded that you do and maybe make recommendations that the resources you have could be allocated in another way.

For instance, there has been some indication from your own organization that, for instance, the Consumer Price Index for the elderly might not be as valuable because the sample is small and the index does not reflect special discounts sometimes given to the elderly. The Boskin Commission has raised some concern about that.

Would BLS consider how cost-effective it is to allocate staff and resources to produce alternative indices such as the CPI for the elderly? In other words, as we are looking for whether or not you ought to have resources, would you be in a position to recommend to us if maybe resources could be allocated away from special indices so that we concentrate entirely upon one very important index?

Dr. ABRAHAM. I wish that that were a way to save significant resources. Unfortunately, it is not. Putting the CPI for the elderly together is virtually costless.

Senator GRASSLEY. All right.

Dr. ABRAHAM. The reason is that we use data we have collected anyway. Data collection is the biggest part of our cost. All that index requires is a computer program to process the data differently.

Senator GRASSLEY. Well, then maybe we should ask in a general way, and I will be more specific, is funding a limiting factor on making the cost index more accurate? In other words, if you had more money do you think you would have the ability to make it more accurate?

Dr. ABRAHAM. If we had more resources we could make the index more accurate. The budget proposal that we have put forward includes funding for everything that, as of last summer, we could identify that we believed would help us improve the accuracy of the index. We asked for a couple of million dollars this year, building up to, in steady state, assuming funding is forthcoming in future years, to about \$8-10 million a year.

With this funding, we could make more explicit adjustment for improvements or deterioration in quality and get new items into the index more promptly. We could produce alternative measures that take substitution bias into account. Once you get beyond that, however, at this point we run out of ideas as to how to improve the index.

Senator GRASSLEY. For instance, if we ask you, because of the tradition of nonpartisanship, or even apolitical, approach that you take, if we said we do not want to do this in the Congress, the Boskin Commission has some, maybe, taint because politicians set it up, if we ask you to do exactly what they were doing, how much would it cost more than you are presently getting to do that?

Dr. ABRAHAM. What they were doing, meaning to come up with a best judgment about remaining bias in the indexes?

Senator GRASSLEY. Yes. Yes.

Dr. ABRAHAM. That would be something that we would not be in a position to do. I think that is not putting it too strongly.

Senator GRASSLEY. Explain that, please.

Dr. ABRAHAM. What we are about, and what I think we are appropriately about, is producing statistics using methods that yield reproducible results, methods that we can write down and describe, methods such that, if we got somebody else to come in and do the work, they would get the same answer.

If we get into the business of making judgments about things that are not measurable, of guessing, even if it is a best guess, we really, I think, would be undermining the credibility of our statistics, with very adverse consequences for all of the data we produce. That is just not something that we are in a position to do.

Senator GRASSLEY. Are you not a partial step in that direction anyway? I know my time is up, so let me just say this. Are you not partially taking a small step in that direction anyway, because periodically you update your own?

Dr. ABRAHAM. I think that is different. We have made changes to the way we produce the index, but those are changes in precisely-defined procedures. They are not making judgments about things that really inherently are not measurable, or that we do not know how to measure.

The CHAIRMAN. Senator Conrad.

Senator CONRAD. Thank you, Mr. Chairman, and I thank Dr. Abraham for being here.

In listening to this and in reading your testimony, I find a bit of tension. Let me just read to you from your testimony and try to sort this through. You said, "The report begins with one over-arching recommendation. The BLS should establish a cost-of-living index as its objective in measuring consumer prices." Then you say, "This seems basically right to me. Indeed, the BLS long has said

that it operates within a cost-of-living framework in producing the CPI."

Now, one thing about Washington, is the way we use language sometimes fools ourselves and has real consequences. As I understand it, when you produce the CPI, that is a price index. It measures changes in prices of a market basket of goods over time. So, by definition, that is not a cost-of-living index.

A cost-of-living index would measure changes in cost of living for people in this country over time. That is different than measuring the change in prices in a basket of goods over time because that is not how people shop. We do not go out and buy the same basket of goods every year.

This whole substitution bias is a question of people substituting one good for another because of price differences. So it confuses me when you say that. I thought I understood that you were constructing a Consumer Price Index, and that measures changes in the prices of goods in a market basket. Now you say, "The BLS long has said that it operates within a cost-of-living framework in producing the CPI." How do these things fit together?

Dr. ABRAHAM. I guess they fit together in the following sense. If we knew how to produce, on a monthly basis, a true cost-of-living measure, that would be what we would produce. Because of limitations in available data and perhaps other factors, we cannot do that. Operationally, we just cannot do that.

Senator CONRAD. Why would you produce a cost-of-living index, if you could, rather than a Consumer Price Index? A Consumer Price Index has utility, I presume. I mean, there is a reason that you do it.

We are the ones that have made a judgment to take the Consumer Price Index and apply it to indexing all these programs. That was not your decision. You are not responsible for that, we are responsible for that. But now I hear you are saying, in a perfect world, you would produce a cost-of-living index rather than the CPI.

Dr. ABRAHAM. That is correct. That is our view, and has for some time been our view, of what we were about. The measure that we currently produce has certain properties vis-a-vis a cost-of-living index. Specifically, because it tracks the cost of purchasing a fixed market basket through time, it gives you an upper bound on what is happening to the cost of living. If you took the substitution bias into account, you would get something that went up a little less rapidly.

Senator MOYNIHAN. An upper bound.

Dr. ABRAHAM. An upper bound, thinking just about the substitution bias here and not about some of these other issues. So, it gives you a bound on what is happening to the cost of living, an upper bound.

Senator CONRAD. Let me ask you this. In previous testimony, Dr. Gordon, of Northwestern, who is on the commission, referred to the personal consumer expenditure explicit deflator that is constructed by the Commerce Department.

In the most recent year, that showed about nine-tenths of 1 percent lower rate of inflation than CPI. He pointed to that as a con-

firming indicator that the Consumer Price Index overstates the cost of living. What would be your reaction to that suggestion?

Dr. ABRAHAM. A lot of people have been looking at the personal consumption deflator. It is different from the CPI in a variety of ways. One is that it does not just track a fixed set of things. It is, in some sense, taking substitution into account.

But its scope is also quite different than that of the Consumer Price Index. There are, for example, purchases of nonprofits that are covered in the set of things being priced. So there are other reasons why the behavior of the personal consumption deflator and the CPI might differ.

I guess the most important point, probably, is that if you look over a longer period of time, not just the last year or so, the rate of growth of the personal consumption deflator and the rate of growth of the CPI actually have been very, very similar. Because of some details of the way they are put together, the CPI for recent months may tend to go up a little faster than the personal consumption deflator. But then the personal consumption deflator is subject to revision, and that should tend to make the two gives more similar.

Senator CONRAD. Right. I thank the Chairman. I thank the witness as well.

The CHAIRMAN. Senator Graham.

Senator GRAHAM. Thank you, Mr. Chairman. I think we are onto some fundamental issues here, the first of which is whether the CPI is structurally capable of serving the purpose of being a cost-of-living index. We have made that political judgment because we, the Congress, have mandated that the CPI be the statistical method by which a number of revenue and tax measures are adjusted for the intended purpose of cost of living.

Let me start by asking this question. What is your definition of what the purpose of the Consumer Price Index is?

Dr. ABRAHAM. I do not know if I have a definition of what the purpose of it is. What it is, at this point in time, is a measure of what is happening to the cost of purchasing a fixed market basket of goods and services. It is something we have been producing since 1919.

Senator GRAHAM. That use of the CPI, the fixed market basket, what are the utilizations of that for purposes other than those that are written in the statutes?

Dr. ABRAHAM. In addition to the uses of the CPI that have been legislated, it is frequently used in the private sector to escalate contracts of one sort or another. It is often a point of reference that gets looked at by employers assessing wages, even if there is not a formal contract saying that there will be cost-of-living adjustments.

By and large, it is used, it is my sense, as though it were a cost-of-living measure, though it has limitations for that purpose that we have been discussing.

Senator GRAHAM. So the CPI is a statistical method which has almost 80 years of history and utility outside its statutory-directed purposes. I would assume that, if you were to radically depart from the tradition of how the CPI would be constructed, that it might be subject to challenge, that you had, without sanction, altered a

statistical method which had tradition, a context, and a series of uses beyond their legislative use.

Dr. ABRAHAM. I would not anticipate that if we were to follow our ordinary process. Over the years we have made many changes in the way the CPI is put together. We have always given users of the data substantial advance notice of changes that were coming.

Senator GRAHAM. But you stayed within the basic definition of it being a fixed market basket of consumer purchases.

Dr. ABRAHAM. That has been true throughout its history, though it has also been true, as I indicated, that for some time we have said that the guiding framework for what we produce is the framework of a cost-of-living index.

If we could come up with good, objective ways to move the monthly measure we produce closer to being a true cost-of-living index, provided that they did not have other significant drawbacks, we would make changes accordingly.

Senator GRAHAM. Suppose the Congress were to weed through the statutes and eliminate the specific reference to the Consumer Price Index and instead insert a directive to the Bureau of Labor Statistics that it was directed to develop a cost-of-living index. Would you think that would be a wise thing to do, and if the Congress were to do it, wise or foolish, how would you go about accepting that directive?

Dr. ABRAHAM. We already, as I guess I have said, operate within the cost-of-living framework. So, to the extent that we can, we produce the monthly CPI according to those principles already.

The one thing that we really cannot do in the monthly index is to deal fully with the substitution bias problem. The reason we cannot is that dealing with substitution bias requires information on what is happening to people's expenditures that we do not get until after the fact.

Something that we could produce and have proposed to produce would be an annual measure that dealt with substitution bias in a way that we cannot in the monthly CPI. So I suppose my reaction would be to say, this is what I think we can do beyond what we're doing in the monthly index.

Senator GRAHAM. So your answer to the question is, you would retain some of the statistical methodology of the CPI—

Dr. ABRAHAM. Virtually all of it.

Senator GRAHAM [continuing]. But augment it with some steps that would take into account what the CPI does not inherently take into account, which is substitution, and would make it an annual, rather than a monthly, report.

Dr. ABRAHAM. That would be the only feasible schedule on which we could produce such a measure, in my view.

Senator GRAHAM. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Breaux.

Senator BREAUX. Thank you, Mr. Chairman. Thank you, Dr. Abraham, for being with us. This is really incredibly important and I am glad the committee is spending the time we are on it. I think about a third of the entire Federal budget outlays are automatically escalated each year based on using the CPI as a cost-of-living adjustment, which it is not.

I mean, we are clearly making a mistake by using your statistics to do something that you say it was never intended to do. So the mistake, I guess, if anything, was by Congress in selecting something that is not the cost of living and using it for that purpose.

You know, it is interesting. We are trying to get these accurate figures. I wonder, if the Boskin Commission, Mr. Chairman, had stated that the CPI understated the cost of living by 1.1 percent, whether the same groups would be here arguing that Congress should not do anything about that.

I have a feeling that if their recommendation was that the CPI was understating the cost of living by 1.1 percent, there would be a flurry of people coming to Congress saying, you must immediately correct this horrible problem because we are not getting enough, because it is understating the CPI, the cost-of-living adjustment.

So, I understand, I mean, the fact that they are saying it is overstating it and everybody is saying do not do anything. But we cannot make the argument that we ought to guarantee seniors and everybody an accurate cost of living. That is the challenge that we have and that is the thing we are facing now.

One of the things you have mentioned in your testimony which I thought was of interest that I would like to ask you about on page 4, is you say that the current CPI formula that you used does not allow for the potential substitution among items within a category. I guess my question is, why not?

It seems it was something that is relatively simply that we have all heard discussed, that when the price of beef goes up, people buy more chicken. It would seem that that would be an easy calculation to incorporate in your formula, yet you do not do that. I guess my question is, why not?

Dr. ABRAHAM. Maybe I can distinguish between why we have not done it in the formulas we use to construct the sub-indexes and why we have not done it in the formulas we use to aggregate those up to get the overall index.

You suggested it should be fairly easy to take account of how people shift their consumption patterns when relative prices change. But, at the level of disaggregation when you are looking at the sub-indexes, unfortunately, we just do not have information on how much people are spending on this brand of shirt versus that brand of shirt. We do not have that information.

We have come up with a—

Senator BREAUX. But, on that point, if you do not have it, the Boskin Commission says that everybody substitutes and buys, probably, things that are of equal quality, but at a better price. Is it, therefore, impossible to get an accurate reading on how much that affects the cost of living?

Dr. ABRAHAM. At that level of disaggregation, I think that the best that we can do at this point in time—and maybe in the future with the availability of scanner data we will be able to do better—is perhaps to shift over to a formula that gives us a better approximation.

When it comes to aggregating up the sub-indexes, we do have information on how people's spending is shifting from, say, apples to shirts when relative prices change. The problem there is that we

do not get the information on a schedule that would let us fold it into a monthly index.

That is why, in response to Senator Graham, I was talking about producing—as we have been doing for some while on an experimental basis—an annual measure that would take that into account.

Senator BREUX. I think we all share the same goal of getting an accurate assessment of the cost of living if a third of the budget is going to be based on that formula, and I understand that seniors are very concerned about any changes. But I am also aware that the statistics show us that about 9.6 percent of the elderly in this country live in poverty, and almost 40 percent of the children in this country live in poverty.

We had recommended last—and this is not really a question, more of a point, I guess—year in the so-called Chafee-Breaux Mainstream Coalition, which got 46 votes, that a half of a percent CPI change was appropriate. That would have meant that Social Security average monthly benefits would have gone, without any change, from \$637 a month to \$656 a month.

With our change, it would have gone from \$637 a month to \$653 a month, \$3 a month less of an increase and a savings of billions of dollars to try and make sure that the program exists for their children one day.

So I think it is really important that all of us put all of this in proper perspective and see what we are trying to accomplish here. Thank you, Mr. Chairman. Thank you.

The CHAIRMAN. Thank you.

Senator Rockefeller.

Senator ROCKEFELLER. Thank you, Mr. Chairman. Is it true that the current CPI index is based upon a market basket of goods that was analyzed between 1982 and 1984?

Dr. ABRAHAM. Yes and no. It is true in the sense that the weights that get attached to the sub-indexes that are aggregated up to form the overall index are derived from expenditure patterns as of 1982 to 1984. We will be updating those next January.

Below that level, though, we replace all of the specific items that we are pricing on a 5-year cycle. So, on average, the specific things we are pricing were introduced into the index about 2½ years ago.

Senator ROCKEFELLER. How does that weight, in terms of preponderance of effect upon the result, the weight of the “yes” part to your answer and the weight of the “no” part to your answer; is it 50/50?

Dr. ABRAHAM. I am not sure I am understanding the question.

Senator ROCKEFELLER. All right. You said, yes, I am right that part of it was done from 1982 to 1984, but no, I am wrong, that other parts have been done at a much faster basis.

Dr. ABRAHAM. The weights for the whole market basket that get used in aggregating up the little sub-indexes to form the total, all of them were based on data from 1982 to 1984. It is just that, when you get below that level, throughout the whole index, the very specific things we are pricing were selected over the past 5 years.

Senator ROCKEFELLER. All right. Now, you referred to December or January, let us say, when the next one comes out.

Dr. ABRAHAM. January 1998.

Senator ROCKEFELLER. Yes. When that one comes out, is it not true that the market basket figures for that indication will be from 1993 to 1995?

Dr. ABRAHAM. Yes, that is correct. The weights that get used for aggregating the sub-indexes will be about 3½ years old at the time we first introduce them, which is something that has been a concern to us, and which is an important part of the motivation for the budget proposal we have come forward with, to allow us to get the new market basket weights in more quickly the next time we do an updating.

Senator ROCKEFELLER. But, in that you do not have the increased budget at this point, and in that there was, sort of, quite a radical speed-up of time, 1982 to 1984 for now, 1993 to 1995 for 1998, what did you do to make that come about?

Dr. ABRAHAM. I am sorry, to make what come about?

Senator ROCKEFELLER. The fact that you can do it a little bit more quickly now. In 1998, what you come out with then, the market basket, will rely on figures from between 1993 and 1995.

Dr. ABRAHAM. We first introduced the 1982 to 1984 market basket in 1987, so at the time it was introduced it was, on average, 3½ years out of date, which is the same as what will be the case when we introduce the new market basket in January 1998. But then our historical practice has been not to change that market basket for some time.

We have revised the CPI about once every 10 years, put in place a new market basket, picked a new sample of cities so that they would be representative of where people actually lived at that point in time. So, in between market basket datings, which have occurred at about 10-year intervals, the basket has gotten, of course, older and older.

Senator ROCKEFELLER. But, Dr. Abraham, I am just thinking that when Alan Greenspan was here he quoted John Maynard Keynes as saying, "It is better to be roughly right than precisely wrong." In other words, to be generally correct has an advantage.

In that you do do the CPI, in that your training indicates not only that you can do that, but also you know that it is being used for cost-of-living adjustments, that it has an enormous effect on the future of, I think, 70 million people, or about that number, why was it not possible to either decry the 10-year lag earlier, to put us on notice that we were, perhaps, overpaying, or overestimating adjustments for beneficiaries? Because you surely understood that, as a professional.

Dr. ABRAHAM. Maybe I could make a couple of points. Until very recently, it would not have been possible for us to update the market basket more often than about every 10 years because we did not do, on an ongoing basis, the surveys that underlie those weights. We did not have the information. There has not, until very recently, been much interest in that whole issue.

I might also add to that that, in terms of—

Senator ROCKEFELLER. That there has not been much interest is entirely different from your knowing that the effect of the advice that is emanating from the BLS has an overwhelming effect on the economy.

Dr. ABRAHAM. We have been, I think, quite responsible in making available information, which is the information that the advisory commission has drawn on, on such things as the difference in movements of the CPI versus a measure that takes substitution effects into account, the effect on having a CPI with an old market basket versus a more recent market basket.

I guess it seems to me that our job is to ensure that relevant information is out there on the table. Our job is not to push policy-makers in any one direction or another. I think we have been very responsible in getting the relevant information out there on the table.

Senator ROCKEFELLER. My time is up. Thank you, Dr. Abraham.

Senator MOYNIHAN. Mr. Chairman, could I just interject to say that Dr. Abraham is absolutely correct, as we would assume, in that the Boskin Commission, our five commissioners, had the complete cooperation of the Bureau of Labor Statistics in analyzing what they did; no one knows more of what they do than they.

It was professional and it was done at the highest levels of competence, and we should thank you for that. Thank them. They spoiled everybody's Thanksgiving Day, as you may know. They found a mistake the night before, so everyone had to work all weekend.

The CHAIRMAN. Senator Bryan.

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

Good morning, Dr. Abraham. I would like to pursue a line of questioning about the substitution bias, but, first, let me ask you, do you believe that the current CPI does have a bias? If so, is it, in your judgment, upward or downward, and could you quantify that in percentage terms for us?

Dr. ABRAHAM. There are certain things that can be quantified. It does seem clear that there is a substitution bias in the CPI as a proxy for a change in the cost of living.

Senator BRYAN. Is that upward or downward?

Dr. ABRAHAM. That is upward.

Senator BRYAN. So there is an upward bias?

Dr. ABRAHAM. There is an upward bias there. There are two pieces of that. The piece that relates to substitution across index components we have quantified and estimate to be of about 0.15 percent per year. That is the number that the commission used as well. I am less certain about the magnitude of the within-component piece.

Senator BRYAN. That would be the lower level?

Dr. ABRAHAM. The lower level substitution bias. The commission's estimate is that that is 0.25 percent per year. That assumes that the alternative formula that we are looking at is appropriate in all index components.

Senator BRYAN. That is the geometric mean?

Dr. ABRAHAM. The geometric mean. I suspect it is not appropriate in all index components and that, therefore, the magnitude of that bias is somewhat smaller than they have estimated.

On their estimates, the substitution bias pieces together add up to about 0.4 percent per year. I, therefore, think the number is probably somewhat smaller than that. I do not know how much smaller.

We are, over the next year—less than a year, now, I guess—going to be evaluating the geometric mean formula and making a decision about whether, and where, to adopt it in constructing the index. When we have done that, we will implicitly have an estimate of how big we think that is.

Senator BRYAN. Without putting words in your mouth, Doctor, are you indicating that in the substitution bias there is an upward bias of at least 0.1?

Dr. ABRAHAM. At least 0.15 percent per year.

Senator BRYAN. At least 0.15. You are less sure with respect to the upper level?

Dr. ABRAHAM. Correct, although we anticipate having, implicitly, our answer on that within a year from now.

Senator BRYAN. Do you suspect the bias, if any, that you would find in the upper level, would that tend to be an upper or a lower bias?

Dr. ABRAHAM. Oh, it would be an upward bias.

Senator BRYAN. An upper bias.

Dr. ABRAHAM. Yes. Clearly, if we make changes, they will be moving in the direction of allowing for this substitution behavior and reducing the rate of growth of the index.

Senator BRYAN. Again, so I might understand and not misstate your proposition, at least a 0.15 bias, and some additional, perhaps, in the other category, but in no event would you find it to be a lower bias, correct?

Dr. ABRAHAM. Correct.

Senator BRYAN. Now, with respect to the quality of the new introduction of goods, let me get your assessment on that. Is there a bias in that, in your judgment, and is that upper or lower, or how would you quantify it?

Dr. ABRAHAM. There are certainly issues there. There are parts of the index where it does seem clear that what we do gives us a measure that is upward biased. I am thinking about medical care, in particular, where it is very clear that there have been important improvements in the quality of medical care that we have no good way of taking into account.

We are making improvements in our procedures, but that is only going to get us part-way there. I think there are things there that we just cannot measure, so I anticipate that there would be a continuing, inherent problem, if you will, in that component of the index.

Senator BRYAN. In that being an upward bias?

Dr. ABRAHAM. In that component of the index. I guess where I would depart from the views of the advisory commission is that, first off, we do an awful lot now to take change in quality into account.

Senator BRYAN. I believe your testimony was 2.5 percent that you made in adjustments.

Dr. ABRAHAM. In 1995, in the goods and services portion of the index. I think there is some reason to be concerned that our current procedures for taking quality change into account, in some cases, may be over-adjusting, not under-adjusting.

I think that bears further investigation. I think, as well, that the research that has been done to date has tended to focus on seg-

ments of the index where folks, a priori, thought there might be some overstatement of the index.

There are a whole lot of components of the index where one might, a priori, think the opposite was true, that, for example, the quality of customer service across a whole, broad spectrum of types of outlets had deteriorated over time.

Senator BRYAN. And do you measure that?

Dr. ABRAHAM. We have not measured that. This is speculation on my part.

Senator BRYAN. So that is not included currently in the indices that BLS has put out?

Dr. ABRAHAM. No. You used to be able to go into a store and find someone who knew the merchandise, and now you go in and there is no one who can be helpful to you. We do not reflect that in the index.

Senator BRYAN. Is it appropriate, in your judgment, to incorporate that; is that a valid criteria? Obviously there has been some deterioration of service, I think, in some categories.

Dr. ABRAHAM. I think if there were a way to quantify that in an objective sort of fashion it would be desirable. That is clearly going to be extremely difficult to do. There, too, we may never be able to do a fully satisfactory job.

So I guess my bottom line on the whole quality, new goods, new kinds of outlet issues raised by the commission is that I am really very uncertain. There clearly are issues, but, bottom line, I am very uncertain as to what impact on the index overall all of that might have. I do not have an estimate.

Senator BRYAN. Thank you very much, Dr. Abraham.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Mack.

Senator MACK. Thank you, Mr. Chairman. Again, I commend you and Senator Moynihan for continuing to hold these hearings on the CPI. This is an important issue that affects many of our constituents and also affects very significantly the decisions that are made from an economic perspective. So, I think they are important.

Commissioner Abraham, it is a delight to see you again. We used to see each other at least once a month for the unemployment information.

I might say, Commissioner Abraham has, I think, done an outstanding job, and so I respect what you have to say with regard to these issues.

Chairman Greenspan suggested that, in essence, we look at this issue from two points of view. One, is that there were technical assumptions or technical aspects of the CPI that could be changed. Then there would be the calling for a national commission to deal with, I believe, other aspects that would have to do with quality and substitution, and so forth.

I would be interested in your reaction to his proposal.

Dr. ABRAHAM. I think his proposal is an interesting one. It is not something on which I have any institutional view one way or another. It clearly is going to be the case that any statistics that we produce are going to have limitations.

I think it would be perfectly appropriate if, in view of that fact, the Congress were to decide to have some group make a judgment about how the data ought to be used that focused in on the limitations of what we are able to give you and what that implies. I do not have a view on it one way or another, I guess.

Senator MACK. Well, maybe from a professional perspective. I mean, right now the BLS is the one that makes the judgments with respect to all the various aspects, is that not correct?

Dr. ABRAHAM. We try to avoid making judgments. I mean that in the following sense. We are good at designing surveys. We are good at designing methods that give us objective, reproducible measures.

But there are a whole set of things that we really cannot measure, and I do not think we probably are ever going to be able to measure. We are not in the business of making judgments about those things, things like the value of the fact that when you go into a store today there is a lot more choice of items that you might buy. That is something that is undoubtedly of value to consumers, but that value is not something I know how to measure.

Maybe a better example is in the medical care area. If there are improvements in procedures that mean that people have to spend less time in the hospital, we can account for that. But if there are improvements in procedures that mean that people enjoy a better quality of life because the procedures worked better and they are healthier and live longer, we do not have any way to measure that and I would not want us to be making a judgment about it.

Senator MACK. Should that be taken into consideration in this kind of an analysis?

Dr. ABRAHAM. I do not think it is something that we should be folding into our measures. It may well be something that, as a policymaker, you want to be thinking about in deciding whether and how you want to use the data we can give you.

Senator MACK. It sounds like—again, at the risk of me trying to say this is what you said, and that is not my intention—there are a series of these areas where there will be political judgments made as to the value or to its impact.

One of the things we have heard, I think, a number of times was that this decision ought to be one based on, again, what is technically correct and should be pretty careful about the political judgment.

Dr. ABRAHAM. Is that a question?

Senator MACK. I was waiting to see whether you thought it was. [Laughter.]

Dr. ABRAHAM. I guess the point is—and I maybe already said this—that we work hard to produce the best data possible. There are limits to what we are going to be able to measure.

Senator MACK. All right.

Dr. Abraham. I think it is important to recognize that. That does not mean, I think, that we are doing a bad job, it is just that there are some things that, using the kinds of methods that are appropriate for us to use, you really cannot measure.

Senator MACK. This has probably already been asked of you, but, again, what kind of bias do you think exists in the present, No. 1. No. 2, it has been suggested that you need additional funds to pur-

sue this issue. Is that accurate, and give me a sense about the timing.

Dr. ABRAHAM. May I respond?

The CHAIRMAN. Go ahead.

Dr. ABRAHAM. All right. Flowing from my previous comment, there is a bias in the CPI as a proxy for the cost of living that we can measure, that is the substitution bias piece of what the advisory commission talked about.

That is, in my view, something less than—I do not know how much less than—0.4 percent per year. When you get into talking about the whole set of issues that they have raised related to quality, new goods, new kinds of outlets, those are things that, if you look at the report, they do not really have measures, what they have is their best judgment. But, since I am in the business of things I can really measure, I do not have a figure to give you on that.

There are some things that we could do if we had additional resources. We are working on some things now. We have made a change in the hospitals component of the index effective with the data for January. We are bringing in a new market basket next January. We are evaluating the adoption of the geometric mean formula for the index. That is something we would be looking at making a decision about a little less than a year from now and implementing whatever we decided to do in about January 1999, I would guess.

We have asked for resources that would let us do more with adjusting for change in the characteristics of items, ensuring that we get new items in quickly. Those two things are things that we would do gradually over time.

There is not anything we could do right away, beyond these things.

Senator MACK. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. Thank you very much, Dr. Abraham, for being here today.

We will leave the record open until 5 o'clock tonight, if anyone has any written questions.

Senator ROCKEFELLER. Mr. Chairman, there is something that is hounding me. I started to write a note to Pat Moynihan, but I just have to ask this to Dr. Abraham. I do not really understand, when you say we do statistics, we try to make them as precise as possible. I understand that we have been over-estimating by about 1.1 percent, or whatever percentage it was that you agreed to. But then the institutional part of you says, it is not my job to tell you in Congress that you are making wrong policy.

I mean, would it not be possible to have alerted Senator Dole, when he was chairman, or Senator Packwood, or Senator Moynihan, or Senator Roth, that COLAs, potentially, are being substantially over-estimated? Why do you close out the policy implications of your position, if not the policy responsibilities?

Dr. ABRAHAM. Let me try to articulate this. It is our job, I think, to try to make people aware of the limitations of the data that we produce. I was not here in 1973, if that is the right year, when the decision was made to tie Social Security payments to the Consumer Price Index.

Senator MOYNIHAN. 1972.

Dr. ABRAHAM. 1972. Thank you, Senator.

The CHAIRMAN. He was here.

Senator MOYNIHAN. A small correction in the date.

Dr. ABRAHAM. I would hope that, at that time, the Bureau of Labor Statistics staff were consulted and they were clear about the fact that the CPI was an upper bound measure on change in the cost of living because it did not take the substitution problem into account.

Being more active than that, telling people, you are using these data the wrong way; you should not be using them this way, you should be using them that way because they have got this problem, I think, just oversteps our bounds.

I think that if we were ever perceived to have an advocacy position one way or another about how our data ought to be used, that that would undermine the credibility of the statistics that we produce.

If I were to have come up to the Hill uninvited and made an appointment to see Senator Dole and said, I need to talk to you; I think that you need to look at how Social Security is being indexed because this measure is an upward bound and that is not what you want, people might begin to think that I somehow had an interest in slowing the rate of growth of Social Security benefits.

They might then begin to wonder about whether they could trust the statistics that I produced. If Senator Dole did not take my advice, people might think that I was making changes to achieve my desired end in some other way.

I think the only feasible course of action for a statistical agency is to keep totally away from anything having to do with policy decisions.

