

THE GAS GUZZLER TAX PROPOSAL

A Comparison of Its Impact With That of the Fuel Efficiency Incentive
Tax Proposal Upon the Future of the U.S. Passenger Automobile Industry

UNITED STATES INTERNATIONAL TRADE COMMISSION

Report to the Committee on Finance of the United States Senate
on Investigation No. 332-86 Under Section 332 of the
Tariff Act of 1930

COMMITTEE ON FINANCE UNITED STATES SENATE

RUSSELL B. LONG, *Chairman*



SEPTEMBER 1977

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(11)

LETTER OF TRANSMITTAL

U.S. INTERNATIONAL TRADE COMMISSION,
Washington, D.C., September 2, 1977.

The Honorable RUSSELL B. LONG,
Chairman, Committee on Finance, U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: This is in reference to your letter of August 2, 1977, requesting the United States International Trade Commission to conduct a study to compare the impact on the domestic passenger automobile industry of the Gas Guzzler Tax reported by the Committee on Ways and Means in sections 2021 and 2022 of H.R. 6881 with the impact of the Administration proposal.

Enclosed is the Commission's report comparing the impact of these two proposals on U.S. sales of United States/Canadian and imported new passenger automobiles, employment in the U.S. automobile industry, and U.S. consumers of passenger automobiles. The Commission's analysis is for the 1979 through 1985 period and its projections are made on the basis of an econometric forecasting model. The major observations of the report are as follows:

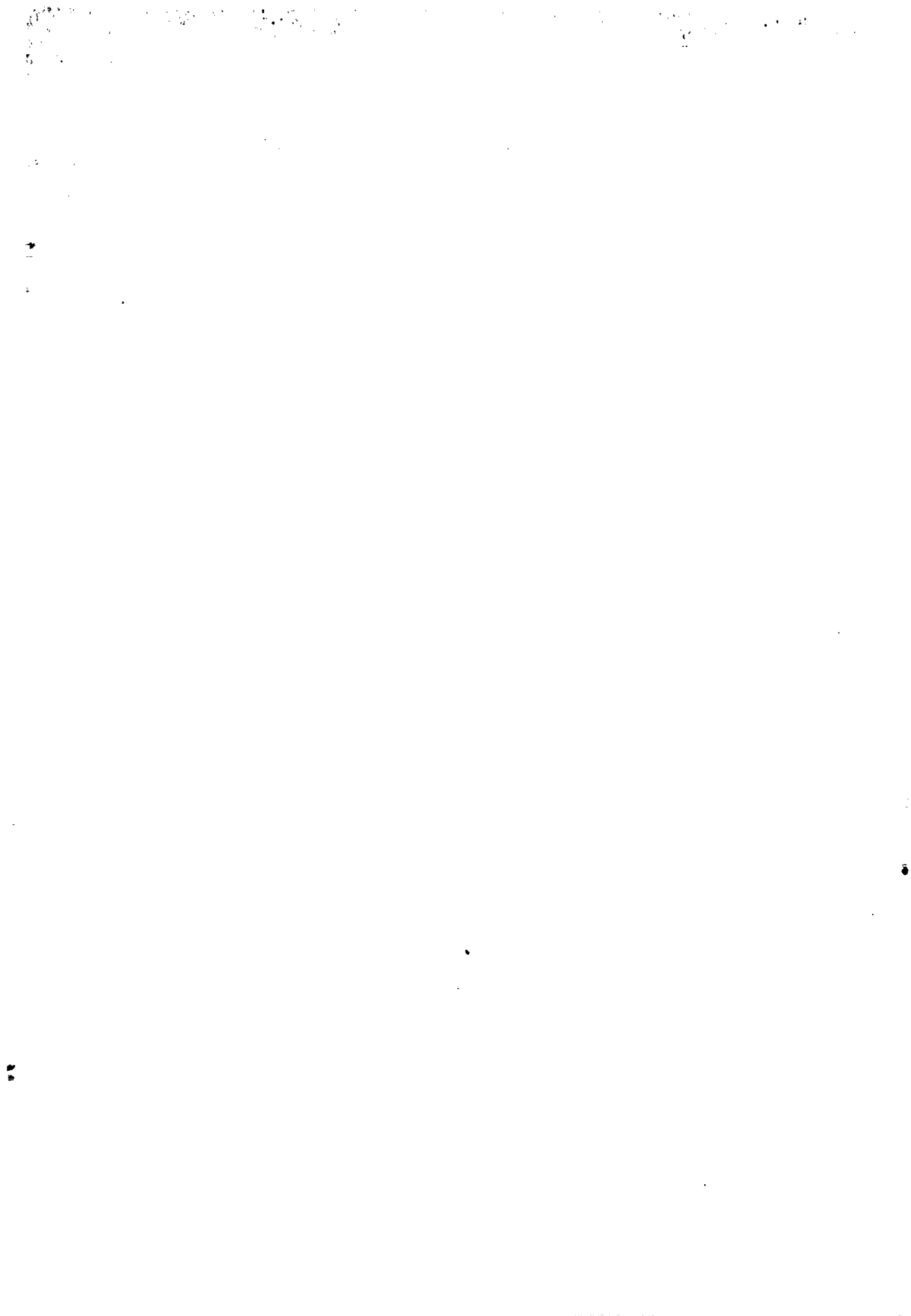
- More United States/Canadian new passenger automobiles and fewer imported new passenger automobiles would be sold under the House proposal than under the Administration proposal.
- Employment in the United States in the production of new passenger automobiles would be greater under the House proposal than under the Administration proposal.
- Prices of United States/Canadian subcompact and compact passenger automobiles sold in the U.S. would be higher under the House proposal than under the Administration proposal while prices for all other size classes of automobiles would generally be lower under the House proposal.
- The House proposal, in general, would be less effective than the Administration proposal in deterring U.S. consumer demand for fuel-inefficient automobiles.

Please continue to call upon us whenever we can be of assistance to you. I hope you have a nice day.

Yours sincerely,

DANIEL MINCHEW, *Chairman.*

Enclosure.



UNITED STATES INTERNATIONAL TRADE COMMISSION

**THE GAS GUZZLER TAX PROPOSAL: A COMPARISON OF
ITS IMPACT WITH THAT OF THE FUEL EFFICIENCY
INCENTIVE TAX PROPOSAL UPON THE FUTURE OF THE
U. S. PASSENGER AUTOMOBILE INDUSTRY**

**Report to the Committee on Finance of the
United States Senate on Investigation No. 332-88
Under Section 332 of the Tariff Act of 1930**



September 1977

UNITED STATES INTERNATIONAL TRADE COMMISSION

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PREFACE

In response to a request dated August 2, 1977, by the Senate Committee on Finance, the United States International Trade Commission reports herein the results of investigation No. 332-88, instituted on August 12, 1977, under section 332(g) of the Tariff Act of 1930 (19 U.S. C. 1332(g)), 1/ comparing the impact on the domestic passenger automobile industry of the Gas Guzzler Tax, as reported by the Committee on Ways and Means in H.R. 6831, with the impact of the Administration's Fuel Efficiency Incentive Tax Proposal.

The full text of the request is as follows:

On behalf of the Committee on Finance, may I thank the Commission and your staff for the report on the impact of the Administration's fuel efficiency incentive tax proposal on the domestic passenger automobile industry. The Committee will find the information in that report extremely useful during consideration of H.R. 6831 this fall.

The Committee would like the Commission to compare the impact on the domestic passenger automobile industry of the fuel inefficiency tax reported by the Committee on Ways and Means in sections 2021 and 2022 of H.R. 6831 (H. Rept. No. 95-496 Part III) with the impact of the Administration proposal. This request is made under section 332(g) of the Tariff Act of 1930. The Commission's report should be submitted to the Committee on Finance no later than September 2, 1977.

This is the second report submitted to the Committee on Finance by the Commission concerning the President's proposal. The first report, issued in response to a request dated May 20, 1977, and submitted to the Committee on July 15, 1977, was entitled The Fuel

1/ See notice of investigation published on Aug. 17, 1977, 42 F.R. 41498.

Efficiency Incentive Tax Proposal: Its Impact Upon the Future of the U.S. Passenger Automobile Industry (investigation No. 332-86).

While no public hearing was held in connection with this investigation, interested parties were urged in the Commission's notice of this investigation to submit written statements. The information contained in this report was obtained from those written submissions, from earlier responses to the Commission's questionnaires concerning investigation No. 332-86, from published and unpublished studies by U.S. Government agencies and other sources, and from the Commission's files.

The Commission has examined several well-known and respected econometric automobile demand forecasting models. The Wharton Econometric Forecasting Associates Automobile Demand Model was used as an analytical tool in making projections of automobile sales, product mix, employment in the U.S. industry, and retail prices. Except as noted, none of the observations or projections presented in this report should be attributed to any interested party.

SUMMARY AND OBSERVATIONS

The Commission has compared the impact of the Gas Guzzler Tax proposal (secs. 2021 and 2022 of H.R. 6831 as reported by the Committee on Ways and Means) with that of the Fuel Efficiency Incentive Tax proposal (secs. 1201-1204 of the President's proposed National Energy Act) on the domestic passenger automobile industry. The Commission's projections were made on the basis of output received from the Wharton Econometric Forecasting Associates Automobile Demand Model and are for the 1979-85 period.

Both the Gas Guzzler Tax proposal (the House proposal) and the Administration's Fuel Efficiency Incentive Tax proposal (the Administration proposal) rely primarily on pricing mechanisms aimed at the U.S. consumer of new passenger automobiles. The House proposal has as its intended purpose deterring the demand for fuel-inefficient automobiles. The Administration proposal, in addition, is intended to encourage the demand for fuel-efficient automobiles (through the implementation of the Fuel Efficiency Rebate).

As in the use of any econometric model which attempts to project the future, there may be a significant margin of error inherent in estimating the impacts of the House proposal and the Administration proposal on the future of the U.S. passenger automobile industry. While a uniform methodology was applied to the Commission's projections, in certain cases the margin of error may be as great as the projected differences between the impacts of both proposals.

Impact on Sales

It is projected that more United States/Canadian-made new passenger automobiles and fewer imported new passenger automobiles would be sold under the House proposal than under the Administration proposal. In 1985, sales of United States/Canadian-made automobiles would number 11.3 million units under the House proposal, approximately 300,000 units more than would be sold under the Administration proposal (11.0 million units). In contrast, U.S. sales of imported automobiles in 1985 would number 1.5 million units under the House proposal, or about 200,000 units less than under the Administration proposal (1.7 million units). However, the House proposal may not alter significantly the sales level projected under the Base Case hypothesis which embodies all existing laws and regulations, but excludes any tax and/or tax and rebate schemes. 1/

For example, the U.S. sales level of United States/Canadian-made automobiles under the House proposal would be unchanged compared with the Base Case for each of the years 1979 and 1980 and would fluctuate around Base Case levels within a range of less than 50,000 units for most of the 1981-85 period. The only exception would be 1984, when about 300,000 fewer United States/Canadian automobiles would be sold under the House proposal than under the Base Case. 2/ In addition, the U.S. sales level of imported new passenger automobiles under the House proposal would be unchanged compared with the Base Case during the years 1979 and

1/ See app. C of this report for Base Case projections of the future of the U.S. passenger automobile industry if no change were made to present laws and regulations.

2/ The House tax is more effective in 1984 because in that year (owing to mileage projections for full-sized automobiles) full-sized automobiles are taxed at a higher rate than in other years.

1980 and would be greater than Base Case levels during each of the years 1981-83 by 10,000 units or less. Sales levels for imported automobiles under the House proposal would be above those for the Base Case for each of the years 1984 and 1985 by about 100,000 units.

Impact on Employment

Employment in the United States in the production of new passenger automobiles would be greater under the House proposal than under the Administration proposal. Specifically, employment in 1985 would be 976,000 persons under the House proposal and 957,000 persons under the Administration proposal. Base Case employment in 1985 would be 978,000 persons.

Impact on Prices

Prices of United States/Canadian subcompact and compact new passenger automobiles sold in the United States would be higher under the House proposal than under the Administration proposal since no rebate on retail prices would be available to the U.S. consumer. U.S. prices for all other size classes of automobiles would generally be lower under the House proposal. Fewer automobiles are projected to be subject to the tax schedule as proposed by the House than under the Administration proposal.

Impact on Fuel Economy

Automobile manufacturers are required under existing law (the Energy Policy and Conservation Act) to meet increasing average annual fuel economy standards for model years 1978-85, reaching

27.5 miles per gallon (mpg) for passenger automobiles produced in model year 1985. Substantial penalties are provided by present law for a manufacturer which does not meet the average fuel economy standard for a model year.

It appears likely that manufacturers could adjust their product mix of passenger automobiles to mitigate the impact of the House proposal, if enacted, so that relatively few automobiles would actually be subject to the tax. Thus, the House proposal could be the practical equivalent of forbidding the manufacture of the small number of relatively fuel-inefficient automobiles that would be subject to the tax. The House proposal is less effective in deterring the demand for fuel-inefficient automobiles than the Administration proposal and provides no direct incentive for increasing consumer demand for fuel-efficient automobiles.

INTRODUCTION

The Gas Guzzler Tax (subpt. A, pt. II, title II, of H.R. 6831, as reported by the House Committee on Ways and Means) is a substitute for the Fuel Efficiency Incentive Tax (subpt. I, pt. B, title II, secs. 1201-1204) as incorporated in the National Energy Act as proposed by the President of the United States and transmitted to Congress (H.R. 6831, as introduced in the House of Representatives). This study compares the impact on the domestic passenger automobile industry of the Gas Guzzler Tax proposal as reported in H.R. 6831 (the House proposal) with the impact of the President's Fuel Efficiency Incentive Tax proposal (the Administration proposal).

The House proposal provides for a system of manufacturers' excise taxes designed to increase the retail prices of fuel-inefficient new passenger automobiles in an attempt to discourage the sale and use of such automobiles in the U.S. market. The Administration proposal includes the Fuel Inefficiency Tax (FIT) and the Fuel Efficiency Rebate (FER) and thus also provides for a system of manufacturers' excise taxes designed to similarly increase retail prices of fuel-inefficient automobiles. In addition, the Administration proposal includes a rebate scheme designed to decrease the retail prices of fuel-efficient automobiles sold in the U.S. market.

Projections in this report are for the 1979-85 period and compare the effects of the House proposal and the Administration proposal on the domestic automobile industry with respect to passenger automobiles in use in the United States, U.S. registrations of United States/Canadian

and imported new passenger automobiles, U.S. employment in the automobile industry, retail prices of automobiles, and the impact of retail prices on U.S. consumers. Projections for the period 1979-85 with respect to registrations, retail prices, and import shares are by size classes, i.e., subcompact, compact, mid-size, full-size, and luxury class (irrespective of size).

Assumptions

Mandatory average fuel economy standards are required of U.S. manufacturers and importers of automobiles, beginning with the 1978 model year and increasing thereafter. 1/ The projections in this report were made on the assumption that these standards for model year 1981-84 would have been set at levels at which no tax or rebate would be payable under the Administration proposal. 2/

Automobile exhaust emission standards are prescribed under present law. 3/ While the standards will become more stringent for future model years, the uncertainty of administrative implementation, coupled with the pendency of legislation which would amend the future standards, makes the future impact of this law particularly difficult to assess. Thus, the projections in this report were made on the assumption that the standards in effect for the model year 1977 will continue in effect. To the extent that these standards become more stringent for future

1/ The Motor Vehicle Information and Cost Savings Act, as amended by the Energy Policy and Conservation Act (15 USC 2002 et seq.).

2/ However, for the standards actually prescribed, see 42 F.R. 33534 (June 30, 1977).

3/ Clean Air Act of 1963, as amended (42 USC 1857 et seq.).

model years, they will necessarily tend to have a negative effect on fuel economy.

Similarly, automobile safety standards are prescribed under present law. 1/ The projections in this report were made on the assumption that no new safety standards which would cause additional weight to be added to new passenger automobiles would be implemented through 1985. Any increase in curb weight would necessarily tend to have an adverse effect on fuel economy.

The Administration proposal provides that rebates would be payable with respect to imports of automobiles manufactured in foreign countries other than Canada only to the extent provided in executive agreements entered into with such countries. 2/ The nature and content of any such agreements, which would raise complex international trade issues, are not known. Thus, the projections in this report with respect to the Administration proposal were made on the assumption that such rebates would be payable on sales of such foreign automobiles on an identical basis with those of United States/Canadian automobiles. The House proposal does not incorporate a rebate on fuel-efficient automobiles.

Projections comparing the House proposal with the Administration proposal and their potential impact upon the domestic automobile industry are based primarily upon the Wharton Econometric Forecasting Associates Automobile Demand Model (the Wharton EFA Automobile Demand

1/ Motor Vehicles Safety Act of 1966, as amended (15 U.S.C. 1391).

2/ Sec. 1202 of the proposal.

Model), the basic economic assumptions of which were modified in the following respects (in percent):

	<u>Average annual growth rates</u>		
	<u>1977-80</u>	<u>1981-85</u>	<u>1977-85</u>
GNP (real)-----	3.5	3.3	3.4
Disposable personal income (real)-----	3.8	3.4	3.6
Inflation-----	5.0	4.0	4.5
Price of gasoline ¹ /-----	10.0	10.0	10.0
Unemployment-----	Falling toward 4.5 percent by 1985		

Further, these projections were made upon the assumption that the domestic automobile industry would continue to be composed of four major manufacturers--General Motors, Ford, Chrysler, and American Motors--during the 1979-85 period. Volkswagen and Volvo (assuming Volvo begins U.S. production) would most likely be too small to be considered major domestic manufacturers by 1985.

Nature of Statistical Data Used In This Report

Unless otherwise noted, all annual data are presented on a calendar-year rather than a model-year basis. Furthermore, the automobile demand model used by the Commission used calendar-year data for historical purposes and forecasts.

U.S. registrations of new passenger automobiles refer to the total number of new passenger automobiles registered, domestic and imported, for use during each calendar year. Domestic registrations, unless noted otherwise, refer to U.S. registrations of new passenger

¹/ The impact that enactment of the Crude Oil Equalization Tax (pt. III of title II of H.R. 8444) might have on the price of gasoline for the period 1979-81 has not been separately analyzed, and is not specifically reflected in this assumption.

automobiles manufactured in the United States and Canada. Foreign registrations, or U.S. registrations of imported new passenger automobiles, do not include vehicles made in Canada. For purposes of this report, the terms "registrations" and "sales" may be used interchangeably throughout the 1979-85 period.

Definitions of the Terms and Concepts Used in This Report

1. The following terms are as defined in the Motor Vehicle Information and Cost Savings Act, as amended by the Energy Policy and Conservation Act (15 U.S.C. 2001):

- a. Passenger automobile
- b. Automobile
- c. Fuel economy
- d. Average fuel economy standard
- e. Manufacturer
- f. Model type
- g. Model year

2. Administration proposal is as provided in section 1201 and 1202 of the proposed National Energy Act, as transmitted to Congress by the President.

3. House proposal is as provided in section 2021 and 2022 of H.R. 6831 as reported by the House Committee on Ways and Means.

4. Prices of new passenger automobiles consist of the summation of the following charges: (1) average base list prices for automobiles with no extras, (2) the value of an installed options package, (3) state and local taxes, and (4) transportation charges. Prices include the Administration and the House tax where appropriate.

5. The traditional classification of automobiles such as subcompact, compact, mid-size, full-size, and luxury are defined as follows:

A. Subcompact: All passenger automobiles with a wheelbase of not over 100 inches (excluding luxury cars).

B. Compact: All passenger automobiles with a wheelbase over 100 inches and not over 111 inches (excluding luxury cars).

C. Mid-size: All passenger automobiles with a wheelbase over 111 inches and not over 118 inches (excluding luxury cars).

D. Full-size: All passenger automobiles with a wheelbase over 118 inches (excluding luxury cars).

E. Luxury: Since the basis for this category is the manufacturer's suggested retail price, the actual cutoff is somewhat arbitrary. However, the lowest priced models in this class are generally (for domestic automobiles) the Buick Electra 225, the Oldsmobile 98, and the Chrysler New Yorker. Imported automobiles with a price greater than or equal to the lowest priced of these automobiles are included in this class.

After 1977 the size classifications listed above for passenger automobiles will no longer be applicable owing to the downsizing of each manufacturer's model types. Thus, classifications based upon the traditional method of determining size (wheelbase) will not be valid for the 1979-85 period. Instead, all size classifications used in this report are a function of wheelbase, engine size, interior space, weight, price, and other related factors. For the purpose of this study, whenever subcompact is mentioned it is assumed that this is the smallest classification for that particular year, but it is not necessarily directly comparable in actual weight, wheelbase, and

so forth, with a subcompact of any previous year. This relationship also holds true for all other size classifications (i.e., compact, mid-size, and full-size). In other words, all size classifications are relative to the specific year in question and are not to be construed as absolutes or constants over the 1979-85 period. Furthermore, for purposes of the projections in this report, each size class is assumed to be downsized by about 30 percent in terms of curb weight and by about 40 percent in terms of engine displacement over the period 1979-85.

6. United States/Canadian automobiles consist of automobiles produced in the United States or Canada by firms headquartered in the United States or Canada. It does not include United States- or Canadian-made automobiles produced by such firms as Volvo or Renault which are headquartered in third countries, nor does it include vehicles such as the Chevy Luv or Ford Courier which are assembled in the United States mostly from third-country components. Also excluded from the definition are captive imports as defined in item No. 7.

7. Imported automobile is any new passenger automobile assembled in any country other than the United States or Canada (those under the purview of the Automotive Products Trade Act (APTA)) and imported into the United States. A captive import is an imported vehicle assembled in any country other than the United States or Canada by a subsidiary of a domestic manufacturer or assembled by a domestic manufacturer in a joint effort with a foreign manufacturer.

8. Employment refers to all persons employed at facilities of the four major domestic automobile manufacturers in which complete passenger automobiles and automotive parts are produced in the United States.

H.R. 6831: NATIONAL ENERGY ACT**General Objectives and Background**

H.R. 6831, as introduced in the House of Representatives on May 2, 1977, embodied the President's proposed "National Energy Act". The bill was divided and portions thereof were referred to different committees, which then reported and referred the amended provisions of H.R. 6831. On July 20, 1977, the amended provisions of H.R. 6831 were introduced in H.R. 8444, which was referred to the Ad Hoc Committee on Energy. On July 20, 1977, that committee referred H.R. 8444 to the House, which passed the bill on August 5, 1977.

As reported by the Ad Hoc Committee on Energy, the National Energy Act has three principal themes: Energy conservation, conversion to coal, and incentives to production of energy. The objective of the act is to provide a comprehensive national energy policy in response to the increasing demand for energy and its decreasing supply, particularly of oil and natural gas. This policy is intended to stem the increasing dependency of the United States on foreign oil and the vulnerability of the United States to interruptions of foreign oil supply, to conserve the existing oil and natural gas resources of the United States, and to enhance the efficiency of the use of the Nation's energy resources.

In section 3 of the National Energy Act, six goals of the national energy policy to be attained in 1985 are specified as follows:

- 1) Reduction of annual growth of United States energy demand to less than 2 percent.
- 2) Reduction of the level of oil imports to less than 6 million barrels per day.
- 3) Achievement of a 10-percent reduction in gasoline consumption from the 1977 level.

- 4) Improvement of the efficiency and energy use of heating and cooling systems in 90% of residential buildings, schools, and hospitals.
- 5) An increase in annual coal production by at least 400 million tons over 1976 production.
- 6) Use of solar energy in more than two and a half million homes.

The provisions of the National Energy Act, which are intended to assure that these goals are met, are divided into two titles. Title I consists of the National Energy Act's nontax provisions, and title II consists of tax measures.

Title II of H.R. 6831 as introduced in the House ^{1/} was referred to the Committee on Ways and Means, which reported and referred the title as the Energy Tax Act of 1977 on July 13, 1977, with an amendment in the nature of a substitute. Title II of H.R. 6831 as reported by the Committee on Ways and Means was incorporated in title II of H.R. 8444, which was passed by the House on August 5, 1977. The Gas Guzzler Tax, sections 2021 and 2022 of H.R. 6831 as reported by the Committee on Ways and Means, is embodied in sections 2021 and 2022 of H.R. 8444 as passed by the House without further amendment. The various provisions of the House proposal would amend the Internal Revenue Code of 1954.

^{1/} The Fuel Efficiency Incentive Tax Proposal, contained in sections 1201-1204 of the proposed National Energy Act, as transmitted by the President and as originally introduced as H.R. 6831 in the House, was the subject of an investigation and report by the Commission to the Senate Committee on Finance, transmitted on July 15, 1977, and entitled *The Fuel Efficiency Incentive Tax Proposal: Its Impact Upon the Future of the U.S. Passenger Automobile Industry*.

**The Gas Guzzler Tax, Subpart A of Part II of Title II of
H.R. 6831, as Reported by the House Committee
on Ways and Means: Technical Analysis**

The Gas Guzzler Tax, sections 2021 and 2022 of H.R. 6831, as reported by the House Ways and Means Committee and as passed by the House in sections 2021 and 2022 of H.R. 8444, is an excise tax measure created to discourage the consumption of fuel-inefficient automobiles. 1/

Whereas the Administration's Fuel Efficiency Incentive Tax proposal, sections 1201-1204 of the proposed National Energy Act as introduced in the House, would have imposed a system of manufacturers excise taxes and rebates to influence buying patterns in the U.S. market, the House Ways and Means Committee substitute provides for a system of manufacturers excise taxes alone. Thus, while the original proposal was not intended to provide a net revenue, the House Gas Guzzler Tax proposal would create a net revenue to be placed in a special Public Debt Retirement Trust Fund, which could be used only for the redemption or purchase of public debt instruments of the United States.

1/ No manufacturers excise tax is imposed under present law upon the sale of passenger automobiles or light-duty trucks or buses. Section 401 of the Revenue Act of 1971 amended section 4061 of the Internal Revenue Code of 1954 to repeal the 7-percent manufacturers excise tax on chassis and bodies for passenger automobiles and the 10-percent manufacturers excise tax on chassis and bodies for light-duty trucks and buses (those having a gross vehicle weight of 10,000 pounds or less). The Energy Policy and Conservation Act of 1974 amended the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2001) by establishing mandatory average fuel economy standards effective with model year 1978 for passenger automobiles and with model year 1979 for other 4-wheeled light-duty highway vehicles.

The Administration's Fuel Efficiency Incentive Tax proposal would have levied a graduated excise tax, the Fuel Inefficiency Tax, on the sale by the manufacturer of new automobiles which fail to meet the average fuel economy standards as established by the Motor Vehicle Information and Cost Savings Act, as amended by the Energy Policy and Conservation Act (15 U.S.C. 2001, *et seq.*, hereinafter EPCA), as follows:

<u>Model year</u>	<u>Average fuel economy standard</u>
1978-----	18.0 mpg
1979-----	19.0 mpg
1980-----	20.0 mpg
1981-----	22.0 mpg ^{1/}
1982-----	24.0 mpg ^{1/}
1983-----	26.0 mpg ^{1/}
1984-----	27.0 mpg ^{1/}
1985-----	27.5 mpg

This tax, which would be assessed beginning in model years 1978 for passenger automobiles and 1979 for nonpassenger automobiles, would increase proportionately with the decrease in fuel economy of the particular model of automobile sold.

Gas Guzzler Tax (Sec. 2021)

Like the Administration's Fuel Inefficiency Tax proposal, the House Gas Guzzler Tax proposal would create a new section 4064 of the Internal Revenue Code of 1954, consisting of a graduated manufacturers excise tax to be imposed on the sale of certain motor vehicles

^{1/} The average fuel economy standards for the interim model years were administratively determined by the Secretary of Transportation under section 502(a)(3) of the EPCA (42 F.R. 33534, June 30, 1977).

by the manufacturer. 1/ While the basic concept of the Administration proposal is retained by the House Gas Guzzler Tax, the tax structure and mechanics would be altered substantially.

The first major difference is that the Gas Guzzler Tax would be effective beginning model year 1979, instead of 1978. This delay was apparently agreed to owing to concern that the industry had already set design and tooling of automobiles for model year 1978 and that immediate imposition of such tax might adversely affect competition between U.S. automobile manufacturers in the United States. The largest manufacturer is ahead of its competitors in implementing its downsizing program for its passenger automobiles.

