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AUTOMOBILE MARKETING STRATEGIES, PRICING, AND PRODUCT PLANNING

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16. Abstract

This study examines the problems and practices of the U.S. automobile industry in three areas - product planning, pricing, and marketing. Each of these areas is analyzed from the viewpoint of how current procedures inhibit or prevent the increased manufacture and sales of U.S. cars that are more efficient with respect to fuel economy. Some suggestions and recommendations are made as to how some of the obstacles may be overcome.

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PREFACE

This report, which is intended to provide insight into the U.S. auto industry product planning, pricing and marketing practices, summarizes the work done for DOT's Transportation Systems Center. The report addresses each of these areas and also relates these practices to the issue of understanding the problems and potential of obtaining customer acceptance of fuel-efficient U.S.-produced vehicles.

This report is the joint effort of three people - H.M. Siegel, Vice President Automotive Operations for ASL Engineering of Goleta, California, and Tom Burrows and Charles LaCivita, Ph.D. candidates attending the University of California Santa Barbara.

This study is based on personal experienced gained by working for three auto manufacturers in the pertinent fields of concern, supplemented by an extensive literature search and field investigations. In only one instance was information sought directly from the manufacturers and only two of the four manufacturers responded, with little information being provided. It is understandable that auto manufacturers were reluctant to provide information in the areas they viewed as being proprietary.

It is hoped that this report proves useful to TSC and to the NHTSA Automotive Fuel Economy Regulatory Program personnel by providing recommendations that may be useful in the task of achieving a more fuel-efficient fleet of vehicles on our nation's highways.

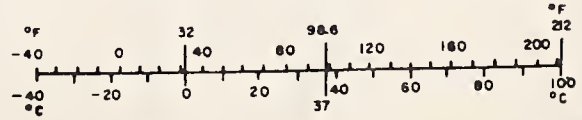
METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
		AREA		
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
		MASS (weight)		
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
		VOLUME		
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
		TEMPERATURE (exact)		
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
		AREA		
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares (10.000 m^2)	2.5	acres	
		MASS (weight)		
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
		VOLUME		
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	35	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
		TEMPERATURE (exact)		
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



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1. EXECUTIVE SUMMARY

This study, conducted for TSC and the NHTSA Automotive Fuel Economy Regulatory personnel, is intended to provide these groups with insight into some of the key areas affecting any shift to a more fuel-efficient automotive fleet.

The areas reviewed are industry practices in:

a. Product Planning
b. Pricing
c. Marketing.

The report contains a descriptive summary of how the companies operate in each area and how these processes need to be understood and utilized by the regulatory personnel. Understandably, auto industry members are reluctant to discuss those proprietary areas that lie at the heart of their profitability. However, by using a combination of directly related experience in the employ of three of the U.S. companies, and a literature and field research effort, it is believed that the findings, conclusions, and recommendations contained in the report are valid.

A fuel-efficient vehicle mix meeting a reasonable timetable can be achieved by industry as long as interrelated requirements such as auto emissions and safety are clearly defined in time and are achievable within the same time frame. This report addresses the issue of what constitutes a reasonable timetable, recognizing the capacity limitations of the industry members and their suppliers to accomplish a dramatic rate of new product change.

A missing link in the advancement of fuel-efficient vehicles has been identified. With regulatory requirements placed upon the manufacturers, and the possibility of tax rebates or penalties placed upon the new car buyer, these two groups will have incentives to produce and buy a more fuel-efficient mix of vehicles. The missing link is the independent dealer organization and salespeople who carry out the key role of selling a car to a buyer.

Under current plans, there is no incentive or penalty for the dealers and they continue to place emphasis on profitability, thus biasing their effort toward the traditionally larger, higher priced, less fuel-efficient vehicles. We believe this is an important issue that must be faced by regulatory personnel.