Senator MOYNIHAN. Jay, I wonder if I could just offer an example from experience. I had very nominal oversight of the BLS for the first half of the 1960's. At that time, the unemployment rate was much disputed. It came out every month and the Chamber of Commerce would say it was too high, and the AFL-CIO would say, too low.

But the number the BLS turned out was the best they could. But the commissioner would never say that unemployment is too high or unemployment is too low. They would just say, unemployment is where we have found it, and you can decide whether you think that is too high or too low. Would that not be correct?

Dr. ABRAHAM. Senator Mack could speak to how the current commissioner testifies regarding the unemployment rate.

Senator GRASSLEY. I think the posture you took in regard to what Senator Rockefeller was asking about, of standing off and being a professional in this area, is entirely right, assuming that you insulate yourself then from people who would benefit or be hurt by you changing your public posture. They might feel you would answer certain questions that would give impetus one way or the other in change of public policy.

Do you, in your role, not listen to public servants who would be affected, public employees that would be affected? Or, I suppose in another sense, taxpayers are going to be affected if we change.

What is your philosophy from the standpoint of being in charge of this whole operation from the standpoint of listening to people's points of view and whether or not you ought to change your position or not?

Dr. ABRAHAM. Our posture is to be jealously independent. I am willing to listen to anyone who has a technical argument about the procedures that we use. Someone who feels that benefits ought to be going up more or less rapidly does not, unless they have a technical argument about our procedures—

Senator GRASSLEY. Do you ever listen to non-technical arguments and persuasions that are trying to be made upon you?

Dr. ABRAHAM. No.

The CHAIRMAN. It does seem to me, Dr. Abraham, that, in a sense, what your testimony does is argue in the favor of some kind of advisory commission, because what you are saying is that it is your job to measure on the basis of the facts, the data, the statistics that you have.

You do not use judgment, either in the process of developing it, nor do you try to interpret your findings for the policymakers. So, in a sense, it seems to me we need someone, somewhere, to try to give us the best advice as to what your measurement means.

Senator BREAUX. Mr. Chairman, what was the Boskin Commission?

The CHAIRMAN. That is what the Boskin Commission was.

Senator BREAUX. So we have already had that.

The CHAIRMAN. I agree. You are making my argument.

Senator BREAUX. It is finished.

Dr. ABRAHAM. If I could just speak to that. I am not arguing either for or against that. That, I gather, is the conclusion you have drawn from what I have had to say about what we can and cannot do.

Senator BREAUX. Mr. Chairman, can I just make one point?

The CHAIRMAN. Senator BreauX, yes.

Senator BREAUX. I made a statement in error when I say that 9.6 percent of the elderly live in poverty and 39.5 percent of children live in poverty. What I should have said, for the record, is that 39.5 percent of the people in poverty are children, which is different. So, just for the record. Thanks.

The CHAIRMAN. Well, we appreciate your being up here, Dr. Abraham. Undoubtedly, we will be consulting further with you. We appreciate your testimony today. Thank you very much.

Dr. ABRAHAM. Thank you very much, Mr. Chairman.

The CHAIRMAN. It is now my pleasure to call forward Dr. Feldstein and Dr. Bosworth, please.

It is indeed a pleasure to welcome both of these distinguished gentlemen. We are very pleased to have Dr. Martin Feldstein, the president of the National Bureau of Economic Research and a Harvard Professor of Economics. Similarly, we are honored to have Dr. Barry Bosworth, who, of course, is a fellow at the Brookings Institution.

I guess I might mention that Dr. Feldstein was one of the—I am beating you to the draw—young economists working on the 1961 Stigler report on the accuracy of the CPI, over 25 years ago. So,

it is a pleasure to have you both here. I hope it does not take us another 25 years to fix the problem.

Dr. Feldstein, do you want to start?

STATEMENT OF MARTIN FELDSTEIN, PH.D., PRESIDENT, THE NATIONAL BUREAU OF ECONOMIC RESEARCH, CAMBRIDGE, MA

Dr. FELDSTEIN. Yes. Thank you very much, Mr. Chairman. It is always a pleasure to appear before the Senate Finance Committee. I cannot take any credit for the Stigler report. I was not actually part of the staff that worked on that important document.

I have three conclusions to share with the committee this morning, so let me State them first, then read a brief statement.

In my judgment, the current Consumer Price Index overstates the true increase in the cost of living by at least the 1.1 percent per year indicated by the Boskin Commission.

Second, Congress and the President should act this year to change the procedure for adjusting government outlays and receipts for inflation.

Third, the appropriate inflation adjustment factor cannot be derived by rigorous statistical methods, it requires the exercise of informed judgment. While the BLS should be encouraged to improve the existing CPI measure, Congress should, as recommended by the advisory commission, establish a rotating expert advisory committee that will periodically recommend an inflation adjustment factor that, in its judgment, best represents the modification of the CPI change that is needed to measure the increase in the cost of living.

I think that is the point that Senator Moynihan made at the beginning of the testimony, and that you made at the end of Dr. Abraham's remarks. I think it is what Senator Breaux said about the role that the Boskin Commission has already played with the modification, that it is not a number for all times.

As the BLS does their work, changes what they do, and as economists learn more about the possible biases, it is necessary to have a reconstituted commission of that sort.

Let me just take a few minutes to expand on these three points. First, that the CPI overstates the cost of living by at least 1.1 percent a year. The most difficult problem in measuring the cost of living are associated with the new products and with the quality changes in existing products. That is much more important than the substitution bias that occupied a lot of the time during the last hour of hearing.

There has been substantial research on these problems in recent years. This research has dealt with a very wide range of particular goods and services, from prescription drugs, to breakfast cereals, to the care of patients who have had heart attacks.

Study after study, the researchers have found that the existing CPI procedures substantially overstate the true rise in the cost of living. Sometimes this is because the CPI procedure introduces new products too slowly. More importantly, the CPI procedure generally fails to take into account the value of the new product as such. That is a point that Dr. Abraham made.

In the case of health care, the CPI procedure takes into account only the cost of the service and not its improving effectiveness in treating patients.

My second conclusion, is that the Congress and the President should act this year to change the inflation adjustment procedure. There is no reason to delay the legislative change. Indeed, the fact that inflation adjustments in the past have been based on the unadjusted CPI means that existing benefit levels and tax rates have gone far beyond the appropriate inflation adjustment.

Although delaying the legislative change would have only a small effect in the first year, that delay would permanently and substantially increase government outlays and reduce government receipts.

On the basis of recent estimates by the Congressional Budget Office, I calculated that a 1.1 percentage point change in the inflation adjustment factor beginning in fiscal year 1998 would reduce the deficit in that year by \$6 billion, and the deficit in 2002 by \$60 billion.

If the inflation adjustment were postponed by just 2 years, the deficit reduction in 2002 would be only about half as large, about \$33 billion, and the national debt would be more than \$90 billion greater.

My final conclusion, is that because the appropriate inflation adjustment factor cannot be derived by rigorous statistical methods but requires informed judgment, the Congress should appoint from time to time a rotating expert advisory committee that will periodically recommend an appropriate adjustment factor.

Individual goods and services can be studied for their bias and they will show that the existing CPI method overstates the rise in the cost of living. But there is no statistically rigorous, scientific way to modify the CPI to the quality changes in the millions of products in our economy or to take into account all of the new products and services that are introduced each year. That, I think, is exactly the point that Dr. Abraham was making. But that is not a reason for ignoring such changes in deciding how much to adjust benefits and tax brackets.

May I finish?

The CHAIRMAN. Yes, please.

Dr. FELDSTEIN. Rather, it tells me that the CPI, calculated according to rigorous rules by the Bureau of Labor Statistics, should be regarded only as a starting point for deciding on the inflation adjustment factor.

To do this, the Congress should, as I said, have an outside expert advisory group that will advise on an appropriate inflation adjustment factor.

Dr. Abraham indicated her concern that the Boskin Commission, when the evidence was sparse, was forced to fall back on its best judgment. She expressed her view that the CPI should be based on tested and reliable statistical techniques. I think she is correct, both in her characterization of the work of the commission—it had to rely on its best judgments—and in the scientific standard to which the official CPI should aspire.

But that is not a reason for the Congress to reject the use of informed judgment in deciding how to adjust benefits and taxes. Indeed, the technical standard that the BLS will rightly insist upon

means that even if the BLS made all of the improvements in the CPI that it currently contemplates, the resulting estimate will still be virtually certain to overstate the true increase in the cost of living.

That would be true even if the BLS produced an annual index that dealt accurately with the substitution bias because it would not deal with all of the other biases that are there. It is important to go beyond the technical CPI calculation by the BLS staff and to introduce an element of judgment.

In thinking about the separate roles of the BLS and the advisory commission, I find it helpful to think of the BLS as similar to an accounting firm. I think this may help Senator Rockefeller see that the proper role of the BLS accountants follow rigorous rules to produce an estimate of the so-called book value of a company.

But, when another firm wants to buy that company, it does not use the accountants' book value, rather it looks to experts for advice based on judgment.

I think such judgmental decisions are inescapable in the current context, and that it is better to rely on the judgments of experts than to use only the BLS method of inflation accounting that a rigorous, reproducible, but then inevitably overstate the true increase in the cost of living.

Thank you.

[The prepared statement of Dr. Feldstein appears in the appendix.]

The CHAIRMAN. Thank you, Dr. Feldstein.

It is a pleasure to have you here, Dr. Bosworth. We look forward to your testimony.

**STATEMENT OF BARRY BOSWORTH, PH.D., SENIOR FELLOW,
ECONOMIC STUDIES PROGRAM, THE BROOKINGS INSTITUTION,
WASHINGTON, DC**

Dr. BOSWORTH. I have a written testimony which could be submitted for the record, and I would like to make just some summary comments.

First, I really do want to thank this committee, and the advisory committee, for the attention that they have brought to this issue of the Consumer Price Index, because I think it is an issue that extends far beyond the Consumer Price Index to the whole statistical system of the United States which, in my view, for years has been dramatically underfunded and has failed to keep up with the technological changes in the U.S. economy.

With this being said, however, I think that my view is that the commission has exaggerated the evidence on the extent of the upward bias in the Consumer Price Index and has paid too little attention to other areas of research that suggest biases that run in the other direction.

I do not mean these reservations to in any way detract from a whole set of recommendations about improvements that could be made in the CPI. I do not think it is necessary to agree precisely on the magnitude of the effects in order to agree that there are good things to do.

I think the issues of the CPI can be divided into two areas. One, is a set of technical issues, this morning discussed mainly under

the heading of substitution bias. I think that those biases exist. I would disagree a little bit with the commission about the magnitude, but it really does not matter.

I think we have new modern procedures that could deal with those. I think the funds should be provided to the Bureau of Labor Statistics, and they should be encouraged to implement these changes as fast as possible. In particular, I think that they can go to some new forms of what are called superlative indexes to deal with the substitution bias.

The big issue and problem, I think, with the report lies in the area of quality change. Quality change is often just in the eye of the beholder and it is a little difficult to quantify exactly what we mean.

The crux, is that I think there is a failure to appreciate, both publicly and professionally, the extent to which the Consumer Price Index already makes a lot of adjustments for changes in quality. In some cases, those changes underestimate the magnitude of quality change, but there are also lots of examples of where they overestimate the magnitude of quality change.

The BLS contributed to this problem until recently because they have never provided very much information on the quality changes that were made in the index. Most recently, a study has come out from the BLS that documents the changes in 1995, 1983, and 1984.

It really was startling, I think, in many respects to discover that the quality adjustments amounted to about 2.5 percentage points to the CPI in 1995, meaning that we had an increase in inflation of around 4.5 to 5 percent, and about half of it was taken away in quality changes, leaving a sort of pure price increase of about half that magnitude. That, I think, is surprising to people outside, that there was that much adjustment taking place.

Second, when you look at it there is a concern that some of these adjustments are overstating the size of the quality adjustment, most specifically, in a specific kind of adjustment that the BLS makes. Most quality adjustments occur when a new model is introduced, or, for some other reason, there is a break in the collection of the information on the price statistic.

A common procedure used by BLS at that point in time is simply to assume that, in the change in model year, was all quality change. So for the specific month in question, they dropped the item out of the index and simply assume that its rate of price increase was roughly the same as all the other components that were being measured at that time.

If it turns out that manufacturers, in producing products, save up price increases for the introduction of a new model year, like, for example, we know was very common with automobiles in the old days, then this procedure ends up overestimating the amount of quality change because they have camouflaged the price increase in the model year.

If, on the other hand, quality changes are something that occur steadily all through the year and are put in the model as they occur, they would be missed because they are too small to technically be viewed as a major change in the product, and you just price it from one month to the other.

So a lot of the question has to do with whether or not there is a tendency for companies to save up price increases and implement them at the time the new models are introduced.

That, I think, is an area where very little research has been done to date because very little data has been available from the Bureau of Labor Statistics about the nature of these adjustments, but I think it could run in the other direction.

Therefore, I do not really think that there is any professional agreement on the studies of the magnitude of the bias due to quality. This is not something that, in my view, somehow you could go outside BLS and you could take a vote of a bunch of economists and they all know. It is not anything that my profession has any particular evidence on one way or another.

I have heard people say the country is going to hell in a hand basket, and other people think the quality of life is steadily getting better. It is very difficult to arrive at a specific figure for what the improvements in American standards of living have been in recent decades. I think it is an illusion to believe that somehow you can set up a national commission that will put forth a number.

I think there is no problem with this Congress deciding to go back to a system in which it makes the decision each year on how much to increase Social Security benefits. As Senator Moynihan said, you used to do that before 1972 and you can do it, if you want to, again.

However, there is no way—

Senator MOYNIHAN. Sir, with great respect, it was not a decision, it was an auction. [Laughter.]

Dr. BOSWORTH. That is what I was just going to say. You cannot avoid, however, responsibility for those decisions that you make. They will be your decisions. There is no scientific basis that I know of to say that the cost of living has increased 1 percent this year versus someone else who says it is five-tenths of 1 percent. It is an illusion to believe that my profession can give you a number like that.

The CHAIRMAN. Dr. Feldstein, would you like to comment on the points raised by Dr. Bosworth?

Dr. FELDSTEIN. I think he and I agree that you cannot produce a scientific number in a rigorous, reproducible way that can be called the increase in the cost of living, that it has to depend on judgment.

I think the fact that he looks at the conclusion of the Boskin report and says he thinks it is too high underlines the fact that different economists are going to have different judgments about that.

But I do not think that it undermines the usefulness of having a group who study in detail what the BLS does, and look at the evidence around them and try to form an informed judgment. I think that is better than pulling the number out of the air or holding an auction, as Senator Moynihan said.

So, it is not a perfect solution. It is an important problem. You need to get the best inputs that you can. I think that the Boskin Commission group did an excellent job. I would say that that is the way in which you are going to have to resolve this in the future going forward. There is no better way of answering that, even though it is an imperfect way.

The CHAIRMAN. You, in your testimony, suggested having an advisory committee of experts. I guess my question is, how do we avoid from being politicized? I think one of the strengths of the Boskin study has been that it has been nonpolitical. I think everybody agrees with that.

But how would you appoint a rotating group?

Dr. FELDSTEIN. Well, I do not know how the names were selected for this group, but if I am right, at least two of the five members were Democrats and at least one of the five members was a Republican, and I do not know about the other two. So if it is the Senate Finance Committee that is going to appoint them, then having the Chairman and the Ranking Minority do the selecting is the way to go.

The CHAIRMAN. It sounds like a very excellent recommendation. [Laughter.]

Would there be any merit in looking at positions rather than individuals, for example, having the chairman of the Federal Reserve and people in other economic positions?

Dr. FELDSTEIN. Well, I think they would then have to delegate it, so you would be asking for the staffs of those people. One of the good things about this group of five is they really are experts in this set of problems.

They have been studying the procedures of the BLS, they have been studying the detailed data in the past, so you do not want to just pick five economists at random, no matter how distinguished their academic or professional position, and say, go study this issue and give us a recommendation. You want people who have been interested in this set of issues.

I might just say also, that if this becomes an ongoing procedure I think we will see more academic research on these subjects. In the past, this was regarded as a quite arcane set of issues and you needed a group of quite specialized people who had worked on it.

But I think, if every few years there is going to be a professional group that comes up with a recommendation about this very important question, I will bet there will be a lot of research being done by quite independent academics, not part of a process, but trying to inform on these issues of some of the questions that Barry Bosworth raised about just when quality improvements are made, whether those quality improvements appear to be greater than the price adjustments that are made at the same time, or less than the price adjustments that are made at the same time.

The CHAIRMAN. It does seem to me that the testimony of Dr. Abraham underscores the need of Congress having some expert advice in these areas, because we are making major, major decisions each year that have tremendous impact on both individuals and the national economy.

I would like to follow-up on a question or a comment Dr. Bosworth made. He indicated that government statistics are not too accurate, too satisfactory. Is this a matter of concern for you, and in other areas as well, facing this kind of a problem?

Dr. BOSWORTH. Yes, it is a matter of great concern. Katherine Abraham, for example, mentioned that the Consumer Price Index could be updated from information from the consumer expenditures survey which is undertaken on a regular basis now.

I have had occasions to work with that survey. I must say that the quality of that data is incredibly low. The number of households who drop out of the sample is too high. It is very unsatisfactory that we do not have a better statistical base in the United States. We have not kept up with the service sector in trying to measure it, either in the area of prices or in the area of physical output.

So all of these things are of concern. The reason, though, I think is fairly clear: the country has cut back rather considerably on the budgets that we spend on trying to gather this sort of statistical information. We can do a much better job, but you cannot do it for nothing. It is going to cost more money to do it.

The CHAIRMAN. Dr. Feldstein, do you want to comment?

Dr. FELDSTEIN. It is hard for me, as a researcher who uses a lot of data, to be against spending more money on improving the data. But there are going to be some things in the end that we are not going to be able to measure, even with better data. So in the current context, I think no matter how much you spend there is going to be an unavoidable element of judgment required.

Dr. BOSWORTH. If you cannot measure it, how do you know it? I mean, I have trouble with this notion that there is a group of experts with unknown data that know what the standard of living of Americans is happening over time.

Dr. FELDSTEIN. But on that basis you would say, well, the Fed cannot measure inflation and they cannot measure unemployment, and they certainly cannot measure GDP growth, so we might as well forget about monetary policy because we do not know if we are doing well or badly.

Dr. BOSWORTH. Well, they do measure that. That is my point. There is a statistic that they look at. They look at real numbers to measure inflation. They look at real numbers for unemployment.

Dr. FELDSTEIN. No, no. They look at numbers for unemployment. They look at an index number which you would—

Dr. BOSWORTH. They do not suggest that somehow they have got some professional opinion about what is happening to people's standard of living. What is the information that is available to my profession that is not in the Government statistics that we know that the quality of life of Americans is improving faster than the statistics say?

I mean, remember, this is not a small thing. In the last two decades, average real wages in the United States have been going up only about 1 percent a year. The suggestion here, is that the rate of increase of Americans' income is twice what the statistics say it is. Why are people complaining in this country? They must be greedy. Their standard of living has been rising dramatically over the past, and would be expected to in the future. Where do you get these notions, if you believe these reports?

The CHAIRMAN. Dr. Bosworth, my time is up. I will give you 30 seconds to respond, Dr. Feldstein.

Dr. FELDSTEIN. At the American Economic Association meetings that you referred to before, Professor Nordhaus, who is a professor at Yale University and was a member of the Council of Economic Advisors to President Carter, reported a very interesting study

using household survey data in different years and looking at the question, are you better off than you were last year.

In some years real incomes, as measured by the CPI, went up more, and in some years they went up less. One could try to infer from that data on what people say about their own improvements in the standard of living how much of a bias there is in the CPI. What he found, was that that bias was about 1.5 percent.

So that exactly what Dr. Bosworth was saying, people say this, people say that, but if you look, on average, at how people respond to the question, are you better off than you were before, they, in effect, think that their real incomes are rising by 1.5 percent more than the statistics suggest.

The CHAIRMAN. Senator Moynihan.

Senator MOYNIHAN. This is wonderful. May I just stick up for the softer side of these subjects? That particular work that Nordhaus referred to, he is using a device developed by two Princeton sociologists in the 1950's called the Self-Anchoring Striving Scale. You put yourself at five and say, where were you, where do you think you are going to be? So, sociology sometimes does something.

Could I just say, Mr. Chairman, that you are hearing a wonderfully rich and evocative discourse here. When I became the Assistant Secretary of Labor so many years ago, Oscar Morgenstern, also at Princeton, had written a long book—and the article was in *Fortune*—on government statistics, which he thought were just all wrong, useless, presumptuous and calamitous. He made a point, on which he was somewhat mistaken. He pointed out that the BLS had two unemployment series. Well, one was insured unemployment and the other was gross unemployment.

I was going to write a letter to *Fortune* saying, aha, Morganstern got you! But then I was just prudent enough to think maybe it is best not to get into a statistical argument with the co-author, with J. von Neumann, of *The Theory of Games and Economic Behavior*, so I forbore. But you always have the general problem of, it is a big, complex world and it is hard to get anything right.

Still, we do much better than we ever did before. I mean, we really do. We know so much more and we are better off, in consequence. The National Bureau of Economic Research is where this all began back in the 1920's. It is, perhaps, wrong for me to put it this way. But if we were looking for a sponsor for a commission that would review the whole subject and give us adjustments from the specific data, the National Bureau would not be the worst candidate, would it? I do not want to press you.

Dr. FELDSTEIN. I would want to think about how we would do that if you came to us with that challenge.

Senator MOYNIHAN. You would want to think about it.

Dr. FELDSTEIN. But the Stigler Commission was an NBER report.

Senator MOYNIHAN. I just leave that as something to be said. You heard a wonderful exchange, and that is why it is a wonderful job they have. Better than ours, I will tell you that.

Thank you, Mr. Chairman. Thank you, gentlemen, doctors, both. The CHAIRMAN. Senator Grassley.

Senator GRASSLEY. At least one person who has looked at the Boskin Commission report has alleged that there might have been

a double counting of some of the biases that they have looked at. As you have looked at it, have you considered that there might be some identifiable overlap that we need to consider as we are looking at the results of this commission?

Dr. FELDSTEIN. I do not hold myself out to be enough of an expert on the details to say about each specific item whether they may have gotten it exactly right or not.

Senator GRASSLEY. Do you know how many?

Dr. BOSWORTH. What was discussed here this morning is Level I bias and Level II bias. If you fixed the lower level bias, then the estimate of the bias of the upper level would be less than it now is. Is this a major issue? No. Given the accuracy with which we can measure the substitution biases to begin with, this little overlap is not a significant part of the problem.

Senator GRASSLEY. I cut you off.

Dr. FELDSTEIN. The big problem keeps coming back to being this issue of quality change in new products.

Senator GRASSLEY. All right. Now, I would like your view on, because for the elderly there will be evidence that the cost of living is higher and we ought to have a separate index for the elderly, do you believe it would be wise to develop such a separate CPI?

Dr. FELDSTEIN. I can certainly see the case for doing it, and I do not see any reason not to do it, if that is what the committee, the Congress, thought was a good thing. When I was CEA chairman we did look at the cost of living, a separate bundle, that somebody in the government constructs for the elderly. I cannot remember who it is, who does it. You are pointing. Is it the BLS who does it?

Senator MCYNIHAN. There was a nod behind you.

Dr. FELDSTEIN. Yes, the BLS. At the time, at least, there was very little difference. Surprising to me, there was very little difference between the cost-of-living bundle of goods, the CPI for the elderly bundle of goods versus the CPI for the regular non-elderly, which is the number that we get from the BLS regularly.

Senator GRASSLEY. On the question of substitution, the BLS has raised a question of whether or not physician services and prescription drugs are items or services that the consumers would substitute. Would you agree with that assessment?

Dr. FELDSTEIN. A very complicated question, because of the role of insurance, the role of HMOs and all that. But I believe that if the issue is, are consumers price sensitive to that, which is really what the essence of the substitution questions are about, in general, yes, I think the consumers are quite price sensitive. The doctor gives them a prescription, they say, my God, that is very expensive; I will not bother to fill that. So, yes, I think people are quite price sensitive, in those areas, as well as in other areas.

Senator GRASSLEY. Do you have an opinion on that, Dr. Bosworth?

Dr. BOSWORTH. I would agree. I do not see any problem with trying to go to something like geometric weighting at the lower level. I am not sure that there is a lot of substitution, but I do not see any reason to have the cutoff point being the elasticity of substitution of unit, either. You could have very high substitution in some products.

So I think, as a neutral assumption, the idea of going to geometric weighting at the lower level, at least to me at first glance, looked like a pretty sensible proposal.

Dr. FELDSTEIN. But, again, I would say that if this now starts to be a thing that the economics profession is going to be called upon in future, Boskin-type commissions to deal with, there will be a lot of research on the degree of substitution because economists will say, this is an important issue, let us see what we can do with our tools to contribute to this process.

Senator MOYNIHAN. Mr. Chairman, may I just make a quick closing point? Yesterday the Senate voted on a proposed constitutional amendment which would suspend certain procedures in times of recession. What was not brought out much in the debate, I think not at all, was that we do not know we have had a recession until the National Bureau of Economic Research tells us we did. This very important fact is determined by something called the Dating Committee, I believe. It sounds like the senior prom.

Dr. FELDSTEIN. It is called the Business Cycle Dating Committee.

Senator MOYNIHAN. Business Cycle Dating Committee.

Dr. FELDSTEIN. Distinguish it from our senior prom Dating Committee. [Laughter.]

Senator MOYNIHAN. But we have turned to the National Bureau to give us the formal assessment that there was a recession, it went this many quarters, and had this large a dimension.

The CHAIRMAN. Well, gentlemen, thank you very much for being here today. Again, we will call on you in the future for further aid and assistance. So, thank you for being here.

Dr. FELDSTEIN. You are very welcome.

The CHAIRMAN. It is now my pleasure to call forth a very distinguished panel made up of Meredith Bagby, member of the board, The Third Millennium, New York; James L. Martin, president, 60 Plus Association, Arlington, VA; Esther Canja, American Association of Retired Persons; and Linda Chavez-Thompson, executive vice president, AFL-CIO.

Ladies and gentlemen, it is a pleasure to welcome each and every one of you here. Your full statement will, of course, be included in the record and we would ask that you keep your comments as brief as possible, but in any way case within 5 minutes.

We will start with Meredith Bagby.

**STATEMENT OF MEREDITH BAGBY, MEMBER OF THE BOARD,
THE THIRD MILLENNIUM, NEW YORK, NY**

Ms. BAGBY. Good afternoon, Mr. Chairman and members of the Senate Finance Committee. I am pleased to be here. I am Meredith Bagby, and I am here representing The Third Millennium, which is a nonpartisan youth organization dedicated to the economic stability of our Nation.

I think my purpose in being here is very simple. It is to recommend what you have already heard from a number of economists about the CPI. I also want to highlight why your decision on this issue is crucial to the future of the Americans in my generation, and the generations that follow.

More than a year ago, the Boskin Commission was appointed to study the Consumer Price Index. This impressive group of econo-

mists told you that it was overstated by 1.1 percent and, indeed, that the problem is nothing new.

The CPI has almost always overestimated inflation because it is not a cost-of-living index, as we have heard today. Even my introductory economics book that I used in college called "Economics: Principles and Policy" by Baumol and Blinder reported that the CPI overstated inflation, hitting a peak bias of 4 percent in 1979. According to the Boskin Commission, prior to 1996 that bias averaged 1.3 percent annually. Again, this is not a new problem; it is older than most of the people in my generation.

Our delay in correcting this problem has cost us hundreds of billions of dollars in the past and threatens the economic solvency of our government in the future. The Boskin report tells us that, if left uncorrected, the current bias in CPI would contribute about \$148 billion to the deficit in 2006.

Remarkably, in that year alone the cost of the error would be so big that it would surpass all but three Federal programs in size, those being Social Security, health care, and defense.

In that year, the mistake would cost us more than all of our spending on education, welfare, and international affairs combined. Between now and 2008, an overstated CPI would contribute more than \$1 trillion to the national debt. That is all according to the Boskin Commission.

In looking at these numbers, it is easy to see why the people in my generation are nervous. Just over 30 percent of all Federal spending is indexed to the CPI. Not adjusting the CPI is another step toward an unsustainable buildup of debt for generations to follow, toward a disaster for our entitlement programs, and toward a continuation of a serious generational disparity that is going on in this Nation.

The Office of Budget and Management projects that future generations can expect to pay an 84 percent average lifetime net tax rate if we do not curtail our government spending. Professor Alan Auerbach of the University of California at Berkeley calculated that a 70-year-old man in 1990 would receive net lifetime benefits from the government of \$46,000. In contrast, an average 25-year-old man can expect to have negative net benefits over his lifetime of \$226,000.

What is the solution to this economic inequity? I think we have to start by being honest about how we index America's most expensive social programs and taxes. The Boskin Commission makes a recommendation. "Congress and the President must decide whether they wish to continue the widespread, substantial over-indexing of the various Federal spending programs and features of the Tax Code.

If the purpose of indexing is accurately and fully to insulate the groups receiving transfer payments and paying taxes, no more and no less, they should pass legislation adjusting the indexing provisions accordingly."

I think the other members of this panel would agree that we cannot make this a political issue. Horace B. Deets, the executive director of the AARP, agreed when he wrote, "In improving the accuracy of the CPI, we should keep the politics out of it."

What exactly does it mean to keep the politics out of it? It means that we ought to ask the experts and then act promptly on their advice, that we make our decision based on evidence and not on lobbying power. The preponderance of evidence in this case—in fact, over three decades of evidence—by America's finest economists and scholars shows, indeed, that the CPI is overstated.

Indeed, the Members of Congress have been told by the Federal Reserve Chairman, Alan Greenspan, whom we have spoken of much today, a man who does not make his statements lightly, that there is almost 100 percent certainty that the CPI overstates inflation. I do not know of any evidence that is more compelling.

Finally, to those who would say that an adjustment to the CPI would be the political fix Greenspan adds, to the contrary, assuming zero for the bias—in other words, doing nothing—is the political fix. On this issue, we should let evidence, not politics, drive policy.