The second major difference in the House Gas Guzzler Tax is that the minimum fuel economy standard for which no tax is imposed in a model year is lower than that of the Administration's proposal, which was determined by the average fuel economy standards of the EPCA. Under the Gas Guzzler Tax those automobiles having a fuel economy rating by model type 2/ falling 3 to 5.5 mpg

1/ Like the Administration's Fuel Efficiency Incentive Tax proposal, the term "manufacturer" in the Gas Guzzler Tax includes an importer. If the manufacturer itself uses the vehicle, rather than selling it, such use would be treated as a sale under present law (section 4218 of the Internal Revenue Code), and the tax would be imposed upon the commencement of such use. The tax would be calculated on the basis of the model year in which the automobile is produced. If an automobile which is not new is imported for use in the United States, the importer (whether or not a consumer) would be liable for the tax, provided such automobile is not "incidentally imported for personal use." See Rev. Rul. 68-30, 1968-1 CB 481.

2/ As defined by the House measure, a model type is a "particular class of automobile as determined by regulation by the EPA [Environmental Protection Agency] Administrator (section 2021(a) of H.R. 8444). See section 501(11) of the EPCA 15 U.S.C. 2002(11)).

(depending on the model year) below the average fuel economy standards under the EPCA would not be taxed. For example, for model year 1979 there would be no tax imposed on those automobiles having a fuel economy rating equal to or greater than 15 mpg, while the average fuel economy standard of the EPCA for passenger automobiles in that particular model year is 19 mpg. The following tabulation gives the lowest fuel economy rating at which no tax would be imposed under the House Gas Guzzler Tax and the average fuel economy standard prescribed by the EPCA, which is also the lowest fuel economy rating at which no tax would be imposed under tax schedules of the Administration's Fuel Inefficiency Tax: ^{1/}

<u>Model year</u>	<u>Average Fuel Economy Standard</u>	<u>Gas Guzzler Tax (lowest fuel economy at which no tax is imposed)</u>	<u>Difference</u>
1978-----	18.0 mpg	no tax	
1979-----	19.0 mpg	15.0 mpg	4.0 mpg
1980-----	20.0 mpg	17.0 mpg	3.0 mpg
1981-----	22.0 mpg	18.5 mpg	3.5 mpg
1982-----	24.0 mpg	20.0 mpg	4.0 mpg
1983-----	26.0 mpg	20.5 mpg	5.5 mpg
1984-----	27.0 mpg	22.0 mpg	5.0 mpg
1985-----	27.5 mpg	23.5 mpg	4.0 mpg

^{1/} In this regard, part B of title IV of The National Energy Conservation Policy Act (S. 2057), as reported by the Senate Committee on Energy and Natural Resources, would provide that each new automobile model sold in the United States after model year 1979 would have to meet or exceed the following levels of fuel economy in the respective model years:

<u>Miles per gallon</u>	<u>Year</u>
16 -----	1980
17 -----	1981
18 -----	1982
19 -----	1983
20 -----	1984
21 -----	1985

The penalty for noncompliance by a manufacturer would be \$10,000 per car. In addition, the fines for violating the fleet average fuel economy requirements of the Energy Policy and Conservation Act would be doubled from \$50 per mpg to \$100 per mpg per car. Although not the subject of this report, the proposal forwarded by the Committee on Energy and National Resources would have an obvious and significant impact upon the future of the U.S. passenger automobile industry.

Even though the Gas Guzzler Tax is imposed at a different fuel economy level than that of the Administration's Fuel Inefficiency Tax, for those automobiles subject to the Gas Guzzler Tax the applicable tax is equal to or greater than the tax which would be imposed under the schedules in the Administration proposal. For model years 1979 and 1980, the applicable taxes would be identical. For subsequent model years, the tax which would be imposed in the highest taxable fuel economy category under the Gas Guzzler Tax would be identical to that in the Administration proposal, and for each lower fuel economy category the tax would be greater than that in the Administration proposal by 5 percent, 10 percent, 15 percent, and so on (see pp. 27-28 for the schedules). To illustrate, in model year 1981 both the Gas Guzzler Tax and the Administration's Fuel Inefficiency Tax proposal would impose a tax of \$245 on an automobile having a fuel economy of at least 17.5 but less than 18.5 mpg (the highest fuel economy category at which automobiles would be taxed under the Gas Guzzler Tax). For the next lower fuel economy category of at least 16.5 but less than 17.5 mpg, the tax would be 5 percent higher under the Gas Guzzler Tax than under the Administration proposal. For the fuel economy category of at least 15.5 but less than 16.5 mpg, the tax would be 10 percent higher, and so on.

Another major difference between the Gas Guzzler Tax and the Administration's Fuel Inefficiency Tax is the classes of motor vehicles to which each proposal would apply. The Gas Guzzler Tax applies to automobiles, as defined in the bill. Under the bill, the term automobile means any 4-wheeled motor vehicle which is manufactured primarily for use on public streets, roads, and highways and which is rated at 6,000 pounds gross vehicle weight

or less. Specifically excluded from the bill's definition of automobile (and thus from the tax) is any truck designed primarily to carry property if its capacity to carry cargo (property, not passengers) is at least 1,000 pounds. The term 'truck' is not to be limited to vehicles with open bed cargo areas and includes vans or other special-purpose vehicles. A vehicle with 4-wheel drive and other significant off-highway operation features would not be included within the definition of automobiles. Thus, the Gas Guzzler Tax is essentially applicable only to passenger automobiles and vans equipped primarily for passengers which are rated at 6,000 pounds gross vehicle weight or less. In comparison, the Administration's Fuel Efficiency Incentive Tax proposal would have applied to all automobiles for which average fuel economy standards are prescribed under the EPCA, including classes of nonpassenger automobiles 1/ and passenger automobiles over 6,000 pounds gross vehicle weight. 2/

1/ The Secretary of Transportation has determined average fuel economy standards for nonpassenger automobiles weighing not more than 6,000 pounds for the model year 1979 as follows: The standard for 4-wheel drive nonpassenger automobiles which are jeep-type vehicles is 15.8 mpg. The standard for all other nonpassenger automobiles (including pickup trucks and vans) weighing not more than 6,000 pounds is 17.2 mpg. The standard for passenger automobiles is 19.0 mpg for the model year 1979 (42 F.R. 33534, June 30, 1977). Average fuel economy standards for classes of nonpassenger automobiles rated at 6,000 to 10,000 pounds gross vehicle weight have not been established.

2/ In model year 1976, there were approximately 600,000 passenger automobiles produced weighing between 6,000 and 10,000 pounds gross vehicle weight. These passenger automobiles included the larger station wagons (e.g., Buick Estate Wagon V-8, Chevrolet V-8 Wagon, and Plymouth Grand Fury Wagon) and larger sedans (e.g., Cadillac (except the Seville), Chrysler New Yorker, and Lincoln Continental) (41 F.R. 55368, Dec. 20, 1976)). Although these passenger automobiles would not be subject to the Gas Guzzler Tax they are to be included in a manufacturer's production for purposes of calculating a manufacturer's fuel economy average (42 F.R. 38368, July 28, 1977). For this reason the number of passenger automobiles rated in this weight category is expected to slowly decrease as the automakers begin their downsizing programs.

The Gas Guzzler Tax would require that the testing and calculation procedures used by the EPA administrator in establishing fuel economy ratings upon which a tax would be imposed for any model type be the same as those used for model year 1975 (weighted 55 percent urban cycle and 45 percent highway cycle) or procedures which yield comparable results. It appears that this provision was intended to insure that an automobile not suffer a tax burden as the result of a change in the method of rating fuel economy under the EPCA. Section 503(d)(1) of the EPCA, as it applies to passenger automobiles (which, along with vans equipped for carrying passengers, are for practical purposes the only vehicles to which the Gas Guzzler Tax would apply), has such a provision. Under the EPCA, fuel economy ratings for nonpassenger automobiles may be determined differently, presumably according to the particular use of such automobiles. ^{1/} Like the EPCA, the Gas Guzzler Tax requires that the fuel economy test be conducted in conjunction with the emissions test under section 206 of the Clean Air Act.

Like the Administration's Fuel Efficiency Incentive Tax, the Gas Guzzler Tax would amend section 4217 of the Internal Revenue Code to provide for the payment of the tax when an automobile is leased rather than sold. ^{2/} Under the Gas Guzzler Tax the first lease would be treated as a sale, and

^{1/} When the NHTSA originally proposed rules setting fuel economy standards for nonpassenger automobiles they proposed a fuel economy standard of 18.7 mpg (41 F.R. 52094, Nov. 26, 1976). When final rules were promulgated, the NHTSA lowered the fuel economy standard to 17.2 mpg for nonpassenger automobiles (other than 4-wheel drive nonpassenger automobiles which are jeep-type vehicles for which a separate standard was set) owing to changes in the testing procedures for model year 1979 which would result in a reduction in measured fuel economy of 8 percent (42 F.R. 13807, Mar. 14, 1977).

^{2/} Sec. 2021(d) of the Gas Guzzler Tax provides that the total Gas Guzzler Tax payable is computed "at the rate in effect at the date of the first lease." However, the rate of the Gas Guzzler Tax is determined by the model year of manufacture of the automobile.

the tax is payable pro rata in accordance with the receipt of payments under the lease. A second or subsequent lease is not treated as a sale. If such a first lease is canceled, or the automobile is sold or otherwise disposed of before the total Gas Guzzler Tax is payable, the remainder of the tax would then be payable.

Like the Administration's Fuel Efficiency Incentive-Tax proposal, the Gas Guzzler Tax would provide that sales and leases of automobiles to State and local governments and to nonprofit educational organizations would not be exempt from the tax. 1/ Further, the Secretary of the Treasury will not have the authority to waive application of the tax in the sale or lease of a vehicle to the United States. 2/

The Gas Guzzler Tax would not be includable in the basis of an automobile subject to the tax for persons who use such automobiles. 3/ If a taxpayer acquires any automobile on which a gas guzzler tax was imposed and (except in situations where the vehicle is sold

1/ Under present law, the manufacturers excise taxes generally do not apply to direct sales or leases to State and local governments or tax-exempt schools if the items purchased or leased are for their exclusive use (sec. 4221(a)(4) and (5)). Also, if a State or local government or tax-exempt school purchases an item subject to the tax from someone other than the manufacturer, the manufacturer may obtain a credit or refund of the tax paid (sec. 6416(b)(2)) if he has repaid or agreed to repay the amount of the tax to the ultimate vendor or obtained the consent of said vendor to the allowance of the credit or refund.

2/ The Secretary of the Treasury has the authority to exempt sales to the United States (sec. 4293) from manufacturers excise taxes, although the Secretary has not exercised this authority extensively.

3/ In general, under present law, a taxpayer's unadjusted basis in property he purchases, either for use in his trade or business or for personal use, is the cost of the property. This basis is utilized not only in computing depreciation and the investment credit but also, after taking into account any appropriate adjustments, in computing gain or loss on the sale of the property. Since an excise tax imposed upon the sale of a vehicle by a manufacturer reflects an additional cost of the item sold, it would be included in the purchaser's basis for the vehicle.

for ultimate use prior to importation) the use of the automobile by the taxpayer begins not more than 1 year after the date of the original sale for consumption, then the basis of the automobile shall be reduced by the amount of the Gas Guzzler Tax imposed on the automobile. If an automobile is sold for ultimate use prior to importation, the 1-year period begins on the date it is considered to have entered this country for customs purposes. This reduction in the basis is automatic; it does not depend upon the extent to which the tax may have been passed on to the purchaser. Rather, the basis is computed simply by reducing the taxpayer's cost basis in the vehicle by the amount of the tax imposed. The reduction is an across-the-board reduction for all purposes, including depreciation, computation of the investment credit, and computation of gain or loss on sale, and it applies whether the vehicle is used in a taxpayer's trade or business or for personal purposes.

The rule applies not only to the original purchaser of the automobile (or user, when use is treated as a sale), but also to any other person whose use of the automobile begins not more than 1 year after the date of the original sale of the automobile for ultimate use (or, if sale for ultimate use precedes importation, the date the vehicle is considered to have entered this country for customs purposes). This 1-year rule is intended to prevent persons from indirectly obtaining the benefit of an increase in basis for the Gas Guzzler Tax by purchasing (or having someone purchase for them) a relatively new automobile.

Trust fund for the purpose of reducing the public debt (Sec. 2022)

The Gas Guzzler Tax proposal would establish a Public Debt Retirement Trust Fund and would appropriate to this fund, out of any money in the Treasury not otherwise appropriated, amounts equivalent to the amount of the Gas Guzzler Tax collected by the Treasury. ^{1/} In general, the amounts appropriated would be transferred at least monthly from the general fund of the Treasury to this trust fund. Use of amounts in the trust fund would be limited to the payment at maturity, or the redemption or purchase before maturity, of any obligation of the United States included in the public debt. All such obligations paid, redeemed, or purchased with money out of the trust fund would be canceled and retired and would not be reissued.

^{1/} The committee's revenue estimate from the Gas Guzzler Tax is \$100 million in each of the fiscal years 1979 and 1980, and \$170 million in fiscal year 1985. The public debt is currently approximately \$680 billion, up from approximately \$620 billion in fiscal year 1976.

The Gas Guzzler Tax proposal, section 2021 of H.R. 8444,
as reported by the House 1/

Tax schedule for new car sales

Miles per gallon		Tax								
At least	But less than	1978	1979	1980	1981	1982	1983	1984	1985	and thereafter
-----	12.5	-----	-----	-----	\$1,216	-----	\$2,134	-----	-----	\$3,856
12.0	13.0	0	\$553	866	-----	1,565	-----	2,636	-----	-----
12.5	13.5	-----	-----	-----	968	-----	1,747	-----	-----	3,219
13.0	14.0	0	438	538	-----	1,264	-----	2,183	-----	-----
13.5	14.5	-----	-----	-----	764	-----	1,427	-----	-----	2,686
14.0	15.0	0	339	428	-----	1,015	-----	1,804	-----	-----
14.5	15.5	-----	-----	-----	597	-----	1,161	-----	-----	2,244
15.0	16.0	0	0	333	-----	809	-----	1,486	-----	-----
15.5	16.5	-----	-----	-----	458	-----	938	-----	-----	1,888
16.0	17.0	0	0	240	-----	636	-----	1,218	-----	-----
16.5	17.5	-----	-----	-----	341	-----	751	-----	-----	1,550
17.0	18.0	0	0	0	-----	491	-----	990	-----	-----
17.5	18.5	-----	-----	-----	245	-----	593	-----	-----	1,276
18.0	19.0	0	0	0	-----	369	-----	797	-----	-----
18.5	19.5	-----	-----	-----	0	-----	459	-----	-----	1,043
19.0	20.0	0	0	0	-----	266	-----	631	-----	-----
19.5	20.5	-----	-----	-----	0	-----	348	-----	-----	843
20.0	21.0	0	0	0	-----	0	-----	490	-----	-----
20.5	21.5	-----	-----	-----	0	-----	0	-----	-----	671
21.0	22.0	0	0	0	-----	0	-----	371	-----	-----
21.5	22.5	-----	-----	-----	-----	-----	-----	0	-----	524
22.0	23.0	0	0	0	-----	0	-----	0	-----	-----
22.5	23.5	-----	-----	-----	-----	-----	-----	0	-----	397
23.0	24.0	-----	-----	-----	-----	-----	-----	0	-----	-----
23.5	24.5	0	0	0	-----	0	-----	0	-----	0
24.0	25.0	0	0	0	-----	0	-----	0	-----	-----
24.5	25.5	-----	-----	-----	-----	-----	-----	0	-----	0
25.0	26.0	0	0	0	-----	0	-----	0	-----	-----
25.5	26.5	-----	-----	-----	-----	-----	-----	0	-----	0
26.0	27.0	0	0	0	-----	0	-----	0	-----	-----
26.5	27.5	-----	-----	-----	-----	-----	-----	0	-----	0
27.0	28.0	0	0	0	-----	0	-----	0	-----	0
27.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1/ The amounts between the dashed lines apply to the whole mile brackets until 1981 when the tax begins to apply to the half-mile brackets. The brackets move up one-half mile per year through 1985 (the dashed lines move toward the righthand corner) so that in 1982, the tax applies to the whole-mile brackets, in 1983, to the half-mile brackets again, in 1984 to the whole-mile brackets, and in 1985 to the half-mile brackets.

The Administration's Fuel Inefficiency Tax proposal, Section 1201
of H.R. 6831, as introduced in the House of Representatives 1/

Tax schedule for new car sales

Miles per gallon		Tax								
At least	But less than	1978	1979	1980	1981	1982	1983	1984	1985	and there- after
-----	12.5	-----	-----	-----	8935	-----	81,524	-----	82,488	-----
12.0	13.0	8449	8553	8666	-----	81,159	-----	81,810	-----	-----
12.5	13.5	-----	-----	-----	774	-----	1,294	-----	2,146	-----
13.0	14.0	345	438	538	-----	972	-----	1,559	-----	-----
13.5	14.5	-----	-----	-----	637	-----	1,098	-----	1,854	-----
14.0	15.0	256	339	428	-----	812	-----	1,336	-----	-----
14.5	15.5	-----	-----	-----	519	-----	929	-----	1,603	-----
15.0	16.0	179	258	338	-----	674	-----	1,143	-----	-----
15.5	16.5	-----	-----	-----	416	-----	782	-----	1,384	-----
16.0	17.0	112	178	249	-----	553	-----	974	-----	1,192
16.5	17.5	52	111	176	-----	446	-----	825	-----	-----
17.0	18.0	-----	-----	-----	245	-----	539	-----	1,021	-----
17.5	18.5	0	52	111	-----	351	-----	693	-----	-----
18.0	19.0	0	0	52	-----	174	-----	437	-----	869
18.5	19.5	-----	-----	-----	110	-----	345	-----	574	-----
19.0	20.0	0	0	0	-----	189	-----	467	-----	733
19.5	20.5	-----	-----	-----	52	-----	262	-----	610	-----
20.0	21.0	0	0	0	-----	120	-----	371	-----	-----
20.5	21.5	-----	-----	-----	0	-----	188	-----	499	-----
21.0	22.0	0	0	0	-----	57	-----	283	-----	-----
21.5	22.5	-----	-----	-----	-----	-----	119	-----	397	-----
22.0	23.0	0	0	0	-----	0	-----	303	-----	-----
22.5	23.5	-----	-----	-----	0	-----	87	-----	304	-----
23.0	24.0	0	0	0	-----	0	-----	129	-----	-----
23.5	24.5	-----	-----	-----	-----	-----	0	-----	219	-----
24.0	25.0	0	0	0	-----	0	-----	62	-----	-----
24.5	25.5	-----	-----	-----	-----	-----	0	-----	140	-----
25.0	26.0	0	0	0	-----	0	-----	0	-----	-----
25.5	26.5	-----	-----	-----	-----	-----	0	-----	67	-----
26.0	27.0	0	0	0	-----	0	-----	0	-----	-----
26.5	27.5	-----	-----	-----	-----	-----	0	-----	0	-----
27.0	28.0	0	0	0	-----	0	-----	0	-----	0
27.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1/ Section 1202, the Fuel Efficiency Rebate, is not shown. The amounts between the dashed lines apply to the whole mile brackets until 1981 when the tax begins to apply to the half-mile brackets. The brackets move up one-half mile per year through 1985 (the dashed lines move toward the righthand corner) so that in 1982, the tax applies to the whole-mile brackets, in 1983, to the half-mile brackets again, in 1984 to the whole-mile brackets, and in 1985 to the half-mile brackets.

**THE FUTURE OF THE U.S. PASSENGER AUTOMOBILE
INDUSTRY: THE HOUSE PROPOSAL VERSUS
THE ADMINISTRATION PROPOSAL**

Projections for the period 1979-85 comparing the effects of the House proposal with the Administration proposal 1/ are made with respect to U.S. passenger automobiles in use, U.S. registrations (sales) of new passenger automobiles, U.S. imports, and U.S. employment within the automobile industry. A separate analysis on consumer impact details consumer preferences and projected prices of new passenger automobiles under both proposals. The Commission's projections are made on the basis of the underlying assumptions previously discussed in this report and may be considered in tandem with Commission projections forwarded to the Senate Committee on Finance on July 15, 1977, in its report entitled The Fuel Efficiency Incentive Tax Proposal: Its Impact Upon the Future of the U.S. Passenger Automobile Industry. 2/

**U.S. Passenger Automobiles in Use and
Registrations/Sales**

The number of U.S. passenger automobiles in use (whether domestic or imported, new or used) is projected to increase during the 1979-85 period from 102.3 to 116.0 million units under the Administration proposal. This is somewhat above the overall levels projected under the

1/ The term "Administration proposal" may be interchanged with the term "FIT/FER" as used in the Commission's report submitted to the Senate Committee on Finance July 15, 1977.

2/ However, a word of caution might be appropriate here. Because of changes made by Wharton Econometric Forecasting Associates with respect to personal income for the years 1984 and 1985 and also owing to changes made to mileage-per-gallon categories, the Wharton EFA Automobile Demand Model results may vary to some degree between reports.

House proposal of between 107.0 and 115.8 million units for the same period (see following table).

Passenger automobiles: In use in the United States under the House proposal and under the Administration proposal, estimated for 1979-85

(In million of units)			
Year	House proposal	Administration proposal	Differences between the Administration proposal and the House proposal
1979-----	107.0	107.3	-0.3
1980-----	108.5	108.7	-.2
1981-----	109.5	109.8	-.3
1982-----	110.7	110.9	-.2
1983-----	112.3	112.4	-.1
1984-----	113.8	114.1	-.3
1985-----	115.8	116.0	-.2

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EPA Automobile Demand Model forecasts.

Accordingly, during the 1979-85 period, the tax proposed in H.R. 6831 would encourage U.S. consumers to drive between 100,000 and 300,000 fewer automobiles each year than they would under the Administration proposal. The proposed tax would raise prices of fuel-inefficient automobiles thereby discouraging consumer demand; there would also be no direct incentive to purchase fuel-efficient automobiles since no rebate would be available (as under the President's proposal). The U.S. consumer would, therefore, most likely postpone his or her purchase of a new automobile in favor of retaining the presently owned one for a longer period of time.

New passenger automobiles: U.S. registrations, domestic and total, under the House proposal and under the Administration proposal, estimated for 1979-85

Year	Domestic registrations ^{1/}			Total U.S. registrations			Domestic registrations as a share of total U.S. registrations		
	House proposal	Administration proposal	Difference	House proposal	Administration proposal	Difference	House proposal	Administration proposal	Difference
	<u>1,000</u> <u>units</u>	<u>1,000</u> <u>units</u>	<u>1,000</u> <u>units</u>	<u>1,000</u> <u>units</u>	<u>1,000</u> <u>units</u>	<u>1,000</u> <u>units</u>	<u>Percent</u>	<u>Percent</u>	<u>Percentage</u> <u>points</u>
1979	9,902	9,700	202	11,349	11,557	-208	87.2	83.9	3.3
1980	10,336	10,084	252	11,785	11,841	-56	87.7	85.2	2.5
1981	10,568	10,301	267	11,942	11,942	0	88.5	86.3	2.2
1982	10,813	10,549	264	12,216	12,270	-54	88.5	86.0	2.5
1983	11,117	10,795	322	12,528	12,480	48	88.7	86.5	2.2
1984	10,925	10,864	61	12,430	12,600	-170	87.9	86.2	1.7
1985	11,316	11,038	278	12,845	12,760	85	88.1	86.5	1.6

^{1/} Includes new passenger automobiles from Canada.

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EPA Automobile Demand Model forecasts.

As indicated in the following table, under the House proposal, U.S. registrations (sales) of domestically produced new passenger automobiles (United States and Canadian) and imported automobiles together would range between 11.3 and 12.8 million units or between 54,000 and 208,000 less than under the Administration proposal during the majority of the 1979-85 period.

United States/Canadian type new passenger automobiles registered in the United States would increase above the Administration proposal levels under the House proposal by 62,000 to 322,000 units. The major reason for the increased domestic (United States/Canadian) registrations compared with the amount under the Administration proposal is owing to the relatively narrow range in which the House proposal is to be levied. That is, while the tax proposed in H.R. 6831 is generally a more stringent absolute tax than that proposed by the President (the Administration proposal), it does not apply its taxes on the upper ranges of the fuel-inefficient automobiles and therefore does not adversely affect as many new passenger automobiles. ^{1/}

The percent of domestically produced (United States/Canadian) automobiles subject to taxation under either proposal is estimated by the Commission as shown in the following table. This information is included here to shed some light on the likely significance of each of the proposals.

^{1/} See page 20 of this report.

New passenger automobiles: Percentage of domestically (United States/Canadian) produced new passenger automobiles estimated to be subject to the tax schemes proposed under the House proposal and under the Administration proposal, 1979-85

		(In percent)						
Proposal	1979	1980	1981	1982	1983	1984	1985	
House-----	0-5	0-3	0-3	10-15	5-8	10-15	0-3	
Administration-----	35-45	40-50	55-65	45-55	40-50	40-50	45-55	

Source: Estimated by the U.S. International Trade Commission.

The tax schedule as proposed by the Administration (if the Fuel Efficiency Rebate were excluded) would very likely affect a greater number of domestically produced automobiles than would the House proposal. What is not readily apparent, however, is that in those years where either of the proposals appear to be effective an improvement in fuel efficiency of less than 1.0 mpg would generally avoid the tax altogether for an additional number of automobiles.

It appears that the increased domestic (United States/Canadian) sales projected under the House proposal, as compared with the Administration proposal, consist in large part of increased sales of new passenger automobiles classified as full-size (as shown in the following table). As already noted, the House proposal is essentially levied within a much more narrow range of fuel-inefficient automobiles than that proposed by the President in his tax and rebate scheme.

New passenger automobiles: Share of total U.S. registrations under the House proposal and under the Administration proposal, by types, estimated for 1979-85

(In percent)

Year	Subcompact		Compact		Mid-size		Full-size		Luxury	
	House proposal	Administration proposal	House proposal	Administration proposal	House proposal	Administration proposal	House proposal	Administration proposal	House proposal	Administration proposal
1979	20.6	27.0	18.6	17.1	27.0	28.0	24.6	18.8	9.3	9.1
1980	19.9	24.9	19.8	19.3	27.0	27.8	23.9	18.7	9.4	9.3
1981	18.8	23.1	21.5	21.6	26.9	27.7	23.3	18.0	9.5	9.5
1982	18.7	23.7	21.7	21.2	26.6	27.3	23.3	18.1	9.7	9.7
1983	18.2	22.6	22.0	22.2	26.3	27.0	23.6	18.4	9.8	9.8
1984	19.6	23.1	24.1	22.1	28.5	27.2	17.8	17.6	10.0	9.9
1985	19.2	22.5	23.8	22.3	27.9	26.7	18.9	18.4	10.1	10.1

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EFA Automobile Demand Model forecasts.

U.S. Imports

U.S. imports of new passenger automobiles from all countries (except Canada) under the House proposal are projected to be below the level of imports projected under the Administration proposal during each of the years 1979-85. This difference is owing to the collective effects of (1) a less effective tax (the House proposal) and (2) the absence of any direct incentive to purchase more fuel-efficient automobiles (e.g. the President's proposed rebate).

As shown in the following table, U.S. registrations of imported automobiles, during the 1979-85 period under the House proposal are projected to range between 1.4 and 1.5 million units--approximately 200,000 to 400,000 units less in each of the years during the period than projected under the Administration proposal.

New passenger automobiles: U.S. registrations of imports (except Canadian) and their share of total U.S. registrations under the House proposal and under the Administration proposal, estimated for 1979-85

Year	U.S. registrations of imports (except Canadian)			U.S. registrations of imports (except Canadian) as a share of total U.S. registrations		
	House proposal	Administration proposal	Difference	House proposal	Administration proposal	Difference
	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>Percent</u>	<u>Percent</u>	<u>Percentage points</u>
1979-----	1,447	1,857	-410	12.8	16.1	-3.3
1980-----	1,449	1,757	-308	12.3	14.8	-2.5
1981-----	1,374	1,640	-266	11.5	13.7	-2.2
1982-----	1,404	1,721	-317	11.5	14.0	-2.5
1983-----	1,411	1,685	-274	11.3	13.5	-2.2
1984-----	1,505	1,736	-231	12.1	13.8	-1.7
1985-----	1,529	1,721	-192	11.9	13.5	-1.6

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EFA Automobile Demand Model forecasts.

U.S. registrations of imported new passenger automobiles will decline in overall importance under either proposal as a share of total U.S. registrations. Since domestically produced (United States/Canadian) automobiles will continue to gain in fuel efficiency over the period 1979-85 (as compared with imported automobiles) domestic automobiles will likely be more competitive with imported automobiles prior to 1985.