2. INTRODUCTION

2.1 U.S. MARKET DEVELOPMENT AFTER THE SECOND WORLD WAR

To understand better what is required to achieve a fuel-efficient automotive fleet in the U.S. market, it is worth reviewing the factors that led the U.S. automotive fleet to be so different from the vehicles in use in the other advanced societies.

At the end of the second world war, the U.S. auto industry resumed automobile production with vehicles approximately the size of today's compact to intermediate sized cars. Each brand name usually offered only one size and name vehicle in "standard" and "deluxe" versions starting with a relatively fuel-efficient mix of vehicles. With each successive new model introduced, the manufacturers made the cars larger, higher-priced, and less fuel-efficeint. In a climate of cheap gasoline prices and a booming but cyclical economy, sales and profits increased dramatically for the U.S. auto industry. The industry was apparently providing the market with the vehicles that buyers wanted.

The impact of imported cars, mostly the smaller, fuel-efficient models, began to be of concern to the domestic manufacturers in the late 1950's. The American consumer began to buy, with careful discrimination, those cars that offered low price, good economy, and most important, reliability and durability. Volkswagen, which had all of these attributes, prospered. Fiat and Renault and some of the British manufacturers introduced cars that were fuel-efficient but which were not durable, reliable, and/or suited to the U.S. market. These entries did well until the reliability and durability problems caught up with them, and interestingly, both Fiat and Renault have never been able to do well in the U.S. market since that time, even with vastly improved current products. The U.S. buyers apparently will not accept the new Fiat and Renault offerings, and their dealer organizations, required to achieve high volume sales, are inadequate to do the job of selling the cars. Why the cars are not selling is likely

due to both non-acceptability as well as dealership inadequacies, but an analysis may show the key factor is now the lack of a dealer network that will risk its private capital without assurance of success.

After showing initial indifference to the Volkswagen, the U.S. auto industry finally became concerned, and in 1960, introduced the Falcon, Corvair, and Valiant--the U.S. answer to VW. These cars, although lower in price and more fuel-efficient than the full-sized offerings, did well in the marketplace but did not have any appreciable effect on Volkswagen. They did, however, have a significant effect on the U.S. manufacturers. It turned out that the U.S. manufacturers did not see any significant increase in sales volume due to these new entries, but rather, found substitution sales taking place with low priced, low profit Falcons, Corvairs, and Valiants substituting for full-sized Fords, Chevrolets and Plymouths.

Faced with lower overall profits as result of producing small cars, the U.S. industry used new concepts to improve its profits. One answer was to utilize the new lightweight, lower cost components to create the Mustang, Barracuda, Econoline, and Chevrolet Greenbrier product entries that would offset the profit effect of the substitution and that could use the image pricing of the new product entries to yield higher per unit profits.

This product complexity and the proliferation of new models has continued to date with the new entries in each segment of the market intended to improve the market penetration and profitability of each manufacturer.

Until the 1973 energy crisis, fuel-efficient vehicles had not been a major concern of the U.S. auto industry and the actions taken by the industry at that time showed more short-term concern with profits rather than concern with the promotion of the sale of more fuel-efficient cars.

2.2 IMPACT OF THE 1973 ENERGY CRISIS

Concurrent with the 1973 energy crisis, wage and price constraints were placed on the auto industry. With rampant inflation, the industry had justification to raise prices and was given authorization approximately every six months to do so. Industry price control guidelines were for the average price of cars sold by a manufacturer, and each manufacturer was given the right to decide how to spread the increase. With the sales of large cars faltering for a time due to the energy crisis and oil embargo, and with the prices of imported cars escalating due to inflation and currency devaluations in Germany and Japan, the U.S. industry chose to raise small car prices disproportionately to the prices of the larger cars. Over a period of time, this led to a situation that has discouraged buyers from selecting the small cars - a subject covered in Section 5 of this report.