If you, indeed, let evidence drive policy, then you will send a message to the people of my generation that accuracy does, indeed, count that you will not pass the buck to a generation already straddled with \$5.3 trillion in debt, and that, indeed, you care about our future, too. My generation is not looking for any special favors, we just want this Nation to hold the same opportunity that it did for our parents and grandparents, and for all of the generations that have brought us this far.

But if America is to provide that opportunity, we must make intelligent fiscal decisions now. We must listen to those whom we have asked to help us, our economists and scholars. Indeed, they have sounded the alarm and we must listen.

Thank you very much for having me.

[The prepared statement of Ms. Bagby appears in the appendix.]

The CHAIRMAN. It is now my pleasure to call on Ms. Thompson, the executive vice president of the AFL-CIO.

STATEMENT OF LINDA CHAVEZ-THOMPSON, EXECUTIVE VICE PRESIDENT, AFL-CIO, WASHINGTON, DC

Ms. CHAVEZ-THOMPSON. Thank you, Mr. Chairman. I appreciate this opportunity to testify on behalf of the AFL-CIO regarding the important matter of the Consumer Price Index, CPI.

This is a matter that raises both technical and policy concerns. The former are dealt with in our written testimony, and I will concentrate on the latter in this oral testimony.

The AFL-CIO is vigorously opposed to any Congressionally-mandated replacement or adjustment of cost-of-living allowances based on the CPI. We also oppose subjecting the Bureau of Labor Statistics to political pressure to change its methods of calculating the CPI. The stakes are enormous, since the economic well-being of millions of Americans depends on the accuracy of the CPI as a measure of cost-of-living inflation.

The CPI has been in the news a great deal since the Boskin Commission released its finding that the CPI overstates cost-of-living inflation by 1.1 percentage points a year. We would like to emphasize that the commission's findings are contested by a number of highly-respected economists, some of whom believe that the CPI may actually understate cost-of-living inflation.

This alone suggests that the Congress should hold back regarding making any changes. Despite this, some policymakers view a technical revision of the measure of cost-of-living inflation as an expedient means of reducing the budget deficit.

Their thinking is that such a revision would reduce COLAs for Social Security and welfare benefits, while also reducing indexation of the tax system. This is tantamount to balancing the budget on the backs of America's elderly, veterans, poor, and ordinary working families.

The Boskin Commission's findings are being used to provide political cover for this maneuver. The unstated reality is that nearly every dollar of deficit reduction achieved in this fashion would come straight out of the pockets of those who can least afford it.

Reducing COLAs based on the CPI would hurt millions of workers whose employment contracts include cost-of-living adjustments. Indeed, the effect on wages would be felt far wider, since workers without COLAs would also be impacted.

This is because the CPI serves as a benchmark in guiding wage increases for both union and non-union workers. Acceptance of the Boskin Commission's claim would provide employers with a justification to lower wage increases across the board. The net result would be further adverse shift in income from wages to profit, to the detriment of working families.

Another group that would be brutally impacted is Social Security recipients. Social Security has been tremendously successful in reducing poverty among the elderly. Were it not for Social Security, 54 percent of the elderly would be in poverty. Social Security recipients are protected against inflation by annual COLAs tied to the increases in the CPI.

Reductions in COLAs of 1.1 percent per year would quickly push many Social Security recipients into poverty. For instance, a retired couple receiving benefits of \$13,400 would suffer a cumulative benefit loss of \$2,360 over the next 5 years.

Since 1981, the Federal income tax has also been indexed with reference to CPI inflation. A downward adjustment of the CPI would reduce bracket levels and exemptions, thereby triggering a substantial tax increase for American taxpayers.

Many other provisions of the Tax Code are also indexed, including the Earned Income Tax Credit. This provision is of special importance to lower-income working families, and it also provides incentives for low-wage workers to seek out employment rather than to rely on welfare.

Low-income families would be further hurt because they rely so heavily on indexed entitlement programs and pensions. Fewer families would be eligible to receive these vital benefits because of income thresholds, and families' eligibility would be reduced.

The above testimony details the disastrous implications of accepting the Boskin Commission's claim that cost-of-living inflation is overstated. The AFL-CIO's concern is bolstered by the fact that leading experts strongly disagree with their findings. These include Janet Norwood, a former BLS commissioner, and Dean Baker, of the Economic Policy Institute.

The Boskin Commission focused on ways the CPI might be overstating inflation, and down-played sources of understatement. The

BLS produces very fine statistical work and pushes an honest measure upon which Americans can rely. This measure is revised and updated on a continuing basis, and the BLS is aware of the technical issues raised by the Boskin Commission.

There is now an imminent danger that the commission's report will be exploited as a politically expedient means of balancing the budget. For all of the reasons presented above, the AFL-CIO strongly opposes tampering with either the CPI or COLAs based upon the CPI.

We oppose subjecting the BLS to political pressure to change their method of calculating the CPI. This would ultimately undermine public confidence in all of the Nation's statistical agencies.

We urge the distinguished members of this committee, and others in Congress, not to take any of these misguided steps. Balancing the budget on the backs of working families and America's most vulnerable is cynical and wrong.

Since 1979, income inequality and economic polarizations have increased. Tampering with inflation indexing in the computation of COLAs would reinforce these trends. Cooking the books in this fashion is the wrong way to achieve fiscal integrity and will exacerbate the Nation's problem of economic equality.

Thank you again for this opportunity to present the views of the AFL-CIO on the vital topic of the CPI and the measurement of cost-of-living inflation.

[The prepared statement of Ms. Chavez-Thompson appears in the appendix.]

The CHAIRMAN. Thank you, Ms. Thompson.
Mr. Martin.

STATEMENT OF JAMES L. MARTIN, PRESIDENT, 60 PLUS ASSOCIATION, ARLINGTON, VA

Mr. MARTIN. Thank you. Thank you for this honor to speak on behalf of senior citizens, Mr. Chairman. 60 Plus is a 5-year-old, nonprofit, nonpartisan group, not taxpayer-subsidized, supported by voluntary donations from its citizen lobbyists. We take no corporate money, and none from political parties.

I also send regards today from a new advisor to our committee, former Senator Pressler, of this committee last year, and our honorary chairman, a former Indiana Congressman named Roger Zion, who served here with distinction in the 1960's and 1970's.

As administrative assistant also to a former colleague of yours, the late Senator Edward Gurney of Florida, a World War II hero and a hero of mine, I can appreciate the work that goes into these hearings.

60 Plus agrees with Senator Roth and Senator Moynihan when they correctly point out that the question is not about an increase or a decrease in the CPI, it is, simply put, an attempt to find an accurate measuring device for future COLAs, cost-of-living adjustments.

I would also like to make it crystal clear that the finest friends seniors have in the U.S. Senate sit right here on this committee.

As I prepared this testimony before coming here, I turned for advice, as I so often do as I grow older, to my favorite senior citizen,

my mother—my sainted mother, if you will—who is alive and well, and, I might add, still working down in Florida.

She said you Senators would do what is right. In the words of Senator Breaux, she said she wanted what she deserved, nothing less, nothing more. That if she is entitled to a \$13 a month increase instead of a projected \$21, perhaps, based on faulty measuring devices, then the \$8 monthly savings would be that much less than the young folk would have to pay in the way of taxes.

She further said, if there has been a mistake made in calculating benefits, then let us correct it. Growing up as she did in the Great Depression, she said one reason you had erasers, was so that if you made a mistake you corrected it and you moved on.

If the Boskin Commission's findings are adopted, I believe a corrected CPI will help seniors in the long run by leading toward a balanced budget and a stabilized Social Security system for at least another full generation.

There is widespread consensus that the CPI significantly overstates the rate of increase in the cost of living. Nowhere have I seen that BLS has made adjustments for understating our downward bias, even though critics of Boskin try to make a case for this argument.

Federal Reserve Board Chairman Greenspan says that the best available evidence suggests that there is virtually no change that the CPI understates. He says there is about a 100 percent probability that we overstate. The BLS commissioner, today, acknowledged that it overstates.

Again, Senator Moynihan has correctly, and rather forcefully, described the question as not about an increase or a decrease, but an attempt to find an accurate measuring device for future COLAs.

Senator Moynihan further points out that no major study has been made to modernize the methodology of the BLS since the 1961 Stigler report and when he was a young Assistant Secretary of Labor in this town.

Bipartisan action is the order of the day. Last year, a reduction of about a half a percentage point won the support of 46 Senators: 24 Democrats, 22 Republicans. To politicize the issue is to ignore the enormous long-range problems facing Social Security and Medicare, and it is a disservice to the highly-regarded Boskin Commission.

I honestly believe that this Congress and this President working unselfishly together—and I mean unselfishly together—has one of those once-in-a-lifetime moments to make a real contribution toward the solvency of this country's fiscal future. There is a window of opportunity here for Congress and the President, particularly the latter, to seize the moment to do what is right.

President Clinton can secure his place in history, or, as former New York Governor Mario Cuomo has said, can make his mark. He could truly take this out of the political arena by issuing an executive order directing his Secretary of Labor to implement the Boskin recommendations.

In conclusion, at 60 Plus we have a slogan: Tax Fairness for Seniors. There are lots of unfair taxes, I think, on seniors, working, as well as retired seniors. Just one of these is the 33 percent extra tax on seniors' earnings in the 65 to 69 age bracket.

But if 60 Plus is to be credible when working for tax fairness for seniors, then 60 Plus must acknowledge when taxes may be unfair for other age groups, such as Ms. Bagby's group, my children, your children, and grandchildren's age brackets. This is fairness for all, the very point of view of my favorite senior again, my mom. That is why 60 Plus will be credible, we think, later when we lobby you for true tax fairness for seniors. We are trying to be very fair to all age groups. Thank you.

[The prepared statement of Mr. Martin appears in the appendix.]

The CHAIRMAN. Thank you, Mr. Martin.

Now I would like to call on Ms. Canja, who is vice president of the American Association of Retired Persons.

STATEMENT OF ESTHER CANJA, VICE PRESIDENT, AMERICAN ASSOCIATION OF RETIRED PERSONS, PORT CHARLOTTE, FL

Ms. CANJA. Thank you, Mr. Chairman. I am Tess Canja, vice president of the American Association of Retired Persons. We appreciate your invitation to present our views on the Boskin Commission report on the Consumer Price Index.

Let me emphasize that AARP believes the CPI should be as accurate as possible. In our view, the nonpartisan, nonpolitical experts at the Bureau of Labor Statistics should continue their ongoing responsibility for adjusting this important national index to assure its accuracy.

If, as occurred in 1995 and 1996, BLS's research validates the need for an adjustment to the CPI, AARP would not object. We recognize that the fiscal integrity of the overall Federal Government and the Social Security trust funds depend on an accurate CPI. We know the economic security of millions of Americans also depends on a properly calculated index.

However, AARP would continue to oppose legislative reductions in the CPI in the absence of BLS substantiation. AARP is well aware of the issues raised by the Boskin Commission. We asked a noted CPI expert, former Assistant BLS Commissioner for Prices, Dr. Joel Popkin, to analyze the commission's findings. Popkin found their conclusions "non-convincing," and warranted "no basis for Congress to change the CPI."

Popkin questions the commission's methodology. He emphasizes, (1) the absence of supporting evidence to justify their new goods and quality bias estimate; (2) the improper adding together of overlapping components of the substitution bias; and (3) the commission's failure to consider all aspects of a cost-of-living index, particularly those that might indicate an understatement. Similar concerns, as you have heard today, have been raised by other economists, the BLS, and in the administration's fiscal year 1998 budget.

Federal Reserve Chairman Greenspan has proposed a two-track approach for indexing Federal benefits and taxes. His first track, to expedite BLS's ability to continue improving the CPI without legislative interference, is consistent with our position.

However, our written testimony raises numerous questions about the need for, composition of, and responsibilities of his second track, which is a commission to determine indexing levels.

Please remember, the proposed commission would do more than generate budgetary savings. It will have a significant impact on

real people. If Federal benefits are under-adjusted for inflation, millions of vulnerable Americans will lose dollars they depend on to meet their day-to-day expenses.

For example, a 1 percentage point reduction in the CPI means a 65-year-old widow earning \$8,500 in Social Security benefits would lose over \$5,000 over the next 10 years.

Indeed, as the split Advisory Council on Social Security unanimously noted the full COLAs beneficiaries receive throughout their retirement are one of the program's most important contributions to income security.

If the CPI is arbitrarily reduced, other vulnerable populations would be affected. For example, it means the Earned Income Tax Credit, child support or alimony payments could be inadequate, since they are pegged to the index. In short, we believe it is better to be precisely above the poverty line than roughly below it.

Instead of the Greenspan approach, an independent panel of academic experts could be established, similar to the current business and labor advisory panels that report directly to the BLS. This could help ensure that BLS's adjustments to the CPI are technically accurate and independently calculated.

However, if Congress wants to ignore the BLS or go beyond what the agency finds supportable, it does not need to create another commission. Instead, Congress can go to the American people and explain it has to cut COLAs and increase taxes as a means of cutting the deficit. Since deficit reduction is important to all of us, we should have a say in how it is implemented.

Thank you.

[The prepared statement of Ms. Canja appears in the appendix.]

The CHAIRMAN. Well, I want to thank each and every one of you for being here this morning. I guess, given the diverse interests of the membership of the organizations you represent, I cannot say that I am particularly surprised by your testimony.

But I would like to have each one of you comment on the importance of accuracy in government statistics. For example, if the Boskin Commission report, and Dr. Greenspan, had revealed an understatement of inflation, would your views be the same today?

Mr. Martin.

Mr. MARTIN. Well, I am glad you asked that question. In fact, I mentioned that in my prepared remarks, and I think Senator Breaux touched on this earlier too. I have said it before, and I have wondered out loud, were the shoe on the other foot, so to speak. I would still be here today saying exactly the same thing. I think tax fairness means a lot to all age groups, again, not just, obviously, senior citizens. But, yes, I think there might be a different spin on things by others here today.

The CHAIRMAN. Ms. Bagby.

Ms. BAGBY. I agree. I think that the most important thing is accuracy. I think the thing that concerns my generation is that the government is accurate in its estimation of the CPI and all of these other statistics. Not only that, but I think for your bond holders out there, people who hold U.S. debt, people who invest in this country, I think it is very, very important that we get it right. The CPI is not just about Social Security, the CPI has a lot of other impacts on the economy. I think we all agree on that. It has to be correct.

I think the overwhelming evidence in this case, from economists and scholars, is the fact that it overstates inflation.

I cite again, this is in an introductory economics textbook that I used when I was a freshman in college, it is something that has been going on for three decades. There it is. Right. I think that the preponderance of evidence shows that it is overstated, and all we are asking for is accuracy.

The CHAIRMAN. Thank you.

Ms. Canja.

Ms. CANJA. Well, we stressed in our testimony the importance of accuracy. But AARP has a track record on this issue of when the statistics might favor certain of our members, but when we are called upon to do the right thing. This was that whole "Notch" issue, and you know the position we took on the Notch.

So we have to look at two things. We have to look at accuracy, we have to look at who is affected, how they are affected, what is the best thing for our country? We have come down on the side of that. We have been very credible, I believe, in all of our testimony where these issues have been raised.

The CHAIRMAN. Ms. Thompson.

Ms. CHAVEZ-THOMPSON. As long as it is done fairly and it does not affect and hurt the people that it is supposed to help.

The CHAIRMAN. Senator Moynihan.

Senator MOYNIHAN. Well, I just would like to especially thank Ms. Bagby for citing my dear friends, Bill Baumol, and Alan Blinder, on their sixth edition of Economics, Principles, and Policy. This issue goes back 15 years. But they note that, in 1980, the CPI records a 13.5 percent inflation number. It was a very high inflation period.

The Bureau of Economic Analysis, with the GDP inflator, recorded only 9.5. This is not something new to our calculations. We have been teaching this for a generation. I do not think I need to say any more than that, except to note to everybody that Dr. Abraham very candidly and accurately said that the CPI is an upper bound.

We are only trying to get it straight, and we are not introducing anything new. We are not seeking any political fix. This has been in the literature for a very long while.

I think it was interesting, Mr. Chairman, the comment of Martin Feldstein, that the economics profession is going to get a lot more interested and we will learn a lot more. Think of all those young Ph.Ds. But thank you very much. This has been excellent testimony.

The CHAIRMAN. We do appreciate it. There may be additional written questions.

[Whereupon, at 12:29 p.m., the hearing was concluded.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

PREPARED STATEMENT OF KATHARINE G. ABRAHAM

I appreciate the opportunity to testify today on the final report of the Senate Finance Committee's Advisory Commission to Study the Consumer Price Index. The Commission's review clearly has made a contribution to the ongoing discussion of measurement issues bearing on the accuracy of the Consumer Price Index (CPI), and I appreciate the members' work on this important subject.

I intend this morning to focus my remarks on some of the measurement issues raised in the Commission's report and, perhaps more importantly, to discuss what I believe the Bureau of Labor Statistics (BLS) can and cannot do in the near term to address those issues. I will not focus in my opening remarks on the issues raised by the Commission that relate to possible longer-term improvements in the CPI; although some of these issues are quite important, it is my sense that they are of lesser current interest to the Committee. I will, of course, be happy to respond to any questions about these issues the Members of the Committee may wish to raise.

As I believe the Members of the Committee are aware, the BLS has a long tradition of being in the forefront of price measurement research and operational innovation. Given that tradition, I am especially pleased to be able to report that the President's Fiscal Year (FY) 1998 budget includes a program increment that will allow us to take several steps toward increasing the accuracy of the CPI. The BLS will be requesting resources to speed up the process of updating the CPI market basket in future Revisions. Resources to expand the collection of information on the prices and characteristics of certain goods and services, together with resources to be devoted to the early identification of new goods as they become available in the marketplace, also will be requested. This information will enable us to improve the methods we use to adjust for quality change and to insure that new items are brought into the index in a more timely fashion. Finally, the request provides for the production of supplementary measures of change in consumer prices that we believe would provide closer approximations to the change in the cost of living than the currently published CPI. At the appropriate points in my testimony, I will indicate the relationship between these activities and the issues raised in the Commission's report.

The report begins with one overarching recommendation: "The BLS should establish a cost of living index (COLI) as its objective in measuring consumer prices." This seems basically right to me. Indeed, the BLS long has said that it operates within a cost-of-living framework in producing the CPI. That framework has guided, and will continue to guide, operational decisions about the construction of the index. Putting things slightly differently, if the BLS staff or other technical experts knew how to produce a true cost of living index on a monthly production schedule, that would be what we would produce. I therefore have no fundamental disagreement with the Commission about what the objective of our CPI program ought to be, though we disagree to some extent about what changes to the index would be feasible and prudent and about the timetable on which those changes could be implemented.

More specifically, the Commission's report focuses on two broad issues concerning the CPI as a proxy measuring changes in the cost of living of the U.S. consumer. The first is substitution bias, comprising what the Commission terms lower-level and upper-level components. The Commission believes that these components together impart an upward bias in the CPI of 0.4 percentage point per year. The second broad issue involves how best to treat changes in the quality of goods and services that consumers buy, changes in how and where those goods and services are

sold, and the emergence of new goods and services. The Commission believes that failure to adjust adequately for these effects imparts a 0.7 percentage point per year upward bias to the CPI. The total overstatement of the change in the cost of living due to substitution bias and other problems together is judged by the Commission to amount to 1.1 percentage points per year.

Let me talk first about substitution bias. Like the Commission members, I also am an economist. Almost any economist would agree that an index such as the CPI that tracks the cost of purchasing a fixed market basket of goods and services represents an upper bound on the change in the cost of living. Indeed, for many years, the BLS has attempted to explain exactly this point.

Operationally, as the Commission suggests, substitution bias may show up at two levels. By way of background, the CPI is constructed by first aggregating the roughly 90,000 price quotations collected each month to form a series of subindexes for categories of items such as "Apples," "Men's Shirts," and "Prescription Drugs," and then aggregating those subindexes to form the overall CPI. The formula used to aggregate the individual price quotations to form the subindexes does not account for consumers' ability to substitute across items within item categories when the relative prices of those items change—for example, when the price of Delicious apples increases and the price of Granny Smith apples falls. Similarly, the formula used to aggregate the subindexes to form the overall CPI does not reflect the substitution across item categories that takes place when the relative prices of items in different categories change—for example, when the price of apples falls relative to the price of oranges. Were such substitution taken into account, the CPI undoubtedly would rise less rapidly.

To address the so-called lower-level substitution problem, the Commission has suggested adoption of an alternative formula for aggregating price quotations, one that has been under investigation by the BLS over the past several years. As noted above, the current CPI formula does not allow for the potential substitution among items within a category, such as between different varieties of apples, when the relative prices of those items change. The proposed alternative formula, termed the geometric mean formula, is based on a different assumption about consumers' substitution behavior, namely that consumers substitute among items in such a way as to hold the share of their expenditures devoted to each item constant. Neither the assumption of no substitution underlying our current practice nor the assumption underlying the geometric mean formula is likely to provide a close approximation in all cases. It may be more plausible to assume that consumers substitute freely between types of apples or between brands of television sets when their relative prices change than to assume similar substitutability between types of prescription drugs or between electric power companies. The BLS has made a commitment to evaluate the likely applicability of the two alternative assumptions, item category by item category, over the next year or so, and to make a decision at that point about whether to adopt the geometric mean formula in some components of the index.

Upper-level substitution bias occurs because the formula currently used to aggregate CPI subindexes ignores the fact that consumers substitute across item categories when relative prices change. Here, however, the nature of the operational problem faced by the BLS is a bit different than that at the lower level of item aggregation. The detailed data needed to account for lower-level substitution in the calculation of CPI subindexes are simply not available. In contrast, at the upper level of item aggregation, the BLS does collect information on consumer expenditures across item categories, like apples, men's shirts, and prescription drugs. Therefore, it is possible to construct a measure that accounts for substitution across those item categories in response to relative price changes, though not on the same schedule as the current CPI. The expenditure information required to construct such a measure—one of the so-called superlative indexes—is available only with a lag, so that the index cannot be produced until the fall following the year to which it applies. The BLS currently produces these measures on an experimental basis, and would be happy to produce them to a higher standard of precision and reliability. Thus, we are receptive to the spirit of the Commission's recommendation that we produce an annual superlative index as a supplement to the official monthly CPI, and will be able to make substantial headway in this regard if we receive the FY 1998 program increase we will be requesting.

Recognizing the unavoidable time lag in producing a true superlative measure, the Commission recommends that the BLS explore steps that might make the monthly CPI a better approximation to such an index. The Commission has suggested, for example, that updating the index's expenditure weights on a continuous rather than a periodic basis and changing the formula for aggregating subindexes might make the CPI behave more like a superlative index. The BLS is, of course,

open to exploring this sort of option, as can be seen in the variety of experimental indexes we have published for some time, and we will continue our work in this area. Adopting any option that has neither a sound theoretical foundation nor a clear empirical justification, however, would be a mistake. We can produce superlative measures, albeit with a lag, and thus convincingly deal with the "substitution bias" problem. I believe we would gain little, and possibly do much damage to the credibility of our statistical system, if we were to move hastily to adopt untested techniques for producing the official CPI.

I have, purposely, spent a good deal of time talking about substitution bias. The largest share of the bias in the CPI that the Commission concludes exists—0.7 percentage point per year, or nearly two-thirds of the total of 1.1 percentage points per year—arises from other sources. The Commission believes that the failure to make adequate adjustment for changes in the quality of the goods and services people buy and to account properly for the value to consumers of newly available goods, together with deficiencies in the way the CPI treats differences in the prices charged at different retail outlets, constitute a serious problem.

Before commenting on the evidence marshaled by the Commission in support of its conclusions in the quality/new goods area, I would like to note that the BLS already has procedures in place designed to account for changes in the quality of the items being priced. (It often mistakenly has been assumed, though not by the Commission, that BLS makes few or no such adjustments.) Although I would readily acknowledge that our adjustment procedures are not perfect, they do have a very important effect on the rate of price change the BLS reports. The best available information on this point applies to a CPI subindex covering roughly the commodities and services component of the market basket (about 70 percent of the total, with shelter the largest exclusion). During 1995, this subindex would have risen by 4.7 percentage points had these procedures not been applied. Because of their application, however, the subindex actually rose by only 2.2 percentage points over the year. Roughly speaking, these figures imply that the adjustments made by the BLS for changes in the quality of these goods and services amounted to 2.5 percentage points over the course of a single year. I would add that the BLS also has established procedures for bringing new items and new outlets into the index. The expenditure share information used to aggregate the CPI subindexes is updated only once every ten years or so, but the specific stores in which prices are collected and the specific items priced are reselected on a five-year cycle. Although more frequent sample rotations undoubtedly would be desirable, it is a fact that a considerable share of the resources available for producing the CPI are devoted to ensuring that the sample of items priced is representative of what consumers actually are purchasing.

The Commission does not argue, of course, that the BLS is not making a good effort to address quality/new goods biases, but rather that, in spite of a good effort, residual bias remains. The report's approach to assessing this residual bias is to divide the index into 27 categories, and then to make a judgment about the magnitude of the bias in each case. Unfortunately, the evidence applicable to many of these categories is rather sparse.

In some of the categories, absent evidence, the Commission is forced to fall back on its best judgment. The food and beverages categories are perhaps the best examples; the Commission's estimates of upward biases in these categories rest exclusively on not implausible, but unsubstantiated, judgments regarding the value to consumers of increased variety on grocery and liquor store shelves, together with the value of greater choice in restaurants.

In other cases, members of the Commission have produced evidence that bears on the trend in prices for particular sorts of items. I cannot say, however, that this evidence always leads me to the same conclusions as those reached by the Commission. The Commission's estimate that the growth in prices of new and used cars has been overstated by 0.6 percentage point per year in the recent past, for example, rests on data showing that the average age of cars on the road has risen, together with an assumption that current CPI procedures do not capture any of the increases in automobile durability that may have occurred. This latter assumption, however, is incorrect; attached to my testimony is a document listing some of the many durability-related model changes for which adjustments have been made in the CPI over the past few years.

The Commission's estimate that the CPI has overstated the rate of growth of apparel prices by 1.0 percentage point per year since 1985, to take another example, rests on a comparison of the official CPI data with price indexes constructed using Sears catalogue prices for items remaining unchanged from one year to the next. Even beyond the reservations I have about drawing any general conclusions based upon the prices charged by a single catalogue merchant, I am skeptical of any index

based only on the prices of unchanging items, particularly in a market segment where changing fashion is as important as it is in apparel.

On another note, I also would have found the report more persuasive had the Commission made a more systematic effort to explore the possible existence of negative biases in the CPI. Other analysts have hypothesized reduced convenience and comfort of air travel, and deteriorating quality of higher education, as examples of quality decreases that are ignored in the CPI. More generally, whereas the Commission notes some service quality improvements, such as the introduction of automatic credit-card readers at gasoline pumps, the BLS often hears complaints about broad-ranging declines in the quality of customer service, which are equally difficult to incorporate in the CPI.

A more subtle issue is that price increases for many goods occur intermittently and often are timed to coincide with model replacements or other quality improvements. The BLS commonly adjusts for quality differences between successive models by, in effect, treating the difference in price between them as wholly attributable to a difference in quality. There is a risk that this procedure over-adjusts for quality change, imparting a downward bias to the index. Methods have been introduced to try to minimize that possibility, but the Commission paid little attention to this potential problem.

Close to half of the quality/new goods bias the Commission believes exists in the overall CPI is judged to occur in just two areas of the index: medical care and high-tech consumer goods. These clearly are components of the index in which the BLS faces particularly difficult measurement problems, though I cannot say what the magnitude of any bias in these index components might be.

From a BLS perspective, the most important question about possible quality/new goods problems is what we might do to improve our procedures and ameliorate those problems. Recognizing the particular difficulties associated with measuring medical care prices and high-tech consumer goods prices, the BLS has devised and announced important improvements in our methods. These include changes in our hospital price measurement procedures, effective with the data for January of this year, and changes in our sample rotation procedures that will allow us to update item samples in rapidly changing market segments more frequently than once every five years (at the cost of less frequent updates in more static market segments). In addition, the FY 1998 budget we will be submitting would allow us to make important progress in the quality/new goods area, by supporting greater use of techniques that explicitly account for changes in the characteristics of items being purchased and implementation of more aggressive procedures for identifying and beginning to price new goods promptly once they appear in the marketplace.

The Commission's report also discusses the question of new outlet bias, namely, how changes in the mix of retail outlets at which consumers shop ought to be treated. Current CPI procedures treat purchases of a particular item at different retail outlets as distinct transactions; the prices at the different stores are never directly compared. This could impart an upward bias to the CPI if, for example, stores offering lower prices but comparable service gained in market share. As a practical matter, however, measurement of any such bias is complicated by the fact that different types of outlets commonly offer quite different shopping environments. Research on the factors affecting consumers' choices about where to shop ultimately may be helpful in devising appropriate procedures for dealing with changes in outlet mix.

All of this, however, leaves us a long way from having a complete solution to the quality/new goods and new outlet problems the Commission believes exist with the CPI. There is much of what the Commission discusses that we do not know how to measure—or, to put it another way, for which economists simply do not have operational procedures to correct the problems cited. Let me try to illustrate what I mean.

Has the variety of goods and services available to consumers grown? I am certain that it has. Is this variety of value to consumers? Again, I would answer yes. We are, however, a very long way from being able to measure the value of that variety, and thus a very long way from being able to reflect the value of increased variety in the monthly CPI. We have been actively working on potential uses for scanner data in the CPI, one of which might be to allow us to identify new product introductions soon after they occur. Unfortunately, the techniques available for measuring the gains in consumer welfare from those new products (and the losses from product disappearances) are in their infancy, and may never be adaptable for implementation in a large, ongoing price measurement program like the CPI.

To take another example, I would readily acknowledge that there have been major improvements in the medical treatment available for many serious health problems—improvements that have been of indubitable value to those suffering from the afflictions in question. Unfortunately, as a general matter, the BLS has no good way

to measure the value of these improvements. Consider, to take just one example, a hypothetical improvement in knee surgery techniques that gives patients greater mobility following surgery than they previously could have expected. This improved mobility undoubtedly would be of value to those who benefit from the improvement in technique, but there is no obvious or clearly objective way to quantify that value. This is, I believe, an important point about which the Commission and the BLS are in agreement.