Canada

Imports of new passenger automobiles from Canada during the 1979-85 period are estimated to account for about 9.5 percent of the United States/Canadian new passenger automobiles registered in the United States under both the House proposal and the Administration proposal. As shown in the following table, U.S. registrations of Canadian-made new passenger automobiles under the House proposal are projected to be at levels above those projected under the Administration proposal by between 6,000 and 31,000 units during the 1979-85 period. The increase in U.S. registrations of Canadian-made passenger automobiles above Administration levels is in concert with the overall projected increase in total United States/Canadian registrations under the House proposal. Total U.S. registrations of Canadian-made automobiles are projected to range between 941,000 and 1.1 million units during the 1979-85 period under the House proposal.

New passenger automobiles: U.S. registrations of United States-made and Canadian-made automobiles, and Canadian-made as a share of total U.S. registrations under the House proposal and under the Administration proposal, estimated for 1979-85

Year	United States-made			Canadian-made			U.S. registrations of Canadian-made automobiles as a share of total U.S. registrations		
	House proposal	Administration proposal	Difference	House proposal	Administration proposal	Difference	House proposal	Administration proposal	Difference
	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
1979	8,961	8,778	183	941	922	19	8.3	8.0	0.3
1980	9,354	9,126	228	982	958	24	8.3	8.1	.2
1981	9,564	9,322	242	1,004	979	25	8.4	8.2	.2
1982	9,786	9,547	239	1,027	1,002	25	8.4	8.2	.2
1983	10,061	9,770	291	1,056	1,025	31	8.4	8.2	.2
1984	9,887	9,832	55	1,038	1,032	6	8.4	8.2	.2
1985	10,241	9,989	252	1,075	1,049	26	8.4	8.2	.2

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EFA Automobile Demand Model forecasts.

Japan

Under the House proposal, U.S. imports of new passenger automobiles from Japan are expected to constitute about 71 percent of the total new imported passenger automobiles registered in the United States; under the Administration proposal such imports from Japan are estimated to constitute approximately 75 percent of the total new imported passenger automobiles registered.

As shown in the following table, for the 1979-85 period, U.S. registrations from Japan under the House proposal are projected to be below the levels shown under the Administration proposal by 136,000 to 225,000 units. With U.S. demand greater for the full-size automobile under the House proposal than under the Administration proposal imports from Japan (which predominates in the subcompact class) would slacken. U.S. consumers would likely continue to purchase relatively more full-size, mid-size, and compact automobiles under the House proposal to the detriment of the subcompact class.

New passenger automobiles: U.S. registrations of imports from Japan and their share of total U.S. registrations under the House proposal and under the Administration proposal, estimated for 1979-85

Year	U.S. registrations of imports from Japan			U.S. registrations of imports from Japan as a share of total U.S. registrations		
	House proposal	Administration proposal	Difference	House proposal	Administration proposal	Difference
	1,000 units	1,000 units	1,000 units	Percent	Percent	Percentage points
1979-----	1,027	1,318	-291	9.0	11.4	-2.4
1980-----	1,029	1,247	-218	8.7	10.5	-1.8
1981-----	975	1,164	-189	8.2	9.7	-1.5
1982-----	997	1,222	-225	8.2	9.9	-1.7
1983-----	1,002	1,196	-194	8.0	9.6	-1.6
1984-----	1,069	1,233	-164	8.6	9.8	-1.2
1985-----	1,086	1,222	-136	8.4	9.6	-1.2

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EFA Automobile Demand Model forecasts.

All other countries

The share of U.S. import registrations from all other countries is estimated by the Commission to be about 29 percent under the House proposal and 25 percent under the Administration proposal. The percentage of total U.S. demand for imported automobiles other than those produced in Japan and Canada, is expected to be greater under the House proposal than under the Administration proposal since demand for Japanese automobiles will decline, as explained earlier, leaving a greater share of the import market for new passenger automobiles from all other countries. ^{1/}

^{1/} If Japan accounts for 71 percent of such U.S. registrations (as estimated under the House proposal) it is a mathematical equality that all other countries must account for 100 percent less 71 percent, or 29 percent.

The following table projects U.S. passenger automobile registrations of imports from all other countries (except Canada and Japan) and shows the small but negative effect the House proposal would have with respect to U.S. imports from those countries (when compared with the Administration proposal). Thus, while U.S. imports are projected to be below the levels shown under the Administration proposal compared with the House proposal, the bulk of the lost imports are Japanese.

New passenger automobiles: U.S. registrations of imports from all other countries ^{1/} and their share of total U.S. registrations under the House proposal and under the Administration proposal, estimated for 1979-85

Year	U.S. registrations of imports from all other countries			U.S. registrations of imports from all other countries as a share of total U.S. registrations		
	House proposal	Administration proposal	Difference	House proposal	Administration proposal	Difference
	1,000 units	1,000 units	1,000 units	Percent	Percent	Percentage points
1979-----	420	539	-119	3.7	4.7	-1.0
1980-----	420	510	-90	3.6	4.3	-.7
1981-----	399	476	-77	3.3	4.0	-.7
1982-----	407	499	-92	3.3	4.1	-.8
1983-----	409	489	-80	3.3	3.9	-.6
1984-----	436	503	-67	3.5	4.0	-.5
1985-----	443	499	-56	3.5	3.9	-.4

^{1/} Essentially, West Germany, Belgium, the United Kingdom, Italy, Sweden, and France.

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EPA Automobile Demand Model forecasts.

U.S. Employment

Implementation of the House proposal would probably result in greater employment in the domestic passenger automobile industry than would be the case if the Administration proposal were implemented, as shown in the table below.

Employment: Average annual employment 1/ in the domestic passenger automobile industry under the House proposal and under the Administration proposal, 1979-85

(In thousands of employees)				
Year	House proposal	Administration proposal	Difference	
1979-----	853	839	14	
1980-----	891	873	18	
1981-----	912	893	19	
1982-----	931	913	18	
1983-----	958	936	22	
1984-----	947	943	4	
1985-----	976	957	19	

1/ Employment refers to all persons employed at facilities of the 4 major domestic automobile manufacturers in which complete passenger automobiles and automotive parts are produced in the United States.

Source: Estimated by the U.S. International Trade Commission.

The employment figures shown in the preceding table are for the domestic passenger automobile industry only and do not include persons working in automobile-related and other supporting industries, nor do they include persons employed by importers, dealers, and distributors of imported automobiles. Thus, the overall employment effect on the economy of the House proposal and the Administration proposal would be somewhat

different than the figures shown on the preceding page. Whereas in the domestic passenger automobile industry there would be 19,000 fewer employees in 1985 under the Administration proposal than under the House proposal, in the economy as a whole (even taking into account an employment increase of 13,000 owing to increased sales of imported automobiles 1/) there would be approximately 44,000 fewer employees under the Administration proposal in that year than under the House proposal.

It must be pointed out that the margin of error of the employment figures quoted above is quite large, depending upon the methodology used, and that the figures quoted above most likely present a "worst-case" scenario for the domestic industry and the economy; conceivably, there could be little or no employment differences between the two proposals. 2/ Moreover, employment engaged in the production of U.S. automobile exports (which accounted for 8-percent of domestic production in 1976) is not taken into account in this analysis. However, based upon the methodology used in this report, it seems reasonable to conclude that employment (both in the domestic passenger automobile industry and in the economy as a whole) will be somewhat greater under the House proposal than under the Administration proposal.

1/ This assumes that there is 1 job gained for each increase in sales of 12.5 imported automobiles.

2/ In testimony before the Commission July 6, 1977, in connection with investigation No. 332-86, the American Imported Automobile Dealers Association (AIADA) advanced their position (supported by a study conducted by Harbridge House, Inc., entitled "The Imported Automobile Industry" and sponsored by the AIADA, Volkswagen of America, and the Automobile Importers of America, Inc.) that a decrease in U.S. sales of new imported passenger automobiles and a corresponding increase in sales of domestically produced automobiles would not generate a net increase in such U.S. employment but would actually reflect a net loss to the U.S. economy owing to a number of assumptions and use of a methodology different than that employed in this report.

**CONSUMER IMPACT: THE HOUSE PROPOSAL
VERSUS THE ADMINISTRATION PROPOSAL**

On the basis of the output generated by the Wharton EFA Automobile Demand Model in conjunction with the Commission assumptions it is predicted that the domestic fleet average of new passenger automobiles will not meet the fuel economy standards, as prescribed by law, during the years 1981-85. As indicated below, the shortfall on the part of domestic manufacturers will range between 0.3 mpg and 2.5 mpg for each of the years concerned under the House proposal and fall by between 0.1 mpg and 2.2 mpg under the Administration proposal.

New passenger automobiles: Domestic fleet averages as required under the law and as projected under the House proposal and under the Administration proposal, 1981-85

(In miles per gallon)			
Year	Domestic fleet averages (E.P.A.)		
	Under existing laws and regulations	House proposal	Administration proposal
1981-----	22.0	21.7	21.9
1982-----	24.0	22.6	22.9
1983-----	26.0	23.5	23.8
1984-----	27.0	24.8	24.9
1985-----	27.5	25.6	25.7

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EFA Automobile Demand Model forecasts.

The shortfall predicted is critical in that if the domestic manufacturers do meet the standards prescribed by law (as they, indeed,

contend), they will be in a relatively better competitive position vis a vis imported automobiles than is portrayed in this report.

Consumer Preferences

Whether the U.S. consumer will willingly and readily adapt to the demise of the fuel-inefficient automobile and will purchase smaller, more fuel-efficient automobiles is questionable. The House proposal and the Administration proposal are designed, in part, to provide consumers an incentive to switch their purchases toward more fuel-efficient automobiles.

The House proposal will have virtually no additional impact on the switch towards fuel-efficient automobiles which will occur anyway as a result of the Energy Policy and Conservation Act. On the other hand, the Administration proposal will indeed lead to some acceleration of the trend toward more fuel-efficient automobiles; under the Administration proposal consumers will purchase 193,000 more subcompact and compact automobiles in 1985 than under the House proposal, and 265,000 less mid-size, full-size, and luxury automobiles.

The fact that relatively fuel-inefficient automobiles could be taxed under the House proposal or under the Administration proposal could theoretically result in an inequitable burden upon those consumers who actually need large automobiles, i.e. large families, persons owning trailers or large boats, and the like. However, information submitted to the Commission indicates that there will be some automobiles with considerable interior space (including station wagons) which will

indeed meet the fuel economy standards. Moreover, consumers could also avoid or mitigate the tax by opting for smaller (more fuel-efficient) engines in those automobiles. Likewise, manufacturers could eliminate the tax burden on their automobiles by eliminating their most fuel-inefficient engines and offering or advertising smaller engines, although this would lead to some restriction of consumer choice of options and engine sizes. One group of consumers who could be disadvantaged to some degree would be consumers in need of large engines to pull trailers or boats, although, as we shall see in the price section of this report the tax on the purchase of fuel-inefficient automobiles under either the House proposal or the Administration proposal is only a small portion of the average full-size automobile's initial purchase price.

Prices

Average retail prices of domestic (United States/Canadian) and imported automobiles for the 1979-85 period under the House proposal and under the Administration proposal are shown in the tables on the following pages. The projected prices are based partly on the assumption that the U.S. inflation rate during the 1979-85 period will be approximately 2.6 percentage points per year lower than the projected index of foreign automobile export prices, owing to rising labor costs abroad and to possible fluctuations in exchange rates.

The retail prices shown in the table consist of the summation of the following charges: (1) average base list price for automobiles with no extras, (2) the value of an installed options package, (3) State and local taxes, and (4) transportation charges. The prices shown also indicate the price to the consumer if the full tax and/or rebate were passed through at the retail level as appropriate under each proposal; this assumes that manufacturers or dealers will not make arbitrary price changes such as raising the price on fuel-efficient automobiles (thus absorbing part of the consumer's rebate as applicable under the Administration proposal) or even lowering the price on fuel-inefficient automobiles (thus dampening the effect of the tax as applicable under either proposal). Nevertheless, since the full amount of the tax or rebate will be indicated on the sticker of each automobile, the consumer will have the impression that he or she is in fact paying the entire tax or benefiting from the entire rebate, as the case may be.

New passenger automobiles: Average retail prices of domestic and imported subcompact and compact automobiles under the House proposal and under the Administration proposal, 1979-85

(Prices in current dollars)

Year	Domestic				Imported			
	House	Administration	Difference		House	Administration	Difference	
	proposal	proposal	Actual	Percentage	proposal	proposal	Actual	Percentage
Subcompact:								
1979	\$4,828	\$4,533	\$295	6.5	\$4,869	\$4,549	\$320	7.0
1980	5,090	4,791	299	6.2	5,135	4,810	325	6.8
1981	5,302	4,996	306	6.1	5,409	5,103	306	6.0
1982	5,529	5,186	343	6.6	5,684	5,341	343	6.4
1983	5,744	5,396	348	6.4	5,964	5,649	315	5.6
1984	5,987	5,639	348	6.2	6,241	5,894	348	5.9
1985	6,233	5,852	382	6.5	6,522	6,185	337	5.4
Compact:								
1979	5,477	5,383	94	1.8	8,313	8,075	238	3.0
1980	5,789	5,652	136	2.4	8,875	8,634	241	2.8
1981	6,045	5,908	138	2.3	9,461	9,248	212	2.3
1982	6,318	6,212	106	1.7	10,054	9,857	197	2.0
1983	6,579	6,473	106	1.6	10,660	10,461	199	1.9
1984	6,872	6,812	60	.9	11,267	11,097	170	1.5
1985	7,169	7,104	65	.9	11,885	11,699	186	1.6

New passenger automobiles: Average retail prices of domestic and imported mid-size, and luxury automobiles under the House proposal and under the Administration proposal, 1979-85

(Prices in current dollars)

Year	Domestic mid-size ^{1/}				Domestic full-size ^{1/}				Luxury							
	House proposal		Administration proposal		House proposal		Administration proposal		Domestic				Imported			
	Price	Per-	Price	Per-	Price	Per-	Price	Per-	Price	Per-	Price	Per-	Price	Per-	Price	Per-
	(\$)	centage	(\$)	centage	(\$)	centage	(\$)	centage	(\$)	centage	(\$)	centage	(\$)	centage	(\$)	centage
1979	\$6,599	0	\$6,599	0	\$7,477	-116	\$7,594	-1.5	\$11,469	-185	\$11,654	-1.6	\$17,093	0	\$17,093	0
1980	6,970	0	6,970	0	7,891	-117	8,008	-1.5	12,076	-185	12,261	-1.5	18,416	0	18,416	0
1981	7,273	-55	7,327	-0.8	8,227	-183	8,410	-2.2	12,820	0	12,820	0	19,812	-55	19,866	-0.3
1982	7,593	-60	7,653	-0.8	8,582	-199	8,781	-2.3	13,361	0	13,361	0	21,241	-126	21,367	-0.6
1983	7,895	-125	8,020	-1.6	8,913	-276	9,189	-3.0	13,926	0	13,926	0	22,702	-198	22,900	-0.9
1984	8,230	-136	8,366	-1.6	9,701	27	9,673	0.3	14,628	24	14,604	0.2	24,182	-298	24,480	-1.2
1985	8,565	-231	8,796	-2.6	10,042	-27	10,070	-0.3	15,219	26	15,192	0.2	25,700	-321	26,020	-1.2

^{1/} There are no imported automobiles in this class.

Source: Estimated by the U.S. International Trade Commission on the basis of Wharton EPA Automobile Demand Model forecasts.

As shown in the preceding tables, the House proposal would lead to higher average prices for consumers on subcompact and compact automobiles than would with the Administration proposal, but would lead to generally lower average prices on mid-size, full-size, and luxury automobiles than would with the Administration proposal. The most significant price differences occur in the subcompact class; in 1985, the price of a domestic subcompact would be \$382 (or 6.5 percent) greater under the House proposal than under the Administration proposal, while the price of an imported subcompact would be \$337 (or 5.4 percent) greater.

APPENDIX A
GAS GUZZLER TAX (SUBPART A, PART II,
TITLE II, OF H.R. 6831) AS REPORTED
BY THE HOUSE COMMITTEE ON WAYS AND MEANS

PART II—TRANSPORTATION**Subpart A—Gas Guzzler Tax****SEC. 2021. GAS GUZZLER TAX.**

(a) **GENERAL RULE.**—Part I of subchapter A of chapter 32 (relating to motor vehicle excise taxes) is amended by adding at the end thereof the following new section:

“SEC. 4064. GAS GUZZLER TAX.

“(a) **IMPOSITION OF TAX.**—There is hereby imposed on the sale by the manufacturer of each automobile a tax determined in accordance with the following tables:

“(1) In the case of a 1979 model year automobile:

“If the fuel economy of the model type in which the automobile falls is:	The tax is:
At least 15.....	0
At least 14 but less than 15.....	\$339
At least 13 but less than 14.....	438
Less than 13.....	553

“(2) In the case of a 1980 model year automobile:

“If the fuel economy of the model type in which the automobile falls is:	The tax is:
At least 17.....	0
At least 16 but less than 17.....	\$349
At least 15 but less than 16.....	333
At least 14 but less than 15.....	438
At least 13 but less than 14.....	538
Less than 13.....	608

"(3) In the case of a 1981 model year automobile:

"If the fuel economy of the model type in which the automobile falls is:	The tax is:
At least 18.5.....	0
At least 17.5 but less than 18.5.....	\$345
At least 16.5 but less than 17.5.....	341
At least 15.5 but less than 16.5.....	458
At least 14.5 but less than 15.5.....	597
At least 13.5 but less than 14.5.....	764
At least 12.5 but less than 13.5.....	968
Less than 12.5.....	1,216

"(4) In the case of a 1982 model year automobile:

"If the fuel economy of the model type in which the automobile falls is:	The tax is:
At least 20.....	0
At least 19 but less than 20.....	\$366
At least 18 but less than 19.....	369
At least 17 but less than 18.....	491
At least 16 but less than 17.....	636
At least 15 but less than 16.....	809
At least 14 but less than 15.....	1,015
At least 13 but less than 14.....	1,264
Less than 13.....	1,545

"(5) In the case of a 1983 model year automobile:

"If the fuel economy of the model type in which the automobile falls is:	The tax is:
At least 20.5.....	0
At least 19.5 but less than 20.5.....	\$346
At least 18.5 but less than 19.5.....	459
At least 17.5 but less than 18.5.....	603
At least 16.5 but less than 17.5.....	761
At least 15.5 but less than 16.5.....	933
At least 14.5 but less than 15.5.....	1,161
At least 13.5 but less than 14.5.....	1,427
At least 12.5 but less than 13.5.....	1,747
Less than 12.5.....	2,134

"(6) In the case of a 1984 model year automobile:

"If the fuel economy of the model type in which the automobile falls is:	The tax is:
At least 22.....	0
At least 21 but less than 22.....	\$371
At least 20 but less than 21.....	490
At least 19 but less than 20.....	631
At least 18 but less than 19.....	797
At least 17 but less than 18.....	990
At least 16 but less than 17.....	1,218
At least 15 but less than 16.....	1,488
At least 14 but less than 15.....	1,804
At least 13 but less than 14.....	2,163
Less than 13.....	2,638

"(7) In the case of a 1985 or later model year automobile:

"If the fuel economy of the model type in which the automobile falls is:	The tax is:
At least 23.5.....	0
At least 22.5 but less than 23.5.....	\$397
At least 21.5 but less than 22.5.....	594
At least 20.5 but less than 21.5.....	671
At least 19.5 but less than 20.5.....	843
At least 18.5 but less than 19.5.....	1,043
At least 17.5 but less than 18.5.....	1,276
At least 16.5 but less than 17.5.....	1,550
At least 15.5 but less than 16.5.....	1,869
At least 14.5 but less than 15.5.....	2,244
At least 13.5 but less than 14.5.....	2,688
At least 12.5 but less than 13.5.....	3,219
Less than 12.5.....	3,856

"(b) DEFINITIONS.—For purposes of this section—

"(1) AUTOMOBILE.—The term 'automobile' means any 4-wheeled vehicle propelled by fuel—

"(A) which is manufactured primarily for use on public streets, roads, and highways (except any vehicle operated exclusively on a rail or rails), and

"(B) which is rated at 6,000 pounds gross vehicle weight or less.

Such term does not include a truck designed primarily to carry property and the cargo capacity of which is at least 1,000 pounds.

"(2) FUEL ECONOMY.—The term 'fuel economy' means the average number of miles traveled by an automobile per gallon of gasoline (or equivalent amount of other fuel) consumed, as determined by the EPA Ad-

ministrator in accordance with procedures established under subsection (c).

"(3) **MODEL TYPE.**—The term 'model type' means a particular class of automobile as determined by regulation by the EPA Administrator.

"(4) **MODEL YEAR.**—The term 'model year', with reference to any specific calendar year, means a manufacturer's annual production period (as determined by the EPA Administrator) which includes January 1 of such calendar year. If a manufacturer has no annual production period, the term 'model year' means the calendar year.

"(5) **MANUFACTURER.**—The term 'manufacturer' includes a producer or importer.

"(6) **EPA ADMINISTRATOR.**—The term 'EPA Administrator' means the Administrator of the Environmental Protection Agency.

"(7) **FUEL.**—The term 'fuel' means gasoline and diesel fuel. The Secretary (after consultation with the Secretary of Transportation) may, by regulation, include any product of petroleum or natural gas within the meaning of such term if he determines that such inclusion is consistent with the need of the Nation to conserve energy.

"(c) DETERMINATION OF FUEL ECONOMY.—For purposes of this section—

"(1) IN GENERAL.—Fuel economy for any model type shall be measured in accordance with testing and calculation procedures established by the EPA Administrator by regulation. Procedures so established shall be the procedures utilized by the EPA Administrator for model year 1975 (weighted 55 percent urban cycle, and 45 percent highway cycle), or procedures which yield comparable results. Procedures under this subsection, to the extent practicable, shall require that fuel economy tests be conducted in conjunction with emissions tests conducted under section 206 of the Clean Air Act. The EPA Administrator shall report any measurements of fuel economy to the Secretary.

"(2) SPECIAL RULE FOR FUELS OTHER THAN GASOLINE.—The EPA Administrator shall by regulation determine that quantity of any other fuel which is the equivalent of one gallon of gasoline.

"(3) TIME BY WHICH REGULATIONS MUST BE ISSUED.—Testing and calculation procedures applicable to a model year, and any amendment to such procedures (other than a technical or clerical amendment), shall be promulgated not less than 12 months before the model year to which such procedures apply."

(b) REDUCTION IN BASIS OF AUTOMOBILE ON WHICH GAS GUZZLER TAX WAS IMPOSED.—Section 1016 (relating to adjustments to basis) is amended by redesignating subsection (c) as subsection (d) and by inserting after subsection (b) the following new subsection:

“(c) REDUCTION IN BASIS OF AUTOMOBILE ON WHICH GAS GUZZLER TAX WAS IMPOSED.—If—

“(1) the taxpayer acquires any automobile with respect to which a tax was imposed by section 4064, and

“(2) the use of such automobile by the taxpayer begins not more than 1 year after the date of the first sale for ultimate use of such automobile,

the basis of such automobile shall be reduced by the amount of the tax imposed by section 4064 with respect to such automobile. In the case of importation, if the date of entry or withdrawal from warehouse for consumption is later than the date of the first sale for ultimate use, such later date shall be substituted for the date of such first sale in the preceding sentence.”

(c) DENIAL OF CERTAIN EXEMPTIONS AND REFUNDS.—

(1) TAX-FREE SALES.—Subsection (a) of section 4221 (relating to certain tax-free sales) is amended by adding at the end thereof the following new sentence:
“Paragraphs (4) and (5) shall not apply to the tax imposed by section 4064.”

(2) UNITED STATES AND POSSESSIONS.—Section 4293 (relating to exemption for United States and possessions) is amended by inserting “(other than section 4064)” after “chapters 81 and 82”.

(3) DENIAL OF REFUNDS FOR CERTAIN USES.—Paragraph (2) of section 6416(b) (relating to tax payments considered overpayments in the case of specified uses and resales) is amended by adding at the end thereof the following new sentence:

“Subparagraphs (C) and (D) shall not apply in the case of any tax paid under section 4064.”

(d) PAYMENT OF TAX IN CASE OF LEASED AUTOMOBILES.—Section 4217 (relating to leases) is amended by adding at the end thereof the following new subsection:

“(e) LEASES OF AUTOMOBILES SUBJECT TO GAS GUZZLER TAX.—

“(1) IN GENERAL.—In the case of the lease of an automobile the sale of which by the manufacturer would be taxable under section 4064, the foregoing provisions of this section shall not apply, but, for purposes of this chapter—

“(A) the first lease of such automobile by the manufacturer shall be considered to be a sale, and

“(B) any lease of such automobile by the man-

manufacturer after the first lease of such automobile shall not be considered to be a sale.

"(2) PAYMENT OF TAX.—In the case of a lease described in paragraph (1) (A)—

"(A) there shall be paid by the manufacturer on each lease payment that portion of the total gas guzzler tax which bears the same ratio to such total gas guzzler tax as such payment bears to the total amount to be paid under such lease,

"(B) if such lease is canceled, or the automobile is sold or otherwise disposed of, before the total gas guzzler tax is payable, there shall be paid by the manufacturer on such cancellation, sale, or disposition the difference between the tax imposed under subparagraph (A) on the lease payments and the total gas guzzler tax, and

"(C) if the automobile is sold or otherwise disposed of after the total gas guzzler tax is payable, no tax shall be imposed under section 4064 on such sale or disposition.

"(3) DEFINITIONS.—For purposes of this subsection—

"(A) MANUFACTURER.—The term 'manufacturer' includes a producer or importer.

“(B) **TOTAL GAS GUZZLER TAX.**—The term ‘total gas guzzler tax’ means the tax imposed by section 4064, computed at the rate in effect on the date of the first lease.”

(e) **CLERICAL AMENDMENT.**—The table of sections for part I of subchapter A of chapter 32 is amended by adding at the end thereof the following new item:

“Sec. 4064. Gas guzzler tax.”

(f) **EFFECTIVE DATE.**—The amendments made by this section shall apply with respect to 1979 and later model year automobiles (as defined in section 4064 (b) of the Internal Revenue Code of 1954).

SEC. 2022. TRUST FUND FOR PURPOSE OF REDUCING PUBLIC DEBT.

(a) **ESTABLISHMENT OF TRUST FUND.**—There is hereby established in the Treasury of the United States a trust fund to be known as the “Public Debt Retirement Trust Fund” (hereinafter in this section referred to as the “Trust Fund”). The Trust Fund shall consist of such amounts as may be appropriated and transferred to it as provided in subsection (b).

(b) **TRANSFER OF GAS GUZZLER TAX TO THE TRUST FUND.**—

(1) **IN GENERAL.**—There is hereby appropriated to the Trust Fund, out of any money in the Treasury not

otherwise appropriated, amounts equivalent to the taxes which are imposed by section 4064 of the Internal Revenue Code of 1954 (relating to gas guzzler tax) and which are received in the Treasury.

(2) **METHOD OF TRANSFER.**—The amounts appropriated by paragraph (1) shall be transferred at least monthly from the general fund of the Treasury to the Trust Fund on the basis of estimates by the Secretary of the Treasury of amounts referred to in such paragraph received in the Treasury. Proper adjustments shall be made in the amounts subsequently transferred to the extent prior estimates were in excess of or less than amounts required to be transferred.

(c) **USE OF TRUST FUND.**—Amounts in the Trust Fund may be used only for the payment at maturity, or the redemption or purchase before maturity, of any of the obligations of the United States included in the public debt of the United States. All obligations of the United States paid, redeemed, or purchased with money out of the Trust Fund shall be canceled and retired and shall not be reissued.