2.3 FACTORS AFFECTING FOREIGN MANUFACTURERS

It is interesting to note that during these postwar years, the autos produced in Europe and Japan continue to be the smaller and more fuel-efficient types. The factors leading to this are both unregulated and regulated policy of the countries involved. Using West Germany as an example, these factors are:

Unregulated

a. The price of new cars vs. buyers' net earnings is substantially higher than in the U.S., thus favoring small cars which are more fuel-efficient.
b. Auto insurance cost is based on engine horsepower. Since horsepower is a function of engine displacement, small cars have reasonable performance and minimal insurance costs.

Regulated

a. Gasoline is expensive due to taxes. Prices which are higher than current U.S. prices have been in effect for years.

b. Annual registration fees are based on engine displacement and the fees are high.

Equivalent or more severe regulations are in effect throughout Europe and have been effective in keeping cars small, engine displacement small, and vehicles fuel efficient. Fuel economy has not been regulated, but the market forces have been focused to achieve the same end result.

2.4 FUEL ECONOMY STANDARDS

With respect to fuel economy standards, it is important for NHTSA to continue to promulgate attainable standards for average fleets and to refrain from giving the industry any specific vehicle design requirements. As the motoring public becomes more conscious of the need to drive more fuel-efficient vehicles, the manufacturers who have achieved compliance with the fuel economy standards in the most innovative way will gain market share and prifitability. Small cars with good fuel economy need not be cheap, drab, stripped models. The success of Honda in the U.S. auto market and the outstanding success of the Honda Accord provide examples of what can be achieved with well styled, luxurious, fuel-efficient small cars.

3. CONCLUSIONS AND RECOMMENDATIONS

This section of the report is intended to summarize the conclusions reached after researching the limited number of areas considered at this time.

To permit more effective use of this study, there is a separate subsection covering conclusions and recommendations. Within each subsection each of the main topic areas that are contained in the following sections of this report is treated separately.

3.1 CONCLUSIONS

The results of this study support the following conclusions:

3.1.1 Industry Decision Making Process

Product Planning Organization and Decision Making Process

A rather complex decision-by-committee process is used to formulate and approve plans for new products. In most companies the marketing personnel play a minor supportive role with the product group (product planning, product engineering and styling) in the position of primary responsibility.

Typical Product Planning Decision Making Process

The auto industry decision-making process usually involves two or three committees which review product direction before the top level decision-making committee takes action. The overriding factor in these decisions is profitability. Actions such as those required to meet fuel economy regulations are difficult since they largely result in lower operating profit margins.

New Model Constraints

The ability of the auto industry to accomplish a rapid product changeover such as downsizing cars is limited by several key factors which include:

a. New Model Lead Time Requirements
Auto companies require from 24 to 36 months to introduce a new model from the time that advanced engineering work starts. The re-skinning of existing models using carry-over frame, chassis and body inner panels would take 19 to 24 months, but this latter level of change would not impact fuel efficiency as the vehicle weight would remain unchanged.

b. Manufacturers' Capacity to Develop New Models
Practical limitations to develop new models are determined by manpower, equipment, and financial constraints. As a general rule, a company can only introduce one new body shell per year - the approach GM is using to downsize their cars. This is the reason it would take 5 to 6 years from a decision date to accomplish a complete change in all car lines.

c. Supplier Constraints to Rate of Change
In addition to their internal constraints, key supplier capacity limitations prevent companies from more rapid rates of change. These limitations exist in:

1. Design - Job Shops
2. Die Models
3. Tooling
4. Machine Tools

Impact of Interrelated Regulatory Requirements

Interrelated requirements that are not firmly established, such as fuel economy and emissions, result in inordinate delays in the decision making process. Manufacturers move with caution due to the magnitude of investments. The rate of dieselizetion utilized to achieve economy improvements is dependent on the long term NoX requirement; therefore, auto companies have moved cautiously with plans to introduce diesel engines.

3.1.2 Industry Pricing

Industry Approach to Pricing

The automakers use both image and cost pricing for their products.