The BLS is committed to producing the very best CPI it can. Indeed, as I've noted, our Fiscal Year 1998 budget request proposes an increase in funding that would enable us to make significant progress on a number of the issues we have discussed here today. Although I believe that we can make important improvements in the CPI, I do not believe it to be possible to produce a perfect cost-of-living measure. This means that those who use the data we are able to produce should recognize the limitations of those data and exercise judgment accordingly concerning whether and how the data ought to be used.

Attachment.

Examples of New Car Reliability/Durability Quality Adjustments in the CPI Since 1992:

- Improved corrosion protection—body, electrical system, fuel tank, pump, shocks, brakes and cables
- Increased warranties
- Body side cladding
- Sealing improvements
- Stainless steel exhaust
- Longer life spark plugs—100,000 mile life
- Improved steering gears
- Powertrain improvements
- Dextron III transmission fluid—100,000 mile life
- Water pump front face—150,000 mile life
- Battery saver
- Increased catalyst load—100,000 mile life
- Rust resistant fuel injection—100,000 mile life
- Clearcoat paint
- siled galvanized steel body panels
- Serpentine drive belt

PREPARED STATEMENT OF HON. RICHARD H. BRYAN

First, I welcome the opportunity to join the Finance Committee as a new member. I look forward to participating in the many challenging issues that face this Committee.

Today's hearing on the final report recommendations of the Advisory Commission To Study The Consumer Price Index, chaired by Michael Boskin, is certainly among one of the most challenging.

The final report's title—"Toward A More Accurate Measure Of The Cost of Living"—sums up our purpose today.

While the CPI is the best measure available today, as the report states, it is not a true cost of living index.

It is in the best interests of both beneficiaries who are entitled to receive cost-of-living adjustment increases or COLAs, and the federal treasury that disburses these COLAs to have an accurate cost-of-living measurement.

If the consumer price index is incorrectly calculated—if it is indeed overstated—then action should be taken to ensure we have an accurate way to measure the cost of living.

If the Boskin Commission is correct, and the CPI is overstated by 1.1 percentage points, we are talking about truly substantial amounts of money.

The Commission Report states, "if the change in CPI overstated the change in the cost of living by an average of one percentage point per year over this period, this bias alone would contribute almost \$135 billion to the deficit in the year 2006. By 2008, the increased deficit would be \$180 billion and national debt \$1 trillion."

The impact on our country's entitlement programs, and federal debt is obvious.

I do not believe that any respected economist has asserted that the current CPI is an accurate measurement of price, or that it accurately reflects the cost-of-living upon which to calculate COLAs. If the CPI is incorrect, it is not possible to defend continuing it, as it is.

I believe a more accurate CPI measurement or cost-of-living index can be developed. Federal Reserve Chairman, Alan Greenspan testified last week before the Senate Budget Committee, that the CPI does overstate inflation, and can be improved. Chairman Greenspan suggests providing more funding to the Bureau of Labor Statistics to allow it to implement much of the needed changes to the measurement.

Likewise, the Commissioner of Labor Statistics, Katharine Abraham has recently stated that the Bureau should be allowed to decide on any changes to the CPI calculation.

I do not know if the Bureau can quickly and accurately make the changes needed. But I do know that if changes need to be made, it should be our goal to achieve those corrections as soon as possible.

I look forward to the testimony we will hear today and in future hearings from those who have much different viewpoints on any change to the CPI. Whether the CPI calculation is ultimately changed or not, its repercussions will affect each and every American.

PREPARED STATEMENT OF MEREDITH BAGBY

Good morning, Mr. Chairman, and members of the Senate Finance Committee. My name is Meredith Bagby, and I am pleased to be here representing Third Millennium, a national, non-partisan organization of young adults concerned about the long-term economic future of the United States. Thank you for inviting my organization and me to participate.

My purpose in being here is very simple. It is to endorse, from a youth perspective, what you already have heard about the CPI by an impressive array of economists, academics, and researchers. I also intend to highlight why your decision on this issue is crucial to the future of Americans in my age group and the generations that follow.

More than a year ago, the Boskin Commission was appointed to study the Consumer Price Index. This impressive group of economists informed you that the CPI is overstated by 1.1%, and that this problem is nothing new.

CPI has almost always overestimated inflation because it is not a cost of living index. Even the introductory economics book that I used when I was a college freshman, *Economic Principles* by Baumol and Blinder, reported that the CPI overstated inflation, hitting a peak bias of 4% in 1979. According to the Boskin Commission, prior to 1996, that bias averaged 1.3% annually. Again, this is not a new problem; in fact, it is older than I am (I'm 23).

Our delay in correcting this problem has cost us hundreds of billions of dollars in the past, and threatens the economic solvency of our government in the future. The Boskin report tells us that, if left uncorrected, the current bias in the CPI would contribute about \$148 billion to the deficit in 2006.

Remarkably, in that year alone, the cost of the error would be so big that it would surpass all but three federal programs in size: Social Security, health care and defense. In that year, the mistake would cost us more than all of our spending on education, welfare and international affairs, combined. Between now and 2008, an overstated CPI would contribute more than a trillion dollars to the national debt.

Imagine how foolish today's Americans will seem to future generations if we sit idle. They will look at us in dismay and wonder how we had the gall to pass on to them--needlessly--another trillion dollars in debt.

Looking at these numbers it is easy to see why people in my generation are anxious. Just over 30% of all federal spending is indexed to the CPI. Therefore, not adjusting the CPI is another step toward an unsustainable buildup of our debt, toward a disaster for our entitlement programs and toward a continuation of a serious generational disparity in this nation.

The Office of Management and Budget projects that future generations can expect to pay an 84% average lifetime net tax rate if current government spending is not curtailed. Professor Alan Auerbach of the University of California at Berkeley calculated that an average 70-year-old man in 1990 would receive net lifetime benefits from the government of \$46,000. In contrast, an average 25-year-old man can expect to have negative net benefits over his lifetime of \$226,000.

What is the solution to this economic inequity? Let's start with being honest about how we index America's most expensive social programs and taxes. The Boskin Commission makes a recommendation: "Congress and the President must decide whether they wish to continue the widespread substantial over-indexing of various federal spending programs and features of the tax code. If the purpose of indexing is accurately and fully to insulate the groups receiving transfer payments and pay-

ing taxes, no more and no less, they should pass legislation adjusting the indexing provisions accordingly."

I think the other members of this panel would agree that we must not make this a political issue. Horace B. Deets, the Executive Director of the AARP, agreed when he wrote that in improving the accuracy of the CPI we should "keep the politics out of it."

What does it mean to "keep the politics out of it?" It means that we ask the technical experts and then act promptly on their advice. That we make our decision based on evidence-not lobbying power. And the preponderance of evidence in this case, over three decades of evidence, by America's finest economists and scholars, shows that the CPI is overstated. Indeed, the members of Congress have been told by Federal Reserve Chairman Alan Greenspan, a man who does not make statements lightly, that there is almost a 100% certainty that the CPI overstates inflation. I don't know of evidence that could be more compelling.

Finally, to those who would say that an adjustment to the CPI would be a political fix, Greenspan further says, "To the contrary, assuming zero for the bias," in other words, doing nothing, "is the political fix. On this issue we should let evidence, not politics, drive policy."

I understand why there is a political uproar brewing over this topic. Several interest groups with considerable political clout have reaped a steady windfall from an overstated CPI. Benefit increases that flow to their members are calculated using the CPI, and, simply put, the more the CPI is overstated, the bigger their members' benefit checks.

Now is the time to make the proper adjustments in the CPI. During a hearing Third Millennium participated in last year, Sen. Moynihan, a distinguished member of this committee, noted there is an error at the heart of the government's calculations, and it needs to be corrected. All of the direct mail solicitations, calls to your offices, and expensive lobbying campaigns that may implore you to ignore this error cannot make it disappear. But you have the power to change things.

You have the ability to tell people in my generation that accuracy counts, particularly when it comes to how much you collect of their taxes.

You can send a signal to my contemporaries, through your actions, that you will not collect more taxes than you need to pay for benefits that do not reflect the true cost of living.

You can tell my peers you are serious about correcting a technical error, and by so doing, do not plan to pass on to us and our children another trillion in debt.

Let's recall that Congress dealt responsibly with another technical problem recently, when it followed the recommendation of a different commission and chose not to provide higher Social Security benefits to so-called "Notch babies"—Americans born between 1917 and 1921. In that case, as with the CPI, needlessly perpetuating an overstated benefits calculation stood to cost American taxpayers hundreds of billions of dollars. To its credit, AARP recognized the potential harm that providing artificially high benefits to "Notch babies" would have caused the Social Security system, and it did not persuade Congress to hike benefits to a segment of their membership. We hope AARP will show similar restraint in the CPI discussion, and help ensure that you can make the most intellectually sound technical decision, "keeping the politics out of it."

My generation is not looking for special favors. We just want this nation to hold us the same opportunity it did for our parents, grandparents and all the generations that brought us this far. If America is to provide that same opportunity, we must make wise fiscal choices now. We must heed the warnings of those whom we have asked to help us, our economists and our scholars. They have sounded the alarm, and we must answer it.

PREPARED STATEMENT OF BARRY P. BOSWORTH

First, the Senate Finance Committee and the Advisory Commission To Study the Consumer Price Index are to be congratulated for the attention they have brought to the question of the adequacy of the Consumer Price Index as a measure of inflation. This is an issue that needs to be explored on an even broader basis because I believe that years of neglect and under funding have resulted in a serious erosion of the quality of the U.S. statistical system. Yet, as we learn in this specific case, the accuracy of the statistics can have major implications for the budget and millions of citizens (in this case, taxpayers and social security recipients). Furthermore, the commission's conclusion about the mis-measurement of inflation, if true, radically alters our perception of the course of economic growth and gains in living standards over the past several decades. It would, for example, roughly double the

growth in real wages, making it difficult to attribute public complaints about the lack of income growth to anything other than inflated expectations.

With that said, however, I think that the Commission exaggerated the evidence on the extent of the upward bias in the CPI and paid too little attention to other areas in which the errors could go in the opposite direction. The tendency to overstate conclusions, however, need not detract from the basic recommendations to implement an expanded and more current set of weights in the CPI and to explore some alternative price indices. Those proposals are unlikely to be met with any opposition. The central issue of dispute is the measurement of quality changes.

The Commission argued in its final report that the Consumer Price Index overstates the annual rate of increase in consumer prices by 1.1 percent per year with a confidence band of from 0.8 to 1.6 percent. The conclusion that the CPI overstates inflation is consistent with prior research on price indexes, and few analysts would disagree. There is far less empirical basis for, and less professional unanimity with, the Commission's estimate of the magnitude of the bias. While it consistent with a number of other recent surveys; it is important to understand that they are all extrapolating from a common small set of empirical studies, and those underlying studies were not intended to provide an unbiased assessment. Few academic economists have been willing to involve themselves in issues of data collection; and most of the empirical evidence arises out of the research of analysts at the Bureau of Labor Statistics. Those studies focused on very specific problems with the CPI, and were not represented as an assessment of their overall importance. Naturally, the researchers looked in those narrow areas of the CPI where the effect would be largest. At this time, we simply do not know the extent to which the results can be generalized to other parts of the index.

More usefully, the issue of bias in the CPI can be divided into (1) a set of technical issues about how to deal with the aggregation of sub-components of the index, and (2) quality change. I have no particular quarrel with the Commission's recommendations with respect to the technical aspects, including the use of alternative price index formulas to more adequately capture the commodity and substitution bias. They have done what a commission should do in highlighting some basic problems and providing specific suggestions that would go a long way toward resolving them. The Congress should provide the funding to update the index and the BLS should move in the direction proposed by the Commission. The result would be a better index.

The crux of the problem with the Commission's report is in the chapter on quality change. This discussion, both publicly and professionally, has always been distorted by a failure to appreciate fully the extent to which the current CPI already adjusts for quality change. We can all point to areas where the quality of goods and services have improved; but that is not the question. Instead, we must know if the improvements have been more than are embodied in the current procedures. In this regard, few people outside of the BLS appreciate that the index already reflects a large amount of quality gain. In 1995, the total price increase in a subsample of the CPI, covering about 70 percent of the total, amounted to 4.7 percent, but the BLS determined that 2.6 percentage points, or slightly over half of the increase, represented improvements in quality. That is, quality improvements offset about half of the gross price increase, yielding an estimated 2.2 percent inflation rate. The Commission is apparently arguing that the quality adjustment should have been close to 3.2 percent rather than 2.6 percent. They could be correct; but, on the basis of existing evidence, we don't know that, and I don't see how anyone can be certain that the number is 3.2, instead of 2.6, or 2.0.

The BLS contributed to the problem until recently by providing little or no information on the magnitude of the existing quality adjustments. However, the Commission provides a one-side view of the problem, and it offers no new procedures to deal with it. We are not going to obtain a solution to the difficulty of measuring quality change with the anecdotal stories and introspective thought experiments provided by the Commission's report. There is a need to develop specific procedures that BLS could use to identify instances of quality change and to measure the amount. The most disappointing aspect of the Commission's report is the lack of any recommendations about how to deal with quality change.

Within the CPI, most issues of quality change arise in the context of breaks in the collection of price information on a specific item, such as might occur with the introduction of a model year change, that necessitate a substitution. BLS treats those substitutions in a variety of ways.

If the new and old items are judged to be nearly equivalent, *comparable substitutes*, the difference between the price of the item in the prior month and the current price of the new item is all assumed to represent a price change.

If the old and new items are both available in the current month, an *overlap method* is used in which the old item can be used to measure the price change from the prior month and the new product can be used to measure the price change going forward. In effect, any difference in the current month's price of the two items is assumed to represent an quality difference and is excluded from the index. Overlaps are only infrequently available.

If the substitute item is not comparable, the BLS may attempt a *direct quality adjustment* using manufacturer information on the costs of the quality differences, as with new automotive models, or hedonic price regressions that relate price differences to specific product characteristics, as with rent and apparel products.

Finally, a *link method* is used to first calculate the average price change for the strata excluding the item, and use that rate of price change to impute a change for the product in question. A recent innovation, the class-mean imputation, estimates the price change for the link using only the price changes of other items classified as comparable substitutes or those with direct quality adjustments.

Recently, The BLS made available a tabulation of the frequency and size of these adjustments for 1995, 1983 and 1984. A summary of the 1995 data is shown in table 1. The analysis refers to a restricted version of the CPI that excludes rent and a few other small items.

The existing procedures certainly miss small changes in quality where the BLS does not find it necessary to make a substitution, but it is striking that the category of non-substitutes (96 percent of the total sample) accounts for such a small portion of the total increase in the CPI. Whatever is quality change is missed does not seem to have much of an impact since it should have biased the price change up. We could give endless examples of gradual improvements in quality that are overlooked, but there are also cases of small decrements as producers reposition items in the market place. Consumers frequently complain about deteriorations in products or services that are not captured in the price indexes any more than the small improvements.

At present, adjustments for quality change are largely limited to situations where the agents identify major discontinuities in the nature of the product being priced. The BLS has made some efforts to expand its use of direct adjustment methods, but the majority of the quality adjustments still occur using the link method (1.50 plus 0.67 percentage points of the total of 2.56 in 1995). Linking creates the situation with the greatest potential for overstating the quality change. If producers follow a practice of timing their price increases to coincide with the introduction of new models or other quality changes, the BLS methodology will result in most of the price increase being linked out: the measure of inflation will be biased downward. That is the problem that emerged in autos (where producers clearly introduced price increases at the beginning of the model year and cut prices in subsequent months), and led to the effort to make direct adjustments.

Another example of the problem with the linking method is provided, until recently, by the apparel category. For years, the CPI reported dramatically lower rates of price increase for women's clothing compared to men's and children. This made little sense when all of the categories should have been subject to similar costs trends. The problem arose because women's clothing underwent major annual style changes that created a break in the pricing and a linking out of all of the price change. Men bought the same clothes year after year, and the same suit could be priced continuously for years.

Thus, much of the dispute over the adequacy of the current estimate of quality change involves different models of how producers go about introducing price and quality changes. If a large portion of the quality improvements are continuous, and independent of the timing of price changes, the current techniques may overlook them. But, if price and quality changes are tied closely together, the link methodology may overestimate the quality improvements and underestimate the amount of price change.

Even in the area of direct adjustment there are problems because, while the criteria of value to the consumer is used to identify significant changes in products such as autos, the BLS normally relies on the producers to provide estimates of the cost of the improvements. They, of course, have an incentive to overstate those costs, as anyone who has dealt with the companies on issues of environment and safety can attest.

Finally, the Commission places great emphasis on making the CPI a measure of the cost of living, and that is right in concept. But the Congress should also understand that pushing the idea to its extreme can open a can of worms that exceed the capacity of the current methodology. Where do we draw the line between eco-

nomic and non-economic aspects of the cost of living, and are they separable? Should we include a cost of the time used to shop for the lowest price? That is, how should we value convenience? How should we treat increases in the range of choice?

We should also distinguish between issues of quality and consumer surplus. Since prices are determined by the marginal buyer and seller, there are, in any market, buyers who obtain the product for much less than they would be willing to pay, consumer surplus. Should the gain in their standard of living be computed to include or exclude the change in consumer surplus. In several instances, the Commission appears to be focusing on questions of capturing consumer surplus in the index not just quality change.

Finally, I am not so naive as to believe that the Committee and the Commission members were interested solely in improving the quality of the nation's statistical system. This issue has large implications for the federal budget and the standard of living of retirees. From a political perspective, a CPI adjustment appears as an immaculate conception version of deficit reduction.

I have no problem with improvements in the procedures of the BLS that result in changed estimates of changes in the CPI. I am troubled, however, by suggestions, such as those of the Chairman of the Federal Reserve, that experts' exist who know what the actual increase in the nation's average cost of living has truly been. And, I am skeptical of suggestion that a commission or its equivalent can produce an additional adjustment to the annual change in benefits of existing retirees that is based on anything other than their own biases.

Were it not for the politics of immaculate conceptions, I don't think we would be considering a benefit reduction that increases with the age of the retiree. The proposal does nothing to the benefit of a new retiree; but, after twenty years, the benefit of an 82-year old Coulee be reduced by 10-20 percent. Under the current system, poverty already increases with age, and this proposal would exacerbate that trend. Private pensions have no annual adjustments and the real income of most retirees declines over time. If OASDI benefits are to be reduced, it seems to me that it would be better to concentrate the cuts at the beginning of the retirement period when individuals can take actions to mitigate their effect by working longer, not in their 80s when they have no employment options.

Table 1. Quality and Price Changes in the Consumer Price Index, 1995

Category	Percentage of Price Quotes	Annual Percent Change		
		Quality Change	Pure Price Change	Total Price Change
Comparable substitutions	2.54	0.00	0.54	0.54
Noncomparable substitutions	1.35	2.56	0.45	3.01
<i>Overlap Method</i>	0.05	-0.01	0.10	0.09
<i>Direct Adjustment</i>	0.41	0.40	0.17	0.57
<i>Link Method</i>	0.57	1.50	0.01	1.51
<i>Class-mean method</i>	0.32	0.67	0.17	0.84
Total Substitutions	3.90	2.56	1.00	3.56
Non-substitutions	96.10	0.00	1.16	1.16
Total covered CPI	100.00	2.56	2.16	4.72
Total CPI			2.50	

Source: Brent R. Moulton and Karin E. Smedley, "Addressing the Quality Change Issue in the Consumer Price Index, Bureau of Labor Statistics (January, 1997)

note: The covered CPI excludes rent, homeowners equivalent rent, used cars, health insurance, and other items with a total relative importance of about 28 percent in the total CPI.

QUESTIONS SUBMITTED BY SENATOR KERREY

Question 1. What are your views regarding the Boskin Commission's recommendations? In your testimony, you state that the Boskin Commission has "exaggerated the evidence on the extent of the upward bias in the CPI and paid too little attention to other areas in which the errors could go in the opposite direction." Could you please elaborate on this point?

Question 2. In the National Journal's article on the President's budget and entitlement reform, you are on record as saying, "The problem is that the growth of the entitlement programs exceeds the growth of the economy. You can't keep making cuts in discretionary spending year after year to offset entitlements that are rising faster than the growth of GDP because after a while, you run out of programs to cut." You are very correct in this observation. If we continue to let entitlement spending grow at its present pace, it will consume 100% of the government's budget by the year 2012. This fact renders the government a virtual ATM machine. I understand that a reduction in the CPI is not the panacea for reforming entitlement programs, but what impact do you believe would a reduction have on long-term entitlement cost problems?

Question 3. Have you considered a change in the law creating a combined government organization (BLS and Commerce) which would measure cost of living and report to congress each year? We could then adjust the CPI up or down accordingly.

Question 4. Is there information available which shows the decline in poverty over the age of 65 since the COLA went into effect?

Question 5. Could you briefly explain why the CPI as calculated now is an inefficient way of accurately measuring and adjusting the cost of living?

Question 6. If we continue to let entitlement spending grow at its present pace, it will consume 100% of the government's budget by the year 2012. This fact renders the government a virtual ATM machine. I understand that a reduction in the CPI is not the panacea for reforming entitlement programs, but what impact do you believe would a reduction have on long-term entitlement cost problems?

Question 7. How significant of an impact would an accurate adjustment to the CPI—or the creation of an accurate cost of living index—have on today's working taxpayer and current social security beneficiary?

Question 8. Each year we continue to let the present CPI be used has an inaccurate measurement for the cost of living has what kind of negative effects on how we view our country's economy?

Question 9. Why should an accurate CPI measurement be important to the everyday American?

Question 10. With greater access to improving measuring technologies and the earnestness of the BLS, why is inflation so hard to measure?

Question 11. How do you view BLS' present methodologies in calculating the CPI?

Question 12. Can a recalculation of the CPI be made without Congressional intervention?

Question 13. If adjustments to CPI were justified solely on the basis of deficit reduction, would the burdens of that deficit reduction be fairly shared?

Question 14. Should Congress look at cost of living indexes relative to the program they are indexing? For example, should there be medical indexes for medical programs, educational indexes for educational programs, etc.?

Question 15. Are there substantial regional differences in the cost of living? Could we be having stagflation in the Midwest and inflation in the Northeast?

RESPONSES TO QUESTIONS FROM SENATOR KERREY

Answer 1. I agree with the Commission's suggestions about how to deal with the various types of substitution bias. In particular the process of updating the weights should be accelerated, and stores and products rotated into the survey on a more frequent basis. This would require an expansion of the consumer expenditure survey and the allocation of some research effort to determine why the current survey appears to perform so poorly. Also, I would favor moving toward some version of a superlative index on at least an annual basis. However, in the area of greatest uncertainty, quality change, the Commission made no specific recommendations—they simply claimed that the current index dramatically under-estimates quality improvements. I would favor expanding the programs of BLS to explore the greater use of hedonic indexes. It may also be possible to expand the direct adjustment procedure in sectors, such as electronics, of rapid technological change.

The current reliance on what BLS calls the link method, in which items with significant changes in characteristics are simply dropped from the index, is a example of the type of situation in which the present procedures may over adjust for quality changes. In effect, price increases that are timed to coincide with the introduction of new models are simply ignored. Historically, this type of over-adjustment for quality was particularly evident in the price index for women's clothing, and it was a major motivation for changing the procedures for measuring price changes in the clothing category.

Answer 2. The commission's proposal to reduce the annual COLA by 1.1 percentage points would eliminate about two-thirds of the current actuarial deficit in the OASDI trust fund and it would eliminate most of the growth in the CBO baseline deficit projections for the next ten years. But, the benefit savings are generated by large cuts in the benefits of the oldest retirees, with no benefit reductions for new retirees. After twenty years, a retiree's benefit would be cut by about one fourth. Beyond that the OASDI expenditure savings plateau because the older retirees die and are replaced with new retirees whose initial benefits are unaffected by the provision. Over the long term, the provision will have it greatest effect in raising income taxes and cutting spending on SSI.

Answer 3. I favor the establishment of a single national statistical agency but it would have no effect on the measurement of the cost of living. Establishing a credible cost of living index that goes beyond correcting for substitution bias is not possible at the present time because of unresolved problems in both the conceptual and applied dimensions.

Answer 4. Data on the poverty rate by age are reported annually in the Green Book, published by the Ways and Means Committee. The poverty rate for the elderly has basically fallen in half since the early 1970s when CPI indexation was introduced.

Answer 5. At present, the only effective change that could be made to move the CPI toward a cost of living index would be to introduce a superlative index to reflect the fact that consumers will avoid some of the cost of a price increase by shifting to substitute products, and even that will only work for small price changes over short periods of time in which there has been minimal changes in the underlying consumer utility. There are other elements of a cost of living index that go far be-

yond the CPI to allow for changes in shopping patterns, convenience, and the benefits of expanded consumer choice, but we don't yet have the technology to implement such factors.

Answer 6. See the answer to question 2.

Answer 7. I don't know how to answer this beyond reference to the effect on OASDI, SSI, and taxes. In all of these cases, the first year effect of a 1.1 percent change in the CPI, is trivial; but it compounds over time. Thus, for those who have been on OASDI for many years, the benefit reduction becomes quite large, a 25 percent income loss after 20 years. Similarly, the adjustment of tax brackets can be viewed as a tax increase relative to the current situation. Income taxes would be raised by about only about 0.6 percent per year, but after 20 years that would cumulate to about a 15 percent tax increase. Unlike OASDI benefits, the effect on tax brackets and the SSI maximum would grow forever.

Answer 8. Other than its effect operating through the budget, the CPI has no major effect on the economy because the economies performance does not depend on the CPI. If the overstatement were correct, however, it would have a major effect on our interpretation of the economy's past performance and implications for the future. Basically it implies that real incomes have been rising about twice as fast as the current statistics imply.

Answer 9. As mentioned, it is used to index portions of the public budget. Plus, some private labor contracts use the CPI for purposes of annual cola wage increases. The CPI also plays a key role in the statistical system in constructing the national accounts and other measures of economic performance. That information can be important to determining national economic policies. For example, we should feel differently about the future cost increases of Social Security if they occur in a situation of rapidly rising worker real incomes versus a world of wage stagnation.

Answer 10. Most of the current difficulties of measuring price inflation reflect conceptual problems of defining quality change. In addition, there have been changes in views of what the CPI should try to measure: there is now a greater degree of interest in excluding the substitution effect. Finally, we have not been willing to expand and revise the nation's statistical system to keep up with the changes in technology and market structure.

Answer 11. As I indicated, I think that most of the Commission's suggestions should be implemented, but it is also important to maintain the BLS's emphasis on completely replicable procedures. I am opposed to the introduction of other adjustments based on opinions, even those of "experts."

Answer 12. Yes, by leaving the computation of the CPI to the BLS. However, it is not possible to get a revision of the magnitude cited by the Commission without intervention to insert qualitative opinions of either the Congress or a panel of experts. No change in replicable procedures is going to generate a change as large as that of the Commission.

Answer 13. I don't believe the burden of deficit reduction would be fairly distributed because of the focus of the benefit cuts on the oldest of the retirees. However, that opinion reflects both the fact that I doubt that the cost of living—properly measured—is rising as slowly as the commission suggests, and a disagreement with a budget strategy that concentrates the reduction in benefits among the oldest of retirees I would prefer a program that spread the benefit reductions more uniformly across all retirees or concentrated on cutting back the benefits of potential new retirees because they are in a position to offset the effects by working longer. In contrast, the adjustment of tax brackets does have a widely diffused effect that strikes me as a basically fair form of tax increase, but I do think it is a tax increase.

Answer 14. The Congress could develop CPI measures for different classes of people, such as the aged. However, I believe that the existing research suggests that there is far more variation of consumption patterns within such groups than across the categories.

Answer 15. There are significant geographical differences in the cost of living and its rate of change that can be traced largely to differences in housing costs. They illustrate some of the problems with pushing the concept of cost of living too far because it is probably non-economic factors that prevent everyone from simply moving to the cheapest region, as the economists would suggest. In addition, there are some significant differences in consumption patterns; but they appear to be relatively small within the United States even though they are very large internationally. Except for change in housing costs, differences in rates of inflation seem to be quite small.

PREPARED STATEMENT OF TESS CANJA

The American Association of Retired Persons (AARP) appreciates the opportunity to present its views regarding the final report of the Advisory Commission to Study the Consumer Price Index (CPI), the "Boskin Commission." One of the nation's primary measures of inflation, the CPI is used to adjust certain federal entitlements and certain provisions in the tax code, as well as other aspects of the economy, such as labor contracts and rents. Given its widespread applications, the CPI should be as accurate as possible.

The index has been the subject of intense scrutiny for the last two years by policymakers and others, some of whom regard a reduction in the CPI as a way of achieving budgetary savings. A modest reduction in the CPI generates considerable governmental savings, but it does so by limiting the disposable income of many individuals since cost-of-living adjustments (COLA) and certain tax provisions are based on this index. Indeed, attempts to reduce COLAs to less than a full CPI are not new, as the following 1982 statement illustrates:

"Faced with rising deficits, Congress has been casting about for a relatively simple and quick means of procuring large and immediate budget savings. Since cost-of-living increases in all federal entitlement programs now make up a sizable portion of the budget, they have been a convenient target. What is ignored by those who espouse drastic reductions in cost-of-living increases is the devastating impact such cuts would have on the elderly—especially on the most vulnerable subgroups among them—namely the oldest and poorest."

(April 23, 1982 testimony by the National Retired Teachers Association and AARP to the Joint Economic Committee).

An accurate CPI helps ensure that those receiving federal benefits can keep pace with the rising costs of goods and services, that "bracket creep" does not automatically lead to a tax increase, and that the federal government's fiscal integrity is maintained. AARP believes the experts at the Bureau of Labor Statistics (BLS) should retain their long-standing responsibility for the index and continue to make the needed adjustments to assure accuracy. Issues regarding the accuracy of the index are not new, but they should continue to be resolved on their own merits by BLS' non-partisan technicians, who collect and develop the underlying data and who adjust the CPI on an ongoing basis.