APPENDIX B

**THE WHARTON EPA AUTOMOBILE DEMAND MODEL
HOUSE PROPOSAL VS. ADMINISTRATION PROPOSAL**

REGISTRATION TAX/RATE VS HOUSE TAX PROPOSAL

TABLE 3.00 SUMMARY

LINE	T Y P E	1975	1976	1977	1978	1979	1980
11	DESIREN STEER & MILES						
111	HOUSE TAX						
1111	TAX/RATE	93,744	94,770	99,853	102,845	105,499	107,181
1112	DIFFERENCE	0,0	0,0	0,0	0,0	-0,298	-0,289
1113	DIFFERENCE	0,0	0,0	0,0	0,0	-0,28	-0,27
12	FACTIAL V4-ENO STEER OF AUTOS						
121	HOUSE TAX						
1211	TAX/RATE	96,73	99,60	102,11	105,01	107,04	108,46
1212	DIFFERENCE	0,0	0,0	0,0	0,0	-0,23	-0,28
1213	DIFFERENCE	0,0	0,0	0,0	0,0	-0,21	-0,25
13	NEW REGISTRATIONS OF AUTOS						
131	HOUSE TAX						
1311	TAX/RATE	8,350	9,868	10,953	11,112	11,349	11,785
1312	DIFFERENCE	0,0	0,0	0,0	0,0	-0,708	-0,056
1313	DIFFERENCE	0,0	0,0	0,0	0,0	-1,60	-0,48
14	FOREIGN REG. REGIS.						
141	HOUSE TAX						
1411	TAX/RATE	1,517	1,463	1,540	1,532	1,447	1,449
1412	DIFFERENCE	0,0	0,0	0,0	0,0	-0,410	-0,308
1413	DIFFERENCE	0,0	0,0	0,0	0,0	-22,07	-17,55
15	DOMESTIC REG. REGIS.						
151	HOUSE TAX						
1511	TAX/RATE	6,833	8,405	9,413	9,580	9,902	10,336
1512	DIFFERENCE	0,0	0,0	0,0	0,0	0,267	0,252
1513	DIFFERENCE	0,0	0,0	0,0	0,0	2,08	2,50
16	VENTURE MILES TRAVELED						
161	HOUSE TAX						
1611	TAX/RATE	1027,0	1029,0	1032,8	1040,2	1055,2	1071,5
1612	DIFFERENCE	0,0	0,0	0,0	0,0	-1,0	-4,0
1613	DIFFERENCE	0,0	0,0	0,0	0,0	-0,09	-0,37
17	SCRAPPAGE OF AUTOS						
171	HOUSE TAX						
1711	TAX/RATE	5,548	6,909	8,531	8,208	9,324	10,365
1712	DIFFERENCE	0,0	0,0	0,0	0,0	0,020	-0,009
1713	DIFFERENCE	0,0	0,0	0,0	0,0	0,22	-0,09
18	NEW DOMESTIC EPA TEST P.P.C.						
181	HOUSE TAX						
1811	TAX/RATE	14,14	16,95	17,81	18,68	19,68	20,72
1812	DIFFERENCE	0,0	0,0	0,0	0,0	-0,32	-0,30
1813	DIFFERENCE	0,0	0,0	0,0	0,0	-1,58	-1,41

ADMINISTRATION TAX/REBATE VS HOUSE TAX PROPOSAL

TABLE 3.00 SUMMARY

LINE	ITEM	1981	1982	1983	1984	1985
1	UNDESIRED STOCK OF AUTOS					
	MILL AUTOS:					
2	HOUSE TAX	109,276	111,724	113,056	114,790	116,484
3	TAX/REBATE	109,553	111,518	113,309	115,001	116,688
4	DIFFERENCE	-0,277	-0,294	-0,252	-0,211	-0,182
5	% DIFFERENCE	-0,25	-0,26	-0,22	-0,18	-0,16
6						
7	ACTUAL YR-END STOCK OF AUTOS					
	MILL AUTOS:					
8	HOUSE TAX	109,54	110,71	112,24	113,64	115,78
9	TAX/REBATE	109,76	110,92	112,40	114,15	115,97
10	DIFFERENCE	-0,22	-0,21	-0,17	-0,29	-0,29
11	% DIFFERENCE	-0,20	-0,19	-0,15	-0,25	-0,17
12						
13	NEW REGISTRATIONS OF AUTOS					
	MILL AUTOS:					
14	HOUSE TAX	11,942	12,216	12,528	12,430	12,845
15	TAX/REBATE	11,942	12,270	12,488	12,600	12,760
16	DIFFERENCE	0,000	-0,054	0,048	-0,170	0,085
17	% DIFFERENCE	0,00	-0,44	0,38	-1,35	0,67
18						
19	FOREIGN NEW REGIS.					
	MILL AUTOS:					
20	HOUSE TAX	1,374	1,404	1,411	1,505	1,529
21	TAX/REBATE	1,640	1,721	1,685	1,736	1,721
22	DIFFERENCE	-0,267	-0,317	-0,275	-0,231	-0,192
23	% DIFFERENCE	-16,26	-18,44	-16,29	-13,32	-11,16
24						
25	DOMESTIC NEW REGIS.					
	MILL AUTOS:					
26	HOUSE TAX	10,568	10,813	11,117	10,925	11,316
27	TAX/REBATE	10,301	10,549	10,795	10,864	11,038
28	DIFFERENCE	0,267	0,264	0,322	0,062	0,278
29	% DIFFERENCE	2,59	2,50	2,99	0,57	2,51
30						
31	VEHICLE MILES TRAVELED					
	MILL MILES:					
32	HOUSE TAX	1086,5	1102,7	1120,7	1141,2	1160,2
33	TAX/REBATE	1091,4	1107,7	1126,3	1146,9	1166,9
34	DIFFERENCE	-4,9	-5,0	-5,6	-5,7	-6,8
35	% DIFFERENCE	-0,45	-0,45	-0,50	-0,49	-0,58
36						
37	SCRAPPAGE OF AUTOS					
	MILL AUTOS:					
38	HOUSE TAX	10,861	11,046	11,001	10,823	10,908
39	TAX/REBATE	10,916	11,107	10,997	10,874	10,914
40	DIFFERENCE	-0,056	-0,061	0,004	-0,050	-0,006
41	% DIFFERENCE	-0,51	-0,55	0,04	-0,46	-0,05
42						
43	NEW DOMESTIC EPA TEST M.P.G.					
	MILL AUTOS:					
44	HOUSE TAX	21,66	22,56	23,49	24,78	25,61
45	TAX/REBATE	21,99	22,90	23,83	24,87	25,72
46	DIFFERENCE	-0,33	-0,34	-0,34	-0,09	-0,11
47	% DIFFERENCE	-1,48	-1,47	-1,42	-0,36	-0,43

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WHARTON EPA AUTOMOBILE MODEL ANALYSIS

TABLE 5.00 SUMMARY - CONTINUED

LINE	ITEM	1975	1976	1977	1978	1979	1980
11	NEW AUTOS FLEET M.P.G. (EPA)						
21	HOUSE TAX	17.17	17.02	18.64	19.51	20.43	21.44
31	TAX/REBATE	17.17	17.02	18.64	19.51	20.95	21.89
41	DIFFERENCE	0.0	0.0	0.0	0.0	-0.52	-0.85
51	% DIFFERENCE	0.0	0.0	0.0	0.0	-2.47	-2.04
61							
71	NEW DOMESTIC AUTOS M.P.G.						
81	HOUSE TAX	16.14	16.95	17.81	18.68	19.68	20.72
91	TAX/REBATE	16.14	16.95	17.81	18.68	20.00	21.02
101	DIFFERENCE	0.0	0.0	0.0	0.0	-0.32	-0.30
111	% DIFFERENCE	0.0	0.0	0.0	0.0	-1.58	-1.61
121							
131	NEW FOREIGN AUTOS M.P.G.						
141	HOUSE TAX	24.12	25.24	26.01	27.05	27.66	28.48
151	TAX/REBATE	24.12	25.24	26.01	27.05	27.90	28.69
161	DIFFERENCE	0.0	0.0	0.0	0.0	-0.24	-0.22
171	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.87	-0.75
181							
191							
201	SHARE OF NEW REGISTRATIONS:						
211							
221	SURCOMPACT						
231	HOUSE TAX	0.291	0.238	0.223	0.220	0.206	0.199
241	TAX/REBATE	0.291	0.238	0.223	0.220	0.270	0.249
251	DIFFERENCE	0.0	0.0	0.0	0.0	-0.064	-0.050
261	% DIFFERENCE	0.0	0.0	0.0	0.0	-23.84	-10.98
271							
281	COMPACT						
291	HOUSE TAX	0.219	0.179	0.183	0.176	0.186	0.198
301	TAX/REBATE	0.219	0.179	0.183	0.176	0.171	0.193
311	DIFFERENCE	0.0	0.0	0.0	0.0	0.015	0.006
321	% DIFFERENCE	0.0	0.0	0.0	0.0	8.85	2.95
331							
341	MID-SIZE						
351	HOUSE TAX	0.228	0.301	0.281	0.276	0.270	0.270
361	TAX/REBATE	0.228	0.301	0.281	0.276	0.280	0.278
371	DIFFERENCE	0.0	0.0	0.0	0.0	-0.010	-0.008
381	% DIFFERENCE	0.0	0.0	0.0	0.0	-3.71	-2.96
391							
401	FULL-SIZE						
411	HOUSE TAX	0.169	0.186	0.222	0.237	0.246	0.239
421	TAX/REBATE	0.169	0.186	0.222	0.237	0.188	0.187
431	DIFFERENCE	0.0	0.0	0.0	0.0	0.059	0.051
441	% DIFFERENCE	0.0	0.0	0.0	0.0	31.23	27.36
451							
461	LUXURY						
471	HOUSE TAX	0.094	0.096	0.092	0.092	0.093	0.096
481	TAX/REBATE	0.094	0.096	0.092	0.092	0.091	0.093
491	DIFFERENCE	0.0	0.0	0.0	0.0	0.001	0.001
501	% DIFFERENCE	0.0	0.0	0.0	0.0	1.18	1.68

WHARTON EPA AUTOMOBILE MODEL ANALYSIS

TABLE 3.00 SUMMARY - CONTINUED

LINE	ITEM	1981	1982	1983	1984	1985
11	NEW AUTOS FLEET M.P.G. (EPA)					
21	HOUSE TAX	22.32	23.23	24.13	25.45	26.271
31	TAX/REBATE	22.77	23.71	24.59	25.64	26.471
41	DIFFERENCE	-0.45	-0.48	-0.46	-0.20	-0.211
51	% DIFFERENCE	-1.98	-2.03	-1.88	-0.76	-0.781
61						
71	NEW DOMESTIC AUTOS M.P.G.					
81	HOUSE TAX	21.66	22.56	23.49	24.78	25.611
91	TAX/REBATE	21.99	22.90	23.83	24.87	25.721
101	DIFFERENCE	-0.33	-0.34	-0.34	-0.09	-0.111
111	% DIFFERENCE	-1.48	-1.47	-1.42	-0.36	-0.431
121						
131	NEW FOREIGN AUTOS M.P.G.					
141	HOUSE TAX	29.11	30.01	30.69	31.69	32.411
151	TAX/REBATE	29.31	30.25	30.92	31.88	32.591
161	DIFFERENCE	-0.20	-0.25	-0.22	-0.19	-0.181
171	% DIFFERENCE	-0.69	-0.82	-0.72	-0.61	-0.561
181						
191						
201	SHARE OF NEW REGISTRATIONS:					
211						
221	SUBCOMPACT					
231	HOUSE TAX	0.188	0.187	0.182	0.196	0.1921
241	TAX/REBATE	0.231	0.237	0.226	0.231	0.2251
251	DIFFERENCE	-0.044	-0.050	-0.044	-0.035	-0.0331
261	% DIFFERENCE	-18.90	-21.23	-19.85	-15.10	-14.511
271						
281	COMPACT					
291	HOUSE TAX	0.215	0.217	0.220	0.241	0.2381
301	TAX/REBATE	0.216	0.212	0.222	0.221	0.2231
311	DIFFERENCE	-0.001	0.005	-0.002	0.020	0.0151
321	% DIFFERENCE	-0.69	2.57	-0.68	9.16	6.641
331						
341	MID-SIZE					
351	HOUSE TAX	0.269	0.266	0.263	0.285	0.2791
361	TAX/REBATE	0.277	0.273	0.270	0.272	0.2671
371	DIFFERENCE	-0.008	-0.008	-0.007	0.012	0.0121
381	% DIFFERENCE	-3.05	-2.75	-2.62	4.46	4.401
391						
401	FULL-SIZE					
411	HOUSE TAX	0.233	0.233	0.236	0.178	0.1891
421	TAX/REBATE	0.180	0.181	0.184	0.176	0.1841
431	DIFFERENCE	0.053	0.052	0.052	0.002	0.0061
441	% DIFFERENCE	29.63	28.73	28.38	1.07	3.001
451						
461	LUXURY					
471	HOUSE TAX	0.095	0.097	0.098	0.100	0.1011
481	TAX/REBATE	0.095	0.097	0.098	0.099	0.1011
491	DIFFERENCE	0.000	0.000	0.000	0.001	0.0011
501	% DIFFERENCE	0.39	0.45	0.30	0.59	0.501

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.01 SHARES BY SIZE CLASS

LINE	ITEM	1975	1976	1977	1978	1979	1980
11 SHARES OF DESIRED STOCK:							
21							
31	SUBCOMPACTS						
41	HOUSE TAX	0.231	0.204	0.204	0.205	0.200	0.198
51	TAX/REBATE	0.231	0.204	0.204	0.205	0.200	0.231
61	DIFFERENCE	0.0	0.0	0.0	0.0	-0.039	-0.033
71	% DIFFERENCE	0.0	0.0	0.0	0.0	-16.17	-14.34
81							
91	COMPACTS						
101	HOUSE TAX	0.188	0.189	0.178	0.178	0.179	0.187
111	TAX/REBATE	0.188	0.189	0.178	0.178	0.173	0.184
121	DIFFERENCE	0.0	0.0	0.0	0.0	0.006	0.002
131	% DIFFERENCE	0.0	0.0	0.0	0.0	3.42	1.23
141							
151	MID-SIZE						
161	HOUSE TAX	0.264	0.263	0.261	0.262	0.261	0.263
171	TAX/RATE	0.264	0.263	0.261	0.262	0.266	0.267
181	DIFFERENCE	0.0	0.0	0.0	0.0	-0.005	-0.004
191	% DIFFERENCE	0.0	0.0	0.0	0.0	-1.70	-1.55
201							
211	FULL SIZE						
221	HOUSE TAX	0.224	0.252	0.265	0.266	0.267	0.290
231	TAX/R/PAYE	0.224	0.252	0.265	0.266	0.231	0.224
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.036	0.034
251	% DIFFERENCE	0.0	0.0	0.0	0.0	15.65	15.28
261							
271	LUXURY						
281	HOUSE TAX	0.092	0.092	0.092	0.092	0.093	0.094
291	TAX/RATE	0.092	0.092	0.092	0.092	0.092	0.093
301	DIFFERENCE	0.0	0.0	0.0	0.0	0.001	0.001
311	% DIFFERENCE	0.0	0.0	0.0	0.0	1.07	1.01

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.01 SHARES BY SIZE CLASS

LINE	ITEM	1981	1982	1983	1984	1985

11	SHARES OF DESIRED STOCK:					
21						
31	SUBCOMPACTS					
41	HOUSE TAX	0.193	0.192	0.188	0.197	0.1931
51	TAX/REBATE	0.225	0.230	0.224	0.227	0.2251
61	DIFFERENCE	-0.032	-0.038	-0.036	-0.031	-0.0311
71	DIFFERENCE	-14.36	-16.41	-16.11	-13.49	-13.801
81						
91	COMPACTS					
101	HOUSE TAX	0.197	0.200	0.206	0.218	0.2191
111	TAX/REBATE	0.198	0.197	0.204	0.206	0.2081
121	DIFFERENCE	-0.001	0.003	-0.000	0.013	0.0111
131	DIFFERENCE	-0.52	1.52	-0.22	6.29	5.081
141						
151	MID-SIZE					
161	HOUSE TAX	0.265	0.265	0.266	0.277	0.2761
171	TAX/REBATE	0.270	0.270	0.271	0.273	0.2711
181	DIFFERENCE	-0.005	-0.005	-0.005	0.004	0.0051
191	DIFFERENCE	-1.79	-1.80	-1.87	1.51	1.741
201						
211	FULL SIZE					
221	HOUSE TAX	0.250	0.246	0.246	0.210	0.2131
231	TAX/REBATE	0.213	0.208	0.205	0.196	0.1981
241	DIFFERENCE	0.038	0.039	0.041	0.013	0.0151
251	DIFFERENCE	17.66	18.74	20.07	6.71	7.661
261						
271	LUXURY					
281	HOUSE TAX	0.095	0.096	0.097	0.098	0.1001
291	TAX/REBATE	0.094	0.096	0.097	0.098	0.0991
301	DIFFERENCE	0.001	0.001	0.001	0.000	0.0001
311	DIFFERENCE	0.63	0.67	0.56	0.66	0.391

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.02 SHARES BY SIZE CLASS - CONTINUED

LINE	I T E M	1975	1976	1977	1978	1979	1980
11	SHARES OF ACTUAL YR-END STOCKS:						
21							
31	SUBCOMPACT						
41	HOUSE TAX	0.168	0.160	0.190	0.198	0.204	0.208
51	TAX/REBATE	0.168	0.160	0.190	0.198	0.211	0.221
61	DIFFERENCE	0.0	0.0	0.0	0.0	-0.007	-0.012
71	% DIFFERENCE	0.0	0.0	0.0	0.0	-3.27	-5.52
81							
91	COMPACT						
101	HOUSE TAX	0.175	0.177	0.179	0.179	0.181	0.183
111	TAX/REBATE	0.175	0.177	0.179	0.179	0.179	0.181
121	DIFFERENCE	0.0	0.0	0.0	0.0	0.002	0.002
131	% DIFFERENCE	0.0	0.0	0.0	0.0	0.98	1.21
141							
151	MID-SIZE						
161	HOUSE TAX	0.231	0.234	0.240	0.244	0.248	0.252
171	TAX/REBATE	0.231	0.234	0.240	0.244	0.249	0.254
181	DIFFERENCE	0.0	0.0	0.0	0.0	-0.001	-0.002
191	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.47	-0.88
201							
211	FULL SIZE						
221	HOUSE TAX	0.338	0.318	0.301	0.288	0.276	0.265
231	TAX/REBATE	0.338	0.318	0.301	0.288	0.279	0.253
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.006	0.012
251	% DIFFERENCE	0.0	0.0	0.0	0.0	2.35	4.65
261							
271	LUXURY						
281	HOUSE TAX	0.087	0.089	0.090	0.090	0.091	0.092
291	TAX/REBATE	0.087	0.089	0.090	0.090	0.091	0.091
301	DIFFERENCE	0.0	0.0	0.0	0.0	0.000	0.000
311	% DIFFERENCE	0.0	0.0	0.0	0.0	0.13	0.20

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.02 SHARES BY SIZE CLASS - CONTINUED

LINE	I T F M	1981	1982	1983	1984	1985
11SHARES OF ACTUAL YR-END STOCKS:						
21						
31	SUBCOMPACT					
41	HOUSE TAX	0.210	0.209	0.207	0.205	0.2021
51	TAX/REBATE	0.226	0.231	0.233	0.234	0.2341
61	DIFFERENCE	-0.017	-0.022	-0.026	-0.029	-0.0311
71	% DIFFERENCE	-7.39	-9.48	-11.22	-12.38	-13.371
81						
91	COMPACT					
101	HOUSE TAX	0.187	0.192	0.196	0.202	0.2071
111	TAX/REBATE	0.185	0.189	0.194	0.198	0.2021
121	DIFFERENCE	0.002	0.003	0.002	0.004	0.0041
131	% DIFFERENCE	1.08	1.34	1.19	2.21	2.901
141						
151	MID-SIZE					
161	HOUSE TAX	0.256	0.259	0.262	0.264	0.2691
171	TAX/REBATE	0.258	0.263	0.266	0.269	0.2701
181	DIFFERENCE	-0.003	-0.004	-0.004	-0.003	-0.0011
191	% DIFFERENCE	-1.13	-1.41	-1.64	-1.07	-0.521
201						
211	FULL SIZE					
221	HOUSE TAX	0.255	0.247	0.242	0.232	0.2261
231	TAX/REBATE	0.238	0.225	0.214	0.205	0.1991
241	DIFFERENCE	0.017	0.021	0.028	0.027	0.0261
251	% DIFFERENCE	7.31	10.13	13.00	13.21	13.241
261						
271	LUXURY					
281	HOUSE TAX	0.092	0.093	0.094	0.095	0.0961
291	TAX/REBATE	0.092	0.093	0.094	0.094	0.0951
301	DIFFERENCE	0.000	0.000	0.000	0.000	0.0001
311	% DIFFERENCE	0.28	0.32	0.35	0.39	0.431

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WHARTON EPA AUTOMOBILE MODEL ANALYSIS

TABLE 3.03 SHAPES BY SIZE CLASS - CONTINUED

LINE	I T E M	1975	1976	1977	1978	1979	1980
11	DOMESTIC SHARE OF NEW REGISTRATIONS						
21							
31	DOMESTIC SHARE OF TOTAL						
41	HOUSE TAX	0.818	0.852	0.859	0.862	0.872	0.877
51	TAX/REBATE	0.818	0.852	0.859	0.862	0.839	0.852
61	DIFFERENCE	0.0	0.0	0.0	0.0	0.033	0.025
71	DIFFERENCE	0.0	0.0	0.0	0.0	3.95	2.90
81							
91	DOMESTIC SHARE OF SUBCOMPACTS						
101	HOUSE TAX	0.4694	0.4573	0.4600	0.4600	0.4700	0.4800
111	TAX/REBATE	0.4694	0.4573	0.4600	0.4600	0.4700	0.4800
121	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
131	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
141							
151	DOMESTIC SHARE OF COMPACTS						
161	HOUSE TAX	0.9264	0.9464	0.9400	0.9400	0.9450	0.9450
171	TAX/REBATE	0.9264	0.9464	0.9400	0.9400	0.9450	0.9450
181	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
191	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
201							
211	DOMESTIC SHARE OF LUXURY						
221	HOUSE TAX	0.8792	0.9005	0.9000	0.9050	0.9100	0.9100
231	TAX/REBATE	0.8792	0.9005	0.9000	0.9050	0.9100	0.9100
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
251	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0

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TABLE 3.05 SHARPS BY SIZE CLASS - CONTINUED

LINE	ITEM	1981	1982	1983	1984	1985
11	DOMESTIC SHARE OF NEW REGISTRATIONS:					
21						
31	DOMESTIC SHARE OF TOTAL					
41	HOUSE TAX	0,885	0,885	0,887	0,879	0,8811
51	TAX/REBATE	0,863	0,860	0,865	0,867	0,8651
61	DIFFERENCE	0,022	0,025	0,022	0,017	0,0161
71	DIFFERENCE	2,59	2,95	2,59	1,98	1,81
81						
91	DOMESTIC SHARE OF SUBCOMPACTS					
101	HOUSE TAX	0,4900	0,4900	0,4900	0,4900	0,49001
111	TAX/REBATE	0,4900	0,4900	0,4900	0,4900	0,49001
121	DIFFERENCE	0,0	0,0	0,0	0,0	0,0
131	DIFFERENCE	0,0	0,0	0,0	0,0	0,0
141						
151	DOMESTIC SHARE OF COMPACTS					
161	HOUSE TAX	0,9500	0,9500	0,9500	0,9500	0,95001
171	TAX/REBATE	0,9500	0,9500	0,9500	0,9500	0,95001
181	DIFFERENCE	0,0	0,0	0,0	0,0	0,0
191	DIFFERENCE	0,0	0,0	0,0	0,0	0,0
201						
211	DOMESTIC SHARE OF LUXURY					
221	HOUSE TAX	0,9100	0,9100	0,9100	0,9100	0,91001
231	TAX/REBATE	0,9100	0,9100	0,9100	0,9100	0,91001
241	DIFFERENCE	0,0	0,0	0,0	0,0	0,0
251	DIFFERENCE	0,0	0,0	0,0	0,0	0,0

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.04 NEW REGISTRATIONS BY SIZE CLASS

LINE	ITEM	1975	1976	1977	1978	1979	1980
LINE REGISTRATIONS:							
21							
51	SURCOMPACT						
	MILL AUTOS						
61	HOUSE TAX	2,427	2,348	2,441	2,441	2,533	2,346
51	TAX/REBATE	2,427	2,348	2,441	2,441	3,120	2,946
61	DIFFERENCE	0.0	0.0	0.0	0.0	-0.786	-0.600
71	DIFFERENCE	0.0	0.0	0.0	0.0	-23.21	-20.36
81							
91	COMPACT						
	MILL AUTOS						
101	HOUSE TAX	1,825	1,768	1,999	1,952	2,110	2,337
111	TAX/REBATE	1,825	1,768	1,999	1,952	1,974	2,281
121	DIFFERENCE	0.0	0.0	0.0	0.0	0,136	0,056
131	DIFFERENCE	0.0	0.0	0.0	0.0	6.09	2.86
141							
151	MID-SIZE						
	MILL AUTOS						
161	HOUSE TAX	1,905	2,968	3,073	3,064	3,063	3,100
171	TAX/REBATE	1,905	2,968	3,073	3,064	3,239	3,293
181	DIFFERENCE	0.0	0.0	0.0	0.0	-0,176	-0,113
191	DIFFERENCE	0.0	0.0	0.0	0.0	-5.44	-3.42
201							
211	FULL SIZE						
	MILL AUTOS						
221	HOUSE TAX	1,408	1,838	2,427	2,636	2,793	2,811
231	TAX/REBATE	1,408	1,838	2,427	2,636	2,167	2,217
241	DIFFERENCE	0.0	0.0	0.0	0.0	0,626	0,593
251	DIFFERENCE	0.0	0.0	0.0	0.0	26.87	26.73
261							
271	LUXURY						
	MILL AUTOS						
281	HOUSE TAX	0,786	0,945	1,013	1,018	1,050	1,111
291	TAX/REBATE	0,786	0,945	1,013	1,018	1,057	1,104
301	DIFFERENCE	0.0	0.0	0.0	0.0	-0,007	0,007
311	DIFFERENCE	0.0	0.0	0.0	0.0	-0.64	0.60

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WHARTON EFA AUTOMOBILE MODFL ANALYSIS

TABLE 3.04 NEW REGISTRATIONS BY SIZE CLASS

LINE	ITEM	1981	1982	1983	1984	1985
1	NEW REGISTRATIONS:					
2						
3	SUBCOMPACT MILL AUTOS:					
4	HOUSE TAX	2,241	2,283	2,278	2,437	2,469
5	TAX/REBATE	2,763	2,910	2,817	2,910	2,869
6	DIFFERENCE	-0,522	-0,628	-0,539	-0,473	-0,401
7	% DIFFERENCE	-18,69	-21,57	-19,14	-16,25	-13,93
8						
9	COMPACT MILL AUTOS:					
10	HOUSE TAX	2,564	2,655	2,760	3,001	3,057
11	TAX/REBATE	2,501	2,599	2,768	2,787	2,848
12	DIFFERENCE	-0,018	0,055	-0,008	0,214	0,210
13	% DIFFERENCE	-0,69	2,12	-0,30	7,69	7,36
14						
15	MID-SIZE MILL AUTOS:					
16	HOUSE TAX	3,212	3,248	3,299	3,537	3,589
17	TAX/REBATE	3,313	3,355	3,374	3,432	3,411
18	DIFFERENCE	-0,101	-0,107	-0,076	0,105	0,178
19	% DIFFERENCE	-3,65	-3,18	-2,24	3,05	5,10
20						
21	FULL SIZE MILL AUTOS:					
22	HOUSE TAX	2,784	2,845	2,958	2,213	2,433
23	TAX/REBATE	2,149	2,220	2,295	2,220	2,347
24	DIFFERENCE	0,637	0,625	0,663	-0,006	0,087
25	% DIFFERENCE	29,63	28,17	28,87	-0,29	3,68
26						
27	LUXURY MILL AUTOS:					
28	HOUSE TAX	1,139	1,186	1,234	1,242	1,300
29	TAX/REBATE	1,135	1,186	1,224	1,251	1,285
30	DIFFERENCE	0,004	0,000	0,008	-0,010	0,015
31	% DIFFERENCE	0,39	0,01	0,68	-0,76	1,17