Image Pricing

Image pricing, which allows the manufacturers to decide where a car fits in the market, is more profitable than cost pricing and is used whenever possible. Examples of cars with prices based on image rather than cost are the Cadillac Seville, Ford Granada, Mercury Monarch and Lincoln Versailles.

Cost Pricing

Cost pricing is used in two ways: First, it is used to establish a target price for a new model introduced to compete against another manufacturer's existing model. Second, it is used to determine annual price adjustments. In the last five years, the smaller models have received a disporportionate share of the annual price increase.

Dealer Discounts

The dealer discount is the percentage of the "sticker" price the dealer receives as his profit. Discounts are smaller on the smaller models. This, combined with the fact that small car prices are close to those of the larger models, has made it easier and more profitable for dealers to sell the larger models. This discount practice is unique to the auto industry; most other products provide a constant markup/discount percentage for the retailer.

3.1.3 Marketing Techniques

In most situations, rebate programs have been found to be effective in the short term in reducing inventories of unwanted cars. The reason for this is that they effectively change the usual price structure of the industry, giving the consumer the financial incentive necessary to purchase the previously slow moving vehicle. The currently existing price structure,

considering both the retail price and the size of the discount available on different classes of automobiles (see Section 5), provides little in the way of incentives toward the purchase of smaller, fuel-efficient vehicles.

Advertising can be extremely effective in promoting new vehicle concepts as evidenced by the Ford MPG campaign, the GM downsizing effort, and the AMC Buyer Protection Plan. However, advertising alone (in the absence of external factors such as the oil embargo) will not sell a vehicle which is perceived to be of poor quality, a problem which plagued the Vega, nor will it sell a car which is improperly priced relative to other models. Examples of this are apparent with virtually all domestic small cars.

Sales training and promotion programs can be effective in increasing the sale of desired vehicle types. This was demonstrated in GM's downsizing campaign as well as the recent "Fortune Four" promotion offered by Ford to its salesmen and dealers. Training programs could also be implemented to educate sales staff as to the advantages of small car ownership.

Financial incentives to dealers and salesmen have also been demonstrated to be effective in selling desired vehicle types. Examples of this are the various contests and bonus schemes periodically sponsored by manufacturers.

The possibility of changing the current factory-dealer relationship is examined on a somewhat hypothetical level in the main text of this study. However, any attempts to modify this strongly entrenched relationship would probably meet so much resistance as to make it unfeasible.

Dealers and Salespeople

In the chain between auto manufacturer and car buyer, there is an important link - the dealer and his salesmen - and this is a missing link in the effort to sell fuel-efficient vehicles. The manufacturers are regulated by fuel economy standards and the buyers may get rebates for fuel-efficient vehicles and may pay extra taxes on the less fuel efficient vehicles. However, the

dealer and his salesmen are aloof to these factors and make more money selling the larger, less fuel-efficient vehicles.

Financial Constraints

In order to meet the 1985 fuel efficiency standards, the automakers will have to spend approximately $45 billion in capital investments, with the bulk of this amount to be spent by 1980. This compares to $36 billion in capital spending for the previous ten-year period. Given a healthy economy, the automakers should be able to make the capital expenditures necessary, with the possible exception of AMC.

Implications of Fuel Efficiency Compliance

The implications of the fuel efficiency standards on the automakers are clear. The changes the industry will have to make in their products to meet the standards will constitute the greatest short-term change in their history. Huge sums of money are being committed to make these changes. Depressed economic conditions or a rejection of the newer, smaller models by the buying public could have a severe impact on the industry. Tightening the fuel efficiency or pollution standards after the automakers have committed themselves could prove disastrous.

3.2 RECOMMENDATIONS

This study is supportive of the following recommendations with respect to fuel efficiency regulations.