If, as occurred in 1995 and 1996, supportable BLS research can document the need for adjustments to the CPI, AARP would not object. However, we continue to oppose legislative changes to the CPI in the absence of such BLS findings. If Congress chooses to ignore the BLS or go beyond what the agency has found supportable, it should directly explain the reasons for such changes and the implications for the American people. Then, Congress should allow feedback from its constituents.

History of the CPI

The Consumer Price Index was first published in 1919 to help set new wage levels for workers in shipbuilding yards. In the thirties, the market basket of goods and services was updated to reflect changed purchasing habits. BLS made major revisions to the CPI again, in 1953, 1964, 1978 and 1987 to respond to further changes.

Two CPIs are used to index federal spending and the tax code. The Consumer Price Index for Wage Earners and Clerical Workers (CPI-W), which is used to determine cost-of-living adjustments (COLAs) for federal benefits, particularly Social Security and the federal civilian and military retirement programs, represents the spending patterns of 32 percent of the total population—those who receive half or more of their income from wage or clerical employment. A broader-based index, the Consumer Price Index for Urban Consumers (CPI-U), developed in 1978, covers about 80 percent of the non-institutionalized population. This index reflects the spending patterns of professional employees, the self-employed, the poor, the unemployed and retired persons. It is used to adjust tax provisions, including the tax brackets, personal exemptions, and the standard deduction.

In 1972, Congress mandated automatic cost-of-living adjustments for Social Security benefits, which became effective in 1975. Automatic COLAs were viewed as a means to prevent a beneficiary's purchasing power from being eroded by inflation and as a way of avoiding the ad hoc, often large (particularly in election years) benefit adjustments that Congress had adopted prior to 1972. The 1972 legislation specified the use of the Consumer Price Index [Social Security Act, Section 215 (1)(i)] for annual COLAs. These adjustments have been largely responsible for stabilizing the poverty rate for older Americans.

The Report of the Advisory Commission to Study the Consumer Price Index

On January 10, 1995, Federal Reserve Board Chairman Alan Greenspan suggested that the CPI overstated inflation by one percentage point. His statement produced a flurry of interest regarding the accuracy of the index because large budgetary savings would result if the index was adjusted downward. At the end of June 1995, following three days of hearings on the issue, this committee appointed five of the witnesses to an advisory panel, chaired by Michael Boskin, to study the CPI and report back in a year.

After two and a half months, the commission released its interim report. Their September 15, 1995, findings stated that the CPI overstates inflation by one percentage point. Dr. Joel Popkin, a noted expert on the CPI and a former Assistant BLS Commissioner for Prices, prepared a review of the interim report for AARP. His analysis, which the Association provided to the members of this committee, concluded that the Boskin Commission did not offer any evidence to support two of the four sources of upward bias it identified: quality changes and new product bias. Popkin also noted that the commission erred in adding the four sources of bias together, an approach BLS believes would lead to double counting. Popkin, stating that bias "is in the eyes of the beholder," observed that the "Commission comprises five of the six witnesses who gave the highest estimate of bias" to the Finance Committee.

The Boskin Commission's final report, released on December 4, 1996, asserts that the CPI overstates inflation by 1.1 percentage points because it improperly accounts for new goods, consumer substitution, and quality changes. The commission recommended changes for BLS and Congress to institute. The report acknowledged that the BLS is "one of our major national (economic) observatories" and should be kept free from political interference.

Dr. Popkin prepared an analysis of the commission's final report, and his findings were distributed to the Congress. He maintained that the Boskin report's conclusions "are not convincing" and "provide no basis for Congress to change federal indexation formulas that are based on the CPI." In Popkin's view:

- The commission's estimates of the new goods and the quality bias are not supported by sufficient evidence and may be too high for the spending patterns of the "average" consumer.
- The commission's estimate of the substitution bias may be overstated because it incorrectly adds together overlapping components of this bias.
- The commission did not consider all aspects of a true cost-of-living index, particularly those that would point to an understatement of inflation.

AARP encourages this committee to consider the differing views of academics and policy analysts who have examined the Boskin report, as well as the extensive comments from the BLS. In particular, we refer the committee to the recent observations regarding the Boskin report found in the Analytical Perspectives section of the Administration's Fiscal Year (FY) 98 Budget, pages 6-7. The Administration notes:

"The Commission's findings were controversial. Although there is a widely shared view that problems in calculating the CPI may give it an upward bias, there is far less agreement over the size of the bias and over the practical steps that should be taken to remedy it"

In preparing its report, the Advisory Commission relied heavily on retrospective data that are unavailable when the CPI is actually produced. Other gaps in the data were filled by the informed judgments of its authors. This is a common practice in academic studies, and it is appropriate in that context, but it would be questionable in a Federal statistical series that must be based on objective data."

We would remind the committee that the economics profession is far from unanimous on the extent, if any, to which the CPI overstates inflation. The CPI is not perfect, but in our view, any evaluation of its shortcomings should be unbiased, comprehensive, and technically supportable. In addition, AARP maintains that BLS should remain the arbiter of the CPI. We believe the American people would agree that government statistics should be technically accurate and independently calculated.

The CPI and a Cost-of-Living Index (COLI)

The Boskin Commission faults the use of the CPI as a measure of the cost-of-living, a use BLS cautioned against even before Congress adopted the CPI for that purpose. A cost-of-living index (COLI) would be a more appropriate measure for federal indexation if such an index actually existed or could be constructed. However, the components of a properly calculated COLI are the subject of considerable discussion, and many potential elements of such an index are highly subjective. Popkin and other economists have noted that while the Boskin Commission recognized the issues involved in the construction of a COLI, it did not adequately address them.

There are considerable methodological difficulties in constructing a COLI. A COLI assumes consumers, in order to obtain the same level of satisfaction, can and will substitute expenditures for certain goods for expenditures on different goods as their relative prices change. Economists, including the BLS, differ about a consumer's ability to make substitutions for certain types of expenditures, e.g. one type of medicine for another; or a washer for a dryer. It is also questionable whether some substitutions would approximate the same level of consumer satisfaction. Furthermore, a properly constructed COLI would include many "quality of life" considerations, such as highway congestion, that are difficult to quantify and are not included in a fixed market basket analysis such as the CPI. Also, a COLI would treat some taxes, e.g. a sales tax, and certain government-provided services, such as the costs associated with environmental cleanup, differently than the CPI. In short, a COLI would raise many of the same—and many new—questions of measurement accuracy.

Looking to Solutions

Federal Reserve Chairman Greenspan has recently proposed a two track approach for adjusting the CPI. The first track would allow BLS to make its planned statistical improvements to the CPI in "relatively short order" and without legislative interference. We agree with Chairman Greenspan that, "with adequate support and diligent effort," the agency can pursue its technical agenda more vigorously. Congress could facilitate this process by earmarking additional funding for BLS' multi-year upgrading of the CPI. The Administration requested an additional \$2.1 million for BLS for Fiscal Year 1998 to expedite the agency's activities.

Greenspan's second track would be to establish a national commission to determine indexing levels for entitlements and taxes. In his view, this approach would lead to indexing that is "roughly right rather than precisely wrong." This new commission would evaluate areas in which there was considerably less professional agreement and less rigorous economic analysis. He suggests three immediate areas for further exploration and refinement: measuring quality adjustments, valuing new products, and understanding consumer choices regarding where they shop.

The Association has a number of critical questions about creating a new commission to "second-guess" the BLS:

- What is the purpose of this commission if we already have an existing agency that has done an excellent job of evaluating the CPI?
- How will the commission be funded?
- Will the commission become an "official" government agency?
- To whom will the commission report? to BLS? to Congress? or both?
- If the commission reports to Congress, what provisions will be made to ensure BLS input?
- How will the "experts" for this panel be chosen, and what selection criteria will be used to ensure the panel's objectivity and technical expertise?
- With what frequency will the panel meet and how frequently will they issue a report?
- Will the commission do its own data collection?
- Will this panel undertake independent research, hold public hearings, and detail its methodology?
- Will the panel address issues such as differing purchasing patterns within the population that reflect income, age, and geographic differences.

AARP raises these questions because Chairman Greenspan's recommendation for a commission that helps set indexing levels for benefits and taxes differs considerably from the panel suggested by the Boskin Commission. The Boskin Commission proposal is a permanent (rotating) group of independent experts to review progress in this area and work with the BLS. The Greenspan proposal also appears in sharp contrast to the 1961 Stigler Commission, constituted to review price statistics. The Stigler Commission undertook a comprehensive, year-long review, commissioned and produced substantial independent research, held public hearings, and published an extensive and detailed report.

Impact on Individuals

AARP wishes to remind the committee that arbitrary action on the CPI would do more than simply generate budgetary savings, it will have a significant impact on individuals. The impact would be particularly harsh on those who depend on these dollars for their daily living expenses. For example, a case study prepared for AARP by Price Waterhouse shows that a 65-year old widow who relies on Social Security for most (\$8,500) of her \$10,000 income would lose benefits totaling over \$5,000 (nominal dollars) in ten years if the CPI were reduced by one percentage point (see

attached). Indeed, the older she gets, the larger the benefit reduction. In the tenth year alone, the benefit reduction is over \$1,000.

We also want to remind the committee of other regressive features of reducing the CPI. Not only will any dollar loss represent a larger portion of the overall income of low and moderate income individuals, but the CPI is also used for other adjustments affecting vulnerable people such as the Earned Income Tax Credit, the Supplemental Security Income program, Food Stamp benefits, and alimony and child support payments. For these and many other beneficiaries, it is better to be precisely above the poverty level than roughly below it.

A CPI reduction would also lead to an increase in income taxes, since a number of important provisions in the tax code are indexed to the CPI, including the tax brackets, the personal exemption, and the standard deduction. Indeed, if the Boskin Commission's findings are correct that the tax code has been over-indexed, then the American people have been under-taxed by tens of billions of dollars. For most taxpayers, it is far better to be precisely in the right tax bracket than roughly above it.

From a practical standpoint, a commission that "adjusts" indexing levels could create havoc in the economy because private industry could have to choose from two estimates of the cost of living. Such a commission also calls into question the credibility of all federal statistical agencies, not just the BLS. In the past, there have been heated debates over the actual unemployment rate and the appropriate level of interest rates. Will we also need commissions to better gauge the unemployment rate, to set interest rates or resolve other indexes whose accuracy is called into question?

Social Security Solvency

A reduction in the CPI, by reducing COLAs, would increase the size of the Social Security trust funds. The larger trust funds would delay the Social Security insolvency date as well as mask an even larger amount of the "on budget" deficit. If Congress wants to act to restore Social Security's long-term solvency, it should do so within the context of the program, not to reduce the deficit in the rest of the budget. The Social Security Advisory Council, which splintered into three groups on restoring the program's long-term solvency, was *unanimous* in its view that "(m)aintaining full cost-of-living adjustments (COLAs) throughout the period of benefit receipt is one of Social Security's most important contributions to individual security." The Council went further, however, and stated

"The Council, however, does not support changes in the COLA motivated by political considerations. No matter how well-intentioned or even how accurate such changes might later prove to be, the Council believes it would be a bad precedent. Changes should be made only as a result of careful expert consideration by the government agency charged with that task."

(Report of the 1994-1996 Advisory Council on Social Security, pages 17-18)

Conclusion

AARP strongly supports improving the accuracy of the CPI. We also support efforts to reduce the federal budget deficit and maintain the integrity of the Social Security trust funds. But there is a right way and a wrong way to accomplish these goals. The right way to adjust the CPI is to allow the experts at the BLS to continue doing their jobs and ensure adequate funding for their work. If a commission is convened to recommend adjustments to the CPI, it should report to BLS, similar to BLS' current labor and business advisory councils. If Congress chooses to change its indexing policy, it does not need, nor should it create, another commission. Rather, it should explain to the American people the reasons for reducing cost-of-living adjustments and increasing taxes by indexing for less than the full CPI level.

The right way to reduce the federal deficit is for our elected officials to explain the decisions that need to be made and engage the public in an open discussion of the consequences of those decisions. The wrong way is to legislate a back-door reduction in COLAs and a tax increase by arbitrarily changing the CPI and leaving millions of Americans wondering why they can no longer make ends meet.

Change in Taxes and Benefits From a 1.0 Percentage Point Reduction in CPI

A 65-year-old widow with no dependents. She has social security and interest income.

	1996	1997			2002			2006		
	Current Law	Current Law	Reduced CPI	Change	Current Law	Reduced CPI	Change	Current Law	Reduced CPI	Change
Total Income	10,000	10,311	10,226	-85	11,957	11,380	-577	13,474	12,412	-1,062
Earned Income:										
Wage and Salary /1	0	0	0	0	0	0	0	0	0	0
Retirement Income:										
Social Security /2	8,500	8,768	8,683	-85	10,150	9,573	-577	11,425	10,363	-1,062
Taxable Social Security	0	0	0	0	0	0	0	0	0	0
Private Pension /3	0	0	0	0	0	0	0	0	0	0
Unearned Income:										
Interest and Dividends /1	1,500	1,542	1,542	0	1,807	1,807	0	2,049	2,049	0
Adjusted Gross Income	1,500	1,542	1,542	0	1,807	1,807	0	2,049	2,049	0
Deductions /4	5,000	5,161	5,111	-50	5,972	5,633	-340	6,722	6,097	-625
Exemptions /4	2,550	2,632	2,607	-26	3,046	2,873	-173	3,428	3,109	-319
Taxable Income	0	0	0	0	0	0	0	0	0	0
Federal Income Tax /4	0	0	0	0	0	0	0	0	0	0
Net Income	10,000	10,311	10,226	-85	11,957	11,380	-577	13,474	12,412	-1,062
Loss as a Percent of Total Income				-0.8%			-4.8%			-7.9%
Cumulative Change (dollars)				-85			-1,940			-5,433

Health Policy Economics Group, Price Waterhouse LLP

/1 Income in this category is inflated according to CBO forecasts

/2 Social Security is inflated by CBO forecast CPI-W

/3 Private pension amount is fixed

/4 The standard deduction, exemptions, and taxable income thresholds are inflated by CBO forecast CPI-U

December 3, 1996

Question 1: What are the views of the Boskin Commission's recommendations?

AARP has expressed reservations regarding the final report of the Advisory Committee to Study the Consumer Price Index (CPI), the "Boskin Commission." We agree with the findings of former Assistant Commissioner for Prices at the Bureau of Labor Statistics (BLS), Joel Popkin, regarding the Boskin Commission's final report and are submitting his analysis for inclusion in the hearing record. Popkin states that the commission's findings do not provide sufficient justification for changing federal indexation formulas tied to the CPI because:

- The commission's estimate of a new goods and quality bias in the CPI (the bulk of overstatement suggested by the Commission) is not supported by sufficient evidence.
- The commission's estimate of new goods and quality bias may not be as high for the average consumer.
- The commission's estimate of the substitution bias may be overstated because it adds together components of the substitution that overlap, an approach the BLS rejects.
- The commission did not consider all aspects of a true cost-of-living index, particularly those that would point to an understatement of inflation.

Question 2: If the BLS should decide that the CPI overstates inflation, does the AARP have a plan or recommendation as to how their group membership should prepare for a possible reduction in benefits?

AARP fully supports improving the accuracy of the CPI through the proper means. We strongly believe any changes should be made by the non-partisan, non-political BLS. AARP did not oppose the 0.21 percentage point reduction that the BLS made to the CPI in the past two years. Indeed, we perceived these changes as technical changes designed to achieve accuracy, and as such were not a "reduction in benefits". AARP did not highlight these technical changes in any of our publications. Since many AARP members have become more interested in the CPI now that it has been raised as a political issue and they may be dramatically affected by developments regarding the CPI, we may advise them of subsequent BLS action. We will certainly advise them of any "legislative" changes to the CPI.

Question 3: Has the AARP done any significant research on how a reduction in the CPI would impact different member demographics in their organization?

The Association has looked at the impact of a CPI change on different segments of our membership. We are including 4 case studies prepared for the Association by Price Waterhouse that show the impact over time of a 1 percentage point CPI reduction on both sample Social Security benefactors and sample tax payers. For example, a 65-year old widow with \$8,500 in benefits would face a cumulative loss of \$22,000 of Social Security benefits over the remainder of her anticipated life expectancy (2015), and a 65-year old couple with \$15,000 in Social Security benefits this year would lose nearly \$40,000 over the same period.

Question 6: Have you considered a change in the law creating a combined government organization (BLS and Commerce) which would measure cost-of-living and report to Congress each year?

AARP believes the technical experts at BLS have done a thorough job of determining the CPI and they should continue to do so free from political interference. We have not considered proposals to combine BLS with another government organization in order to determine the CPI through a different process. Without additional details about Senator Kerrey's proposal, we are unable to determine the merits of changing current procedure. We continue to believe, however, that BLS should retain responsibility for determining the CPI.

THE EFFECT OF A CPI MINUS ONE PERCENTAGE POINT ON SAMPLE FAMILIES

The CPI is used to determine cost-of-living adjustments for federal benefits, particularly Social Security, as well as the thresholds for federal income tax brackets, the standard deduction and the personal exemption levels. A CPI minus one percentage point results in a tax increase for all taxpayers and a benefit reduction for Social Security recipients.

Prepared by Price Waterhouse, LLP in December 1996 using CBO forecasts, the following case studies show the tax and Social Security benefit impact (in nominal dollars) in each year and cumulatively through the year 2015.

- A. A 65 year old widow who relies on Social Security benefits for most (\$8,500) of her \$10,000 income.

	<u>1997</u>	<u>2002</u>	<u>2015*</u>	<u>Cumulative Loss Through 2015</u>
Benefit Loss	<u>-\$85</u>	<u>-\$577</u>	<u>-\$2,528</u>	<u>-\$21,848</u>

(*Average life expectancy for a 65 year old woman in 1996 is 19 years, or 2015)

- B. A couple, both 65 years old, with \$22,000 of income (\$15,000 from Social Security).

	<u>1997</u>	<u>2002</u>	<u>2015</u>	<u>Cumulative Loss Through 2015</u>
Benefit Loss	<u>-\$150</u>	<u>-\$1,018</u>	<u>-\$4,460</u>	<u>-\$39,127</u>

- C. Non-elderly couple with two children and \$35,000 of income.

	<u>1997</u>	<u>2002</u>	<u>2015</u>	<u>Cumulative Tax Increase Through 2015</u>
Tax Increase	<u>\$25</u>	<u>\$172</u>	<u>\$754</u>	<u>\$6,530</u>

- D. Non-elderly couple with two children and \$50,000 of income.

	<u>1997</u>	<u>2002</u>	<u>2015</u>	<u>Cumulative Tax Increase Through 2015</u>
Tax Increase	<u>\$25</u>	<u>\$172</u>	<u>\$1,693</u>	<u>\$10,300</u>

**CPI COMMISSION'S FINDINGS ARE NOT
CONVINCING:**

A CRITIQUE OF

**TOWARD A MORE ACCURATE MEASURE OF
THE COST OF LIVING**

*Final Report to the Senate Finance Committee from the
Advisory Commission to Study the Consumer Price
Index*

Prepared by

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Washington, D.C.

for the

American Association of Retired Persons

January 6, 1997

1. Introduction

The Boskin Commission's final report, including its recommendations to the BLS, is for the most part an elaboration of the views expressed in its interim report. The Commission's view about the size of the overall bias in the CPI is nudged up a bit, from 1.0 percentage points to a final estimate of 1.1 percentage points per year. The range of uncertainty the Commission associates with its 1.1 percentage points estimate is narrowed, mostly by lowering the upper end from 2.0 to 1.6 percentage points and raising the lower end from 0.7 to 0.8 percentage points. Very little evidence and no new research is presented to support the Commission's estimate for the largest part of the bias it reports—namely, that associated with quality change and new products.¹ For that and other reasons, the substance of our evaluation of the interim report, that its conclusions lacked an analytical foundation, still stands.² Furthermore, in its final report, the Commission omits consideration of several other issues it should have addressed. These omissions, discussed in further detail below, include the failure to flesh out a cost-of-living framework for the CPI and to fully analyze the need for a CPI for the elderly. Moving the CPI toward a cost-of-living index would include an evaluation of the weights given to individual households when estimating an economy-wide measure of inflation. Finally, there are, in

¹It should be recalled that the Commission was not given the mandate to conduct new research. A good summary of what is known about the bias in the CPI can be found in Moulton (1996).

²Joel Popkin and Company, "CPI Commission's Findings are Unjustified: An Analysis of Toward A More Accurate Measure of the Cost-of-Living" October 2, 1995.

our view, recommendations to the BLS that are preferable to many of those that appear in the Commission's report.³ They, too, are found in the discussion that follows.

2. The Need for a Cost-of-Living Index

The Commission has been helpful in stating unequivocally that a cost-of-living index, if it were developed in practice, would be the appropriate measure to index entitlements and certain aspects of the tax code. But the Commission still fails to pursue fully the logic of that framework to arrive at its conclusions. Substitution, quality change, and new products are not the only issues separating the CPI from a COLI. The environment, crime, congestion, infrastructure, income and other taxes, and government services are others. Some of these, such as the environment and crime, are principally quality-of-life issues, but they often prompt consumers to spend income to prevent an erosion in their level of well-being. Taxes paid directly and indirectly by consumers and the quantity and quality of the government services they receive in return also affect their cost of living.

The Commission report recognizes a few of the issues just raised, but it fails to address any of them in a satisfactory fashion.⁴ As is perhaps characteristic of the methodology used in

³Its recommendation about de-emphasizing CPI geographical coverage (#6, page 81) should not be made to the BLS but to Congress, which has an important say in the amount of geographical area detail in which national statistics are published.

⁴With respect to the environment, the Commission estimated some of the added cost of cleaning up the environment and supported adjustments to the CPI for the downward bias created by the present treatment of anti-pollution costs associated with motor vehicle transportation. The BLS actually had made this adjustment in 1970 but reversed itself

the report, it concludes *"the remaining negatives are important but seem to us to have been more than offset by increased quality... and most importantly by the major increase in longevity (of life) which perhaps swamps everything else."* (page 76) By taking this view, and by pushing the study of those issues into the future, the Commission seems to favor the correction by BLS of only the potential upward biases before it looks into areas where biases could go in the other direction or before all potential sources of bias are identified.⁶

3. Quality Change and New Products

The Commission's report states that BLS' procedures produce an understatement of quality change and the effect of new products, which accounts for 0.6 of the 1.1 percentage point bias it attributes to the CPI. Its estimates of quality and new goods bias continue to rely heavily on its own assumptions and give short shrift to the identification of cases of deteriorating quality and disappearing products. The report evaluates quality and new product bias in the framework of 27 CPI commodity-group components. It finds no quality deterioration in any, zero bias in seven, and an upward bias in 20 commodity groups.

upon the advice of academic economists whose views were not, on balance, supportive of the current Commission's views. The BLS Commissioner at that time had solicited their views in response to recommendations of an interagency committee, called for by the Director of the Office of Management and Budget (OMB), that disagreed with the BLS approach.

⁶The Commission's recommendation on page 84 of its report that the BLS collect data on detailed time use from a large sample of consumers is notable in this context. Such a survey could show, for example, that consumers are spending more time commuting or engaging in new types of household production such as assembling furniture bought at a discount outlet. A time-use survey would be useful in addressing several quality-of-life issues.

These conclusions flow from the underlying examples that are cited. In 46 of the 49 specific examples presented by the Commission in Section V of its report, it concludes there is an understatement of quality.

This section of the Commission's report is clearly the most judgmental, and the estimates are very sensitive to the selection by the Senate Finance Committee of the members of the Commission. It is widely recognized that the Commission comprises economists whose estimates of upward bias are among the largest.⁶ The judgmental aspect of the report is underscored by the fact the Commission cites existing research to support its estimates of bias in only nine of the 27 commodity groups studied. Moreover, the Commission ignores both past and recent studies that find evidence of downward bias in the CPI.⁷

⁶The first question reporters asked at the Senate Finance Committee's news briefing on the report was why economists with lower estimates of bias were not appointed to the Commission.

⁷There is a mistaken belief in many quarters that the BLS takes few, if any, steps to deal with the problem of quality change when constructing the CPI. In practice, the BLS pursues several options to correct for quality change. In 1995, BLS adjustments for quality change reduced the growth in the CPI from 4.7 percent over the previous year to 2.2 percent. As an example, corrections for quality change are always made when precisely the same item cannot be priced in consecutive time periods. One procedure used to correct for quality differences under these circumstances is called "linking" and its effects have been examined in a recent study by Professor Charles Hulten of the University of Maryland (Hulten, 1996). Professor Hulten estimates that BLS' linking procedure may have caused a downward bias in the CPI of up to 0.6 percentage point. Note that this estimate exactly negates the upward bias reported by the Commission. There is little doubt that as the Commission's analysis is circulated, other independent research will emerge and be helpful in evaluating the Boskin report.

There is universal agreement that not all quality change, whether positive or negative, is captured in the CPI. However, the Commission projects an image of unanimity onto a profession that is still divided over the issue of quality change. For example, there is no agreement within the profession on the size of the quality bias in the CPI. There is also a lack of agreement on what constitutes quality change and how it should be measured.⁸

The handful of studies that have addressed the issue of quality change and new goods have focused on a few obvious but limited examples. Comprehensive studies of quality change are nonexistent in the economics literature.⁹ The economics literature, as well as the Commission report, is devoid of estimates of losses suffered by consumers. These losses arise from the disappearance of goods and outlets and restrictions placed on consumer choice, such as restrictions imposed by HMOs and insurance companies or government regulations.¹⁰ The economist's tool-kit also lacks the ability to quantify all

⁸An article titled "A Single Number Puts the Economy in a New Light," in the *Washington Post*, dated December 11, 1996, is illustrative of this discord. The various testimonies before the Senate Finance Committee during 1995 also reflected a wide range of opinions.

⁹Many of the cited studies from which generalizations are made by the Commission are limited in scope. One study considered "quality" change only in breakfast cereals, another looked only at cataract surgery, and a third looked only at two specific drugs.

¹⁰The Commission report recognizes those and other instances of decline in consumer welfare, but provides no estimate of the loss. Absent comprehensive evaluation, there is reason to doubt that the Commission estimate of the new goods and quality change bias is truly net of these losses. As pointed out by Shapiro and Wilcox (1996), there is no theoretical basis in economics that justifies the Commission's presumption that the loss from the disappearance of old items is more than offset by the gain from the appearance of new items. Shapiro and Wilcox go on to say that the "scientific basis for making a judgment about the magnitude of the new-items effect is particularly thin."

aspects of quality change, such as the value individual consumers may place on an additional year of life. Sometimes, consumers' opinions of quality change are subject to revision. For example, we are now more aware of the hazards of air bags in cars. There is a need, therefore, not to make hasty changes to the CPI that could prove worse than the problems they are intended to address.

4. CPI Weight Concept

The report omits consideration of how household expenditure data should be aggregated to construct CPI weights. Instead, it accepts uncritically the present BLS method of adding up economy-wide spending in each expenditure category and calculating expenditure proportions at the economy level ("plutocratic" weighting). An alternative method that has been discussed in the economics literature is to use an average of the percentage distribution of individual household expenditure weights ("democratic" weighting).¹¹ The present BLS weighting system gives more weight to spending patterns of upper income families. In view of the increase in the inequality of the distribution of income, the CPI weights have become even less representative of the typical American household. The present BLS method serves to place a higher weight on the more expensive varieties of goods like personal car phones, home computers, and airline travel. These are some of

¹¹In the presence of inflation, different households make different adjustments to their expenditures in order to maintain an unchanged standard of living. A democratic index is defined to be the average of these individual adjustments. See Pollak (1980).

the areas where the Commission is most worried that quality change is understated. It is conceivable, even likely, that many quality improvements are in items and varieties that are beyond the reach of median income households. The items and varieties they buy in relatively greater quantities, in contrast, may experience more-than-average quality deterioration. Thus, while the CPI may overstate inflation in the market basket for high income consumers, it may understate inflation for lower income households. The BLS needs to examine the whole issue of whether the impact of quality change and new products is different on households in different percentiles of the income distribution.¹²

5. Substitution Issues

There appears to be agreement in principle between the Commission and the BLS on this issue; the BLS has long recognized that if the CPI is to be modeled after a true cost-of-living index, the issue of substitution bias has to be addressed. The Commission's report identifies the following types of substitution bias: upper-level substitution, lower-level substitution, and outlet substitution. Upper-level substitution is defined to occur in the

¹²It is not uncommon for the price of new goods to decline substantially following their introduction into the market. This price decline is often missed by the CPI because of the inevitable lag between a new good's arrival in the market and its capture in the sample of items that comprise the CPI market basket. The resulting bias in the CPI may be estimated by evaluating the difference between the price at which a household would have first bought a unit of the new good, its "reservation" price, and the price at which the new good enters the CPI. The reservation price for new goods among median households may be much closer to the price at which they are introduced into the CPI than the price at which new goods make their way into high-income households. If so, the new-goods bias in the CPI may not be nearly as large as believed by the Commission.

higher reaches of the CPI item hierarchy. An example of upper-level substitution is the substitution of canned goods for frozen goods. Lower-level substitution occurs within the detailed elements of the CPI commodity structure; e.g., the substitution of canned beans for canned peas.¹³ The BLS has already implemented its methods for dealing with lower-level substitution bias and more changes, such as the use of geometric means instead of arithmetic means, are being considered.¹⁴ Outlet substitution bias occurs when consumers realize net gains from switching to discount outlets, and those are not accounted for in the CPI. The differences between the BLS and the Commission are about the size of the biases and how to correct for them.¹⁵

A problem with estimating the overall size of the substitution bias is that its different manifestations are not independent of each other. It has also been pointed out in the

¹³More technically, upper-level substitution bias occurs when indexes for 207 item groups and 44 areas are combined to yield the CPI. This is the level at which expenditure weights are first applied. Lower-level substitution bias occurs when the 71,000 or so price quotes for goods and services that exist within the above mentioned item groups and geographical areas are aggregated. Expenditure weights are not used for the aggregation of those individual price quotes.