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3,05 STOCKS BY SIZE CLASS

LINE	ITEM	1975	1976	1977	1978	1979	1980
1	UNDESIRABLE STOCKS						
21							
31	SUBCOMPACT						
41	HOUSE TAX	22,300	20,296	20,808	21,524	21,381	21,493
51	TAX/REBATE	22,300	20,296	20,808	21,524	25,561	25,154
61	DIFFERENCE	0,0	0,0	0,0	0,0	-4,179	-3,661
71	DIFFERENCE	0,0	0,0	0,0	0,0	-16,35	-14,55
81							
91	COMPACT						
101	HOUSE TAX	18,233	18,871	18,205	18,254	19,179	20,247
111	TAX/REBATE	18,233	18,871	18,205	18,254	18,585	20,052
121	DIFFERENCE	0,0	0,0	0,0	0,0	0,594	0,195
131	DIFFERENCE	0,0	0,0	0,0	0,0	3,20	0,97
141							
151	MID-SIZE						
161	HOUSE TAX	25,582	26,207	26,690	27,477	27,987	28,544
171	TAX/REBATE	25,582	26,207	26,690	27,477	28,491	29,060
181	DIFFERENCE	0,0	0,0	0,0	0,0	-9,504	-9,516
191	DIFFERENCE	0,0	0,0	0,0	0,0	-1,91	-1,80
201							
211	FULL SIZE						
221	HOUSE TAX	21,695	25,113	27,014	28,100	28,597	27,971
231	TAX/REBATE	21,695	25,113	27,014	28,100	24,779	24,333
241	DIFFERENCE	0,0	0,0	0,0	0,0	3,818	3,638
251	DIFFERENCE	0,0	0,0	0,0	0,0	15,81	14,95
261							
271	LUXURY						
281	HOUSE TAX	8,915	9,198	9,389	9,656	9,933	10,200
291	TAX/REBATE	8,915	9,198	9,389	9,656	9,849	10,124
301	DIFFERENCE	0,0	0,0	0,0	0,0	0,084	0,076
311	DIFFERENCE	0,0	0,0	0,0	0,0	0,85	0,76

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.05 STOCKS BY SIZE CLASS

LINE	I T F M		1981	1982	1983	1984	1985

1		UNDESIRABLE STOCKS					
21							
31		SUBCOMPACT					
		MILL AUTO					
41		HOUSE TAX	21,108	21,241	21,090	22,379	22,303
51		TAX/REBATE	24,697	25,460	25,178	25,935	25,918
61		DIFFERENCE	-3,589	-4,219	-4,089	-3,556	-3,615
71		% DIFFERENCE	-14.53	-16.57	-16.24	-13.71	-13.95
81							
91		COMPACT					
		MILL AUTO					
101		HOUSE TAX	21,581	22,159	22,841	24,872	25,321
111		TAX/REBATE	21,737	21,869	22,926	23,459	24,137
121		DIFFERENCE	-0,156	0,290	-0,085	1,413	1,184
131		% DIFFERENCE	-0.72	1.32	-0.37	6.02	4.90
141							
151		MID-SIZE					
		MILL AUTO					
161		HOUSE TAX	29,016	29,368	29,601	31,588	31,978
171		TAX/REBATE	29,605	29,965	30,416	31,158	31,885
181		DIFFERENCE	-0,589	-0,596	-0,815	0,390	0,493
191		% DIFFERENCE	-1.99	-1.99	-2.02	1.25	1.57
201							
211		FULL SIZE					
		MILL AUTO					
221		HOUSE TAX	27,429	27,286	27,570	23,851	24,655
231		TAX/REBATE	23,359	23,023	22,997	22,409	22,939
241		DIFFERENCE	4,071	4,263	4,573	1,442	1,716
251		% DIFFERENCE	17.43	18.51	19.89	6.44	7.48
261							
271		LUXURY					
		MILL AUTO					
281		HOUSE TAX	10,408	10,654	10,933	11,191	11,521
291		TAX/REBATE	10,359	10,603	10,886	11,168	11,496
301		DIFFERENCE	0,045	0,051	0,047	0,023	0,025
311		% DIFFERENCE	0.43	0.48	0.43	0.21	0.22

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.06 STOCKS BY SIZE CLASS - CONTINUED

LINE	T T F M		1975	1976	1977	1978	1979	1980
11 YEAR-END ACTUAL STOCKS:								
21								
31		MILL AUTO						
41			16,296	17,929	19,409	20,827	21,847	22,600
51			16,296	17,929	19,409	20,827	22,655	23,981
61			0.0	0.0	0.0	0.0	-0,788	-1,381
71			0.0	0.0	0.0	0.0	-3,48	-5,76
81								
91		MILL AUTO						
101			16,965	17,643	18,254	18,843	19,361	19,890
111			16,965	17,643	18,254	18,843	19,229	19,701
121			0.0	0.0	0.0	0.0	0,132	0,189
131			0.0	0.0	0.0	0.0	0,69	0,96
141								
151		MILL AUTO						
161			22,329	23,542	24,523	25,620	26,499	27,280
171			22,329	23,542	24,523	25,620	26,679	27,570
181			0.0	0.0	0.0	0.0	-0,181	-0,299
191			0.0	0.0	0.0	0.0	-0,68	-1,05
201								
211		MILL AUTO						
221			32,701	31,740	30,776	30,249	29,588	28,756
231			32,701	31,740	30,776	30,249	28,971	27,588
241			0.0	0.0	0.0	0.0	0,617	1,288
251			0.0	0.0	0.0	0.0	2,13	6,39
261								
271		MILL AUTO						
281			8,435	8,830	9,188	9,473	9,723	9,930
291			8,435	8,830	9,188	9,473	9,731	9,931
301			0.0	0.0	0.0	0.0	-0,008	-0,081
311			0.0	0.0	0.0	0.0	-0,09	-0,01

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.06 STOCKS BY SIZE CLASS - CONTINUED

LINE	ITEM	1981	1982	1983	1984	1985
1 YEAR-END ACTUAL STOCKS:						
21						
51	SUBCOMPACT					
	MILL AUTO					
61	HOUSE TAX	22,956	23,141	23,193	23,340	23,445
51	TAX/REBATE	24,837	25,613	26,163	26,706	27,199
61	DIFFERENCE	-1,880	-2,472	-2,969	-3,366	-3,661
71	DIFFERENCE	-7,57	-9,65	-11,35	-12,60	-13,52
81						
91	COMPACT					
	MILL AUTO					
101	HOUSE TAX	20,531	21,210	21,977	22,989	24,007
111	TAX/REBATE	20,352	20,969	21,751	22,549	23,370
121	DIFFERENCE	0,179	0,241	0,226	0,440	0,636
131	DIFFERENCE	0,88	1,15	1,04	1,95	2,72
141						
151	MID-SIZE					
	MILL AUTO					
161	HOUSE TAX	27,996	28,684	29,371	30,263	31,180
171	TAX/REBATE	28,372	29,149	29,905	30,669	31,322
181	DIFFERENCE	-0,376	-0,465	-0,534	-0,406	-0,215
191	DIFFERENCE	-1,33	-1,59	-1,79	-1,32	-0,60
201						
211	FULL SIZE					
	MILL AUTO					
221	HOUSE TAX	27,948	27,375	27,163	26,465	26,139
231	TAX/REBATE	26,097	26,905	26,074	23,437	23,121
241	DIFFERENCE	1,851	2,470	3,089	3,029	3,017
251	DIFFERENCE	7,09	9,92	12,83	12,92	13,05
261						
271	LUXURY					
	MILL AUTO					
281	HOUSE TAX	10,107	10,298	10,531	10,784	11,000
291	TAX/REBATE	10,099	10,285	10,511	10,769	11,051
301	DIFFERENCE	0,008	0,013	0,021	0,015	0,029
311	DIFFERENCE	0,08	0,13	0,20	0,14	0,26

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.07 CAPITALIZED COSTS PER MILE

LINE	ITEM	1975	1976	1977	1978	1979	1980
11	AVG NOMINAL CAP. COST PER MILE \$/MILE						
21	HOUSE TAX	0.195	0.208	0.222	0.238	0.253	0.269
31	TAX/REBATE	0.195	0.208	0.222	0.238	0.250	0.265
81	DIFFERENCE	0.0	0.0	0.0	0.0	0.004	0.004
51	DIFFERENCE	0.0	0.0	0.0	0.0	1.45	1.38
61							
71	AVG REAL CAP. COST PER MILE 1972 \$						
81	HOUSE TAX	0.152	0.153	0.154	0.157	0.159	0.161
91	TAX/REBATE	0.152	0.153	0.154	0.157	0.157	0.159
101	DIFFERENCE	0.0	0.0	0.0	0.0	0.002	0.002
111	DIFFERENCE	0.0	0.0	0.0	0.0	1.45	1.38
121							
131	CAPITALIZED COST PER MILE BY SIZE:						
141							
151	SUBCOMPACTS \$/MILE						
161	HOUSE TAX	0.152	0.163	0.174	0.187	0.199	0.212
171	TAX/REBATE	0.152	0.163	0.174	0.187	0.198	0.207
181	DIFFERENCE	0.0	0.0	0.0	0.0	0.005	0.005
191	DIFFERENCE	0.0	0.0	0.0	0.0	2.61	2.49
201							
211	COMPACTS \$/MILE						
221	HOUSE TAX	0.176	0.186	0.200	0.215	0.226	0.242
231	TAX/REBATE	0.176	0.186	0.200	0.215	0.226	0.239
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.002	0.002
251	DIFFERENCE	0.0	0.0	0.0	0.0	0.74	0.98
261							
271	MID-SIZE \$/MILE						
281	HOUSE TAX	0.198	0.208	0.223	0.238	0.254	0.269
291	TAX/REBATE	0.198	0.208	0.223	0.238	0.254	0.269
301	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
311	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
321							
331	FULL SIZE \$/MILE						
341	HOUSE TAX	0.217	0.228	0.243	0.259	0.275	0.293
351	TAX/REBATE	0.217	0.228	0.243	0.259	0.277	0.295
361	DIFFERENCE	0.0	0.0	0.0	0.0	-0.002	-0.002
371	DIFFERENCE	0.0	0.0	0.0	0.0	-0.69	-0.65
381							
391	LUXURY \$/MILE						
401	HOUSE TAX	0.281	0.295	0.313	0.335	0.357	0.379
411	TAX/REBATE	0.281	0.295	0.313	0.335	0.359	0.382
421	DIFFERENCE	0.0	0.0	0.0	0.0	-0.003	-0.003
431	DIFFERENCE	0.0	0.0	0.0	0.0	-0.77	-0.72

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.07 CAPITALIZED COSTS PER MILE

LINE	ITEM	1981	1982	1983	1984	1985
11	AVG NOMINAL CAP. COST PER MILE \$/MILE					
21	HOUSE TAX	0,284	0,299	0,315	0,331	0,349
31	TAX/REBATE	0,281	0,295	0,311	0,328	0,347
41	DIFFERENCE	0,004	0,004	0,004	0,003	0,001
51	DIFFERENCE	1,30	1,36	1,14	0,98	0,80
61						
71	AVG REAL CAP. COST PER MILE 1972 \$					
81	HOUSE TAX	0,163	0,165	0,167	0,169	0,172
91	TAX/REBATE	0,161	0,163	0,165	0,168	0,170
101	DIFFERENCE	0,002	0,002	0,002	0,002	0,001
111	DIFFERENCE	1,30	1,36	1,14	0,98	0,80
121						
131	CAPITALIZED COST PER MILE BY SIZE:					
141						
151	SUBCOMPACTS \$/MILE					
161	HOUSE TAX	0,225	0,237	0,250	0,264	0,279
171	TAX/REBATE	0,220	0,231	0,245	0,259	0,274
181	DIFFERENCE	0,005	0,006	0,005	0,006	0,006
191	DIFFERENCE	2,28	2,42	2,20	2,18	2,13
201						
211	COMPACTS \$/MILE					
221	HOUSE TAX	0,254	0,268	0,282	0,298	0,314
231	TAX/REBATE	0,252	0,266	0,280	0,296	0,313
241	DIFFERENCE	0,002	0,002	0,002	0,001	0,001
251	DIFFERENCE	0,92	0,68	0,64	0,36	0,37
261						
271	MID-SIZE \$/MILE					
281	HOUSE TAX	0,284	0,299	0,314	0,330	0,348
291	TAX/REBATE	0,285	0,300	0,316	0,333	0,352
301	DIFFERENCE	-0,001	-0,001	-0,002	-0,002	-0,004
311	DIFFERENCE	-0,31	-0,33	-0,64	-0,66	-1,06
321						
331	FULL SIZE \$/MILE					
341	HOUSE TAX	0,309	0,325	0,341	0,365	0,383
351	TAX/REBATE	0,312	0,328	0,345	0,365	0,383
361	DIFFERENCE	-0,003	-0,003	-0,004	0,000	-0,000
371	DIFFERENCE	-0,96	-0,99	-1,30	0,12	-0,12
381						
391	LUXURY \$/MILE					
401	HOUSE TAX	0,403	0,424	0,445	0,470	0,498
411	TAX/REBATE	0,403	0,424	0,445	0,470	0,498
421	DIFFERENCE	-0,000	-0,000	-0,000	-0,000	-0,000
431	DIFFERENCE	-0,02	-0,04	-0,07	-0,02	-0,02

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.00 CAPITALIZED COSTS PER MILE - CONTINUED

LINE	ITEM	1975	1976	1977	1978	1979	1980
11	CAP. COST PER MILE BY FOR/DOM:						
21							
31	TOTAL DOMESTIC						
41	HOUSE TAX	0.196	0.210	0.225	0.242	0.258	0.273
51	TAX/RATE	0.196	0.210	0.225	0.242	0.254	0.270
61	DIFFERENCE	0.0	0.0	0.0	0.0	0.003	0.003
71	DIFFERENCE	0.0	0.0	0.0	0.0	1.26	1.20
81							
91	TOTAL FOREIGN						
101	HOUSE TAX	0.166	0.178	0.190	0.203	0.216	0.234
111	TAX/RATE	0.166	0.178	0.190	0.203	0.208	0.225
121	DIFFERENCE	0.0	0.0	0.0	0.0	0.010	0.009
131	DIFFERENCE	0.0	0.0	0.0	0.0	4.50	4.13
141							
151	DOMESTIC SUBCOMPACT						
161	HOUSE TAX	0.154	0.163	0.176	0.188	0.201	0.213
171	TAX/RATE	0.154	0.163	0.176	0.188	0.196	0.208
181	DIFFERENCE	0.0	0.0	0.0	0.0	0.005	0.005
191	DIFFERENCE	0.0	0.0	0.0	0.0	2.47	2.36
201							
211	FOREIGN SUBCOMPACT						
221	HOUSE TAX	0.151	0.163	0.173	0.185	0.198	0.211
231	TAX/RATE	0.151	0.163	0.173	0.185	0.192	0.205
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.005	0.005
251	DIFFERENCE	0.0	0.0	0.0	0.0	2.73	2.60
261							
271	DOMESTIC COMPACT						
281	HOUSE TAX	0.174	0.185	0.198	0.213	0.226	0.239
291	TAX/RATE	0.174	0.185	0.198	0.213	0.224	0.237
301	DIFFERENCE	0.0	0.0	0.0	0.0	0.002	0.002
311	DIFFERENCE	0.0	0.0	0.0	0.0	0.64	0.95
321							
331	FOREIGN COMPACT						
341	HOUSE TAX	0.199	0.216	0.229	0.245	0.263	0.282
351	TAX/RATE	0.199	0.216	0.229	0.245	0.259	0.278
361	DIFFERENCE	0.0	0.0	0.0	0.0	0.004	0.004
371	DIFFERENCE	0.0	0.0	0.0	0.0	1.51	1.43
381							
391	DOMESTIC LUXURY						
401	HOUSE TAX	0.276	0.287	0.307	0.328	0.349	0.371
411	TAX/RATE	0.276	0.287	0.307	0.328	0.353	0.374
421	DIFFERENCE	0.0	0.0	0.0	0.0	-0.003	-0.003
431	DIFFERENCE	0.0	0.0	0.0	0.0	-0.86	-0.81
441							
451	FOREIGN LUXURY						
461	HOUSE TAX	0.318	0.350	0.371	0.398	0.428	0.462
471	TAX/RATE	0.318	0.350	0.371	0.398	0.428	0.462
481	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
491	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.08 CAPITALIZED COSTS PER MILE - CONTINUED

LINE	ITEM	1981	1982	1983	1984	1985
11	CAP. COST PER MILE BY FOR/DOM					
21						
31	TOTAL DOMESTIC					
	\$/MILE					
41	HOUSE TAX	0.288	0.303	0.318	0.334	0.3521
51	TAX/REBATE	0.284	0.299	0.316	0.333	0.3511
61	DIFFERENCE	0.003	0.003	0.003	0.001	0.0011
71	DIFFERENCE	1.16	1.08	0.87	0.31	0.21
81						
91	TOTAL FOREIGN					
	\$/MILE					
101	HOUSE TAX	0.252	0.267	0.284	0.300	0.3181
111	TAX/REBATE	0.243	0.256	0.274	0.290	0.3091
121	DIFFERENCE	0.009	0.011	0.010	0.010	0.0101
131	DIFFERENCE	3.70	4.12	3.62	3.34	3.101
141						
151	DOMESTIC SURCOMPACT					
	\$/MILE					
161	HOUSE TAX	0.225	0.237	0.249	0.263	0.2781
171	TAX/REBATE	0.220	0.231	0.243	0.258	0.2721
181	DIFFERENCE	0.005	0.006	0.006	0.006	0.0061
191	DIFFERENCE	2.28	2.42	2.33	2.19	2.281
201						
211	FOREIGN SURCOMPACT					
	\$/MILE					
221	HOUSE TAX	0.224	0.237	0.251	0.266	0.2811
231	TAX/REBATE	0.219	0.232	0.244	0.260	0.2761
241	DIFFERENCE	0.005	0.006	0.005	0.006	0.0051
251	DIFFERENCE	2.28	2.42	2.08	2.17	1.991
261						
271	DOMESTIC COMPACT					
	\$/MILE					
281	HOUSE TAX	0.252	0.265	0.279	0.296	0.3111
291	TAX/REBATE	0.250	0.264	0.277	0.293	0.3091
301	DIFFERENCE	0.002	0.002	0.002	0.001	0.0011
311	DIFFERENCE	0.90	0.66	0.62	0.33	0.341
321						
331	FOREIGN COMPACT					
	\$/MILE					
341	HOUSE TAX	0.300	0.319	0.338	0.359	0.3801
351	TAX/REBATE	0.297	0.316	0.335	0.356	0.3771
361	DIFFERENCE	0.003	0.003	0.003	0.003	0.0031
371	DIFFERENCE	1.17	1.02	0.97	0.77	0.601
381						
391	DOMESTIC LUXURY					
	\$/MILE					
401	HOUSE TAX	0.394	0.413	0.433	0.457	0.4791
411	TAX/REBATE	0.394	0.413	0.433	0.457	0.4791
421	DIFFERENCE	0.0	0.0	0.0	0.000	0.0001
431	DIFFERENCE	0.0	0.0	0.0	0.00	0.001
441						
451	FOREIGN LUXURY					
	\$/MILE					
461	HOUSE TAX	0.495	0.528	0.563	0.600	0.6371
471	TAX/REBATE	0.496	0.530	0.566	0.605	0.6431
481	DIFFERENCE	-0.001	-0.002	-0.003	-0.005	-0.0051
491	DIFFERENCE	-0.18	-0.39	-0.57	-0.80	-0.811

WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.09 MISCELLANEOUS

LINE	ITEM	1975	1976	1977	1978	1979	1980
11	DESIRED STOCK PER FAMILY						
21	HOUSE TAX						
31	TAX/REBATE	1,252	1,261	1,278	1,293	1,300	1,302
41	DIFFERENCE	1,252	1,261	1,278	1,293	1,304	1,306
51	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.004	-0.004
61		0.0	0.0	0.0	0.0	-0.28	-0.27
71	YEAR-END STOCK PER FAMILY						
81	HOUSE TAX						
91	TAX/REBATE	1,292	1,299	1,307	1,320	1,323	1,318
101	DIFFERENCE	1,292	1,299	1,307	1,320	1,326	1,321
111	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.003	-0.003
121		0.0	0.0	0.0	0.0	-0.21	-0.25
131	VEHICLE MILES PER FAMILY						
141	HOUSE TAX						
151	TAX/REBATE	13,727	13,407	13,216	13,079	13,040	13,021
161	DIFFERENCE	13,727	13,407	13,216	13,079	13,052	13,070
171	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.012	-0.049
181		0.0	0.0	0.0	0.0	-0.09	-0.37
191	VEHICLE MILES PER AUTO						
201	HOUSE TAX						
211	TAX/REBATE	10,778	10,478	10,236	10,044	9,952	9,945
221	DIFFERENCE	10,778	10,478	10,236	10,044	9,951	9,959
231	% DIFFERENCE	0.0	0.0	0.0	0.0	0.002	-0.014
241		0.0	0.0	0.0	0.0	0.02	-0.14
251	RATIO-NEW REGIS. TO BEGIN, STOCK						
261	HOUSE TAX						
271	TAX/REBATE	0.0889	0.1020	0.1099	0.1088	0.1081	0.1101
281	DIFFERENCE	0.0889	0.1020	0.1099	0.1088	0.1101	0.1104
291	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.0020	-0.0003
301		0.0	0.0	0.0	0.0	-1.00	-0.27
311	RATIO-SCRAPPAGE TO BEGIN, STOCK						
321	HOUSE TAX						
331	TAX/REBATE	0.0591	0.0714	0.0856	0.0804	0.0808	0.0966
341	DIFFERENCE	0.0591	0.0714	0.0856	0.0804	0.0804	0.0967
351	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0002	0.0001
361		0.0	0.0	0.0	0.0	0.22	0.13
371	REAL DISP. INCOME PER FAMILY THOU 172 \$						
381	HOUSE TAX						
391	TAX/REBATE	9,406	9,481	9,685	9,658	10,040	10,234
401	DIFFERENCE	9,406	9,481	9,685	9,658	10,040	10,234
411	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
421		0.0	0.0	0.0	0.0	0.0	0.0
431	FAMILIES WITH INCOME OVER \$15,000						
441	HOUSE TAX						
451	TAX/REBATE	22.05	20.94	20.23	20.09	21.04	22.60
461	DIFFERENCE	22.05	20.94	20.23	20.09	21.04	22.60
471	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
481		0.0	0.0	0.0	0.0	0.0	0.0

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.09 MISCELLANEOUS

LINE	I T E M	1981	1982	1983	1984	1985
11	DESIRED STOCK PER FAMILY AUTOS					
21	HOUSE TAX	1,304	1,303	1,302	1,301	1,299
31	TAX/REBATE	1,307	1,307	1,305	1,303	1,302
41	DIFFERENCE	-0.003	-0.003	-0.003	-0.002	-0.002
51	% DIFFERENCE	-0.25	-0.26	-0.22	-0.18	-0.16
61						
71	YEAR-END STOCK PER FAMILY AUTOS					
81	HOUSE TAX	1,307	1,297	1,293	1,290	1,292
91	TAX/REBATE	1,310	1,300	1,295	1,293	1,294
101	DIFFERENCE	-0.003	-0.002	-0.002	-0.003	-0.002
111	% DIFFERENCE	-0.20	-0.19	-0.15	-0.23	-0.17
121						
131	VEHICLE MILES PER FAMILY THOU MILES					
141	HOUSE TAX	12,964	12,922	12,911	12,932	12,942
151	TAX/REBATE	13,023	12,981	12,976	12,996	13,018
161	DIFFERENCE	-0.059	-0.059	-0.064	-0.064	-0.075
171	% DIFFERENCE	-0.45	-0.45	-0.50	-0.49	-0.56
181						
191	VEHICLE MILES PER AUTO THOU MILES					
201	HOUSE TAX	9,968	10,013	10,054	10,096	10,105
211	TAX/REBATE	9,991	10,039	10,087	10,124	10,142
221	DIFFERENCE	-0.022	-0.026	-0.033	-0.030	-0.037
231	% DIFFERENCE	-0.22	-0.26	-0.33	-0.29	-0.37
241						
251	RATIO-NEW REGIS. TO REGIN. STOCK RATIO					
261	HOUSE TAX	0.1101	0.1115	0.1132	0.1107	0.1128
271	TAX/REBATE	0.1098	0.1118	0.1125	0.1121	0.1118
281	DIFFERENCE	0.0003	-0.0003	0.0006	-0.0013	0.0010
291	% DIFFERENCE	0.26	-0.24	0.58	-1.20	0.92
301						
311	RATIO-SCRAPPAGE TO REGIN. STOCK RATIO					
321	HOUSE TAX	0.1001	0.1008	0.0998	0.0964	0.0958
331	TAX/REBATE	0.1004	0.1012	0.0991	0.0967	0.0956
341	DIFFERENCE	-0.0003	-0.0004	0.0002	-0.0003	0.0002
351	% DIFFERENCE	-0.26	-0.35	0.23	-0.31	0.20
361						
371	REAL DISP. INCOME PER FAMILY THOU '72 \$					
381	HOUSE TAX	10,377	10,521	10,684	10,850	11,031
391	TAX/REBATE	10,377	10,521	10,684	10,850	11,031
401	DIFFERENCE	0.0	0.0	0.0	0.0	0.0
411	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0
421						
431	FAMILIES WITH INCOME OVER \$15,000 %					
441	HOUSE TAX	24.22	25.79	27.36	28.93	30.56
451	TAX/REBATE	24.22	25.79	27.36	28.93	30.56
461	DIFFERENCE	0.0	0.0	0.0	0.0	0.0
471	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0

WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.10 MILES PER GALLON

LINE	ITEM	1975	1976	1977	1978	1979	1980
11	OVERALL FLEET MILES PER GALLON - WEFA						
31	HOUSE TAX	12.60	12.71	12.82	13.03	13.32	13.70
41	TAX/REBATE	12.60	12.71	12.82	13.03	13.33	13.75
51	DIFFERENCE	0.0	0.0	0.0	0.0	-0.01	-0.04
61	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.09	-0.31
71							
81	NEW AUTO MILES PER GALLON (WEFA):						
91	TOTAL						
101	HOUSE TAX	13.29	13.80	14.44	15.12	15.83	16.61
111	TAX/REBATE	13.29	13.80	14.44	15.12	16.23	16.95
121	DIFFERENCE	0.0	0.0	0.0	0.0	-0.40	-0.34
131	% DIFFERENCE	0.0	0.0	0.0	0.0	-2.47	-2.02
141							
151	SUBCOMPACT						
161	HOUSE TAX	18.78	19.64	20.45	21.32	22.07	23.00
171	TAX/REBATE	18.78	19.64	20.45	21.32	22.07	23.00
181	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
191	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
201							
211	COMPACT						
221	HOUSE TAX	13.94	14.42	15.10	15.68	16.66	17.75
231	TAX/REBATE	13.94	14.42	15.10	15.68	16.66	17.75
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
251	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
261							
271	MID-SIZE						
281	HOUSE TAX	11.70	12.75	13.39	14.10	14.83	15.62
291	TAX/REBATE	11.70	12.75	13.39	14.10	14.83	15.62
301	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
311	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
321							
331	FULL SIZE						
341	HOUSE TAX	10.80	11.56	12.42	13.19	13.97	14.58
351	TAX/REBATE	10.80	11.56	12.42	13.19	13.97	14.58
361	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
371	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
381							
391	LUXURY						
401	HOUSE TAX	10.51	11.64	12.30	12.93	13.43	13.97
411	TAX/REBATE	10.51	11.64	12.30	12.93	13.43	13.97
421	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
431	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0

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WHARTON EPA AUTOMOBILE MODEL ANALYSIS

TABLE 3.10 MILES PER GALLON

LINE	ITEM	1981	1982	1983	1984	1985
11	210OVERALL FLEET MILFS PER GALLON - WEFA					
31	HOUSE TAX	14.15	14.67	15.25	15.66	16.51
41	TAX/REBATE	14.24	14.80	15.42	16.00	16.73
51	DIFFERENCE	-0.09	-0.13	-0.17	-0.20	-0.22
61	% DIFFERENCE	-0.66	-0.88	-1.10	-1.25	-1.36
71	81NEW AUTO MILES PER GALLON (WEFA);					
91	TOTAL					
101	HOUSE TAX	17.27	17.97	18.66	19.64	20.27
111	TAX/REBATE	17.61	18.34	19.01	19.81	20.44
121	DIFFERENCE	-0.34	-0.37	-0.35	-0.16	-0.17
131	% DIFFERENCE	-1.94	-2.02	-1.86	-0.83	-0.84
141						
151	SUBCOMPACT					
161	HOUSE TAX	23.76	24.57	25.28	26.03	26.68
171	TAX/REBATE	23.76	24.57	25.28	26.03	26.68
181	DIFFERENCE	0.0	0.0	0.0	0.0	0.0
191	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0
201						
211	COMPACT					
221	HOUSE TAX	18.79	19.55	20.34	21.17	21.88
231	TAX/REBATE	18.79	19.55	20.34	21.17	21.88
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.0
251	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0
261						
271	MID-SIZE					
281	HOUSE TAX	16.31	16.98	17.67	18.40	19.04
291	TAX/REBATE	16.31	16.98	17.67	18.40	19.04
301	DIFFERENCE	0.0	0.0	0.0	0.0	0.0
311	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0
321						
331	FULL SIZE					
341	HOUSE TAX	15.07	15.71	16.38	17.11	17.78
351	TAX/REBATE	15.07	15.71	16.38	17.11	17.78
361	DIFFERENCE	0.0	0.0	0.0	0.0	0.0
371	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0
381						
391	LUXURY					
401	HOUSE TAX	14.42	15.05	15.70	16.38	17.02
411	TAX/REBATE	14.42	15.05	15.70	16.38	17.02
421	DIFFERENCE	0.0	0.0	0.0	0.0	0.0
431	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.11 MILES PER GALLON - CONTINUED