3.2.1 Recognition of Reasonable New Model Constraints

Timing and capacity constraints should be understood by the rule-making group within NHTSA. Further analysis may be warranted to establish guidelines for NHTSA use in setting required dates for industry compliance. These guidelines could avoid non-productive activities by the industry that cause delays to occur in complying with regulations.

An examination of the history of the air bag development and implementation provides an example of what must be avoided.

3.2.2 Coordination of Interrelated Standards

Fuel economy and emission standards must both be definitive with respect to standards and years of implementation. The current system with two different agencies responsible for rule-making is not efficient and should be changed.

3.2.3 Widening of Price and Cost of Ownership Differential Among Models

The use of rebates by the automakers (see Section 4) has shown that increasing the price differential between the larger and smaller models increases the percentage of small cars sold. Thus, a tax rebate scheme favoring fuel-efficient models should help to sell these models. However, the automakers' success with image pricing indicates that a one-time tax on larger models may not be enough to deter a sufficient number of people from buying the larger cars. Thus, an annual tax based on fuel efficiency, horsepower, etc., may be necessary to achieve the desired fuel efficient mix.

One strategy might be to impose some type of unusual tax rebate on the fuel-efficient vehicles, perhaps combined with a penalty on fuel-inefficient cars. This would serve to alter the price and cost of ownership structure sufficiently to give customers an incentive to purchase smaller cars.

We believe it is imperative, however, that this type of program be implemented in conjunction with some form of annual displacement, horsepower or mpg tax on fuel-inefficient vehicles. Otherwise, the one-time penalty tax might simply increase the "snob" value of the fuel-inefficient, and now more expensive, big car. The ability of the auto manufacturer to sell higher priced "snob" appeal products has been fully documented under image pricing. This tax should be uniformly applied in all states in order to eliminate both taxpayer complaints of unfairness as well as the creation of problems of avoidance.

It is often instructive to look at successful approaches to similar problems faced by others. The successful European practices outlined in the introduction to this study should prove useful in this regard.

3.2.4 Public Relations Campaign

The above recommendations should be integrated with a comprehensive public relations campaign run by the Government--a plan similar in nature to the exhaustive GM downsizing advertising campaign. This effort should be implemented with government-sponsored campaigns in the media, emphasizing the benefits of fuel-efficient automobile ownership, and perhaps singling out specific models which meet prescribed standards. This could be an incentive for manufacturers since the Federal Government would, in effect, be subsidizing their own advertising programs.

3.2.5 Dealership Level Incentives

Finally, some type of training and incentives should be offered at the dealership and sales level. Educational programs touting the benefits of driving fuel-efficient vehicles should be offered to sales staff. A rebate or tax credit should be offered to salespersons selling fuel efficient vehicles. Government grants could be used to provide salespersons with fuel efficient automobiles which would allow the salespersons to become more knowledgeable concerning the fuel efficient products. Also, a special tax credit to fleets and rental companies purchasing only fuel-efficient vehicles could get more of the product before the public.

4. INDUSTRY DECISION MAKING PROCESS

4.1 BACKGROUND

An examination has been conducted of the industry decision-making process and the pertinent factors that would be involved in the process of achieving more fuel-efficient vehicles. This review and analysis covers the many constraints that face the industry in responding to the demands of the market or of the government. The following material is not all-inclusive, but is intended to focus on how the industry companies go about planning new products.

4.2 PRODUCT PLANNING, ORGANIZATION, AND DECISION MAKING

Over the past twenty years, each of the four U.S. manufacturers has developed an organizational structure for assigning responsibility for new model planning and development. These structures are neither common to all companies nor stabilized within each company. In fact, it is likely that the organization of the product planning function has been one of the most frequently changed components of the operation.

4.2.1 The Product Planning Function

In each company, the organization of the product planning function covers three distinct phases of the new product development. These are:

1. Determination of New Vehicle Plans. This includes the specific function of determining what is required, when it is required, and the profitability of the action. Products can be required to meet an established market requirement, to keep up with competition, to meet government requirements or to move into new and promising market segments.