¹⁴The Boskin Commission recommends the use of geometric means under the presumption that it is a better way of accounting for consumer substitution across items at the lower levels (more precisely, sub-strata levels) of the CPI. However, as pointed out by BLS Commissioner Katharine Abraham, the geometric mean is superior to the arithmetic mean in this context only when consumer substitution across items within a CPI stratum is of a high degree. While this is true for some strata, such as fresh fruits, it is not true of others, such as prescription drugs.

¹⁵For example, the Commission adopts without question Reinsdorf's (1993) estimate of the outlet substitution bias. But as pointed out by Moulton (1996), the Reinsdorf finding is barely statistically significant and needs to be replicated for other years.

economics literature that there exists a relationship between substitution bias and the new goods and quality change bias.¹⁶ One reason is that all these effects evolve from the reaction of consumers to changes in relative prices. The interaction was also noted by the BLS in its report to the House Budget Committee dated April 28, 1995. The Commission agrees with this assessment when it notes on page 21: "*These different biases overlap...*" Nonetheless, the Commission proceeds to make a numerical estimate for each type of substitution bias and then adds up these estimates as if they were independent. The total substitution bias noted by the Commission on page 68 of the report is 0.5 percentage point. As mentioned above, because the numbers are not additive, the total substitution bias is, in fact, lower.

The Commission recommends one way to correct for higher-level substitution bias. It largely requires averaging the expenditure weights for two adjacent time periods—i.e., the current one and the one immediately prior.¹⁷ The use of current-period expenditure weights would allow the price index to reflect the effect of consumers substituting one commodity for another. But current-period weights are available only with a lag; therefore, the Commission recommends both a preliminary and then a revised index be published.¹⁸

¹⁶See Moulton (1996) and Shapiro and Wilcox (1996).

¹⁷The index formula recommended to incorporate the current and previous period's weights is named after its creator Tornqvist.

¹⁸This specific recommendation relates to the publication of an annual index. Other procedures would apply to monthly indexes, but the BLS has expressed reservations about those recommendations because their adoption would lead to a downward bias in the CPI.

While under certain conditions this approach deals better with substitution in response to relative price change than the present BLS method, it is hard to implement.¹⁹ The approach means the indexes will be subject to historical revision, making their use for indexation in the government and private sectors much more difficult.

As an alternative to revising the CPI, the BLS could, for example, consider introducing new expenditure weights into the CPI every five years instead of the present ten. Like now, the BLS could use expenditure data averaged over three years, but centered on years in which the Census Bureau conducts economic censuses used to benchmark the GDP. Thus, CPI weights would not only be more up-to-date, but the index would blend better with other economic statistics.²⁰

6. Cost-of-Living Index for Elderly Households

The Commission dismisses too quickly the notion of the need for a CPI for older people. Differences in expenditure patterns or weights between older citizens and the rest of the population is only one factor in this debate. A more important issue is that older people

¹⁹The Commission recommends the Tornqvist index because it is believed to provide a close approximation to the true cost-of-living index. However, this is true only if consumer preferences satisfy certain restrictive conditions. If they do not, changes in income level and its distribution can drive a wedge between the true cost-of-living index and the Tornqvist index.

²⁰More frequent weight revision need not necessarily reduce upper-level substitution bias.

may consume different types of goods and services. A point-of-purchase survey (POPS) of older people is the essential ingredient to determining whether or not specific pricing is needed for such an index. If households of older people shop in different outlets and studies show they buy items that are different from the remainder of the population, they may face a different rate of inflation than the CPI.²¹

In addition, the judgments the Commission makes regarding the bias in the CPI need not carry over to a price index for the elderly. Research will be needed to determine if older people display similar patterns of substitution, especially across outlets, and if the new goods and quality bias issue is equally relevant for them. For example, the change in the quality of consumer electronics and computers may be a non-issue in a CPI for older persons.

7. Where the BLS Should Look for Research Input

The Commission's report recommends a research and implementation agenda, but makes it clear the BLS should have the final word on adopting it. While there may be differences of opinion about research and implementation priorities, there should be no disagreement

²¹Though the Commission takes no notice of it, the BLS currently computes an experimental CPI for Americans 62 years of age or older. That index rises faster than the official CPI. One reason this version of the CPI is called experimental is that no point-of-purchase survey of the elderly or separate pricing is conducted by the BLS in its estimation.

with the Commission's view that the BLS must remain independent of the political process. The Commission does recommend that a permanent, independent, public, professional entity be established and funded by the BLS to provide research input. But, the BLS already has a formal mechanism to do this. It has business and labor research advisory committees. Perhaps it could establish an academic research advisory committee.²²

The BLS would be better advised to consider establishing arrangements with other national laboratories, such as the National Institute of Science and Technology (NIST) to get the kind of technical advice needed to identify new products and evaluate quality change. Other agencies the BLS could draw on that come to mind are the National Institute of Health (NIH) research arms, the Consumer Product Safety Commission (CPSC) and the Environmental Protection Agency (EPA).²³ Economists should not be put in the position of playing the roles of engineers, doctors, and environmental scientists.²⁴

²²The BLS is already an active participant in the National Bureau of Economic Research (NBER) Conference for Research on Income and Wealth and its price and productivity workshop. The discussion and sharing of research strategies and results has been a "two-way street" for a long time. BLS findings are often published in academic journals and edited volumes. Fifteen of the 60 references cited by the Commission are to research by those associated with the BLS' cutting edge Price Research Division. And there would have been more if the Commission had considered the important conceptual cost-of-living research by Pollak (1989) and the quality adjustment work of Tripllett (1975, 1988, 1993). The impetus for the Commission came, however, from the Federal Reserve and Congress, not from any academic body.

²³For at least ten years now, the BLS has drawn on the Food and Drug Administration (FDA) for decisions about when generic and brand name pharmaceuticals are chemical equivalents.

²⁴For example, NIST could have advised BLS about the "physical" reasons for the increased life of autos. A key reason is rust proofing. As it turns out, the BLS has always

8. Conclusion

The Commission's findings are not convincing. Its report lacks comprehensiveness and its estimate of the bias in the CPI is not the outcome of rigorous economic analysis. Because of that, its caution that readers, particularly BLS, the Congress and the executive branch, need some time to digest and understand the report is a point well taken. When all issues that separate the CPI from a COLI are evaluated and the BLS continues its program of improvement to the index, we are of the opinion that there is a reasonable possibility that the dispute over bias will disappear. For Congress to act now to adjust federal indexation formulas that are based on the CPI would be premature.

With respect to the Commission's recommendations to BLS, it should be recognized that other changes could be considered. Some, such as the use of democratic weighting instead of plutocratic weighting, have been discussed in this critique. Others will surely emerge as the BLS and other researchers review the final report of the Boskin Commission.

given the auto industry credit for the costs it incurs when rust proofing is improved. Thus, that aspect of quality improvement has already been introduced in the CPI.

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PREPARED STATEMENT OF LINDA CHAVEZ-THOMPSON

I appreciate this opportunity to testify on behalf of the AFL-CIO regarding the important matter of the Consumer Price Index (CPI).

The AFL-CIO is vigorously opposed to any Congressionally mandated replacement or adjustment of cost of living allowances (COLAs) based on the CPI. We also oppose subjecting the Bureau of Labor Statistics (BLS) to political pressure to change its methods of calculating the CPI. The stakes are enormous, since the economic well-being of millions of Americans depends on the accuracy of the CPI as a measure of inflation.

The CPI has been in the news a great deal since December 4, 1996, when the Boskin Commission released its finding that the CPI overstates cost of living inflation by 1.1 percentage points a year. This amounts to an overstatement of more than one-third of the entire increase in the CPI in recent years.

The Boskin Commission's findings are contested by a number of highly respected economists, some of whom believe that the CPI may actually understate cost of living inflation. This alone suggests that the Congress should hold back regarding making changes.

Despite this, there are signs that many policy makers view a technical revision of the CPI as an expedient means of reducing the budget deficit. Their thinking is that it would reduce COLAs for social security and welfare benefits, while also reducing the indexation of the tax system. This is tantamount to balancing the budget on the backs of America's elderly, America's veterans, America's poor and ordinary working Americans.

Through the guise of improving the measure of cost of living inflation, the Boskin Commission is being used to provide political cover for this cynical maneuver. The unstated reality is that nearly every dollar of deficit reduction achieved in this fashion would come straight out of the pockets of those who can least afford it.

Since 1979, the income disparity between rich and poor has widened. To make ends meet, workers are putting in longer hours: at the same time, profits and CEO salaries have skyrocketed. Tampering with the index on which COLAs are based would reinforce these trends, thereby worsening the problems of economic polarization and income inequality.

In sum, tampering with inflation indexing and the computation of COLAs to fix the deficit is wrong, and it must not be allowed to happen. "Cooking the books" is not the right way to achieve fiscal integrity, and will exacerbate the problems of economic inequality.

Workers' Wages Would Be Reduced By COLA Cuts

Reducing COLAs based on the CPI would hurt millions of workers. One third of union contracts contain provisions that tie cost of living wage adjustments to the CPI. A 1.1 percentage points per year reduction in the CPI would cause the typical auto worker to lose \$6,500 in COLA payments over the next five years. Aerospace workers at Boeing would be hit with a \$6,550 loss in COLA payments over the next seven years. The wages of the National Association of Letter Carriers, the American Postal Workers Union and the Mail Handlers Union represent 700,000 postal employees, are all affected by cost-of-living increases that are tied to the CPI.

In practice, the effect on wages would be felt far wider since workers without COLAs would also be impacted. This is because the CPI serves as a benchmark in guiding wage increases for both union and non-union workers. Accepting the Boskin Commission's claim that the CPI overstates cost of living inflation would therefore provide employers with a reason to lower wage increases across the board. The result would be a further adverse shift in income from wages to profits, to the detriment of working families.

Social Security Recipients Would Be Harmed By COLA Cuts

Another group that would be brutally impacted by tampering with COLAs based on the CPI is social security recipients. Social Security insures 171 million American workers. Last year, more than 47 million Americans—retirees, disabled workers, their dependants, and survivors—received payments under the program. About 91% of all seniors—32 million of them—receive Social Security. For 66% of them it is their major source of income, and for 16% it is their only source of income. Social Security has been tremendously successful in reducing poverty among the elderly. The current incidence of poverty among the elderly is 12%; were it not for Social Security, 54% of the elderly would be in poverty.

Since 1975, Social Security recipients have been protected against loss of purchasing power by annual COLAs based on increases in the CPI. Reduced COLAs would erode quickly the purchasing power of Social Security. The 1.1 percentage points reduction called for by the Boskin Commission would cut yearly COLAs by more than

one-third. A retired couple receiving \$13,400 in Social Security benefits in 1996 would be hit with a cumulative benefit loss of \$2,360 over the next five years. Single retirees with Social Security benefits averaging \$8,860 in 1996 would face a cumulative benefit loss of \$1,560 over the next five years. For widows or widowers with average Social Security benefits of \$8,360, the loss of benefits would total \$1,470. For disabled Social Security recipients with average disability benefits of \$8,390, the loss would amount to \$1,480.

Benefit cuts of this size would push many Social Security recipients into poverty. If 1.1 percentage point COLA reductions had been implemented 10 years ago, 600,000 more seniors would be below the poverty line today—an increase in elderly poverty of over 16%. More than two-thirds of this increase would have occurred among seniors 75 years old and up. Among this group, poverty would have increased by 24%.

Reduced Cost of Living Inflation Means Big Tax Increases for Working Families

Since 1981, the federal income tax system has been indexed with reference to CPI inflation. The intent of tax system indexation is to protect taxpayers from the effects of "bracket creep": higher taxes that result solely from inflation, rather than higher real incomes. Not only the break points between tax brackets (for example, between the 15% and 28% brackets), but the amounts allowed for personal exemptions and for standard deductions are also indexed.

Implementing the Boskin Commission's recommendations would reduce bracket levels, exemptions and deductions, thereby triggering a substantial tax increase for American taxpayers. According to the Congressional Budget Office, a one percentage point reduction in annual tax indexation would result in a \$9.6 billion tax increase in the year 2000, and a \$44.5 billion tax increase in 2006.

For a family of four with 1996 income of \$50,000, the CPA firm Coopers & Lybrand estimates that implementation of the Boskin Commission's recommendations would trigger a \$450 tax increase between 1997 and 2001: the increase would be \$1,760 tax between 1997 and 2006.

Low Income Families Would Be Hurt

Many other provisions of the tax code are also indexed, including the Earned Income Tax Credit, or EITC. This provision is of special importance to lower-income working families, and it also provides incentives for low wage workers to seek out employment rather than rely on welfare. Reduced indexation of EITC would hit low income working families. There are more than 19 million low-income working families. An EITC-eligible family with 1996 income of \$20,000 and an EITC of \$1,790, would lose \$1,060 between 1997 and 2001.

Low income families would be further hurt because they rely so heavily on indexed entitlement programs and pensions. Both Supplemental Security Income (SSI) and Veterans benefits are indexed to the CPI, and reduced indexation would lower these benefits. At the same time, fewer families would be eligible to receive SSI, Veterans benefits and pensions, Medicaid, and Food Stamps. This is because the income thresholds at which families lose eligibility for benefits would be reduced.

The Boskin Findings Represent Only One Point of View

The above testimony details the disastrous implications of adopting the Boskin Commission's recommendations. The AFL-CIO's concern is bolstered by the belief that the Commission's claims are tendentious, and by the fact that leading experts strongly disagree with their findings.

All of the five economists appointed to the Commission were known to already hold the view that the CPI substantially overstates inflation. Leading economists disagree with their findings. These include Janet Norwood, a former BLS Commissioner, and Dean Baker of the Economic Policy Institute.

The Boskin Commission focused on ways the CPI might be overstating inflation, and down-played sources of understatement. There are many good examples of such understatement. For instance, when evaluating the cost of transportation, the BLS looks only at the prices of cars and gasoline. It does not include the increased costs resulting from increased traffic congestion, which wastes time and gasoline, and causes wear and tear on cars.

Another example of understatement is the failure to take account of the greater contributions for health care premiums and doctor co-payments that have been forced upon Americans as a result of the changing health care delivery system.

Numerous other examples of understatement are available, so much so that it possible that the CPI may even understate inflation. However, tit-for-tat regarding what is understated and overstated misses the real point, which is that the Boskin Commission's findings are wholly implausible. The Commission claims that inflation

has been overstated, and as a result real wage and income growth has been understated by 1.1% per year. If we extrapolate this faster growth rate back to 1960, the Commission's finding amounts to saying that 50% of households were living at the poverty level in 1960: if we extrapolate it forward, it means that average hourly wages measured in today's purchasing power, will be \$38.65 in 2030. These implications are totally implausible, and the Commission therefore stands discredited by its own logic.

The Boskin Commission Ignores the Impact of Inflation on the Elderly

A particularly unfair aspect of the Boskin Commission's recommendations is that it will reduce social security benefits for the elderly. Yet, it is widely acknowledged that the CPI understates the impact of inflation on the elderly owing to their heavy consumption of medical services. A special index calculated by the Bureau of Labor Statistics (BLS) estimates this understatement to be 0.3 percentage points per year. With Medicare Part B premiums and out-of-pocket health care costs headed higher, the CPI's understatement of the rise in cost of living for the elderly is likely to increase even further in the years ahead.

Conclusion

The BLS produces very fine statistical work, and has calculated the CPI for decades. It publishes an honest measure upon which Americans can rely. This measure is revised and updated on a continuing basis, and the BLS already addresses the technical issues raised by the Boskin Commission.

The Boskin Commission has asserted that the CPI overstates cost of living inflation without conducting any new research, and without addressing the acknowledged problems of potential CPI understatement of cost of living inflation. There is now an imminent danger that its findings will be exploited as a politically expedient means of balancing the budget.

For all of the reasons presented above, the AFL-CIO vigorously opposes tampering with inflation indexing or COLAs based upon the CPI. We oppose subjecting the BLS to political pressure to change their method of calculating the CPI: this would ultimately undermine public confidence in all of the nation's statistical agencies.

We urge the distinguished members of this Committee, and others in the Congress, not to take any of these misguided steps. Balancing the budget on the backs of working Americans and America's most vulnerable is cynical and wrong. Let me reiterate that the AFL-CIO believes that "cooking the books" is not the right way to achieve fiscal integrity, and will only worsen the already severe problem of economic inequality.

Finally, in the event that you would like to discuss some of the more technical issues, I invite you to contact our staff economists at the AFL-CIO. Thank you again for this opportunity to present the views of the AFL-CIO on the vital topic of the CPI and the measurement of inflation.

THE AFL-CIO HAS NOT RECEIVED ANY GRANTS OR CONTRACTS UNDER THE FAIR LABOR STANDARDS ACT IN THIS FISCAL YEAR OR IN THE TWO PREVIOUS FISCAL YEARS.

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LINDA CHAVEZ-THOMPSON AFL-CIO Executive Vice President

Linda Chavez-Thompson was elected Executive Vice-President of the AFL-CIO on October 25, 1995 at the federation's convention in New York, part of an insurgent campaign to reinvigorate the American labor movement.

A second-generation American of Mexican descent, Chavez-Thompson has twenty-eight years experience in the labor movement. She rose from the organizing ranks of her union, the American Federation of State, County and Municipal Employees, to become the first person of color elected to an executive office of the AFL-CIO. She is the highest ranking woman in the labor movement.

Prior to her election as Executive Vice-President, Chavez-Thompson served as a Vice-President of the AFL-CIO since August 3, 1993. She served on the Executive Council Committees on Full Participation, International Affairs, Article XX Appeals and Housing. She was elected National Vice-President of the Labor Council for Latin American Advancement in 1986 and served in this capacity through 1996.

Chavez-Thompson was a Vice President of AFSCME from June 1988 and through June 1992. As Vice President of AFSCME, she directed the union's efforts in a seven-state district -- Arizona, Colorado, Nevada, New Mexico, Oklahoma, Texas, and Utah -- that is widely recognized as unfriendly to labor. But she achieved numerous successes there, including an organizing drive in Texas that brought in 5,000 new members over the past five years, and the passage of a collective bargaining law for public employees in New Mexico.

She was elected Executive Director of Texas AFSCME Council 42 on February 4, 1995, responsible for advancing legislative, political action and education programs for more than seventeen local unions that make up the council.

Born to sharecropper parents in Lubbock, Texas, Chavez-Thompson began her trade union career as a union secretary for the Laborers' International Union from December 1967 through June 1971. She served as an AFSCME International Representative, Assistant Business Manager, Business Manager and Executive Director of AFSCME Local 2399 from June 1971 to February 1995.

Chavez-Thompson served on many city and community boards in San Antonio and was named to several political appointments in her home state of Texas.

Prior to moving to Washington, D.C. in November 1995, Chavez-Thompson resided in San Antonio, Texas. She is the widow of Robert Thompson, and has two children by a previous marriage and a grandson.

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PREPARED STATEMENT OF MARTIN FELDSTEIN, PH.D.

Thank you, Mr. Chairman. I am pleased to appear before this Committee to discuss the problem of adjusting government outlays and receipts for changes in the cost of living. I have three conclusions to share with the Committee:

(1) In my judgment, the current Consumer Price Index overstates the true increase in the cost of living by at least the 1.1 percent per year indicated by the Advisory Commission to Study the Consumer Price Index.

(2) Congress and the President should act this year to change the procedure for adjusting government outlays and receipts for inflation.

(3) The appropriate Inflation Adjustment Factor cannot be derived by rigorous statistical methods but requires the exercise of informed judgment. While the Bureau of Labor Statistics should be encouraged to improve the existing CPI measure, Congress should (as recommended by the Advisory Commission) establish a rotating expert advisory committee that will periodically recommend the Inflation Adjustment Factor that, in its judgment, best represents the modification of the CPI needed to measure the increase in the cost of living.

I will now comment briefly on each of these three conclusions.

1. The CPI currently overstates the increase in the cost of living by at least 1.1 percent per year.

The most difficult problems in measuring the cost of living are associated with the introduction of new products and changes in the quality of existing products. There has been substantial research on these problems in recent years, especially among the economists who are associated with the National Bureau of Economic Research. This research has dealt with a very wide range of particular goods and services, including such very different things as prescription drugs, breakfast cereals, and the care of patients who have experienced heart attacks.

In study after study, the researchers have found that the existing CPI procedures substantially overstate the true rise in the cost of living. Sometimes this is because the CPI procedure introduces new products too slowly. More importantly, the CPI procedure generally fails to take into account the value of the new product as such and only captures the change in its price long after it is has been introduced.

In the case of health care, the CPI procedure takes into account only the cost of the service and not its improving effectiveness in treating patients. There are also a variety of special problems. For example, the CPI fails to capture the important price decline that occurs when the patent runs out on a prescription drug, causing the same generic drug to be available at a much lower price.

2. Congress and the President should act this year to change the inflation adjustment procedure.

There is no reason to delay the legislative change. Indeed, the fact that inflation adjustments in the past have been based on the unadjusted CPI means that the existing benefit levels and tax rates have gone far beyond the appropriate inflation adjustment.

Delaying the legislative change would have only a small effect in the first year but would mean that government outlays would be permanently and substantially higher than they should be and government receipts would be permanently and substantially lower. On the basis of recent estimates by the Congressional Budget Office, I have calculated that a 1.1 percentage point change in the Inflation Adjustment Factor beginning in fiscal year 1998 would reduce the deficit in that year by \$6 billion and the deficit in 2002 by about \$60 billion. If the inflation adjustment were postponed by just two years, the deficit reduction in 2002 would be only about half as large (about \$33 billion) and the national debt would be more than \$90 billion larger.

3. Because the appropriate Inflation Adjustment Factor cannot be derived by rigorous statistical methods but requires informed judgment, the Congress should appoint a rotating expert advisory committee that will periodically recommend an appropriate Inflation Adjustment Factor.

Although studies of individual goods and services can indicate that the existing CPI method overstates the rise in the cost of living, there is no statistically rigorous scientific way to modify the CPI for the quality changes in the millions of products in our economy or to take into account all of the new products that are introduced each year. But that is not a reason for ignoring such changes in deciding how much to adjust benefits and tax brackets each year.

Rather it tells me that the CPI calculated according to rigorous rules by the Bureau of Labor Statistics should be regarded as only a starting point for deciding on the Inflation Adjustment Factor. To do this, the Congress should establish a rotat-

ing expert advisory committee that will periodically recommend an Inflation Adjustment Factor that, in its judgment, best represents the modification of the CPI change needed to measure the increase in the cost of living.

In her recent testimony to the Senate Budget Committee, BLS Commissioner Katharine Abraham indicated her concern that when "evidence . . . is sparse" the recent Advisory Commission was "forced to fall back on its best judgment" and expressed her view that the CPI should instead be based on tested and reliable statistical techniques. I think she is correct both in her characterization of the work of the Commission and in the scientific standard to which the official CPI should aspire.

But that is not a reason for the Congress to reject the use of informed judgment in deciding how to adjust benefits and taxes. Indeed the technical standard that the BLS will rightly insist upon means that even if the BLS makes all of the improvements in the CPI that it currently contemplates and that future research may suggest, the resulting estimate will still be virtually certain to overstate the true increase in the cost of living. It is important therefore to go beyond the technical CPI calculation done by the BLS staff and introduce an element of judgment.

In thinking about the separate roles of the BLS and the advisory committee, I find it helpful to think of the BLS as similar to an accounting firm. Accountants follow rigorous rules to produce an estimate of the so-called book value of a company. But when another firm wants to buy that company, it doesn't use just the book value. Rather it looks to experts for advice based on judgments. I think such judgmental decisions are inescapable in the current context and that it is better to rely on the judgment of experts than to use only the BLS methods of inflation accounting that are rigorous and replicable but that inevitably overstate the true increase in the cost of living.

JOINT PREPARED STATEMENT OF MESSRS. MICHAEL J. BOSKIN, ELLEN R. DULBERGER,
ROBERT J. GORDON, ZVI GRILICHES, AND DALE W. JORGENSON

Chairman Roth, Ranking Member Moynihan and other distinguished members of the Senate Finance Committee, we are pleased to be here today to present the findings and recommendations of the CPI Commission to you. Before summarizing those findings and recommendations, I would like to reiterate a few important points of procedure.

First, I want to thank Chairman Roth, Senator Moynihan, and the Finance Committee staff for the thoroughly professional manner in which they have dealt with and assisted the Commission throughout its deliberations and the presentation of the report. I suppose you would say this was a thoroughly bipartisan effort; it certainly was that. From our standpoint, it was a nonpartisan effort. We were asked to render a thoughtful, careful and professional judgment, and nobody ever suggested that we do anything other than that. We received substantial encouragement and support from the Chairman, the Ranking Member and the staff in doing so. For dealing with us in this completely professional manner, we are deeply grateful.

Second, the CPI Commission is the first official systematic external expert evaluation of the nation's price statistics in 35 years. The Stigler Commission report, issued in 1961, raised some of the same issues and was an important input to the major changes made by BLS in 1978. But since 1961, there have been numerous important developments that could not have been readily predictable at that time: major theoreticians' breakthroughs in index number theory and in methods to adjust for quality change, plus technological change such as scanners, on the one hand, and the widespread indexing (to the CPI) of the government budget in response to the high inflation of the 1970's, on the other. These developments make the Commission's recommendations to improve the accuracy of the Consumer Price Index both more important, and more feasible, to implement.

Third, the Commission had dozens of meetings—in person, electronically and telephonically. We examined everything from the mathematics of the index number formulas to BLS procedures to the actual price collection mechanism. We went out with the price takers to observe that process as well. We also had many meetings with the leadership of the Bureau of Labor Statistics, including a meeting at which our recommendations were thoroughly discussed two weeks prior to the presentation of the final report. We appreciate the cooperation we received from the many dedicated, talented people at BLS. Indeed, our findings and recommendations have been heavily influenced by our interaction with BLS.

Fourth, while the widespread indexing of government programs makes the budgetary and programmatic ramifications of our findings, as you will hear in a moment, quite important, it is important for us to reiterate that every single finding and rec-

ommendation of the Commission would be identical even if the budget was in surplus and there were no long-run entitlement cost problems on the horizon.

Fifth, it is important to understand that many of the issues we raised and findings we report are endemic to the generation of price statistics in all countries. This is not just a problem with the United States Consumer Price Index. It is a problem with the price statistics in all countries. In some dimensions, the US BLS is ahead of the statistical agencies in other countries—for example, in its use of sampling techniques. In some other dimensions, other agencies have moved ahead faster to correct some of the problems. For example, Statistics Canada has already implemented one of our recommendations, the movement to geometric means at the lowest level of aggregation in the price statistics. All of these agencies, especially the BLS, have active research and programmatic plans to make improvements in some of the areas covered in our recommendations. As indicated below, this is likely to take some time and resources, and while we believe that the statistical agencies should move forward with all deliberate speed—emphasizing both deliberate and speed—they are going to catch up only partially and gradually.

The CPI Commission: Finding and Recommendations

Measuring prices, and their rate of change, accurately is central to almost every economic issue from the conduct of monetary policy to measuring economic progress over time and across countries to the cost and structure of indexed spending and taxes. Many private contracts, including indexed bonds, are explicitly tied to the consumer price index (CPI) and an even larger number calibrate informally. About one-third of the US federal budget outlays are automatically escalated each year by change in the CPI, as are income tax brackets (but unfortunately without the definition of income).

In the first external extensive evaluation of the nation's price statistics since the Stigler Commission in 1961, the CPI Commission (see Boskin, et al. (1997)) concluded that the change in the CPI overstates the change in the cost of living by about 1.1 percentage points per year (the range of plausible values is 0.8 to 1.6 percentage points). That is, if inflation as measured by the percentage change in the CPI is running 3 percent, the true change in the cost of living is about 2 percent. This bias might seem small, but when compounded over time, the implications are enormous. Over a dozen years, the cumulative additional national debt from over-indexing the budget would amount to \$1 trillion. Likewise, the implications of overstating inflation for understanding economic progress are equally dramatic. Instead of falling, average real earnings have risen, and instead of stagnating, real median income has grown, over the last quarter century. The poverty rate would be smaller. And because the CPI component price indexes are inputs into the national income accounts, real GDP growth is also understated. (See Boskin and Jorgenson (1997)).

But why is inflation so hard to measure? Despite numerous improvements that have been made historically and continue to be made by government statisticians in all countries, including the US Bureau of Labor Statistics, many of them laboring under inadequate human and financial resource constraints, it is difficult to keep up with the dynamic change in the economy. New products are being introduced all the time and existing ones improved, while others leave the market. Relative prices of different goods and services change frequently, for example, in response to technological and other factors affecting costs and quality, which leads consumers to change their buying patterns. There are literally hundreds of thousands of goods and services available in rich industrialized modern market economies. A single supermarket may contain 30,000 differently priced items and a WalMart store over 40,000. As we have become richer, demand has increasing¹ shifted to services away from goods and to characteristics of goods and services such as enhanced quality, more variety and greater convenience. Technology and entrepreneurship provide them. But all these factors, plus others, mean a larger fraction of what is produced and consumed in an economy is harder to measure than decades ago when a larger fraction of economic activity consisted of easier to measure items such as tons of steel and bushels of wheat.

Findings

How to obtain information on who is buying what, where, when, why and how in an economy, and then to aggregate it into one or a few measures of price change raises a host of complex analytical and practical problems. The mathematics of aggregating changes in the prices of different goods and services are complex and subtle (See Fisher (1922) and Diewert (1976)). Despite decades of analytical and empirical research, some of it recently done in statistical agencies such as the BLS, the statistical agencies around the world still primarily rely on fixed weight indexes which do not account for consumer substitution among commodities. Thus, these

Laspeyres measures of inflation are inherently an upper bound, and empirical studies led the Commission to conclude that this source of substitution bias—failing to catch that consumers substitute chicken for beef when beef prices go up (upper level substitution bias), or Delicious for Macintosh apples under similar circumstances (lower level substitution bias)—leads to an overstatement in the US Consumer Price Index of about 0.4 percentage points.