LINE	I T E M	1975	1976	1977	1978	1979	1980
1	NEW AUTO M.P.G. BY FOR/DOM (NEFA):						
21							
31	TOTAL DOMESTIC						
41	HOUSE TAX	12.38	13.04	13.72	14.40	15.17	15.88
51	TAX/REBATE	12.38	13.04	13.72	14.40	15.19	16.19
61	DIFFERENCE	0.0	0.0	0.0	0.0	-0.22	-0.21
71	DIFFERENCE	0.0	0.0	0.0	0.0	-1.44	-1.29
81							
91	TOTAL FOREIGN						
101	HOUSE TAX	19.82	20.69	21.25	22.04	22.47	23.09
111	TAX/REBATE	19.82	20.69	21.25	22.04	22.65	23.25
121	DIFFERENCE	0.0	0.0	0.0	0.0	-0.18	-0.16
131	DIFFERENCE	0.0	0.0	0.0	0.0	-0.77	-0.67
141							
151	DOMESTIC SUBCOMPACT						
161	HOUSE TAX	17.13	17.95	18.92	19.81	20.87	22.04
171	TAX/REBATE	17.13	17.95	18.92	19.81	20.87	22.04
181	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
191	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
201							
211	FOREIGN SUBCOMPACT						
221	HOUSE TAX	20.44	21.33	21.97	22.80	23.25	23.96
231	TAX/REBATE	20.44	21.33	21.97	22.80	23.25	23.96
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
251	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
261							
271	DOMESTIC COMPACT						
281	HOUSE TAX	13.67	14.23	14.88	15.46	16.48	17.58
291	TAX/REBATE	13.67	14.23	14.88	15.46	16.48	17.58
301	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
311	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
321							
331	FOREIGN COMPACT						
341	HOUSE TAX	18.41	19.06	19.57	20.14	20.57	21.20
351	TAX/REBATE	18.41	19.06	19.57	20.14	20.57	21.20
361	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
371	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
381							
391	DOMESTIC LUXURY						
401	HOUSE TAX	10.08	11.32	12.07	12.65	13.16	13.70
411	TAX/REBATE	10.08	11.32	12.07	12.65	13.16	13.70
421	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
431	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
441							
451	FOREIGN LUXURY						
461	HOUSE TAX	15.19	15.64	16.09	16.66	17.00	17.39
471	TAX/REBATE	15.19	15.64	16.09	16.66	17.00	17.39
481	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
491	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0

WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.11 MILES PER GALLON - CONTINUED

LINE	ITEM	1981	1982	1983	1984	1985
1	NEW AUTO M.P.G. BY FOR/DOM (WEFA):					
21	TOTAL DOMESTIC					
41	HOUSE TAX	16.69	17.38	18.09	19.04	19.661
51	TAX/REBATE	16.92	17.62	18.33	19.12	19.771
61	DIFFERENCE	-0.23	-0.24	-0.24	-0.07	-0.091
71	% DIFFERENCE	-1.35	-1.36	-1.31	-0.38	-0.441
81	TOTAL FOREIGN					
101	HOUSE TAX	23.55	24.22	24.73	25.45	25.981
111	TAX/REBATE	23.69	24.40	24.89	25.60	26.111
121	DIFFERENCE	-0.14	-0.18	-0.16	-0.14	-0.131
131	% DIFFERENCE	-0.61	-0.73	-0.64	-0.55	-0.501
141	DOMESTIC SUBCOMPACT					
161	HOUSE TAX	23.07	23.98	24.85	25.59	26.361
171	TAX/REBATE	23.07	23.98	24.85	25.59	26.361
181	DIFFERENCE	0.0	0.0	0.0	0.0	0.01
191	% DIFFERENCE	0.0	0.0	0.0	0.0	0.01
201	FOREIGN SUBCOMPACT					
221	HOUSE TAX	24.46	25.20	25.72	26.46	26.991
231	TAX/REBATE	24.46	25.20	25.72	26.46	26.991
241	DIFFERENCE	0.0	0.0	0.0	0.0	0.01
251	% DIFFERENCE	0.0	0.0	0.0	0.0	0.01
261	DOMESTIC COMPACT					
281	HOUSE TAX	18.65	19.42	20.22	21.04	21.761
291	TAX/REBATE	18.65	19.42	20.22	21.04	21.761
301	DIFFERENCE	0.0	0.0	0.0	0.0	0.01
311	% DIFFERENCE	0.0	0.0	0.0	0.0	0.01
321	FOREIGN COMPACT					
341	HOUSE TAX	21.83	22.48	23.15	23.83	24.531
351	TAX/REBATE	21.83	22.48	23.15	23.83	24.531
361	DIFFERENCE	0.0	0.0	0.0	0.0	0.01
371	% DIFFERENCE	0.0	0.0	0.0	0.0	0.01
381	DOMESTIC LUXURY					
401	HOUSE TAX	14.15	14.79	15.45	16.15	16.801
411	TAX/REBATE	14.15	14.79	15.45	16.15	16.801
421	DIFFERENCE	0.0	0.0	0.0	0.0	0.01
431	% DIFFERENCE	0.0	0.0	0.0	0.0	0.01
441	FOREIGN LUXURY					
461	HOUSE TAX	17.88	18.28	18.76	19.11	19.601
471	TAX/REBATE	17.88	18.28	18.76	19.11	19.601
481	DIFFERENCE	0.0	0.0	0.0	0.0	0.01
491	% DIFFERENCE	0.0	0.0	0.0	0.0	0.01

WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.12 DOMESTIC AND FOREIGN AUTO PRICES

LINE	ITEM	1975	1976	1977	1978	1979	1980
11	TOTAL DOMESTIC AUTO PRICES:						
21							
31	SUBCOMPACT						
41	HOUSE TAX	3747.	3933.	4259.	4554.	4828.	5090.
51	TAX/REBATE	3747.	3933.	4259.	4554.	4833.	4791.
61	DIFFERENCE	0.	0.	0.	0.	295.	299.
71	DIFFERENCE	0.0	0.0	0.0	0.0	6.50	6.24
81							
91	COMPACT						
101	HOUSE TAX	4284.	4485.	4840.	5161.	5477.	5789.
111	TAX/REBATE	4284.	4485.	4840.	5161.	5383.	5632.
121	DIFFERENCE	0.	0.	0.	0.	94.	134.
131	DIFFERENCE	0.0	0.0	0.0	0.0	1.75	2.41
141							
151	MID-SIZE						
161	HOUSE TAX	5171.	5416.	5840.	6225.	6599.	6970.
171	TAX/REBATE	5171.	5416.	5840.	6225.	6599.	6970.
181	DIFFERENCE	0.	0.	0.	0.	0.	0.
191	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0
201							
211	FULL SIZE						
221	HOUSE TAX	5867.	6143.	6620.	7057.	7477.	7891.
231	TAX/REBATE	5867.	6143.	6620.	7057.	7598.	8008.
241	DIFFERENCE	0.	0.	0.	0.	-116.	-117.
251	DIFFERENCE	0.0	0.0	0.0	0.0	-1.53	-1.48
261							
271	LUXURY						
281	HOUSE TAX	9023.	9443.	10174.	10836.	11469.	12076.
291	TAX/REBATE	9023.	9443.	10174.	10836.	11654.	12261.
301	DIFFERENCE	0.	0.	0.	0.	-185.	-185.
311	DIFFERENCE	0.0	0.0	0.0	0.0	-1.58	-1.51
321							
331	TOTAL FOREIGN AUTO PRICES:						
341							
351	SUBCOMPACT						
361	HOUSE TAX	3907.	4222.	4482.	4629.	4869.	5135.
371	TAX/REBATE	3907.	4222.	4482.	4629.	4540.	4810.
381	DIFFERENCE	0.	0.	0.	0.	329.	325.
391	DIFFERENCE	0.0	0.0	0.0	0.0	7.83	6.77
401							
411	COMPACT						
421	HOUSE TAX	6435.	7052.	7385.	7820.	8313.	8875.
431	TAX/REBATE	6435.	7052.	7385.	7820.	8075.	8634.
441	DIFFERENCE	0.	0.	0.	0.	238.	241.
451	DIFFERENCE	0.0	0.0	0.0	0.0	2.95	2.88
461							
471	LUXURY						
481	HOUSE TAX	12692.	14143.	14911.	15936.	17093.	18416.
491	TAX/REBATE	12692.	14143.	14911.	15936.	17093.	18416.
501	DIFFERENCE	0.	0.	0.	0.	0.	0.
511	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3,12 DOMESTIC AND FOREIGN AUTO PRICES

LINE	ITEM	1981	1982	1983	1984	1985
11	TOTAL DOMESTIC AUTO PRICES:					
21						
31	SUBCOMPACT					
41	HOUSE TAX	DOLLARS				
51	TAX/REBATE	5302.	5529.	5744.	5987.	6233.
61	DIFFERENCE	4996.	5186.	5396.	5639.	5852.
71	DIFFERENCE	306.	343.	348.	348.	382.
81	DIFFERENCE	6.12	6.61	6.46	6.16	6.52
91	COMPACT					
101	HOUSE TAX	DOLLARS				
111	TAX/REBATE	6045.	6318.	6579.	6872.	7169.
121	DIFFERENCE	5908.	6212.	6473.	6812.	7104.
131	DIFFERENCE	138.	106.	106.	60.	65.
141	DIFFERENCE	2.33	1.71	1.64	0.88	0.92
151	MID-SIZE					
161	HOUSE TAX	DOLLARS				
171	TAX/REBATE	7273.	7593.	7895.	8230.	8565.
181	DIFFERENCE	7327.	7653.	8020.	8366.	8796.
191	DIFFERENCE	-55.	-60.	-125.	-136.	-231.
201	DIFFERENCE	-0.75	-0.78	-1.56	-1.62	-2.63
211	FULL SIZE					
221	HOUSE TAX	DOLLARS				
231	TAX/REBATE	8227.	8582.	8913.	9701.	10042.
241	DIFFERENCE	8410.	8781.	9189.	9673.	10070.
251	DIFFERENCE	-183.	-199.	-276.	27.	-27.
261	DIFFERENCE	-2.17	-2.26	-3.00	0.28	-0.27
271	LUXURY					
281	HOUSE TAX	DOLLARS				
291	TAX/REBATE	12820.	13361.	13926.	14628.	15219.
301	DIFFERENCE	12820.	13361.	13926.	14604.	15198.
311	DIFFERENCE	0.	0.	0.	24.	26.
321	DIFFERENCE	0.0	0.0	0.0	0.17	0.17
331	TOTAL FOREIGN AUTO PRICES:					
341						
351	SUBCOMPACT					
361	HOUSE TAX	DOLLARS				
371	TAX/REBATE	5409.	5664.	5964.	6241.	6522.
381	DIFFERENCE	5103.	5301.	5449.	5894.	6189.
391	DIFFERENCE	306.	343.	315.	348.	337.
401	DIFFERENCE	5.49	6.42	5.57	5.90	5.46
411	COMPACT					
421	HOUSE TAX	DOLLARS				
431	TAX/REBATE	9461.	10054.	10660.	11267.	11885.
441	DIFFERENCE	9248.	9857.	10461.	11097.	11690.
451	DIFFERENCE	212.	197.	199.	170.	186.
461	DIFFERENCE	2.29	1.99	1.90	1.53	1.59
471	LUXURY					
481	HOUSE TAX	DOLLARS				
491	TAX/REBATE	19612.	21241.	22762.	24162.	25700.
501	DIFFERENCE	19866.	21367.	22900.	24480.	26020.
511	DIFFERENCE	-55.	-126.	-198.	-298.	-321.
521	DIFFERENCE	-0.28	-0.59	-0.86	-1.22	-1.23

WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.13 USED CAR MARKET

LINE	ITEM	1975	1976	1977	1978	1979	1980
1	AVERAGE WHOLFSALE PRICE						
2	HOUSE TAX	2008.71	2158.37	2242.45	2416.73	2602.18	2779.61
3	TAX/REBATE	2008.71	2158.37	2242.45	2416.73	2546.01	2740.77
4	DIFFERENCE	0.0	0.0	0.0	0.0	56.17	38.84
5	% DIFFERENCE	0.0	0.0	0.0	0.0	2.21	1.42
6							
7							
8	PRICE OF 1 YR OLD CAR/NEW CAR:						
9							
10	SUBCOMPACT						
11	HOUSE TAX	0.873	0.860	0.798	0.787	0.804	0.808
12	TAX/REBATE	0.873	0.860	0.798	0.787	0.801	0.800
13	DIFFERENCE	0.0	0.0	0.0	0.0	0.003	0.008
14	% DIFFERENCE	0.0	0.0	0.0	0.0	0.42	0.46
15							
16	COMPACT						
17	HOUSE TAX	0.824	0.739	0.731	0.710	0.725	0.728
18	TAX/REBATE	0.824	0.739	0.731	0.710	0.703	0.722
19	DIFFERENCE	0.0	0.0	0.0	0.0	0.022	0.003
20	% DIFFERENCE	0.0	0.0	0.0	0.0	3.13	0.37
21							
22	MID-SIZE						
23	HOUSE TAX	0.636	0.704	0.635	0.642	0.648	0.651
24	TAX/REBATE	0.636	0.704	0.635	0.642	0.651	0.649
25	DIFFERENCE	0.0	0.0	0.0	0.0	-0.004	0.002
26	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.56	0.32
27							
28	FULL SIZE						
29	HOUSE TAX	0.646	0.695	0.591	0.588	0.613	0.616
30	TAX/REBATE	0.646	0.695	0.591	0.588	0.596	0.612
31	DIFFERENCE	0.0	0.0	0.0	0.0	0.017	0.004
32	% DIFFERENCE	0.0	0.0	0.0	0.0	2.80	0.62
33							
34	LUXURY						
35	HOUSE TAX	0.715	0.743	0.689	0.687	0.700	0.700
36	TAX/REBATE	0.715	0.743	0.689	0.687	0.692	0.698
37	DIFFERENCE	0.0	0.0	0.0	0.0	0.008	0.002
38	% DIFFERENCE	0.0	0.0	0.0	0.0	1.20	0.20
39							
40							
41	TOTAL USED CARS PURCHASED						
42	HOUSE TAX	16.98	18.66	15.78	15.39	16.77	17.39
43	TAX/REBATE	16.98	18.66	15.78	15.39	16.80	17.23
44	DIFFERENCE	0.0	0.0	0.0	0.0	-0.03	0.17
45	% DIFFERENCE	0.0	0.0	0.0	0.0	-0.40	0.96

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.13 USED CAR MARKET

LINE	ITEM		1981	1982	1983	1984	1985
1	AVERAGE WHOLESALE PRICE	DOLLARS					
2	HOUSE TAX		2936.51	3084.85	3223.40	3378.80	3548.23
3	TAX/REBATE		2899.45	3045.09	3187.87	3346.26	3502.10
4	DIFFERENCE		37.06	39.76	35.52	32.53	46.13
5	% DIFFERENCE		1.28	1.31	1.11	0.97	1.32
6							
7							
8	PRICE OF 1 YR OLD CAR/NEW CAR						
9							
10	SUBCOMPACT	RATIO					
11	HOUSE TAX		0.799	0.799	0.796	0.800	0.802
12	TAX/REBATE		0.800	0.800	0.797	0.799	0.801
13	DIFFERENCE		-0.001	-0.001	-0.001	0.001	0.001
14	% DIFFERENCE		-0.12	-0.15	-0.10	0.16	0.07
15							
16	COMPACT	RATIO					
17	HOUSE TAX		0.712	0.709	0.705	0.715	0.708
18	TAX/REBATE		0.716	0.712	0.708	0.712	0.709
19	DIFFERENCE		-0.004	-0.002	-0.004	0.003	-0.001
20	% DIFFERENCE		-0.59	-0.37	-0.50	0.40	-0.15
21							
22	MID-SIZE	RATIO					
23	HOUSE TAX		0.653	0.652	0.652	0.663	0.652
24	TAX/REBATE		0.651	0.651	0.650	0.654	0.649
25	DIFFERENCE		0.002	0.000	0.002	0.009	0.003
26	% DIFFERENCE		0.26	0.02	0.33	1.40	0.46
27							
28	FULL SIZE	RATIO					
29	HOUSE TAX		0.620	0.619	0.620	0.586	0.629
30	TAX/REBATE		0.615	0.620	0.615	0.611	0.628
31	DIFFERENCE		0.005	-0.001	0.005	-0.026	0.005
32	% DIFFERENCE		0.77	-0.10	0.85	-4.21	0.82
33							
34	LUXURY	RATIO					
35	HOUSE TAX		0.694	0.701	0.700	0.699	0.704
36	TAX/REBATE		0.701	0.702	0.700	0.699	0.704
37	DIFFERENCE		-0.006	-0.001	-0.000	0.000	0.000
38	% DIFFERENCE		-0.89	-0.08	-0.04	0.06	0.05
39							
40							
41	TOTAL USED CARS PURCHASED	MILL AUTOS					
42	HOUSE TAX		17.31	17.68	17.95	18.04	18.80
43	TAX/REBATE		17.37	17.83	17.94	18.20	18.63
44	DIFFERENCE		-0.06	-0.16	0.02	-0.16	0.16
45	% DIFFERENCE		-0.37	-0.89	0.09	-0.84	0.89

WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.14 UNADJUSTED SHARES BY SIZE CLASS

LINE	I T F M	1975	1976	1977	1978	1979	1980
11	DESIRED SHARES IN STOCK						
21	BEFORE RECONCILING SUM TO 1.0						
31							
41	SUBCOMPACT & COMPACT						
51	HOUSE TAX	0.4210	0.4022	0.3940	0.3921	0.3937	0.3975
61	TAX/REBATE	0.4210	0.4022	0.3940	0.3921	0.4105	0.4134
71	DIFFERENCE	0.0	0.0	0.0	0.0	-0.0168	-0.0159
81	% DIFFERENCE	0.0	0.0	0.0	0.0	-4.10	-3.84
91							
101	MID-SIZE						
111	HOUSE TAX	0.2657	0.2691	0.2696	0.2709	0.2712	0.2719
121	TAX/REBATE	0.2657	0.2691	0.2696	0.2709	0.2649	0.2658
131	DIFFERENCE	0.0	0.0	0.0	0.0	0.0063	0.0060
141	% DIFFERENCE	0.0	0.0	0.0	0.0	2.38	2.27
151							
161	FULL SIZE						
171	HOUSE TAX	0.2253	0.2579	0.2728	0.2770	0.2775	0.2664
181	TAX/REBATE	0.2253	0.2579	0.2728	0.2770	0.2304	0.2225
191	DIFFERENCE	0.0	0.0	0.0	0.0	0.0471	0.0439
201	% DIFFERENCE	0.0	0.0	0.0	0.0	20.46	19.72
211							
221	LUXURY						
231	HOUSE TAX	0.0922	0.0923	0.0920	0.0920	0.0928	0.0941
241	TAX/REBATE	0.0922	0.0923	0.0920	0.0920	0.0918	0.0931
251	DIFFERENCE	0.0	0.0	0.0	0.0	0.0010	0.0009
261	% DIFFERENCE	0.0	0.0	0.0	0.0	1.07	1.01
271							
281	TOTAL						
291	HOUSE TAX	1.0041	1.0216	1.0283	1.0319	1.0352	1.0298
301	TAX/REBATE	1.0041	1.0216	1.0283	1.0319	0.9977	0.9930
311	DIFFERENCE	0.0	0.0	0.0	0.0	0.0376	0.0368
321	% DIFFERENCE	0.0	0.0	0.0	0.0	3.77	3.52

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.14 UNADJUSTED SHARES BY SIZE CLASS

LINE	ITEM	1981	1982	1983	1984	1985
11	DESIRED SHARES IN STOCK					
21	BEFORE RECONCILING SUM TO 1.0					
31						
41	SUBCOMPACT & COMPACT					
51	HOUSE TAX	0.4024	0.4048	0.4050	0.4114	0.4103
61	TAX/REBATE	0.4180	0.4210	0.4222	0.4243	0.4249
71	DIFFERENCE	-0.0155	-0.0162	-0.0172	-0.0127	-0.0145
81	% DIFFERENCE	-3.71	-3.86	-4.07	-2.99	-3.42
91						
101	MTD-SIZE					
111	HOUSE TAX	0.2735	0.2739	0.2748	0.2748	0.2755
121	TAX/REBATE	0.2665	0.2665	0.2670	0.2677	0.2673
131	DIFFERENCE	0.0071	0.0074	0.0078	0.0072	0.0083
141	% DIFFERENCE	2.65	2.76	2.92	2.68	3.10
151						
161	FULL SIZE					
171	HOUSE TAX	0.2586	0.2545	0.2542	0.2678	0.2124
181	TAX/REBATE	0.2103	0.2048	0.2018	0.1925	0.1947
191	DIFFERENCE	0.0483	0.0497	0.0523	0.0753	0.0177
201	% DIFFERENCE	22.99	24.26	25.93	7.94	9.10
211						
221	LUXURY					
231	HOUSE TAX	0.0950	0.0962	0.0974	0.0983	0.0995
241	TAX/REBATE	0.0944	0.0936	0.0969	0.0979	0.0991
251	DIFFERENCE	0.0006	0.0006	0.0006	0.0004	0.0004
261	% DIFFERENCE	0.63	0.67	0.58	0.46	0.39
271						
281	TOTAL					
291	HOUSE TAX	1.0295	1.0294	1.0314	0.9925	0.9978
301	TAX/REFRATE	0.9891	0.9879	0.9879	0.9823	0.9860
311	DIFFERENCE	0.0405	0.0414	0.0435	0.0102	0.0118
321	% DIFFERENCE	4.09	4.19	4.40	1.04	1.20

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.15 UNADJUSTED SHARES BY SIZE CLASS - CONTINUED

LINE	ITEM	1975	1976	1977	1978	1979	1980
11	DESIRED SHARES IN NEW REGISTRATIONS						
21	BEFORE RECONCILING SUM TO 1.0						
31							
41	SUBCOMPACT & COMPACT						
51	HOUSE TAX	0,5093	0,4172	0,4122	0,4028	0,3995	0,4054
61	TAX/REBATE	0,5093	0,4172	0,4122	0,4028	0,4469	0,4478
71	DIFFERENCE	0,0	0,0	0,0	0,0	-0,0474	-0,0424
81	% DIFFERENCE	0,0	0,0	0,0	0,0	-10,60	-9,48
91							
101	MID-SIZE						
111	HOUSE TAX	0,2281	0,3008	0,2852	0,2810	0,2754	0,2753
121	TAX/REBATE	0,2281	0,3008	0,2852	0,2810	0,2842	0,2821
131	DIFFERENCE	0,0	0,0	0,0	0,0	-0,0088	-0,0068
141	% DIFFERENCE	0,0	0,0	0,0	0,0	-3,10	-2,42
151							
161	FULL SIZE						
171	HOUSE TAX	0,1686	0,1663	0,2252	0,2417	0,2511	0,2433
181	TAX/REBATE	0,1686	0,1663	0,2252	0,2417	0,1901	0,1900
191	DIFFERENCE	0,0	0,0	0,0	0,0	0,0610	0,0533
201	% DIFFERENCE	0,0	0,0	0,0	0,0	32,06	28,08
211							
221	LUXURY						
231	HOUSE TAX	0,0941	0,0958	0,0940	0,0934	0,0944	0,0961
241	TAX/REBATE	0,0941	0,0958	0,0940	0,0934	0,0927	0,0946
251	DIFFERENCE	0,0	0,0	0,0	0,0	0,0017	0,0015
261	% DIFFERENCE	0,0	0,0	0,0	0,0	1,83	1,63
271							
281	TOTAL						
291	HOUSE TAX	1,0001	1,0001	1,0166	1,0188	1,0203	1,0201
301	TAX/REBATE	1,0001	1,0001	1,0166	1,0188	1,0138	1,0145
311	DIFFERENCE	0,0	0,0	0,0	0,0	0,0065	0,0056
321	% DIFFERENCE	0,0	0,0	0,0	0,0	0,64	0,55

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WHARTON EFA AUTOMOBILE MODEL ANALYSIS

TABLE 3.15 UNADJUSTED SHARES BY SIZE CLASS - CONTINUED

LINE	T T F M	1981	1982	1983	1984	1985
1	DESIRED SHARES IN NEW REGISTRATIONS					
2	BEFORE RECONCILING SUM TO 1.0					
3						
4	SUBCOMPACT & COMPACT					
5	HOUSE TAX	0,4103	0,4121	0,4103	0,4442	0,4372
6	TAX/REBATE	0,4541	0,4557	0,4544	0,4594	0,4558
7	DIFFERENCE	-0,0438	-0,0436	-0,0443	-0,0152	-0,0184
8	% DIFFERENCE	-9,65	-9,57	-9,75	-3,31	-4,09
9						
10	MID-SIZE					
11	HOUSE TAX	0,2743	0,2711	0,2687	0,2889	0,2836
12	TAX/REBATE	0,2815	0,2775	0,2747	0,2748	0,2720
13	DIFFERENCE	-0,0072	-0,0064	-0,0060	0,0121	0,0116
14	% DIFFERENCE	-2,56	-2,29	-2,18	4,38	4,27
15						
16	FULL SIZE					
17	HOUSE TAX	0,2379	0,2375	0,2409	0,1868	0,1925
18	TAX/REBATE	0,1826	0,1836	0,1868	0,1790	0,1871
19	DIFFERENCE	0,0553	0,0539	0,0541	0,0078	0,0054
20	% DIFFERENCE	30,28	29,34	28,95	1,00	2,87
21						
22	LUXURY					
23	HOUSE TAX	0,0973	0,0990	0,1005	0,1014	0,1029
24	TAX/REBATE	0,0964	0,0981	0,0998	0,1009	0,1025
25	DIFFERENCE	0,0009	0,0009	0,0007	0,0005	0,0004
26	% DIFFERENCE	0,89	0,93	0,74	0,52	0,37
27						
28	TOTAL					
29	HOUSE TAX	1,0198	1,0197	1,0204	1,0154	1,0162
30	TAX/REBATE	1,0147	1,0149	1,0159	1,0161	1,0175
31	DIFFERENCE	0,0051	0,0048	0,0045	-0,0007	-0,0013
32	% DIFFERENCE	0,51	0,48	0,44	-0,07	-0,12