2. Development of Product Specifications. The proposed product is defined in complete part-by-part detail adequate to establish budgets for unit cost, investment, weight, performance, fuel economy, etc.

3. Monitoring the Performance of New Model Programs. The styling, engineering, and manufacturing phases of each program are monitored throughout the entire development process.

4.2.2 Auto Industry Organization of the Product Planning Function

As discussed earlier, each manufacturer has selected a different approach to the organization of its product planning effort.

One of the companies has a product planning organization headed by the Vice President of Product Planning. Organizationally, he reports to the Group Vice President, Product, who also has reporting to him not only Product Planning, but Styling, Product Engineering, and Safety and Emissions as well. The largest manufacturer has its product planning group reporting to the engineering organization while the second largest company currently has its product planning group reporting to the Vice President of Product Development. This company has been the one to change its organizational responsibilities most frequently and it has also been successful most often in being the industry leader with its new products. It has failed to be successful with respect to fuel efficiency and there have been a number of top level personnel changes as a result. The organization of the third largest manufacturer has changed often and their product planning group now reports to the Vice President of Product Development.

It should be noted that at this time, each company has its product planning function reporting to an element of its corporate product group and not to an entity that is responsible for marketing and selling the products in question. This had not been the case at two of the companies until recently.

4.2.3 Typical Product Planning Decision Making Process

The product planning group has the responsibility of determining new vehicle plans. These new vehicle plans must then be presented to at least three decision-making committees before a final decision is reached. A typical committee system is presented below and it should be noted that before these groups meet to deliberate and decide, there are other working level groups involving multi-disciplinary interests.

a. Products Group Staff

The lowest decision-making group, chaired by the Vice President, Product Group includes:

Vice President, Product Planning
Vice President, Styling
Vice President, Product Engineering
Executive Director, Safety and Emissions
Product Planning Manager, Committee Secretary

Note that only Product Group personnel are represented at the meetings that develop basic product direction alternatives.

b. Product Strategy Committee

All new product programs, changes in product direction, and details of product implementation are presented by the Product Planning group to arrive at a consensus and recommendations to the next highest level of responsibility. The committee is advisory. The committee is chaired by the Vice President, Product Planning and includes:

Vice President, Product Group
Vice President, Styling
Vice President, Product Engineering
Executive Director, Safety and Emissions
Vice President, Purchasing
Vice President, Manufacturing
Vice President, Fiannce

Vice President, International Operations
Vice President, Marketing and Sales
Product Planning Manager, Committee Secretary

Note that marketing and sales has one vote out of 10 committee members.

c. Product Committee

The product committee makes all significant decisions on new product development and reviews virtually all details of the vehicles during styling development. The committee is a small, top level, corporate group chaired by the Group Vice President, Product and includes:

Chairman of the Board
President
Vice Chairman of the Board
Executive Vice President
Vice President, Staff
Vice President, Finance

While the organization structure differs within each company, there is a common element of decision by committee.

4.3 NEW MODEL CONSTRAINTS

To provide insight into some of the more important constraints that determine the capability of the manufacturers to respond to new requirements, we have examined the following.

4.3.1 Lead Time Requirements

Using carryover engines modified to meet emission requirements, it takes manufacturers from 19 to 24 months to design, develop, tool, and start volume production. This time starts at clay model approval of the surface of the new vehicle and is usually preceded by up to six months of intensive, advanced engineering effort. Thus, it takes from 24 to 36 months from when a manufacturer is prepared to introduce a new product, to the start of the volume production. A typical timing chart is attached (Figure 1).