Likewise, there has been a fundamental change in the nature of retailing, perhaps most pronounced in the US, but spreading virtually everywhere with the advent of superstores and discount chains. The same VCR available for \$200 in a local appliance store may be only \$160 at Circuit City. Since price data are collected within outlets, the shift of consumers to purchases from discounters does not show up as a price decline even though consumers reveal by their purchases that the price decline more than compensates for the potential loss of personal services. Thus, in addition to substitution bias among commodities there is an outlet substitution bias. In the US, this adds another 0.1 percentage point of upward bias.

Another problem is that price data tend to be collected during the week. In the US, about 1 percent of price quotes are collected on weekends, despite the secular trend of an increasing share of purchases made on weekends and holidays (probably reflecting the increasing prevalence in two-earner couples). Since some outlets emphasize weekend sales, there may be a when bias as well as a what and a where bias. Recent research suggesting that prices rise less rapidly in data collected by scanners rather than price takers may be partly explained by this phenomenon.

These types of problems account for just a little under half of the 1.1 percentage point identified by our Commission. Slightly over half results from the difficulty of adjusting fully for quality change and the introduction of new products. Economists have known since Hicks (1940) that the introduction of a new product should be dealt with in a cost of living index by its reservation price and including the consumer surplus attributable to the introduction of the product. Noting this, our Commission took the more cautious view of primarily including estimates of explicit dimensions of quality change and the very late introduction of major new products into the index. In the US CPI, VCRs, microwave ovens and personal computers were included a decade or more after they had penetrated the market and their price had fallen 80 percent or more. Cellular telephones won't be included in the US CPI until 1998, despite the fact that there are more than 40 million cellular subscribers in the US today and well over 100 million Americans receive calls on land line phones initiated on cellular phones. Jerry Hausman of MIT estimates that the quality adjusted price of cellular services has declined by 90 percent since 1989. The advent of PCS competition and deployment of digital technology will have substantially occurred by the time cellular services begin to get priced. Correspondingly, the pace of quality change in some important areas, such as health care and consumer electronics, has been breathtaking and our statistics are not keeping up.

When economists try to define the change in the cost of living it is to answer the question "How much more income will consumers need to be just as well off with the new set of prices as the old?" In addition to the substitution issue raised above, clearly this involves measuring quality-adjusted prices. One would not want to count a major improvement in quality that greatly enhances well being as inflation. Hence, the Commission examined an exhaustive set of 27 subcomponents of the CPI, and based on empirical research findings and common sense observation, estimated, we believe conservatively, a 0.6 percentage points per year quality change and new product bias in the CPI (see Gordon and Griliches (1997)).

Thus, the total bias is estimated at 1.1 percentage points per year, as detailed in Table 1.

Recommendations

Our Commission made a variety of recommendations that form guideposts for statistical agencies to improve the quality of their statistics. (Many of the world's statistical agencies, including the BLS in the United States, are planning to make progress on at least some of these fronts already.) These include changing from fixed weight formulas to mathematical formulas that account for consumer substitution in the aggregation of prices of goods and services. Also important are reweighting the consumption basket more frequently, increasing the pace of sampling (the US is ahead of most countries in its sampling procedures; some others do not yet sample) so that new products enter more quickly and the prices of new products, the commodity mix and outlet mix are adjusted more rapidly, so the prices collected are more representative of current market activity. More use should be made of hedonic statistical methods to adjust for quality change.

More specifically, the Commission's first and overarching recommendation is that the BLS should establish a cost of living index as its objective in measuring

consumer prices. All of the other specific recommendations are aimed toward achieving this goal. The BLS has explicitly recognized that the CPI is not a cost of living index in its publications for decades. Still, its most common and pervasive use and interpretation is as a cost of living index. We believe a more fundamentally sound cost of living index can and should be developed. In order to achieve this objective, the Commission recommends the publication of two indexes, one of which is published monthly on a timely basis and is designed to maintain the spirit of the cost of living index yet accommodate the inconsistent timing schedules of the required information; and a second index which is published and updated annually and revised historically to introduce improvements arising from new information and new research results. The purpose of having two indexes is to accommodate the complex issues that must be addressed and the time delay in obtaining all of the necessary data.

We divided our recommendations into three time horizons: First, short run, those we think can be implemented immediately with little additional resources or new data collection initiatives. These center on changing the current CPI computation, primarily to make it more current, and second, on computing an annually updated and subsequently revised cost of living index. Second, the intermediate run, which incorporates reforms that are feasible in the current state of the arts, but would require new data collection, reorganization of activities, and/or changes in the detail of the various subindexes produced by the CPI. And third, longer run recommendations, emphasizing topics in areas that need additional research and attention. The timely monthly index should continue to be called the CPI and should move toward a cost of living concept by adopting a "superlative" index formula for account for changing market baskets, abandoning the pretense of sustaining the Laspeyres formula. To accommodate the delay in obtaining information on quantities needed to combine the price changes of items in the lowest groupings, BLS should move away from the assumption that consumers do not respond at all to price changes in close substitutes. Thus, BLS should move to a "trailing Tornquist" index (weighted geometric mean of price relatives), at the stratum and ELI level, and also, concurrently, to geometric means of price relatives at the elementary aggregation level.

These moves would alleviate the problem of the growing irrelevancy of market baskets based on decade-old consumption patterns, reduce significantly the substitution and formula bias, and facilitate the speedier introduction of new goods and services into the index.

a. Because of the lag in collecting up-to-date information on consumer spending patterns, the weights will have to be based on a trailing two- or three-year average of past expenditures, e.g. 1993-4 weights for the 1996 price changes. They should be changed every year. This implies that

b. The BLS should organize itself for "permanent" rather than decadal revisions in the CPI. Both the weights and the priced commodity and services assortment need more frequent updating. Also,

c. Wherever possible, scanner data and other "outside" data should be used both to reduce the cost of data collection and (primarily) to expand the assortment of goods and services priced concurrently, to provide current item weights, and to introduce new items as quickly as they enter the market. Whether this will result in a net reduction in the cost of data collection is an open question.

d. As subsequent data become available, the weights are updated, and new goods are introduced and their history extended backward, the information incorporated in the published CPI should undergo retroactive revision, as far back as the new information warrants, in the form of a new annual COL index, using a compatible "superlative-index" formula. This "revised" COL index would be published annually, with a lag of a year or two, and would be subject to additional revisions after new information emerges and new methodology is introduced. The published versions of this index need never be "final."

The BLS should study the behavior of the individual components of the index to ascertain which components provide most information on the future longer-term movements in the index and which items have fluctuations which are largely unrelated to the total and emphasize the former in its data collection activities.

This could result in the down-weighting or even elimination of data collection for certain cities and a revision of the commodity structure of the index which would consider some goods as having a national market, sampling a larger number of items but with less regard to geography, focusing on geographical differences only for more "local" commodities, such as fuel costs, rent, personal services, and fresh produce. Currently, the BLS collects a large number of price quotes on bananas, because they are inexpensive to collect and their prices are quite variable, even though these variations are not related systematically to the underlying trend-movements in the CPI. At the same time, less attention is paid to less variable but more likely

to change (disappear or be redesigned) and harder to measure commodities, such as surgical treatments, consumer electronics, and communication services.

The BLS should change the CPI sampling procedures to de-emphasize geography, starting first with sampling the universe of commodities to be priced and then deciding, commodity by commodity, what is the most efficient way to collect a representative sample of prices from which outlets, and only later turn to geographically clustered samples for the economy of data collection.

The current city level price indexes are useless for geographical comparisons of levels and misleading as measures of rates of change, since they are not based on any clearly defined levels. To do an adequate job of describing the geography of price levels in the US will require the collection of prices for the same commodities and services in different cities. To study differential changes in the price levels across cities, arising from different competitive and population trends, it may prove adequate to sample the "national" commodities in specific cities only once a year or so, on a rotating basis. More generally, one could design a model consisting of an underlying "national" trend level of the CPI, which would be the primary focus of monthly estimation, and more slowly changing city differentials, which would be based on less frequently collected data.

This would allow the CPI to concentrate resources on expanding the sample and analysis in rapidly changing areas of the commodity and services spectrum, such as health services, communication services, and food away from home, where quality change and commodity turnover is endemic.

Moving to a notion of a new "basket" each year will allow for a faster introduction of new items and new outlets. Moving to a national sample for most of such items would allow expansion of the number of specific items (models, varieties, types) sampled within a particular EII and reduce thereby the number of forced substitutions. Also, this would allow for the use of new sources of data, such as scanner data on prices, and industry-wide information on sales of specific items (for more detailed weights), leading to a quicker identification of new goods and their faster incorporation into the index. This is also the level at which more extensive quality adjustments and "comparable" substitutions could be made, recognizing the appearance of new outlets and new versions of services which provide consumers, effectively, with cheaper sources for the same or similar items consumed previously.

A number of additional specific explicit and implicit recommendations are made in the report, such as creating a more permanent mechanism for bringing outside information, expertise and research results to the BLS; converting the price of durables, such as cars, to a price of annual services analogously to owner-occupied housing; changing the treatment of insurance to an ex ante consumer price rather than an ex post insurance profits-based measure; and determining whether collecting more price data on weekends and holidays would make a difference.

Longer run considerations involve examining the ramifications of the assumptions of price equilibrium, developing perhaps in conjunction with other statistical agencies, research programs to look beyond its current "market basket" framework, perhaps eventually to be able to publish supplementary information on non-market issues, and developing a number of new data collection initiatives, in particular, health status surveys to obtain more information on various quality of life issues, and most importantly, detailed time use from a large sample of consumers to deal with search and related issues.

Of the 1.1 percentage point bias in the US we have identified, we believe that about 0.4 or 0.5 percentage points, from the substitution bias, could be dealt with in relatively short order -- a year or so -- by the statistical agencies. Quality change and new products are harder, but the statistical techniques and getting more up to date sampling should enable the statistical agencies to get another 0.2 or 0.3 percentage points -- although exactly for which products, when, is impossible to say -- over the intermediate run of several years. It is likely there will remain an irreducible minimum -- even with the widespread use of scanner data -- of quality change and new products bias. But the overstatement can be substantially reduced.

The Commission made a variety of recommendations to the Congress, such as providing additional resources necessary to expand the CES sample and the detail collected, to make the POPS survey more frequent and to acquire additional commodity detail from alternative national sources such as industry surveys and scanner data. Congress should establish a permanent rotating independent committee or commission of experts to review progress in this area every few years, and advise it on the appropriate interpretation of the then-current statistics. The Congress should enact legislation necessary for the Department of Commerce and Labor to share information in the interests of improving accuracy and timeliness of economic statistics and to reduce the resources consumed in their development and production. In particular, substantial progress can and should be made in reducing the

time from survey collection to implementation in the price program. Other countries appear to be able to do this in less than half the time that it takes in the United States.

While the CPI is the best measure currently available, it is not a true cost of living index. It suffers from a variety of conceptual and practical problems as the vehicle for measuring changes in the cost of living. Despite important BLS updates and improvements in the Consumer Price Index, it is likely that changes in the CPI have substantially overstated the actual rate of price inflation. Moreover, revisions have not been carried out in a way that can provide an internally consistent series on the cost of living over an extended span of time. More importantly, changes in the Consumer Price Index are likely to continue to overstate the change in the true cost of living for the foreseeable future. This overstatement will have important unintended consequences, including over-indexing government outlays and tax brackets and increasing the federal deficit and debt. If the intent of such indexing is to insulate recipients and taxpayers from changes in the cost of living, use of the Consumer Price Index has in the past, and will in the future, substantially overcompensate (on average) for changes in the true cost of living.

The analytical and econometric research done over recent decades has heightened economists' understanding of these issues. The time has come for governments in the US and elsewhere to recognize these problems, and act accordingly. That involves enhanced support for the statistical agencies to improve the price statistics with all deliberate speed in a non-politicized manner. It may well require additional resources. Virtually every major private firm in the world is spending heavily on information technology—hardware, software, and human capital—and we should not expect better statistics from our government agencies without a corresponding investment.

Finally, the President and Congress must decide whether they wish to continue the widespread over-indexing of their government programs. If the purpose of the indexing is to compensate recipients of the indexed programs or taxpayers from changes in the cost of living, no more and no less, they should move to wholly or partly adjust the indexing formulas. Such changes will have profound ramifications for our fiscal futures, but these changes should be made even if the budget was in surplus and there was no long-run entitlement cost problem. They should be made first and foremost in the interest of accuracy not only for the budget and the programs, but for the economic information upon which citizens depend.

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Table 1—ESTIMATES OF BIASES IN THE CPI-BASED MEASURE OF THE COST OF LIVING

(Percentage points per annum)

Sources of Bias	Estimate
Upper level substitution	0.15
Lower level substitution	0.25
New products/quality change	0.60
New outlets	0.10
Total	1.10
Plausible range	(0.80–1.60)

PREPARED STATEMENT OF ELLEN R. DULBERGER

WHY TWO INDEXES?

There are two major uses of a cost of living index: escalation for government programs and private contracts, and long term analysis of economic activity. In our view, it is not feasible to produce an index which adequately serves both because each as a different audience with different preferences for timeliness vs. accuracy. More specifically, escalation requires timeliness and minimal revision whereas long-term analysis requires historical perspective for understanding trends. The cost of gathering the detailed data, and doing "real time" analysis of new products and quality changes is prohibitively expensive and often just not possible.

Over time, some benefits of long term research can be embedded in a timely index. For example, an hedonic equation once in place can determine the information to be gathered by field agents so that quality adjusted price comparisons can be introduced into the index in real time. In addition, benefits of lower costs of data collection, such as using scanner data, will make it practical to reallocate data collection resources and make use of quantity information in a more timely fashion (as well as for analytical purposes). Methods must be devised to handle the new environment and adapt to further changes over time.

Recognizing the two major important uses of a cost of living index, and the limits and possibilities of producing a meaningful index for each, the commission determined that neither use would be best served by one index for both. A historical index which retrospectively incorporates meaningful research results is clearly necessary to improve our understanding of economic growth and trends.

Producing a timely index for use in escalation requires professional analysis and judgment to make estimates for known inadequacies in the source data—not different from what BLS does elsewhere, for example the establishment employment, and what BEA does in making its estimates of GDP for the periods between benchmark revisions.

Several of the commission's recommendations center on the nature of such judgments, such as the use of geometric means to combine price relatives when data on quantities are not available. Other recommendations are oriented towards facilitating such judgments such as changing the item structure so that the closest substitutes are within the same item stratum, and moving away from pricing durable goods to pricing the services they provide.

Using the timely COL index as an escalator requires an assessment of the intent of the escalator clause and the degree to which the available index will serve that intent. Often, in private contracts, the CPI is employed because it is widely recognized, readily available and not revised (because it is assumed not to need revision). However, the escalation rate is pegged to, but less than the growth rate in the CPI.

There are several rationale including the following:

- "productivity" improvements are demanded and agreed to
- new costs are growing at a lower rate than the CPI
- new technologies are becoming available which mean that not everything relevant is being held constant
- pure price negotiation

Clearly these are not mutually exclusive, but reflect the accommodation that is made to use an imperfect index for the use at hand.

Since it is not feasible to produce a timely index which is unbiased in the sense that it is equally likely to overstate and understate the changes in the long-term index, we concluded that it is logical and fair for Congress to seek the advice of experts to arrive at an estimate that is similarly unbiased, to accommodate the use of the available index to their purpose.

PREPARED STATEMENT OF HON. CHARLES E. GRASSLEY

(JANUARY 28, 1997)

Thank you, Mr. Chairman, for holding this hearing. Dr. Boskin and the members of his Commission have done an admirable job analyzing the current state of the Consumer Price Index and I would like to thank them for their service to this Committee. We are talking about complicated numbers and economic calculations which, if considered alone, would not hold much interest for the general public or the media.

But as soon as it is understood that the Consumer Price Index has a direct impact on the amount of a Social Security check, the income tax bracket you are in, or more indirectly, the level of interest you pay on a loan, America takes notice. Those are

just a couple of areas influenced by the CPI. (I have a list of other programs and areas which are influenced by the CPI which I would like to include in the record. Not only are we talking about the amount of Social Security benefits, CPI impacts Food Stamps, provisions in labor contracts, economic calculations of how fast wages are growing—and many other programs, a fact which has not been treated prominently in this debate.)

Like so many other issues before us right now, any movement to make changes may be interpreted as a shot across the bow to balance the budget or cut entitlements at the expense of vulnerable people. We want to stress that this report was generated because we want to ensure that benefits and taxes are fair for everyone. If the CPI as now calculated does overcompensate for inflation, we are borrowing more money to pay a benefit which is overly generous. But the estimates of how much the CPI overcompensates for inflation deviate dramatically. This uncertainty indicates to me that there is more work to be done before final action is warranted.

It is worth noting, however, if there was a possibility that the CPI was understating inflation, there would be a clamor to change it to reflect reality. Congress would not tolerate an understatement, nor would the AARP. Our aim should be accuracy and neither AARP or Congress should tolerate an overstatement of the CPI.

I am pleased that the Commission members are here to explain their findings and respond to the critiques of their report. The United States has a strong record in providing quality government statistics. This is an area I expect to see further work. Hopefully, we can work in a bipartisan manner to find the right solution.

**Consumer Price Index (CPI):
Sample of the Programs and Statistics Affected***

Programs and/or Uses of the CPI	Approximate Number of Persons Affected Annually
<i>Retirement and Survivor Income</i>	
Social Security (Federal Old Age Survivors and Disability Insurance - OASDI)	42.2 million
Civil Service Retirement System (CSRS) & Federal Retirement Systems (FERS)	2.2 million
Railroad retirement benefits	90,000
Veterans' pensions and veterans' compensation (Department of Veterans' Affairs; disability; survivor; and means-tested benefits)	3.4 million
Military Retirement System	1.5 million
Department of Defense Survivor Benefit Plan (SBP)	173,400 families
<i>Health Programs</i>	
HHS Health Resources and Services Administration, Division of Community and Migrant Health - various programs	N/A
Health Care Financing Administration (HCFA) reimbursement to hospitals for inpatient Medicare expenses	10.4 million discharges
<i>Education and Vocational Training Programs</i>	
Job Training Partnership Act (JTPA)	570,000
Head Start	750,000
<i>Poverty-Related Programs</i>	
Census Poverty Thresholds	N/A
HHS Poverty Guidelines	38.1 million

PREPARED STATEMENT OF HON. CHARLES E. GRASSLEY

(FEBRUARY 11, 1997)

Mr. Chairman, I commend you and Senator Moynihan for your leadership in evaluating the Consumer Price Index Issue. You are courageous indeed for examining anything that affects the "third rail" of American Politics. The "third rail" is said to be Social Security; however, you can also consider anything that affects the other various entitlements to be politically sensitive.

Our government has increasingly become about the transfer of wealth from working American families to other segments of our society. Our nation's government used to be more about guaranteeing personal liberties, and the American Dream.

The President has yet to join in meaningful debate on the CPI or an accurate cost of living index. Therefore, if the CPI is an *inaccurate* measurement of the cost of living, taxpayers will not get much justice from the President this year. As I have said, a CPI adjustment will happen only if the President uses his office to lead us to it. Since it does not seem that he will be the leader, it will be difficult, if not impossible to have a meaningful debate on the CPI.

Nonetheless, I am still interested in finding fairness in a cost of living adjustment. That is the core issue. There will be testimony about the effect on COLAs and the effect on taxes. However, the core issue is a moral one: "Does the CPI accurately measure the cost of living for 1997, and beyond?" What is fair?

I welcome the testimony of the witnesses.

PREPARED STATEMENT OF JAMES L. MARTIN

Thank you for this honor to speak on behalf of senior citizens and to hopefully help set the record straight on a number of misconceptions. Keep in mind that seniors are not the greedy old geezers they are made out to be. They always pay their fair share if all segments of society are made to pay theirs. My parent's generation lived through war, poverty, and great social upheaval in our country.

I'd like to say that as Administrative Assistant and Press Secretary for six years to a former colleague of yours, the late Senator Edward J. Gurney of Florida, (a World War II hero and a hero of mine) I can appreciate the enormous amount of work that goes into these hearings and the follow up required, and the buffeting you are subjected to from special interest groups whose "ox may be gored" or perceived to be so, at the expense of others.

I'd like also to make it perfectly clear, crystal clear, that some of the very finest friends that senior citizens have in the U.S. Senate, sit right here on this Committee—whether it's Chairman Roth; ranking member Moynihan; the new Chairman of the Senate Select Committee on Aging, Senator Grassley; my home state of Florida's two Senators, Connie Mack and Bob Graham; or the state in which I was born, Kentucky's Wendell Ford; or Mr. Protector of Social Security himself, Sen. Bob Kerrey—my whole point is that senior citizens may hear a lot of overheated (and often distorted) rhetoric in the months ahead (what's new?) but they can be certain this Committee is on their side.

As I prepared for this appearance, I was stunned, actually astonished, to discover the complexities of this issue. I came away with a deeper appreciation for the Bureau of Labor Statistics and its enormous responsibilities.

As I read the Boskin Commission's report, as well as voluminous reports by the BLS and several think tanks, and statements by the Joint Economic Committee, the head of the Federal Reserve Board, the Commissioner of the BLS, and remarks by this Committee's Chairman, its ranking member and others, including the President of the United States who noted that his Administration made a minor adjustment (downward) and was prepared to "reduce it even more if we could have gotten BLS to say it was out of whack," I decided to skip over trying to be what I'm not—an expert on the intricacies of this issue. So I scrapped my first, second and third drafts of this statement. Instead, I heeded the advice, as I so often do the older I get, of my favorite senior citizen, my mother, my sainted mother, if you will, who's alive and well and, I might add, still working down in Florida. In trying to explain to her that I was learning more than I ever wanted to know about the CPI and that once again a political storm was brewing—my mom, as the kids say, "cut to the chase."

She said you Senators would do what's right, that she had confidence you would, indeed, do what's fair and honest. Do the right thing became my guiding light. My mother is very proud of the fact that I've testified before Congress on several occasions on other issues, but she recognizes this is the most important to date. Just Sunday night, she reminded me that she and my late father, a coal miner from Ken-

tucky, were so proud that their two sons were college graduates, not bad, she said, for two working parents with limited education but a work ethic that keeps her going today.

Clearly, as I tried to summarize hundreds of pages of fact-finding recommendations, more than a dozen in the Boskin Report—my mom's advice kept coming back: be fair to all taxpayers, not just to the elderly, but to her children (two) and her grandchildren (six) and her great grandchildren (six), that she wanted what she deserved, in the words of Senator Breaux of Louisiana, "nothing less, but nothing more," her point being that if she was entitled to a \$13 a month increase, instead of \$21 based on a faulty measuring device, then the \$8 monthly savings would be that much less that the young folk would have to pay in the way of taxes. She further said she thought this was actually much ado about nothing. "What's all the fuss about," she asked? If there has been a mistake made in calculating benefits then let's correct the mistake. Growing up in the Great Depression she said "one reason you had pencils with erasers was so that if you made a mistake you corrected it and moved on." (I wonder out loud that if there had been a finding of understatement, that instead of a \$21 a month increase, it would have been projected in the future to be, say \$8 higher, for a \$29 boost, if these rush-to-judgment critics would be calling the Boskin Report purely political and hastily thrown together, when actually the Boskin Commission held dozens of meetings and went into the field with BLS personnel. It's findings "have been heavily influenced by interaction with the BLS."

And to those harshest critics of the Boskin Report that say "These are evaluations of a high-income individual," I say stop rushing to judgment. Critics as well as proponents have called for thorough study and evaluation before making a final determination.

Senator Roth has said this report is of critical importance. BLS, as you point out, has already taken steps to change the way it calculates the CPI.

House Ways and Means Chairman Archer has said, the only standard that should apply to a change in the CPI is accuracy.

A true cost of living measuring device has eluded economists for decades. It must be as accurate as possible to protect families and individuals, of all ages, against having their standard of living eroded by inflation.

There is widespread consensus from the academic community, the Federal Reserve, the Congressional Budget Office (CBO), and even the BLS, that the CPI significantly overstates the rate of increase in the cost of living.

The Federal Reserve research staff has concluded that the CPI could overstate the change in the cost of living by up to 1.5 percentage points per year. A recent Congressional Budget Office study concludes that the upward bias in the index could be at least 0.8 percentage points. The final report of the Advisory Commission to Study the Consumer Price Index for the Senate Finance Committee estimates the likely future bias in the CPI to be in the range of 0.8 to 1.6 percentage points per year even after the BLS made their correction for formula bias. The Commission's best conservative estimate of the upward bias is 1.1 percentage points.

Upward bias is a well known fact—every study I have seen acknowledges this—even the BLS has made periodic adjustments for this overstatement.

Nowhere have I seen that BLS has made adjustments for understating, or downward bias, even though critics of Boskin try to make a case for this argument.

Federal Reserve Board Chairman Alan Greenspan says that the best available evidence suggests that there is virtually no chance that the CPI understates. He says there's about a 100% probability that we overstate. He further says there are "rough approximations," but even rough approximations "can give us a far better judgment of accuracy. We would be far better served following the wise admonition of John Maynard Keynes that "it is better to be roughly right than precisely wrong!"

Investors Business Daily says "No one who looks at the matter can sincerely deny that the Bureau of Labor Statistics' CPI overstates increases in the cost of living. Some estimates even go well above the 1 to 1.1 percentage error cited by the non-partisan Boskin Commission."

The Wall Street Journal says, "we welcome the Boskin Commission's contribution to economic clarity, we'd be even happier if it enlightened Washington policy makers, who seem incapable of seeing the forest for the trees, that a basic flaw in our economic formulation is to become slaves to one or another statistic."

Joseph Stiglitz, the President's Chairman of the Council of Economic Advisors, notes that most experts, including those at the BLS, question the accuracy of the current CPI.

He said, "The Clinton Administration believes that it is important to have the most accurate measure possible to ensure that Social Security and other benefits are protected from inflation and to adjust tax brackets to keep our tax system fair. This

measure must be based on the best scientific and technical judgment that can be broadly agreed to by the nation's top experts at the BLS and elsewhere.

The CEA chairman said there would be a "careful review" of the Boskin report and of "other evidence regarding the most accurate cost-of-living measure."

Remarking that the BLS has an ongoing effort to improve the CPI, Stiglitz said the process for improving the measure "should never be politicized." He added, "Our goal should be to reach agreement based on the best scientific and technical judgment possible."

Stiglitz' comments echoed statements December 4 by White House press secretary Mike McCurry, who said, "We're committed to cost-of-living adjustments. We believe there may be some problems in measuring cost of living. And we believe that any changes in cost of living should be based on the best economic, scientific and technical analysis, and we're open to studying that type of analysis."

Asked if the White House would take a proactive stance to change the CPI formula or wait for congressional action, he said, "This issue has surfaced in the past in the context of bipartisan budget deliberations, and I suspect it will in the future."

In 1995, Senator Moynihan was warning in a column based on the Boskin Interim Report, that the very survival of Social Security was at stake. He painted a scenario at the White House where somebody in the political war room says, "If we sign onto this, we will be accused of cutting Social Security and raising taxes." But Senator Moynihan points out that this presumes that 'cuts' are in order. Not so, he rightly reasons. The question is not about an increase or a decrease (cut) but, simply put, it's an attempt to find an accurate measuring device (a barometer) for future cost-of-living adjustments (COLAs).

Now, early in 1997, Senator Moynihan further points out that no major study has been made to "modernize" the methodology of the BLS since the 1961 report by Nobel laureate, University of Chicago economics professor, George Stigler. That report said, in part, "If a poll were taken of professional economists and statisticians, in all probability they would designate (and by a wide majority) the failures of the price indexes to take full account of quality changes as the most important defect in these indexes. And by almost as large a majority, they would believe that this failure introduces a systematic upward bias in the price indexes."

At that time, no one at the BLS disagreed, according to Senator Moynihan's article. (Way back then, Senator Moynihan was already having an impact on this town as Assistant Secretary of Labor for President John F. Kennedy's Administration, where he was nominally in charge of the BLS.) Sen. Moynihan further pointed out, again, that the CPI is not a cost of living index, but it is used as one, as has been made abundantly clear time and again.

But as Senator Moynihan concludes, before we rush off and privatize Social Security (all 3 factions of the Advisory Council on Social Security recently agreed on one thing- that privatization is part of the solution) "can we not fix the cost of living adjustment first?" Senator Moynihan's contention, an excellent one, is that this would "drain the panic from the system before making big and potentially destabilizing changes"--such as privatization. His whole point is that the Social Security solvency crisis can be averted for another generation by bringing the system into actuarial balance with the Boskin Commission's recommended adjustments.

Other things I tried to master but failed:

- Deciphering the "trailing and Tornquist index" (the weighted geometric mean of price relatives).
- The biases in the system, some of which the Boskin Commission said could be addressed in the short term and account for about 0.4 to 0.6 percent of the overall 1.1 percent of overstatement: 1) product substitution bias, 2) outlet bias, 3) quality change bias, - an example of quality change bias is Medical care cost, one of the most difficult things to measure - 4) new product bias and a fifth bias having to do with formula uses.
- The Boskin Report had a dozen recommendations, some of which the BLS has already acknowledged and signed on to, from establishing a true cost of living index (COLI) publishing two indexes - monthly as well as annually; other recommendations include combining Department of Commerce and Labor information in the interest of accuracy and timeliness and to establish an independent commission to review the procedure every three years.
- Provide extra resources to accomplish its objectives. (Greenspan agrees. So does the BLS Commissioner who spoke earlier today. So would, I believe, every group in this town regardless of philosophy, when they grasp the enormity of the problem and that BLS doesn't have adequate tools to update or modernize as we move into the 21st Century.)

Further, there is no legislation on the books directing the BLS as to what methodology is to be used in its CPI calculations nor is there legislation even directing

BLS to create a CPI. (Bipartisan action—even nonpartisan is the order of the day. Last year a reduction of 0.5 percentage points won the support of 46 Senators, 24 Democrats and 22 Republicans.)