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APPENDIX C
THE WHARTON EPA AUTOMOBILE DEMAND MODEL
BASE CASE

THE WHARTON EPA AUTOMOBILE DEMAND MODEL
 ITC AUGUST CONTROL SOLUTION- SLOW DOWNSIZING
 10% GAS PRICE GROWTH SCENARIO

TABLE 1.00 SUMMARY

LINE	ITEM		1975	1976	1977	1978	1979	1980
1	UNDESIRABLE STOCK OF AUTOS	MILL AUTOS	93,743	96,770	99,853	102,845	105,199	107,181
2		%GROWTH	1.32	3.23	3.19	3.00	2.29	1.88
3								
4	ACTUAL YR-END STOCK OF AUTOS	MILL AUTOS	96,726	99,685	102,107	105,012	107,037	108,457
5		%GROWTH	2.98	3.06	2.43	2.84	1.93	1.33
6								
7	NEW REGISTRATIONS OF AUTOS	MILL AUTOS	8,350	9,868	10,953	11,112	11,349	11,785
8		%GROWTH	-10.08	18.18	10.99	1.45	2.14	3.84
9								
10	FOREIGN NEW REGIS.	MILL AUTOS	1,517	1,463	1,540	1,532	1,447	1,449
11		%GROWTH	3.87	-3.55	5.22	-0.50	-5.53	0.09
12								
13	DOMESTIC NEW REGIS.	MILL AUTOS	6,833	8,405	9,413	9,580	9,902	10,336
14		%GROWTH	-12.68	23.01	12.00	1.77	3.36	4.38
15								
16	VEHICLE MILS TRAVELED	BILL MILES	1027.4	1029.0	1032.8	1040.2	1055.2	1071.5
17		%GROWTH	3.20	0.15	0.37	0.71	1.44	1.55
18								
19	SCRAPPAGE OF AUTOS	MILL AUTOS	5,548	6,909	8,531	8,208	9,328	10,365
20		%GROWTH	-15.52	24.53	23.47	-3.79	13.59	11.17
21								
22	NEW AUTOS FLEET M.P.G. (EPA)		17.17	17.82	18.64	19.51	20.43	21.44
23		%GROWTH	6.42	3.80	4.60	4.70	4.72	4.93
24								
25	NEW DOMESTIC EPA TEST M.P.G.		16.14	16.95	17.81	18.68	19.68	20.72
26		%GROWTH	5.84	5.06	5.08	4.88	5.36	5.29
27								
28	NEW DOMESTIC AUTOS M.P.G.		16.14	16.95	17.81	18.68	19.68	20.72
29		%GROWTH	5.75	5.06	5.08	4.88	5.36	5.29
30								
31	NEW FOREIGN AUTOS M.P.G.		24.12	25.24	26.01	27.05	27.66	28.48
32		%GROWTH	3.62	4.67	3.03	4.01	2.24	2.95
33								
34								
35	SHARE OF NEW REGISTRATIONS:							
36								
37	SUBCOMPACT		0.291	0.238	0.223	0.220	0.206	0.199
38		%GROWTH	12.94	-18.14	-6.32	-1.46	-6.40	-3.15
39								
40	COMPACT		0.219	0.179	0.183	0.176	0.186	0.198
41		%GROWTH	16.96	-18.01	1.86	-3.75	5.84	6.64
42								
43	MID-SIZE		0.228	0.301	0.281	0.276	0.270	0.270
44		%GROWTH	-12.14	31.87	-6.72	-1.71	-2.13	-0.01
45								
46	FULL-SIZE		0.169	0.186	0.222	0.237	0.246	0.239
47		%GROWTH	-20.07	10.49	18.94	7.08	3.72	-3.07
48								
49	LUXURY		0.094	0.096	0.092	0.092	0.093	0.098
50		%GROWTH	10.41	1.83	-3.51	-0.87	0.96	1.85

THE WHARTON EPA AUTOMOBILE DEMAND MODEL
 ITC AUGUST CONTROL SOLUTION- SLOW DOWNSIZING
 10% GAS PRICE GROWTH SCENARIO

TABLE 1.00 SUMMARY

LINE	I T E M	1981	1982	1983	1984	1985	
11	DESIRED STOCK OF AUTOS	MILL AUTOS	109,305	111,256	113,006	114,793	116,501
21		%GROWTH	1.98	1.78	1.65	1.50	1.40
31							
41	ACTUAL YR-END STOCK OF AUTOS	MILL AUTOS	109,591	110,755	112,288	114,033	115,897
51		%GROWTH	1.05	1.06	1.38	1.55	1.63
61							
71	NEW REGISTRATIONS OF AUTOS	MILL AUTOS	12,01	12,214	12,544	12,644	12,777
81		%GROWTH	1.83	1.78	2.70	0.79	1.05
91							
101	FOREIGN NEW REGIS.	MILL AUTOS	1,384	1,407	1,417	1,418	1,426
111		%GROWTH	-4.47	1.66	0.71	0.08	0.58
121							
131	DOMESTIC NEW REGIS.	MILL AUTOS	10,617	10,807	11,127	11,226	11,351
141		%GROWTH	2.72	1.79	2.96	0.88	1.11
151							
161	VEHICLE MILES TRAVELED	BILL MILFS	1086.7	1103.5	1121.5	1142.4	1162.7
171		%GROWTH	1.42	1.54	1.63	1.87	1.78
181							
191	SCRAPPAGE OF AUTOS	MILL AUTOS	10,867	11,050	11,012	10,808	10,913
201		%GROWTH	4.86	1.68	-0.35	-1.03	0.13
211							
221	NEW AUTOS FLEET M.P.G. (EPA)		22.33	23.24	24.14	25.12	26.00
231		%GROWTH	4.14	4.06	3.88	4.07	3.50
241							
251	NEW DOMESTIC EPA TEST M.P.G.		21.67	22.57	23.50	24.48	25.37
261		%GROWTH	4.57	4.16	4.10	4.20	3.63
271							
281	NEW DOMESTIC AUTOS M.P.G.		21.67	22.57	23.50	24.48	25.37
291		%GROWTH	4.57	4.16	4.10	4.20	3.63
301							
311	NEW FOREIGN AUTOS M.P.G.		29.11	30.00	30.69	31.60	32.33
321		%GROWTH	2.22	3.07	2.29	2.97	2.31
331							
341							
351	SHARE OF NEW REGISTRATIONS:						
361							
371	SUBCOMPACT		0.188	0.187	0.182	0.180	0.179
381		%GROWTH	-5.54	-0.43	-2.65	-1.05	-0.70
391							
401	COMPACT		0.215	0.218	0.221	0.222	0.222
411		%GROWTH	8.50	1.21	1.43	0.53	-0.00
421							
431	MID-SIZE		0.270	0.267	0.265	0.263	0.263
441		%GROWTH	0.22	-1.19	-0.87	-0.65	-0.15
451							
461	FULL-SIZE		0.230	0.230	0.233	0.234	0.234
471		%GROWTH	-3.43	-0.11	1.14	0.48	0.14
481							
491	LUXURY		0.096	0.098	0.099	0.101	0.102
501		%GROWTH	1.90	1.73	1.58	1.32	1.31

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.01 SHARES BY SIZE CLASS

LINE	ITEM	1975	1976	1977	1978	1979	1980
11 SHARES OF DESIRED STOCKS:							
21							
31	SUBCOMPACTS	0,231	0,204	0,204	0,205	0,200	0,198
41		14,00	-11,69	0,09	0,58	-2,54	-0,79
51							
61	COMPACTS	0,188	0,189	0,178	0,174	0,179	0,187
71		3,72	0,43	-5,02	-2,51	3,08	4,19
81							
91	MID-SIZE	0,264	0,263	0,261	0,262	0,261	0,263
101		7,37	-0,60	-0,57	0,10	-0,22	0,00
111							
121	FULL SIZE	0,224	0,252	0,265	0,268	0,267	0,258
131		-21,03	12,32	5,02	1,14	-0,16	-3,47
141							
151	LUXURY	0,092	0,092	0,092	0,092	0,093	0,094
161		7,60	0,11	-0,35	0,00	0,92	1,35
171							
181							
191 SHARES OF ACTUAL YR-END STOCKS:							
201							
211	SUBCOMPACT	0,168	0,180	0,190	0,198	0,204	0,206
221		9,80	6,76	5,60	4,34	3,00	2,00
231							
241	COMPACT	0,175	0,177	0,179	0,179	0,181	0,183
251		2,98	0,91	1,01	0,37	0,01	1,39
261							
271	MID-SIZE	0,231	0,236	0,240	0,240	0,240	0,232
281		-0,95	2,30	1,70	1,58	1,47	1,60
291							
301	FULL SIZE	0,338	0,318	0,301	0,288	0,276	0,265
311		-5,33	-5,02	-5,34	-4,43	-4,08	-4,08
321							
331	LUXURY	0,087	0,089	0,090	0,090	0,091	0,092
341		1,35	1,56	1,10	0,73	0,70	0,80
351							
361							
371 DOMESTIC SHARE OF NEW REGISTRATIONS:							
381							
391	DOMESTIC SHARE OF TOTAL	0,818	0,852	0,859	0,842	0,872	0,877
401		-2,89	4,08	0,91	0,31	1,20	0,53
411							
421	DOMESTIC SHARE OF SUBCOMPACTS	0,4694	0,4573	0,4600	0,4600	0,4700	0,4800
431		-2,68	-2,54	0,59	0,0	2,17	2,13
441							
451	DOMESTIC SHARE OF COMPACTS	0,9264	0,9464	0,9400	0,9400	0,9450	0,9450
461		0,15	2,16	-0,68	0,0	0,53	0,0
471							
481	DOMESTIC SHARE OF LUXURY	0,8792	0,9005	0,9000	0,9050	0,9100	0,9100
491		-0,33	2,42	-0,06	0,54	0,55	0,0

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THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1,01 SHARES BY SIZE CLASS

LINE	ITEM	1981	1982	1983	1984	1985
11	SHARES OF DESIRED STOCK:					
21						
31	SUBCOMPACTS	0,193	0,192	0,188	0,188	0,183
41	%GROWTH	-2,62	-0,43	-2,03	-1,48	-1,34
51						
61	COMPACTS	0,197	0,200	0,204	0,206	0,208
71	%GROWTH	5,69	1,60	1,72	1,18	0,78
81						
91	MID-SIZE	0,266	0,266	0,267	0,267	0,267
101	%GROWTH	0,98	0,16	0,17	0,06	0,15
111						
121	FULL SIZE	0,249	0,245	0,243	0,242	0,242
131	%GROWTH	-3,57	-1,61	-0,52	-0,45	-0,30
141						
151	LUXURY	0,095	0,097	0,098	0,099	0,100
161	%GROWTH	1,39	1,33	1,32	1,20	1,22
171						
181						
191	SHARES OF ACTUAL YR-END STOCKS:					
201						
211	SUBCOMPACT	0,210	0,209	0,207	0,203	0,199
221	%GROWTH	0,39	-0,24	-1,11	-1,64	-1,93
231						
241	COMPACT	0,187	0,192	0,196	0,200	0,204
251	%GROWTH	2,24	2,24	2,24	2,07	1,83
261						
271	MID-SIZE	0,256	0,259	0,262	0,264	0,265
281	%GROWTH	1,68	1,43	1,07	0,69	0,41
291						
301	FULL SIZE	0,255	0,247	0,241	0,238	0,236
311	%GROWTH	-3,90	-3,21	-2,28	-1,44	-0,78
321						
331	LUXURY	0,092	0,093	0,094	0,095	0,096
341	%GROWTH	0,86	0,88	0,96	1,03	1,09
351						
361						
371	DOMESTIC SHARE OF NEW REGISTRATIONS:					
381						
391	DOMESTIC SHARE OF TOTAL	0,885	0,885	0,887	0,888	0,888
401	%GROWTH	0,87	0,01	0,25	0,09	0,06
411						
421	DOMESTIC SHARE OF SUBCOMPACTS	0,4900	0,4900	0,4900	0,4900	0,4900
431	%GROWTH	2,08	0,0	0,0	0,0	0,0
441						
451	DOMESTIC SHARE OF COMPACTS	0,9500	0,9500	0,9500	0,9500	0,9500
461	%GROWTH	0,53	0,0	0,0	0,0	0,0
471						
481	DOMESTIC SHARE OF LUXURY	0,0100	0,0100	0,0100	0,0100	0,0100
491	%GROWTH	0,0	0,0	0,0	0,0	0,0

THE WHARTON EPA AUTOMOBILE DEMAND MODEL

TABLE 1.02 NEW REGISTRATIONS AND STOCKS BY SIZE CLASS

LINE	ITEM		1975	1976	1977	1978	1979	1980
1 NEW REGISTRATIONS:								
21								
31	SUBCOMPACT	MILL AUTOS	2,427	2,388	2,441	2,441	2,333	2,346
41		%GROWTH	1,56	-3,26	3,97	-0,03	-4,41	0,56
51								
61	COMPACT	MILL AUTOS	1,825	1,768	1,999	1,952	2,110	2,337
71		%GROWTH	5,17	-3,11	13,06	-2,36	8,10	10,73
81								
91	MID-SIZE	MILL AUTOS	1,905	2,968	3,073	3,064	3,063	3,180
101		%GROWTH	-20,99	55,88	3,53	-0,28	-0,04	3,83
111								
121	FULL SIZE	MILL AUTOS	1,408	1,838	2,427	2,636	2,793	2,811
131		%GROWTH	-28,13	30,57	32,02	8,64	5,93	0,64
141								
151	LUXURY	MILL AUTOS	0,786	0,985	1,013	1,018	1,050	1,111
161		%GROWTH	-0,72	20,34	7,10	0,57	3,11	5,76
171								
18 DESIRED STOCKS:								
191								
201	SUBCOMPACT	MILL AUTOS	22,380	20,296	20,808	21,526	21,381	21,493
211		%GROWTH	17,80	-8,99	2,52	3,44	-0,66	0,53
221								
231	COMPACT	MILL AUTOS	18,233	18,871	18,205	18,254	19,179	20,247
241		%GROWTH	6,82	3,50	-3,53	0,27	5,07	5,57
251								
261	MID-SIZE	MILL AUTOS	25,582	26,207	26,690	27,477	27,947	28,546
271		%GROWTH	10,57	2,44	1,85	2,95	1,71	2,14
281								
291	FULL SIZE	MILL AUTOS	21,695	25,113	27,014	28,100	28,597	27,971
301		%GROWTH	-18,67	15,75	7,57	4,02	1,77	-2,19
311								
321	LUXURY	MILL AUTOS	8,915	9,198	9,389	9,656	9,933	10,200
331		%GROWTH	10,81	3,17	2,07	2,84	2,87	2,69
341								
35 YEAR-END ACTUAL STOCKS:								
361								
371	SUBCOMPACT	MILL AUTOS	18,296	17,929	19,409	20,827	21,867	22,680
381		%GROWTH	13,07	10,02	8,26	7,31	4,99	3,35
391								
401	COMPACT	MILL AUTOS	16,965	17,643	18,254	18,843	19,361	19,890
411		%GROWTH	6,05	3,99	3,47	3,22	2,75	2,73
421								
431	MID-SIZE	MILL AUTOS	22,329	23,542	24,523	25,620	26,499	27,280
441		%GROWTH	2,00	5,43	4,17	4,47	3,43	2,95
451								
461	FULL SIZE	MILL AUTOS	32,701	31,740	30,776	30,249	29,588	28,754
471		%GROWTH	-2,51	-2,94	-3,04	-1,71	-2,19	-2,81
481								
491	LUXURY	MILL AUTOS	8,435	8,830	9,144	9,473	9,723	9,930
501		%GROWTH	4,38	4,68	3,55	3,59	2,64	2,13

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.02 NEW REGISTRATIONS AND STOCKS BY SIZE CLASS

LINE	I T E M		1981	1982	1983	1984	1985
11 NEW REGISTRATIONS:							
21							
31	SUBCOMPACT	MILL AUTOS	2,257	2,287	2,287	2,281	2,289
41		%GROWTH	-3.81	1.34	-0.07	-0.26	0.35
51							
61	COMPACT	MILL AUTOS	2,582	2,600	2,771	2,807	2,837
71		%GROWTH	10.49	3.01	4.17	1.33	1.05
81							
91	MID-SIZE	MILL AUTOS	3,246	3,264	3,323	3,328	3,350
101		%GROWTH	2.05	0.56	1.81	0.14	0.60
111							
121	FULL SIZE	MILL AUTOS	2,764	2,810	2,919	2,956	2,992
131		%GROWTH	-1.66	1.67	3.88	1.28	1.20
141							
151	LUXURY	MILL AUTOS	1,152	1,193	1,245	1,271	1,302
161		%GROWTH	3.77	3.54	4.32	2.13	2.31
171							
18 DESIRED STOCK:							
191							
201	SUBCOMPACT	MILL AUTOS	21,149	21,283	21,140	21,168	21,225
211		%GROWTH	-1.60	0.63	-0.67	0.13	0.27
221							
231	COMPACT	MILL AUTOS	21,623	22,203	22,896	23,526	24,097
241		%GROWTH	6.80	2.68	3.12	2.75	2.43
251							
261	MID-SIZE	MILL AUTOS	29,115	29,470	29,928	30,411	30,955
271		%GROWTH	2.00	1.22	1.55	1.62	1.79
281							
291	FULL SIZE	MILL AUTOS	27,253	27,098	27,331	27,638	27,988
301		%GROWTH	-2.57	-0.57	0.86	1.10	1.33
311							
321	LUXURY	MILL AUTOS	10,450	10,701	10,992	11,297	11,622
331		%GROWTH	2.45	2.40	2.72	2.77	2.87
341							
35 YEAR-END ACTUAL STOCKS:							
361							
371	SUBCOMPACT	MILL AUTOS	22,971	23,159	23,219	23,193	23,118
381		%GROWTH	1.64	0.82	0.26	-0.11	-0.33
391							
401	COMPACT	MILL AUTOS	20,548	21,231	22,007	22,812	23,610
411		%GROWTH	3.31	3.33	3.65	3.66	3.50
421							
431	MID-SIZE	MILL AUTOS	28,028	28,731	29,439	30,104	30,721
441		%GROWTH	2.74	2.51	2.46	2.26	2.05
451							
461	FULL SIZE	MILL AUTOS	27,924	27,315	27,062	27,087	27,315
471		%GROWTH	-2.89	-2.18	-0.93	0.10	0.84
481							
491	LUXURY	MILL AUTOS	10,120	10,318	10,561	10,836	11,133
501		%GROWTH	1.91	1.95	2.36	2.60	2.74

THE WHARTON EPA AUTOMOBILE DEMAND MODEL

TABLE 1.03 CAPITALIZED COSTS PER MILE

LINE	I T F M		1975	1976	1977	1978	1979	1980
1	AVG NOMINAL CAP. COST PER MILE	S/MILE	0.195	0.208	0.222	0.238	0.253	0.269
21		%GROWTH	8.64	6.32	7.14	7.82	6.51	6.18
31								
4	AVG REAL CAP. COST PER MILE	1972 \$	0.152	0.153	0.154	0.157	0.159	0.161
51		%GROWTH	-0.459	0.525	0.865	1.808	1.445	1.161
61								
7	CAPITALIZED COST PER MILE BY SIZE:							
81								
91	SURCOMPACTS	S/MILE	0.152	0.163	0.174	0.187	0.199	0.212
101		%GROWTH	7.91	7.17	6.79	7.10	6.72	6.46
111								
121	COMPACTS	S/MILE	0.176	0.186	0.200	0.215	0.228	0.242
131		%GROWTH	9.05	6.01	7.36	7.53	6.22	6.64
141								
151	MID-SIZE	S/MILE	0.198	0.208	0.223	0.238	0.254	0.269
161		%GROWTH	10.16	4.78	7.15	6.97	6.45	6.18
171								
181	FULL SIZE	S/MILE	0.217	0.228	0.243	0.259	0.275	0.293
191		%GROWTH	10.09	5.08	6.57	6.73	6.26	6.38
201								
211	LUXURY	S/MILE	0.281	0.293	0.313	0.335	0.357	0.379
221		%GROWTH	11.49	4.30	6.72	6.91	6.55	6.29
231								
241								
25	CAP. COST PER MILE BY FOR/DOME:							
261								
271	TOTAL DOMESTIC	S/MILE	0.196	0.210	0.225	0.242	0.258	0.273
281		%GROWTH	9.12	6.83	7.40	7.28	6.49	6.83
291								
301	TOTAL FOREIGN	S/MILE	0.166	0.178	0.190	0.203	0.218	0.234
311		%GROWTH	6.67	7.68	6.76	6.62	7.33	7.97
321								
331	DOMESTIC SUBCOMPACT	S/MILE	0.154	0.163	0.176	0.188	0.201	0.213
341		%GROWTH	10.29	6.36	7.42	7.37	6.54	6.19
351								
361	FOREIGN SUBCOMPACT	S/MILE	0.151	0.163	0.173	0.185	0.198	0.211
371		%GROWTH	5.80	7.91	6.24	6.86	6.85	6.68
381								
391	DOMESTIC COMPACT	S/MILE	0.174	0.185	0.198	0.213	0.226	0.239
401		%GROWTH	9.07	6.14	7.33	7.35	6.25	5.97
411								
421	FOREIGN COMPACT	S/MILE	0.199	0.216	0.229	0.245	0.263	0.282
431		%GROWTH	9.03	8.71	6.02	7.66	7.17	7.14
441								
451	DOMESTIC LUXURY	S/MILE	0.276	0.287	0.307	0.328	0.349	0.371
461		%GROWTH	11.41	3.95	6.82	6.98	6.56	6.18
471								
481	FOREIGN LUXURY	S/MILE	0.318	0.350	0.371	0.398	0.428	0.462
491		%GROWTH	11.68	9.98	5.93	7.47	7.53	7.79

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.03 CAPITALIZED COSTS PER MILE

LINE	ITEM	1981	1982	1983	1984	1985
11	AVG NOMINAL CAP. COST PER MILE	0,284	0,299	0,314	0,331	0,349
21	%GROWTH	5,46	5,24	5,18	5,42	5,41
31						
41	AVG REAL CAP. COST PER MILE	0,163	0,165	0,167	0,169	0,171
51	%GROWTH	1,400	1,156	1,163	1,342	1,361
61						
71	CAPITALIZED COST PER MILE BY SIZE:					
81						
91	SUBCOMPACTS	0,225	0,237	0,250	0,264	0,279
101	%GROWTH	5,43	5,55	5,55	5,71	5,69
111						
121	COMPACTS	0,254	0,268	0,282	0,298	0,314
131	%GROWTH	5,21	5,38	5,28	5,51	5,54
141						
151	MID-SIZE	0,284	0,299	0,314	0,330	0,348
161	%GROWTH	5,41	5,22	5,05	5,33	5,33
171						
181	FULL SIZE	0,309	0,325	0,341	0,358	0,377
191	%GROWTH	5,55	5,10	4,92	5,17	5,14
201						
211	LUXURY	0,399	0,419	0,440	0,462	0,485
221	%GROWTH	5,40	5,00	4,79	5,15	5,04
231						
241						
251	CAP. COST PER MILE BY FOR/DOM:					
261						
271	TOTAL DOMESTIC	0,287	0,302	0,318	0,335	0,352
281	%GROWTH	5,22	5,20	5,09	5,36	5,34
291						
301	TOTAL FOREIGN	0,252	0,267	0,284	0,302	0,320
311	%GROWTH	7,34	6,16	6,43	6,18	6,09
321						
331	DOMESTIC SUBCOMPACT	0,225	0,237	0,249	0,263	0,278
341	%GROWTH	5,45	5,33	5,19	5,63	5,53
351						
361	FOREIGN SUBCOMPACT	0,224	0,237	0,251	0,264	0,281
371	%GROWTH	6,38	5,75	5,88	5,78	5,84
381						
391	DOMESTIC COMPACT	0,252	0,265	0,279	0,294	0,311
401	%GROWTH	5,22	5,33	5,19	5,47	5,52
411						
421	FOREIGN COMPACT	0,300	0,319	0,338	0,359	0,380
431	%GROWTH	6,63	6,17	6,05	6,09	5,87
441						
451	DOMESTIC LUXURY	0,390	0,409	0,427	0,449	0,478
461	%GROWTH	5,18	4,78	4,56	4,96	4,89
471						
481	FOREIGN LUXURY	0,495	0,528	0,563	0,600	0,637
491	%GROWTH	7,16	6,79	6,53	6,63	6,24

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.04 MISCELLANEOUS

LINE	I T E M	1975	1976	1977	1978	1979	1980
110	DESIRED STOCK PER FAMILY AUTOS	1,252	1,261	1,278	1,293	1,306	1,302
21	%GROWTH	-0.31	0.67	1.35	1.20	0.53	0.19
31							
41	YEAR-END STOCK PER FAMILY AUTOS	1,292	1,299	1,307	1,320	1,323	1,318
51	%GROWTH	1.32	0.50	0.60	1.06	0.18	-0.36
61							
71	VEHICLE MILES PER FAMILY THOU MILES	13,727	13,407	13,216	13,079	13,040	13,021
81	%GROWTH	1.54	-2.33	-1.42	-1.04	-0.30	-0.14
91							
101	VEHICLE MILES PER AUTO THOU MILES	10,776	10,478	10,234	10,044	9,952	9,945
111	%GROWTH	0.21	-2.78	-2.31	-1.88	-0.91	-0.07
121							
131	RATIO=NEW REGIS. TO BEGIN. STOCK RATIO	0.0889	0.1020	0.1099	0.1088	0.1081	0.1101
141	%GROWTH		14.76	7.70	-0.95	-0.69	1.87
151							
161	RATIO=SCRAPPAGE TO BEGIN. STOCK RATIO	0.0591	0.0714	0.0856	0.0804	0.0888	0.0968
171	%GROWTH		20.92	19.81	-6.07	10.45	9.07
181							
191	REAL DISP. INCOME PER FAMILY THOU 172 \$	9,406	9,481	9,685	9,858	10,040	10,234
201	%GROWTH	-3.17	0.80	2.15	1.79	1.85	1.93
211							
221	FAMILIES WITH INCOME OVER \$15,000 %	22.05	20.94	20.23	20.09	21.04	22.00
231	%GROWTH	-0.66	-5.04	-3.37	-0.71	4.74	7.38
241							
251	AVG AGE OF AUTO STOCK YEARS	5.455	5.655	5.731	5.757	5.777	5.784
261	%GROWTH	4.26	3.67	1.35	0.45	0.35	-0.58

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THE WHARTON EFA AUTOMOBILE DEMAND MODFL

TABLE 1.04 MISCELLANEOUS

LINE	ITEM	1981	1982	1983	1984	1985
1	DESIRED STOCK PER FAMILY	1,304	1,304	1,303	1,301	1,300
2	%GROWTH	0.14	-0.03	-0.07	-0.16	-0.09
3						
4	YEAR-END STOCK PER FAMILY	1,308	1,298	1,294	1,292	1,293
5	%GROWTH	-0.78	-0.74	-0.33	-0.11	0.05
6						
7	VEHICLE MILES PER FAMILY	12,967	12,931	12,920	12,946	12,971
8	%GROWTH	-0.42	-0.27	-0.09	0.20	0.19
9						
10	VEHICLE MILES PER AUTO	9,968	10,016	10,056	10,096	10,114
11	%GROWTH	0.23	0.48	0.40	0.39	0.18
12						
13	RATIO-NEW REGIS. TO BEGIN. STOCK	0.1107	0.1115	0.1133	0.1124	0.1120
14	%GROWTH	0.50	0.72	1.62	-0.58	-0.49
15						
16	RATIO-SCRAPPAGE TO BEGIN. STOCK	0.1002	0.1008	0.0994	0.0971	0.0957
17	%GROWTH	3.47	0.63	-1.39	-2.38	-1.40
18						
19	REAL DISP. INCOME PER FAMILY	10,377	10,521	10,684	10,850	11,031
20	%GROWTH	1.40	1.38	1.56	1.55	1.67
21						
22	FAMILIES WITH INCOME OVER \$15,000	24.22	25.79	27.36	28.93	30.56
23	%GROWTH	7.21	6.47	6.07	5.74	5.62
24						
25	AVG AGE OF AUTO STOCK	5.673	5.592	5.508	5.439	5.392
26	%GROWTH	-1.24	-1.42	-1.50	-1.26	-0.87

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THE WHARTON EPA AUTOMOBILE DEMAND MODEL