In conclusion, on Sunday's talk shows, both Gene Sperling, the President's National Economic Council Advisor and Donna Shalala, HHS Secretary, echoed these words of caution, that everyone should take a deep breath before rushing to judgment.

In fact, I beg those who would rush to judgment, please don't. For the sake of future generations, our children and grandchildren, I implore you, don't allow this golden chance, this window of opportunity to close.

In nearly 35 years in this town, first as a reporter during John F. Kennedy's Presidency, I've seen lots of political skullduggery, lots of demagoguery and I believe the public is finally fed up with some of these shenanigans.

The shrillness may have peaked after nearly everybody seemed to sink into a semantic cesspool over Medicare in the last two years. But that was then. This is now.

I honestly believe that this Congress and this President, working unselfishly together, and I emphasize unselfishly together, has one of those once-in-a-lifetime moments to make a real contribution toward the solvency of this country's fiscal future.

It's time to take stock. Stop the politicking. The 1996 elections are behind us. There's a window of opportunity here for Congress and the President, particularly the latter, to "seize the moment." Do what's right. Your country's citizens, regardless of age, will remember you for time immemorial, if you do.

Let's cool the overheated rhetoric. Keep your eyes on the historical prize, if you will. Too often, in this most political of towns, politics rears its head and harsh rhetoric is answered with even more heated responses. Tempers flare. Stakes are raised. Sides are taken. A line is drawn and no retreat is allowed. Not macho! And the moment to do something positive is lost, often forever.

But with conciliatory words emanating from both sides of the political aisle (with an occasional lapse here and there) the time is right, if it's ever going to be, for positive action.

I would call on the President and his advisors to ask their allies to keep their powder dry until this highly complex and technical report and its far-reaching recommendations can be studied and then acted upon.

Critics and proponents alike have argued this approach so I question the motives of these who rushed to judgment on the report.

Now, I'll conclude with a tentative rush to judgment of my own. The overwhelming evidence, not only from the Boskin Report, but from many of the country's leading economists, not the least of which includes Mr. Greenspan, points to the need to implement the Boskin Report. President Clinton can secure his place in history, or as former New York Governor Mario Cuomo has said, can make his mark, by doing something about Social Security and Medicare. He can truly take it out of the political arena by issuing an executive order, directing his Secretary of Labor (nominee Alexis Herman, who understandably has her own opinion on this issue) to implement the Boskin recommendations.

A few final remarks: A correct CPI will actually help seniors in the long run. I say to President Clinton, Do the Right Thing. Seize the Moment. History Will Be Kind.

A 1.1 percent adjustment would reduce the budget deficit. Are we balancing the budget on the backs of the elderly? No. A balanced budget amendment is the best friend our nation's elderly could have. The debt is the threat to seniors. The average American over 65 gets \$15,456 a year in federal benefits from Washington. Spending for the elderly is already the highest national priority, claiming 40 cents on every federal dollar. Defense only gets 15 cents. Under a Balanced Budget Amendment, seniors would get an estimated 43 cents of every federal dollar, or some \$17,000 per year.

As head of a seniors organization, I'm tempted to take the political low road and demagogue this issue but scaring seniors for political gain is not my purpose.

Why the rush to judgment on the long anticipated Boskin Commission's report on the Consumer Price Index. To politicize the issue is to once again ignore the enormous long-range problems facing Social Security and Medicare.

To politicize the issue is a disservice to the highly regarded Boskin Commission and to the equally highly held economists at the Bureau of Labor Statistics.

The President can show real leadership on this issue. By executive order he can direct the BLS, which works for his Labor Secretary, to adopt the Boskin Commission's report.

I believe the country has a small window of opportunity here to correct an outdated measuring system which can lead toward a balanced budget, but more appropriately, can add years to the solvency of the Social Security system.

 SUBMITTED BY SENATORS ROTH AND MOYNIHAN

What America's Most Renowned Experts Are

Saying and Writing Professionally about

the Boskin Commission Report on the CPI:

"Michael Boskin, Ellen Dulberger, Zvi Griliches, Robert Gordon and Dale Jorgenson have written an excellent report. Their estimates of bias components in the CPI are very reasonable but perhaps a bit conservative."

*-Professor Erwin Diewert, University of British Columbia,
 widely regarded as the world's leading expert on index
 numbers*

"The Boskin Commission Report has done a very careful job in documenting the upward bias in the CPI. The existence of substitution bias as well as the appropriate correction has been known for a long time; the BLS should finally fix the problem. However, the Boskin Commission estimate of the upward bias in the CPI due to failure to adjust adequately for quality improvements and the incorrect treatment of new goods in the CPI is likely to be an underestimate. The reason for the under estimate is that the consumer surplus...from new goods has not been included in the Report's estimate."

*-Professor Jerry Hausman, MIT
 widely regarded as the leading expert in the economics of
 new goods. Also, former Clark medal winner as the
 Outstanding American Economist under age 40*

"In my view, the overall assessment is probably accurate: the CPI currently is likely to overestimate the increase in the cost of living by at least 1 percent per year...Correction for new products bias might indicate a significant further upward bias to the CPI...I would recommend reducing the CPI adjustment by at least one half and as much as 1 percent per year over the next decade."

*-Professor William Nordhaus, Yale University
 Expert on quality change and new products and former
 member, Council of Economic Advisers under President
 Carter.*

"For reasons outlined in the Boskin Commission report...we know with near certainty that the current CPI is off...There is every probability that the upward bias ranges between 1/2 percentage point and 1-1/2 percentage points per year...If we cannot find a precise estimate for a certain bias, we should not implicitly choose zero as though that was a more scientifically supportable estimate...it is better to be roughly right than precisely wrong...recent work by staff economists at the Federal Reserve Board has added strong corroborating evidence...[to]...the Boskin Commission."

*-Alan Greenspan, Chairman, Board of Governors,
 Federal Reserve System*

Results of Survey of Two Dozen Experts on the Likely Bias in the CPI

Two dozen experts who are:

- a) recognized for research in the field and/or
- b) current or former government policy officials with responsibility for understanding and acting on these issues and interacting with government researchers in the area

were asked their best judgment on the likely bias in using the change in the CPI as a measure of the change in the cost of living.

The results were as follows (20 of 24 responded; 2 said it was not appropriate to respond):

- 1. Mean = 1.2%
- 2. Median = 1.1%
- 3. 89% were \geq 1.0%
95% were \geq 0.8%
100% were \geq 0.5%.

STATEMENT OF ZVI GRILICHES

Measuring prices is not an easy task in our rapidly changing economy. That is one of the main messages of the Commission's report. The report is not an attack on the Bureau of Labor Statistics (BLS), the agency that collects the prices and constructs the index and that has been struggling valiantly, in a difficult environment and with limited resources, with the very hard questions involved in such an effort. But it can and should do better in the future. As we move into the new century, as the economy gets more complex, the BLS has to reengineer and reinvent itself, and we make some suggestions in that direction.

Nor did we ignore the issues raised by the elderly. The plight of some of them is real, but the problem lies in the levels of support provided to them. It will not be solved by using a faulty escalation formula. Going beyond the discussion of possible improvements in the CPI, we need to understand is that any indexation program has to be paid for and thus imposes a tax on somebody, and to agree on the principles behind such programs.

The commission's report should be read as constructive encouragement to many of the improvement efforts already underway at the BLS and to others that are in the planning stage. BLS is hampered by difficult measurement problems, limited resources, and the political mines that surround it. Much of the "error" that we impute to the CPI was well known to the BLS. Some of it had been discovered and already fixed by them, and some of the other suggested improvements are already on its drawing boards. But even if all of our shorter-term suggestions are accepted by the BLS, and I expect that most of them will be, eventually, this still would eliminate only about a third of the "bias" identified by us (0.4 percent out of a total 1.1 per year). To capture the rest in a responsible and convincing fashion will require new data sources and more research effort by the BLS and the community of scholars around it. Hence, if we want to do more to avert the consequences of the current over-indexing, which is equivalent to an unintended tax on all of us, the Administration and Congress will have to bite the bullet and come to a political agreement to fix it by changing the current indexation procedures. A "technical fix" by the BLS can do only so much. The rest has to be done up-front, not hiding behind it.

An index is just that. Whether it is the current CPI or the improved Cost-of-Living index recommended by us, it is right only for the "average" household. It will underestimate the rise in prices for some, and overestimate it for others. The best that could be expected from such an index is that there is no identifiable sub-group for which it is consistently too high or too low. The commission looked carefully into the claim that the trend in the prices paid by the elderly is somehow different from the rest of the population and found little merit in this argument. Recomputations of the index using more specific weights showed very little difference. The budgets of the elderly differ primarily in giving more weight to expenditures on health and housing. The first is one of the areas of greatest change in quality and largest overestimation in the current measures. Recent studies document the fact that almost all of the rise in health expenditures during the last decade has come not from price rises but from increases in what is done for the benefit of the patients. In the area of housing the elderly benefit from a quirk in the construction of the index which does not take into account that almost three quarters of them own their own houses or apartments and hence they are protected against some of the rise in real-estate prices and need not be compensated again for it. This, of course, is only true on average, and there may be, indeed, subgroups that require special attention.

The elderly, especially the poor elderly, do have a valid complaint, not necessarily against the index but rather its use and interpretation. The index is designed to measure the change in the cost-of-living for an *average, unaging* household in an *unchanging* environment. But we do age, our health expenditures do go up, and the environment in which we function also changes

continuously. All that is, however, outside the scope of the CPI, current or "improved". The CPI does not rise in a cold winter just because we burn more energy to keep ourselves warm, or historically, because our population is older now and hence requires a higher level of medical expenditures. If a new plague, such as AIDS, were to appear today, it would raise the price of health insurance. A reasonable treatment of the CPI would not allow this to be interpreted as a rise in price but would rather treat it as a change in the quality of the coverage provided by the "standard" insurance policy. Nevertheless, the "cost" of living for most of us would have risen.

The last example points out the fact that not all of the rising costs of living of the elderly are or should be in the index and that not all changes in such an index should be used in indexing Social Security and other transfer payments. Health costs rise with age and with some improvements in medical technology. These are real drains on the budgets of the elderly (and the rest of us), but they would be there also if there was no inflation and the response to them has nothing to do with indexing per se. Many the complaints about the findings of the Commission are really about the inadequate *levels* of support for the disabled or for some of our veterans, not about the escalation formula. They should be addressed head on: Are the SSI payment levels adequate (for whom)? One should not try to resolve such difficult questions by applying a faulty escalation formula to a level of payments which may be wrong for other reasons. Moreover, we should remember that whatever we decided should be payed out, all of us will have to pay it. Ultimately, the indexing provisions amount to a tax, primarily on the proverbial middle class, and we should be clear if that is where we want our scarce tax dollars to go.

We have to realize that not all changes in prices can be fully compensated. Unless we are careful in defining what we mean by "inflation" we may commit ourselves to an impossible task. When OPEC raises energy prices, when AIDS appears, we all become poorer. Indexing was developed to protect workers and pensioners from monetary inflation on the assumption that there were gainers from inflation that could be taxed to compensate the losers. But many changes in prices and the cost of living occur in contexts where there are no gainers who could be justly taxed. If energy prices rise why should not all sectors of the society share in this disaster? Does it really make sense to tax one group even more so that another could escape the consequences of this disaster entirely? Because of such considerations, the CPI is ultimately not the right instrument for indexation. Moreover, we should have the courage to look at the level of entitlements directly: how high should they be, how much can we afford, and who should pay for them. Fixing the CPI will not solve that. But leaving it unchanged will impose a large unintended tax on all of us. Hence a searching examination of who really needs support and how we are going to pay for it is still in order. Neither the current or an improved price index will save us from it.

COMMUNICATIONS

STATEMENT OF JAMES E. HARRIS

The CPI is a useful tool to adjust for the cost of living and other related matters. First, it is a statistical measure and as such it has limitations as should be apparent by anyone that would care to read "HOW To Lie With Statistics" by Darrell Huff (ISBN 0-393-31072-10110). This book provides a good lay person's view on the use and misuse and understanding of statistics which is vital to the determination of any creditable CPI.

Furthermore, it is possible to prove anything by taking a suitable premise. One premise is that the current CPI is not accurate. This is absolutely true! Why is this? It is because that the CPI has used the seriously flawed premise that "One size (or CPI) fits all. This is incorrect! The clear fact is that any CPI is based on the facts presented as representing "the average family." This is a figment of one's imagination that this family exists at all. It does not exist!

A CPI is valid, at best for a very narrow segment of the population. For instance a CPI for a seventeen year old in the military will be quite different from that of a seventeen year old in the civilian work world. This changes for every age, status, location and condition. To think that any CPI is accurate is a balmy premise indeed! Those with the big mouths "exposing" that the CPI is "overstated" or "understated" by some amount are whistling in the dark. There have been NO FACTS presented to substantiate such drivel! Where did this information come from? These are exceedingly complex issues and they have been "simplified" by the simplest of people. Any CPI that is accurate for me (a 66 year old male, living in Maryland) will not be accurate for my mother, an 84 year old widow, living in Florida, nor will it be accurate for my younger daughter, a 30 year old female living in Virginia. There simply is no elastic that will stretch to fit us all. If this important fact is not recognized then there is no hope for even an approximation to an accurate CPI. For instance my mother does not drive, nor does she own an automobile; therefore all of the costs associated with automobile (which is a very significant part of a family budget) ownership and operation are simply not germane!

In a similar way, the medical costs for my mother do not apply to my younger daughter for the most obvious reasons, viz: My mother spends more money on medication, than on food, water and electricity and housing, combined. Likewise, my mother does not have any mortgage on her home; my daughter has a hefty one. Therefore any "interest rate factor" has no concern to my mother. In fact, my mother benefits from high interest rates, since she, unlike many (including our Government) saved more than she spent, whereas it is a very important factor for my younger daughter. My mother does not care one bit about college education expenses, nor do I since all of mine have graduated!

DO YOU NOT SEE THAT ONE CPI CAN'T POSSIBLY FIT ALL? That someone is trying to balance the budget on the backs of the senior people of America? Remember this: **WE VOTE! WE REMEMBER IN NOVEMBER!** And we will not permit a CPI that fits all. If there is a CPI to adjust for retirement pay, then in honesty, it must consider the factors that are significant to the people it is to be used for, i.e. those in retirement. To do otherwise would be patently dishonest to our parents, grandparents and those who went on before us, in short, those who built America to what it is, that we so proudly hail and is the envy of the rest of the world!

STATEMENT OF THE MILITARY COALITION

(SUBMITTED BY COLONEL STEVEN P. STROBRIDGE, USAF (RET) CO-CHAIR, TMC RETIRED AFFAIRS COMMITTEE)

Mister Chairman and distinguished members of the committee: On behalf of The Military Coalition, we would like to express appreciation to the Chairman and distinguished members of the Senate Finance Committee for offering this opportunity to express our views on the important issue of adjustments to the Consumer Price Index (CPI). This testimony provides the collective views of the following military and veterans organizations, which represent approximately 5 million current and former members of the seven uniformed services: officer and enlisted: active, Reserve, and Guard; and retired and veterans, plus their families and survivors.

- Army Aviation Association of America
- Air Force Association
- Association of Military Surgeons of the United States
- Association of the United States Army
- Chief Warrant Officer and Warrant Officer Association, United States Coast Guard
- Commissioned Officers Association of the United States Public Health Service, Inc.
- Enlisted Association of the National Guard of the United States
- Fleet Reserve Association
- Jewish War Veterans of the United States of America
- Marine Corps League
- Marine Corps Reserve Officers Association
- National Military Family Association
- National Guard Association of the United States
- National Order of Battlefield Commissions
- Naval Enlisted Reserve Association
- Navy League of the United States
- Reserve Officers Association
- The Military Chaplains Association of the United States of America
- The Retired Enlisted Association
- The Retired Officers Association
- United Armed Forces Association
- United States Army Warrant Officers Association
- United States Coast Guard Chief Petty Officers Association
- Veterans of Foreign Wars

INTRODUCTION

The Military Coalition believes, first and foremost, that the CPI should be as accurate a representation of inflation as statistically possible. To the extent that it demonstrably overstates or understates inflation, it fails to exactly fulfill its function of measuring the effects of inflation, both on the government and on the daily lives of the citizens.

Making the CPI as accurate as possible should be a primary goal. But the CPI's accuracy or lack of it is not a matter of assertion. It must be a matter of reproducible statistical methodology. It must be measured and administered by a process that examines the full range of available data and is insulated as much as possible from political, budgetary or opinion bias.

In short, it is a matter of public trust. Like it or not, the CPI has a pervasive effect on the operation of the government, the fiscal condition of the Treasury, and the financial well-being of millions upon millions of Americans. Necessarily, this means that millions of individuals, from federal compensation recipients to senior government officials, have intense personal and professional vested interests in how the CPI is calculated and applied. Also necessarily, it means that any proposed changes may generate conflicts among these vested interests. The Military Coalition believes strongly that the public trust is served best in this matter by considering the spectrum of economic opinion and ensuring any adjustments reflect objective, reproducible statistical methodology.

After reviewing the Boskin Commission report and the critiques of other respected economists, we cannot conclude that the Boskin Commission report met that high standard. If one accepts the Commission's bottom-line assertion that the CPI overstates inflation at the rate of 1.1 percentage points per year, this means accepting that the 1996 inflation rate was actually only 1.8 percent, and that the existing CPI calculation entailed a measurement error in excess of 60 percent.

The Military Coalition believes the Boskin Commission conclusion represents an unduly extreme view that must be regarded with considerable skepticism. There are several criteria upon which we base this opinion.

REPRESENTATIVENESS

Much has been made of the bipartisan nature of the Commission, and this characteristic has been touted as demonstrating the Commission's lack of political bias. In addition, the commissioners assert that they would have made the same recommendations even if the government was running a surplus rather than a deficit. The Coalition does not doubt the sincerity of either assertion. However, objectivity is not solely a matter of party or budget politics.

All of the members of the Commission are highly respected economists whose professional credentials and personal integrity are beyond doubt. However, we do not believe that they are representative of the spectrum of economic opinion on the critical issue of inflation measurement. Many press reports as well as testimony before this committee indicate that all five Commission members had testified before Congress prior to their appointment concerning their strong belief that the CPI considerably overstates inflation and that, indeed, their estimates of such overstatement were the largest of the opinion spectrum. So it should come as no surprise that their final report reflects their previously expressed opinions.

But having such a group of like-minded economists render judgment on an issue of such broad public and government import must engender considerable doubt about the impartiality of their findings. In our 200-year old democracy, the most respected and enduring outcomes arise from the clash and evaluation of competing ideas. In this regard, The Military Coalition believes the full spectrum of opinion on the CPI as a measure of inflation must be subjected to standards of proof, and the judgments that prevail should be the ones that stand up best to rigorous scrutiny. But the rigor of the scrutiny—and the results of it—must be suspect whenever only one end of the opinion spectrum is sought or considered.

QUALITY ISSUES

The Commission asserts that most of the purported bias in the CPI is attributable to product or service quality issues that CPI calculations do not capture.

Clearly, this is an issue that is relevant to an accurate measurement of the changing cost of living. For example, when a product is improved so that it lasts twice as long, the consumer need not repurchase that product so frequently—at least in theory. However, the methodology and extent of the Commission's assessments on quality issues are difficult to rationalize with the experience of the membership of the various Coalition associations.

In assessing over 30 quality-related areas, the Commission asserted that there was not a single one of these areas in which there was a deterioration of quality that would affect the cost of living of the citizenry. In the Commission's view, a small number of areas were quality-neutral, and the vast majority demonstrated significant positive quality changes which should be considered as offsetting a substantial share of price inflation. The Coalition believes such uniformly positive assessments of quality changes are inconsistent with the experience of the public. A few examples are illustrative.

Health Care. It is extremely difficult to reconcile the Commission's quality improvement assertions with the experience of people who have seen the downsides of managed care, with longer waits to see specialists, insurance-driven limitations on hospital stays for many conditions, and arbitrary substitution of alternative generic drugs, sometimes with attendant side effects, for long-trusted medications. Such changes hold down prices, it's true—but at a considerable cost in quality. Medicare-eligible uniformed services beneficiaries are particularly sensitive to this issue, as base closures and tightening defense budgets have severely degraded their health care availability and coverage. Younger service beneficiaries, too, find that substantial numbers of health care providers now refuse to accept their military health insurance because of its depressed reimbursement levels and onerous paperwork requirements.

Automobiles. It is certainly true that automobile quality has improved, but how much of this has been offset by longer commuting times and more congested highways relative to the situation of one or two decades ago? How much of a quality adjustment for costly standard anti-lock braking systems should be offset by recent news reports concerning the lack of demonstrable evidence that they improve highway fatality rates? What quality values should be assigned to the new safety risks that standard-feature airbags pose for the very young or very elderly?

Technology. In many areas, technological innovations that the Commission might consider deflationary may be of dubious utility to many consumers, particularly the elderly who would be most affected by a CPI revision. Voice mail may be a convenience for the harried worker, but an aggravating irritant to the potential customer who finds it nearly impossible to talk to a human being for help with a service problem. The programmable VCR is an unused mystery to a substantial share of consumers. A parent who spent \$2,000 on a computer for a schoolchild three years ago doesn't necessarily care that the same \$2,000 would buy a much bigger and faster computer today. His concern is that his three-year old computer will no longer run the simplest new games, because games now take much more memory to run, and run on CD-ROM vs. diskette. To maintain value for the child, the parent must now buy a new computer, or spend \$500 to \$1,000 on upgrades—which themselves cause new incompatibilities and are likely to be rendered obsolete in two more years. One implicit assumption in many quality improvement factors is that the improvement will yield a longer product life. Clearly, this often is not the case in an era of rapid technological obsolescence.

METHODOLOGY AND REPRODUCIBILITY

Regardless of whether quality changes represent improvement or deterioration of value, the change in value must be measurable if it is to be applied to the CPI.

One of the unsettling aspects of the Boskin Commission's report is the willingness of the Commissioners to assign explicit deflationary values to highly subjective quality judgments. Using the terminology employed by one of the commissioners, such valuations are "squishy" at best. Assigning explicit CPI deflator values to such things as air quality are enough to raise the eyebrow of most consumers. While one might be persuaded that such things could have some level of impact on cost-of-living standards, The Military Coalition would expect a considerable degree of caution to be exercised in such assessments. These are not judgments that we are comfortable leaving to any group of officials whose views represent only one extreme of the spectrum of economic thought.

To the extent such valuations are to be considered, there should be an explicit, reproducible methodology for making them. To our knowledge, the Commission offered no such methodology, and offered no explicit recommendations for any formulaic means of incorporating additional quality adjustments into the CPI. The Commissioner of the Bureau of Labor Statistics (BLS) and other witnesses before the Finance Committee have testified as to the considerable lengths to which the BLS already goes to accommodate quantifiable quality changes in the CPI calculation. We believe this quantitative analysis process is essential to credibility. Where it can be improved in a reasonable, methodological way, it should be. But plucking arbitrary deflator (or inflator) values from the clouds of subjective judgment has no place in CPI formulation.

AGENDA VS. ACCURACY

The level of difficulty and controversy associated with reforming the CPI is high precisely because the impacts of any such reform are also extremely large—so large that any individual or group that strongly advocates or strongly resists a specific "reform" is perceived by the other side as "having an agenda." One side is perceived as being "bent on balancing the budget on the backs of the people." Those on the other are called "greedy geezers" and other epithets.

Any proposal that is perceived as being "stacked" in the favor of one side or the other inevitably will be viewed with suspicion. Both sides assert they support accuracy, but one is suspected of wanting reductions at any cost and the other of wanting no change at any cost. Because of the budget circumstances leading to the Commission's appointment, the uniformity of commissioners' prior views, its dependence on subjective judgments, and the relatively extreme nature of its bottom-line judgment, the Boskin Commission is seen by many as falling in the former group. Any who articulate what they believe are issues this Commission failed to adequately consider risk being lumped with the latter.

In this situation, objectivity and accuracy become the victims. We must do better than this if we are to earn and win the public trust.

THE RISKS OF CUTTING TOO FAR

Much has been made of the potential deficit impact if the CPI overstates inflation and is not corrected. We must give no less credence to the potential long-term impact on millions of Americans if we pursue an extreme view and "overcorrect" so that recipients of Social Security, federal retirement, veterans disability compensation and many others are not fully protected against the ravages of inflation.

Most of us are familiar with the compound interest charts that show how savings grow geometrically over time. Critics of the CPI use such charts to illustrate the potential cost of COLAs 10 or 20 years in the future, and how much savings over the long term would be generated from even minor reductions in the CPI. But the same argument has a "flip side," recognizing that those savings come from reduced federal payments to individuals.

Reducing the CPI by 1.1 percentage points per year as the Boskin Commission recommends would gradually but dramatically reduce compensation levels for federal annuitants over the course of their lives. An individual who starts drawing Social Security at 65 would be receiving about 15% less by age 80, the actuarially expected lifetime of such a person. A 20-year military retiree—who is forced to leave the service in his or her 40s because of service "up or out" promotion policies—would end up receiving 34% less at the same age, because the reduction would be compounded over a longer period. A typical uniformed services widow or disabled retiree would end up receiving about 36% less.

The Boskin Commission asserts that these individuals would suffer no lost purchasing power, because the smaller adjustments, even compounded over time, would accurately reflect inflation. However, it is important to recognize that, since the Boskin Commission conclusion represents the extreme of economic opinion, there is a very real potential that a 1.1% annual reduction would yield COLAs that significantly understate inflation. Compounded over time, these would victimize federal compensation recipients via an insidious and ever-growing erosion of purchasing power, with the greatest impacts on the disabled and survivors who are dependent upon their federal compensation for the longest time.

Many see even an arbitrary CPI cutback as advantageous, thinking that the risks to individuals is small because the change is only a little over one percentage point per year. But understating inflation by 1.1 percentage point (i.e., understating inflation by one-third or more) each year, compounded over time, would subject COLA-eligibles to an economic "death by a thousand cuts" that could mean a huge drop in their living standards in their later years. These long-term individual risks are no less important than the government's budget risks.

WHERE DO WE GO FROM HERE?

Before, during, and after the Boskin Commission's deliberations, there have been four basic options to proceed: (a) reform the CPI calculation methodology as appropriate to make it more accurately reflect changes relevant to the cost of living, (b) apply an explicit reduction to the CPI measurement for cost-of-living adjustment (COLA) purposes, (c) develop a new, separate index more attuned to cost-of-living issues, or (d) convene an "expert commission" periodically to recommend alternative cost-of-living adjustments.

CPI Calculation Methodology. The Military Coalition believes the first of these alternatives is most appropriate, but that the key must be deliberate, objective, statistically reproducible adjustments such as those that have been introduced already over the past several years by the Bureau of Labor Statistics. In this regard, BLS has already made adjustments to the CPI formula that have effectively reduced CPI growth by .25 percentage points or more annually. Other possible changes are being evaluated, and the Coalition believes BLS should be provided the funding necessary to continue this important research. If this research indicates additional incremental changes are appropriate, the Coalition poses no objection to such changes, just as we have not objected to those implemented in the past.

Explicit CPI Reduction. The Coalition does not support applying an explicit, arbitrary reduction in the CPI for the purpose of reducing federal compensation COLAs below inflation adjustments for other areas. Employing such general measures as "CPI minus 1%" or "CPI minus .5%" fail to meet the standards of accuracy and reproducibility needed to ensure that beneficiaries do, in fact, receive adjustments to their federal compensation that are adequate to offset the compounded effects of inflation over the years. Nowhere is the government's obligation articulated more clearly than in the Committee Print of Title 37, United States Code, that has been published periodically over several decades by the House Armed Services (now National Security) Committee: "[The COLA] reflects the progressive effort made by both the Executive Branch and the Congress to develop an automatic mechanism which would in the last analysis guarantee [emphasis in the original] every military retired member that the purchasing power of the retired pay to which he was entitled at the time of retirement would not, at any time in the future, be eroded by subsequent increases in consumer prices." Applying any "standard reduction" to the CPI for COLA purposes, regardless of changing circumstances and CPI fluctuations

from year to year, does not fulfill the commitment to protect military retirees and other compensation recipients from the actual year-to-year impact of inflation.

Alternative "Cost-of-Living Index." The Military Coalition is not convinced that the issues entailed in measuring the changing cost of living differ from the issues of measuring inflation in a way that any such difference can, in fact, be measured in a meaningful way. Unless that can be demonstrated objectively, any attempt to construct a new index is likely to be viewed with the same skepticism as the CPI or, for that matter, the Boskin Commission findings.

"Expert Commissions." The Coalition strongly opposes the appointment of a commission or commissions in order to recommend separate COLAs for federal compensation recipients, independent from inflation adjustments as measured by the CPI. Any objective measurements that can be developed can also be incorporated into the CPI. At best, appointing periodic "COLA commissions" to recommend separate judgments would compromise government-promised inflation protection via introduction of subjective, if well-meaning judgments. At worst, it would politicize the process and risk "stacking the deck" in any given year with commissioners leaning toward austere or generous COLAs, depending on the budget or political concerns of whichever persons or institutions would have authority to appoint the commissioners.

RECOMMENDATIONS

The Military Coalition believes that it is of utmost importance to maintain and foster public faith in the CPI as an accurate measure of inflation. To the extent that objective, statistically reproducible research determines demonstrable inaccuracies in the CPI, these should be corrected with appropriate formulaic adjustments.

The Coalition believes strongly that public faith in the accuracy of the CPI can best be maintained by reposing oversight responsibility for this important index with an agency that enjoys a high degree of public trust in its objectivity, technical professionalism, and resistance to political influence. In our view, that agency is and should continue to be the Bureau of Labor Statistics. The Coalition believes the BLS has been making reasonable and prudent efforts to improve the accuracy of the CPI in measuring inflation. With adequate funding for additional BLS research, there may be the possibility of accelerating any additional changes that may prove appropriate.

The Coalition does not support any arbitrary reductions in the CPI for COLA purposes or giving any politically appointed commission direct oversight over either the CPI or the COLA adjustment process.

We very much appreciate this opportunity to offer the Committee our collective views on this very important matter.