TABLE 1,05 MILES PER GALLON

LINE	ITEM	1975	1976	1977	1978	1979	1980
11	OVERALL FLEET MILES PER GALLON - WEFA	12.69	12.71	12.82	13.03	13.32	13.70
21	%GROWTH	-0.70	0.17	0.87	1.60	2.21	2.84
31							
41	NEW AUTO MILES PER GALLON (WEFA):						
51							
61	TOTAL	13.29	13.80	14.44	15.12	15.83	16.61
71	%GROWTH	6.43	3.84	4.65	4.70	4.69	4.92
81							
91	SUBCOMPACT	18.74	19.64	20.45	21.32	22.07	23.00
101	%GROWTH	1.89	4.79	4.15	4.24	3.50	4.22
111							
121	COMPACT	13.94	14.42	15.10	15.68	16.64	17.75
131	%GROWTH	5.91	3.47	4.70	3.84	6.24	6.56
141							
151	MID-SIZE	11.70	12.75	13.39	14.10	14.83	15.62
161	%GROWTH	3.87	9.02	5.03	5.27	5.22	5.28
171							
181	FULL SIZE	10.80	11.56	12.42	13.19	13.97	14.58
191	%GROWTH	4.54	7.06	7.37	6.24	5.91	4.36
201							
211	LUXURY	10.51	11.64	12.38	12.93	13.43	13.97
221	%GROWTH	3.95	10.76	6.38	4.45	3.82	4.03
231							
241	NEW AUTO M.P.G. BY FOR/DOM (WEFA):						
251							
261	TOTAL DOMESTIC	12.38	13.04	13.72	14.40	15.17	15.98
271	%GROWTH	5.63	5.33	5.21	4.92	5.40	5.31
281							
291	TOTAL FOREIGN	19.82	20.69	21.25	22.04	22.47	23.09
301	%GROWTH	3.38	4.37	2.75	3.70	1.96	2.76
311							
321	DOMESTIC SUBCOMPACT	17.13	17.95	18.92	19.81	20.87	22.04
331	%GROWTH	0.15	4.78	5.42	4.71	5.36	5.59
341							
351	FOREIGN SUBCOMPACT	20.44	21.33	21.97	22.80	23.25	23.96
361	%GROWTH	3.34	4.35	2.99	3.79	1.96	3.08
371							
381	DOMESTIC COMPACT	13.67	14.23	14.86	15.46	16.48	17.58
391	%GROWTH	6.12	4.04	4.62	3.89	6.56	6.72
401							
411	FOREIGN COMPACT	18.41	19.06	19.57	20.14	20.57	21.20
421	%GROWTH	3.07	3.50	2.70	2.90	2.12	3.05
431							
441	DOMESTIC LUXURY	10.08	11.32	12.07	12.65	13.16	13.70
451	%GROWTH	3.88	12.27	6.65	4.77	4.00	4.16
461							
471	FOREIGN LUXURY	15.19	15.64	16.09	16.46	17.00	17.39
481	%GROWTH	3.47	2.95	2.88	2.35	3.24	2.32

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THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.05 MILES PER GALLON

LINE	I T E M	1981	1982	1983	1984	1985
1	OVERALL FLEET MILES PER GALLON - NEFA	14.15	14.67	15.25	15.86	16.49
21	IGROWTH	3.30	3.70	3.94	3.98	4.03
31	NEW AUTO MILES PER GALLON (NEFA):					
51	TOTAL	17.28	17.97	18.66	19.41	20.07
71	IGROWTH	4.02	4.03	3.84	3.98	3.44
91	SUBCOMPACT	23.76	24.57	25.28	26.03	26.68
101	IGROWTH	3.32	3.39	2.92	2.94	2.50
121	COMPACT	18.79	19.55	20.34	21.17	21.88
131	IGROWTH	5.86	4.84	4.07	4.05	3.37
151	MID-SIZE	16.31	16.98	17.67	18.40	19.04
161	IGROWTH	4.46	4.06	4.11	4.10	3.49
181	FULL SIZE	15.07	15.71	16.38	17.11	17.78
191	IGROWTH	3.35	4.23	4.28	4.46	3.92
211	LUXURY	14.42	15.05	15.70	16.38	17.02
221	IGROWTH	3.24	4.35	4.34	4.29	3.91
231	NEW AUTO M.P.G. BY FOR/DOM (NEFA):					
251	TOTAL DOMESTIC	16.70	17.39	18.10	18.84	19.52
271	IGROWTH	4.49	4.15	4.08	4.12	3.58
291	TOTAL FOREIGN	23.55	24.22	24.72	25.40	26.03
301	IGROWTH	1.97	2.87	2.08	2.72	2.09
321	DOMESTIC SUBCOMPACT	23.07	23.94	24.85	25.59	26.36
331	IGROWTH	4.70	3.76	3.78	2.97	3.02
341	FOREIGN SUBCOMPACT	24.46	25.20	25.72	26.44	26.99
361	IGROWTH	2.09	3.01	2.06	2.00	1.99
371	DOMESTIC COMPACT	18.65	19.42	20.22	21.04	21.76
391	IGROWTH	6.09	4.09	4.12	4.10	3.39
401	FOREIGN COMPACT	21.83	22.48	23.15	23.83	24.53
421	IGROWTH	2.97	3.01	2.99	2.91	2.95
431	DOMESTIC LUXURY	14.15	14.79	15.45	16.15	16.80
451	IGROWTH	3.27	4.52	4.48	4.49	4.02
461	FOREIGN LUXURY	17.88	18.28	18.76	19.11	19.60
481	IGROWTH	2.82	2.23	2.63	1.89	2.56

A PRODUCT OF WHARTON EFA, INC.

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1,06 DOMESTIC AUTO PRICES

LINE	I T E M		1975	1976	1977	1978	1979	1980
11	TOTAL AUTO PRICES:							
21								
31	SUBCOMPACT	DOLLARS:	3747.	3933.	4259.	4554.	4828.	5090.
41		%GROWTH:	12.98	4.95	8.29	6.93	6.01	5.44
51								
61	COMPACT	DOLLARS:	4284.	4485.	4840.	5161.	5477.	5789.
71		%GROWTH:	14.01	4.70	7.90	6.64	6.13	5.60
81								
91	MID-SIZE	DOLLARS:	5171.	5416.	5840.	6225.	6599.	6970.
101		%GROWTH:	18.97	4.74	7.81	6.60	6.01	5.62
111								
121	FULL SIZE	DOLLARS:	5867.	6143.	6620.	7057.	7477.	7891.
131		%GROWTH:	14.79	4.72	7.76	6.61	5.96	5.53
141								
151	LUXURY	DOLLARS:	9023.	9443.	10174.	10836.	11469.	12076.
161		%GROWTH:	15.39	4.65	7.75	6.51	5.84	5.29
171								
181	STATE AND LOCAL TAXES:							
191								
201	SUBCOMPACT	DOLLARS:	150.37	169.29	186.73	203.16	219.17	235.03
211		%GROWTH:	14.73	6.89	10.30	8.80	7.68	7.24
221								
231	COMPACT	DOLLARS:	180.20	192.16	211.17	229.15	247.41	265.08
241		%GROWTH:	15.80	6.64	9.90	8.51	7.97	7.51
251								
261	MID-SIZE	DOLLARS:	218.16	232.68	255.37	276.73	298.32	320.16
271		%GROWTH:	16.77	6.66	9.75	8.36	7.80	7.32
281								
291	FULL SIZE	DOLLARS:	247.13	263.52	289.03	313.14	337.32	361.59
301		%GROWTH:	16.56	6.63	9.68	8.34	7.72	7.19
311								
321	LUXURY	DOLLARS:	383.57	408.66	448.16	485.51	522.60	559.90
331		%GROWTH:	17.15	6.54	9.67	8.33	7.64	7.06
341								
351	TRANSPORTATION CHARGES:							
361								
371	SUBCOMPACT	DOLLARS:	100.60	102.31	106.94	114.66	121.33	130.35
381		%GROWTH:	9.43	1.69	4.53	7.22	5.82	7.43
391								
401	COMPACT	DOLLARS:	134.40	137.10	144.10	154.00	164.50	175.70
411		%GROWTH:	11.53	2.01	5.11	6.87	6.62	6.81
421								
431	MID-SIZE	DOLLARS:	147.77	151.39	161.33	178.25	193.20	213.87
441		%GROWTH:	12.59	2.45	6.57	10.49	8.38	10.70
451								
461	FULL SIZE	DOLLARS:	175.93	180.51	193.11	214.64	233.75	260.31
471		%GROWTH:	13.21	2.60	6.98	11.15	8.90	11.36
481								
491	LUXURY	DOLLARS:	190.80	195.60	208.60	226.90	246.80	268.50
501		%GROWTH:	14.02	2.52	6.65	8.77	8.77	8.79

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THE WHARTON EPA AUTOMOBILE DEMAND MODEL

TABLE 1.06 DOMESTIC AUTO PRICES

LINE	I T F M		1981	1982	1983	1984	1985
11		TOTAL AUTO PRICES:					
21							
31	SUBCOMPACT	DOLLARS:	5302.	5529.	5744.	5987.	6233.
41		%GROWTH:	4.16	4.28	3.89	4.23	4.12
51							
61	COMPACT	DOLLARS:	6045.	6318.	6579.	6872.	7169.
71		%GROWTH:	4.43	4.51	4.13	4.44	4.33
81							
91	MID-SIZE	DOLLARS:	7273.	7593.	7895.	8230.	8565.
101		%GROWTH:	4.34	4.40	3.97	4.25	4.08
111							
121	FULL SIZE	DOLLARS:	8227.	8582.	8913.	9282.	9651.
131		%GROWTH:	4.26	4.31	3.86	4.14	3.97
141							
151	LUXURY	DOLLARS:	12563.	13082.	13563.	14112.	14666.
161		%GROWTH:	4.03	4.13	3.68	4.05	3.93
171							
181		STATE AND LOCAL TAXES:					
191							
201	SUBCOMPACT	DOLLARS:	248.93	244.04	278.99	295.84	313.42
211		%GROWTH:	5.91	6.07	5.66	6.04	5.94
221							
231	COMPACT	DOLLARS:	262.41	300.16	317.75	337.44	357.90
241		%GROWTH:	6.18	6.29	5.86	6.19	6.06
251							
261	MID-SIZE	DOLLARS:	339.37	360.06	380.41	403.17	426.73
271		%GROWTH:	6.00	6.10	5.65	5.98	5.84
281							
291	FULL SIZE	DOLLARS:	382.86	405.71	428.05	453.08	478.96
301		%GROWTH:	5.88	5.97	5.50	5.85	5.71
311							
321	LUXURY	DOLLARS:	591.65	626.25	659.83	697.72	736.87
331		%GROWTH:	5.75	5.85	5.36	5.74	5.61
341							
351		TRANSPORTATION CHARGES:					
361							
371	SUBCOMPACT	DOLLARS:	139.15	147.40	155.62	162.93	169.32
381		%GROWTH:	6.75	5.93	5.57	4.70	3.92
391							
401	COMPACT	DOLLARS:	188.50	200.50	214.50	228.80	244.50
411		%GROWTH:	7.29	6.37	6.98	6.67	6.86
421							
431	MID-SIZE	DOLLARS:	234.55	254.36	274.50	292.74	308.92
441		%GROWTH:	9.67	8.45	7.92	6.65	5.53
451							
461	FULL SIZE	DOLLARS:	287.02	312.73	338.96	362.82	384.05
471		%GROWTH:	10.26	8.96	8.39	7.04	5.85
481							
491	LUXURY	DOLLARS:	292.10	317.70	345.60	376.00	409.00
501		%GROWTH:	8.79	8.76	8.78	8.80	8.78

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THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.07 DOMESTIC AUTO PRICES - CONTINUED

LINE	I T E M		1975	1976	1977	1978	1979	1980
11	BASE PRICE: FIXED-WTD AVG TOT	DOLLARS:	4251.	4439.	4791.	5103.	5197.	5675.
21		%GROWTH:	14.99	4.41	7.94	6.51	5.76	5.15
31								
41	SUBCOMPACT	DOLLARS:	3163.	3302.	3564.	3796.	4015.	4222.
51		%GROWTH:	14.99	4.41	7.94	6.51	5.76	5.15
61								
71	COMPACT	DOLLARS:	3367.	3515.	3794.	4041.	4274.	4494.
81		%GROWTH:	14.93	4.41	7.94	6.51	5.76	5.15
91								
101	MID-SIZE	DOLLARS:	3898.	4070.	4393.	4679.	4949.	5203.
111		%GROWTH:	14.98	4.41	7.94	6.51	5.76	5.15
121								
131	FULL SIZE	DOLLARS:	4378.	4571.	4934.	5255.	5558.	5845.
141		%GROWTH:	15.02	4.41	7.94	6.51	5.76	5.15
151								
161	LUXURY	DOLLARS:	7094.	7407.	7996.	8516.	9007.	9471.
171		%GROWTH:	15.00	4.41	7.94	6.51	5.76	5.15
181								
191	MAX OPT PRICE: FIXED-WTD AVG	DOLLARS:	1305.73	1377.30	1458.59	1535.43	1607.32	1674.50
201		%GROWTH:	10.46	5.48	5.90	5.27	4.68	4.18
211								
221	SUBCOMPACT	DOLLARS:	1169.61	1233.73	1306.54	1375.37	1439.76	1499.94
231		%GROWTH:	6.34	5.48	5.90	5.27	4.68	4.18
241								
251	COMPACT	DOLLARS:	1234.59	1302.27	1379.12	1451.78	1519.75	1583.27
261		%GROWTH:	8.50	5.48	5.90	5.27	4.68	4.18
271								
281	MID-SIZE	DOLLARS:	1286.57	1357.10	1437.19	1512.90	1583.74	1649.94
291		%GROWTH:	9.97	5.48	5.90	5.27	4.68	4.18
301								
311	FULL SIZE	DOLLARS:	1325.56	1398.22	1480.74	1558.75	1631.73	1699.94
321		%GROWTH:	10.51	5.48	5.90	5.27	4.68	4.18
331								
341	LUXURY	DOLLARS:	1520.49	1603.84	1698.50	1787.98	1871.69	1949.93
351		%GROWTH:	17.41	5.48	5.90	5.27	4.68	4.18
361								
371	VALUE OF OPTIONS INSTALLED:							
381	SUBCOMPACT	DOLLARS:	325.89	359.45	401.09	440.01	472.32	503.15
391		%GROWTH:	-3.50	10.30	11.58	9.70	7.34	6.53
401								
411	COMPACT	DOLLARS:	602.56	640.94	690.28	737.06	791.56	853.00
421		%GROWTH:	9.17	6.37	7.70	6.78	7.39	7.76
431								
441	MID-SIZE	DOLLARS:	907.43	962.66	1030.01	1091.40	1159.44	1232.90
451		%GROWTH:	14.92	6.09	7.00	5.96	6.23	6.34
461								
471	FULL SIZE	DOLLARS:	1045.23	1127.99	1203.44	1274.04	1348.13	1426.53
481		%GROWTH:	13.72	5.89	6.69	5.87	5.82	5.67
491								
501	LUXURY	DOLLARS:	1354.15	1431.09	1521.64	1607.87	1693.28	1777.18
511		%GROWTH:	17.20	5.68	6.33	5.67	5.31	4.95

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THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.07 DOMESTIC AUTO PRICES - CONTINUED

LINE	ITEM		1981	1982	1983	1984	1985
11	BASE PRICE: FIXED-WTD AVG TOT	DOLLARS:	5891,	6124,	6335,	6501,	6820,
21		%GROWTH:	3,80	3,96	3,45	3,88	3,74
31							
41	SUBCOMPACT	DOLLARS:	4382,	4556,	4713,	4896,	5079,
51		%GROWTH:	3,80	3,96	3,45	3,80	3,74
61							
71	COMPACT	DOLLARS:	4665,	4849,	5017,	5212,	5407,
81		%GROWTH:	3,80	3,96	3,45	3,88	3,74
91							
101	MID-SIZE	DOLLARS:	5401,	5615,	5809,	6034,	6260,
111		%GROWTH:	3,80	3,96	3,45	3,88	3,74
121							
131	FULL SIZE	DOLLARS:	6667,	6907,	7228,	7778,	8331,
141		%GROWTH:	3,80	3,96	3,45	3,88	3,74
151							
161	LUXURY	DOLLARS:	9831,	10219,	10572,	10983,	11398,
171		%GROWTH:	3,80	3,96	3,45	3,80	3,74
181							
191	MAX OPT PRICE: FIXED-WTD AVG	DOLLARS:	1729,85	1783,91	1833,86	1887,67	1942,42
201		%GROWTH:	3,31	3,13	2,80	2,93	2,90
211							
221	SUBCOMPACT	DOLLARS:	1549,52	1597,35	1642,69	1690,89	1739,93
231		%GROWTH:	3,31	3,13	2,80	2,93	2,90
241							
251	COMPACT	DOLLARS:	1635,60	1686,72	1733,95	1784,83	1836,59
261		%GROWTH:	3,31	3,13	2,80	2,93	2,90
271							
281	MID-SIZE	DOLLARS:	1704,47	1757,74	1806,96	1859,98	1913,93
291		%GROWTH:	3,31	3,13	2,80	2,93	2,90
301							
311	FULL SIZE	DOLLARS:	1756,12	1811,01	1861,72	1916,34	1971,92
321		%GROWTH:	3,31	3,13	2,80	2,93	2,90
331							
341	LUXURY	DOLLARS:	2014,37	2077,53	2135,50	2198,16	2261,91
351		%GROWTH:	3,31	3,13	2,80	2,93	2,90
361							
371	VALUE OF OPTIONS INSTALLED:						
381	SUBCOMPACT	DOLLARS:	531,59	561,99	596,64	632,88	671,58
391		%GROWTH:	5,65	5,70	6,18	6,00	6,19
401							
411	COMPACT	DOLLARS:	909,64	968,23	1030,41	1093,89	1160,10
421		%GROWTH:	6,64	6,44	6,42	6,16	6,05
431							
441	MID-SIZE	DOLLARS:	1297,67	1363,72	1431,04	1499,61	1569,54
451		%GROWTH:	5,25	5,09	4,98	4,79	4,66
461							
471	FULL SIZE	DOLLARS:	1490,65	1556,67	1621,79	1688,67	1756,59
481		%GROWTH:	4,64	4,43	4,18	4,12	4,02
491							
501	LUXURY	DOLLARS:	1844,37	1918,35	1985,27	2055,30	2126,49
511		%GROWTH:	4,01	3,79	3,49	3,53	3,44

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THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.00 FOREIGN AUTO PRICES

LINE	ITEM		1975	1976	1977	1978	1979	1980
11	TOTAL AUTO PRICES:							
21								
31	SUBCOMPACT	DOLLARS:	3907.	4222.	4402.	4629.	4869.	5135.
41		%GROWTH:	3.39	8.06	4.26	5.16	5.10	5.48
51								
61	COMPACT	DOLLARS:	6435.	7052.	7385.	7820.	8313.	8875.
71		%GROWTH:	9.93	9.58	4.72	5.89	6.31	6.76
81								
91	LUXURY	DOLLARS:	12692.	14143.	14911.	15936.	17093.	18616.
101		%GROWTH:	13.39	11.43	5.43	6.87	7.26	7.78
111								
121								
131	STATE AND LOCAL TAXES:							
141								
151	SUBCOMPACT	DOLLARS:	165.54	182.29	193.38	206.82	221.33	237.42
161		%GROWTH:	4.79	10.12	6.08	6.95	7.01	7.27
171								
181	COMPACT	DOLLARS:	273.78	305.73	325.78	350.99	379.65	412.43
191		%GROWTH:	11.55	11.67	6.54	7.74	8.16	8.64
201								
211	LUXURY	DOLLARS:	543.50	617.01	661.87	719.64	785.33	860.87
221		%GROWTH:	15.07	13.52	7.27	8.73	9.13	9.62
231								
241								
251	TRANSPORTATION CHARGES:							
261								
271	SUBCOMPACT	DOLLARS:	95.18	96.89	101.56	109.33	116.04	125.12
281		%GROWTH:	9.26	1.80	4.81	7.65	6.18	7.82
291								
301	COMPACT	DOLLARS:	131.10	133.70	140.60	150.20	160.50	171.40
311		%GROWTH:	11.10	1.98	5.16	6.83	6.86	6.79
321								
331	LUXURY	DOLLARS:	177.00	181.50	193.50	210.50	228.90	249.10
341		%GROWTH:	14.46	2.54	6.61	8.79	8.74	8.82
351								
361								
371	BASE PRICES:							
381								
391	SUBCOMPACT	DOLLARS:	3320.	3583.	3706.	3873.	4059.	4270.
401		%GROWTH:	3.88	7.92	3.42	4.51	4.82	5.19
411								
421	COMPACT	DOLLARS:	5428.	5971.	6228.	6562.	6981.	7438.
431		%GROWTH:	9.91	10.02	4.30	5.68	6.07	6.54
441								
451	LUXURY	DOLLARS:	10617.	11915.	12534.	13398.	14386.	15529.
461		%GROWTH:	12.81	12.21	5.21	6.89	7.37	7.93

A PRODUCT OF WHARTON EFA, INC.

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.0A FOREIGN AUTO PRICES

LINE	T I T L E		1981	1982	1983	1984	1985
11	TOTAL AUTO PRICES:						
21							
31	SUBCOMPACT	DOLLARS	5809.	5688.	5964.	6241.	6522.
41		%GROWTH	5.32	5.08	4.93	4.65	4.50
51							
61	COMPACT	DOLLARS	9461.	10054.	10660.	11267.	11885.
71		%GROWTH	6.60	6.27	6.02	5.70	5.49
81							
91	LUXURY	DOLLARS	19812.	21241.	22702.	24182.	25700.
101		%GROWTH	7.58	7.21	6.88	6.52	6.27
111							
121							
131	STATE AND LOCAL TAXES:						
141							
151	SUBCOMPACT	DOLLARS	254.34	271.89	290.22	309.02	328.60
161		%GROWTH	7.13	6.90	6.78	6.48	6.34
171							
181	COMPACT	DOLLARS	447.30	483.69	521.72	560.97	601.95
191		%GROWTH	8.45	8.14	7.86	7.52	7.30
201							
211	LUXURY	DOLLARS	942.20	1027.69	1117.33	1210.66	1300.68
221		%GROWTH	9.45	9.07	8.72	8.35	8.10
231							
241							
251	TRANSPORTATION CHARGES:						
261							
271	SUBCOMPACT	DOLLARS	133.98	142.29	150.56	157.92	164.35
281		%GROWTH	7.08	6.20	5.81	4.89	4.07
291							
301	COMPACT	DOLLARS	183.90	195.60	209.00	223.20	238.50
311		%GROWTH	7.29	6.36	6.85	6.79	6.85
321							
331	LUXURY	DOLLARS	271.00	296.70	320.60	348.80	379.40
341		%GROWTH	8.79	8.75	8.79	8.80	8.77
351							
361							
371	BASE PRICES:						
381							
391	SUBCOMPACT	DOLLARS	4489.	4708.	4926.	5142.	5358.
401		%GROWTH	5.13	4.88	4.64	4.37	4.19
411							
421	COMPACT	DOLLARS	7920.	8406.	8898.	9389.	9884.
431		%GROWTH	6.47	6.15	5.85	5.51	5.28
441							
451	LUXURY	DOLLARS	16750.	18000.	19279.	20567.	21885.
461		%GROWTH	7.86	7.46	7.10	6.69	6.41

A PRODUCT OF WHARTON EFA, INC.

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.00 USED CAR MARKET

LINE	ITEM		1975	1976	1977	1978	1979	1980
1	AVERAGE WHOLESALE PRICE	DOLLARS	2008.71	2158.37	2242.45	2416.73	2602.18	2779.61
2		%GROWTH	5.20	7.45	3.90	7.77	7.67	6.82
3								
4								
5	PRICE OF 1 YR OLD CAR/NEW CAR							
6								
7	SUBCOMPACT	RATIO	0.873	0.860	0.798	0.787	0.808	0.808
8		%GROWTH	3.01	-1.51	-7.21	-1.32	2.17	-0.05
9								
10	COMPACT	RATIO	0.824	0.739	0.731	0.710	0.725	0.724
11		%GROWTH	3.32	-10.26	-1.12	-2.86	2.05	-0.06
12								
13	MID-SIZE	RATIO	0.634	0.704	0.635	0.642	0.648	0.651
14		%GROWTH	-10.34	10.85	-9.88	1.06	0.94	0.55
15								
16	FULL SIZE	RATIO	0.646	0.695	0.591	0.588	0.613	0.616
17		%GROWTH	0.10	7.63	-14.86	-0.62	4.31	0.65
18								
19	LUXURY	RATIO	0.715	0.743	0.689	0.687	0.700	0.700
20		%GROWTH	4.59	3.97	-7.29	-0.29	1.90	0.07
21								
22								
23	TOTAL USED CARS PURCHASED	MILL. AUTOS	16.94	18.66	15.78	15.39	14.77	17.39
24		%GROWTH	22.74	10.17	-15.42	-2.49	8.98	3.68

A PRODUCT OF WHARTON EFA, INC.

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.09 USED CAR MARKET

LINE	I T F M		1981	1982	1983	1984	1985	
1		AVERAGE WHOLSALE PRICE	DOLLARS	2933.87	3076.41	3214.23	3354.81	3504.38
2			%GROWTH	5.54	4.87	4.48	4.37	4.46
3								
4								
5		PRICE OF 1 YR OLD CAR/NEW CAR:						
6								
7		SUBCOMPACT	RATIO	0.798	0.798	0.797	0.797	0.800
8			%GROWTH	-0.70	-0.03	-0.19	-0.01	0.46
9								
10		COMPACT	RATIO	0.712	0.708	0.705	0.706	0.707
11			%GROWTH	-1.74	-0.45	-0.50	0.15	0.21
12								
13		MID-SIZE	RATIO	0.653	0.651	0.652	0.652	0.654
14			%GROWTH	0.31	-0.30	0.17	-0.07	0.33
15								
16		FULL SIZE	RATIO	0.619	0.618	0.620	0.618	0.624
17			%GROWTH	0.50	-0.10	0.27	-0.34	0.91
18								
19		LUXURY	RATIO	0.701	0.701	0.702	0.701	0.704
20			%GROWTH	0.14	-0.05	0.12	-0.17	0.41
21								
22								
23		TOTAL USED CARS PURCHASED	MILL AUTOS	17.33	17.62	17.99	18.13	18.58
24			%GROWTH	-0.36	1.69	2.10	0.77	2.48

A PRODUCT OF WHARTON EFA, INC.

THE WHARTON FFA AUTOMOBILE DEMAND MODEL

TABLE 1.10 UNADJUSTED SHARES BY SIZE CLASS

LINE	I T F M	1975	1976	1977	1978	1979	1980
11	DESIRED SHARES IN STOCK						
21	BEFORE RECONCILING SUM TO 1.0						
31							
41	SUBCOMPACT & COMPACT	0.4210	0.4022	0.3940	0.3921	0.3937	0.3975
51							
61	MID-SIZE	0.2657	0.2691	0.2696	0.2709	0.2712	0.2719
71							
81	FULL SIZE	0.2253	0.2579	0.2728	0.2770	0.2775	0.2664
91							
101	LUXURY	0.0922	0.0923	0.0920	0.0920	0.0928	0.0941
111							
121	TOTAL	1.0041	1.0216	1.0283	1.0319	1.0352	1.0298
131							
141							
151	DESIRED SHARES IN NEW REGISTRATIONS						
161	BEFORE RECONCILING SUM TO 1.0						
171							
181	SUBCOMPACT & COMPACT	0.5093	0.4172	0.4122	0.4028	0.3995	0.4054
191							
201	MID-SIZE	0.2281	0.3008	0.2852	0.2810	0.2754	0.2753
211							
221	FULL SIZE	0.1686	0.1863	0.2252	0.2417	0.2511	0.2433
231							
241	LUXURY	0.0941	0.0958	0.0940	0.0934	0.0944	0.0961
251							
261	TOTAL	1.0001	1.0001	1.0166	1.0188	1.0203	1.0201

A PRODUCT OF WHARTON FFA, INC.

THE WHARTON EFA AUTOMOBILE DEMAND MODEL

TABLE 1.10 UNADJUSTED SHARES BY SIZE CLASS

LINE	ITEM	1981	1982	1983	1984	1985
1	DESIRED SHARES IN STOCK					
2	BEFORE RECONCILING SUM TO 1.0					
3						
4	SUBCOMPACT & COMPACT	0.4009	0.4032	0.4031	0.4035	0.4027
5						
6	MID-SIZE	0.2729	0.2732	0.2739	0.2745	0.2750
7						
8	FULL SIZE	0.2555	0.2512	0.2502	0.2498	0.2488
9						
10	LUXURY	0.0954	0.0966	0.0979	0.0991	0.1003
11						
12	TOTAL	1.0246	1.0243	1.0251	1.0265	1.0267
13						
14						
15	DESIRED SHARES IF NEW REGISTRATIONS					
16	BEFORE RECONCILING SUM TO 1.0					
17						
18	SUBCOMPACT & COMPACT	0.4111	0.4130	0.4113	0.4107	0.4098
19						
20	MID-SIZE	0.2758	0.2725	0.2703	0.2686	0.2682
21						
22	FULL SIZE	0.2348	0.2346	0.2374	0.2386	0.2390
23						
24	LUXURY	0.0979	0.0996	0.1012	0.1026	0.1040
25						
26	TOTAL	1.0197	1.0196	1.0203	1.0204	1.0206

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