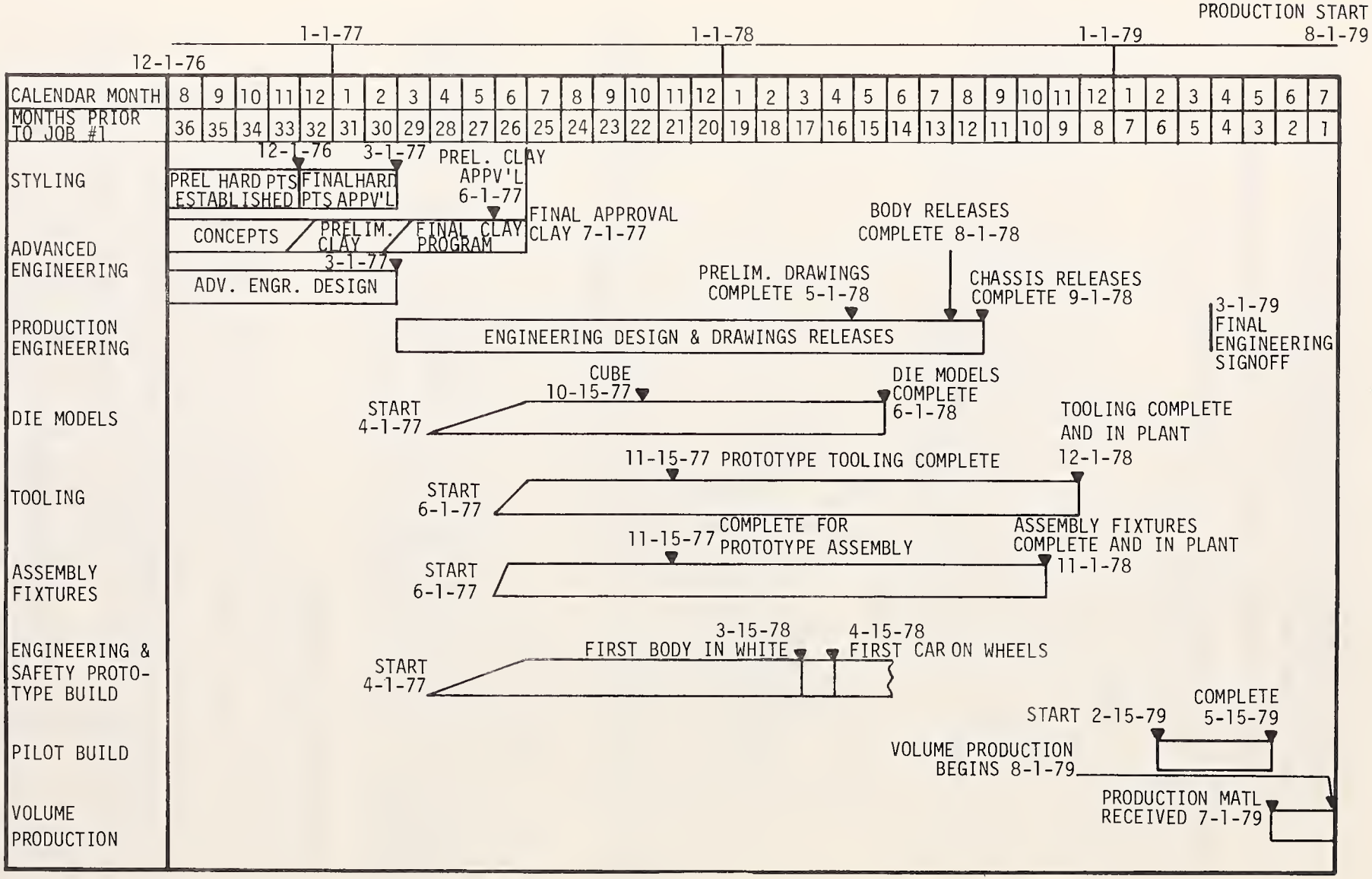

FIGURE 1. TYPICAL THEORETICAL NEW CAR PROGRAM 1980 COMPACT SCALE DOWN PROGRAM

While efforts can be made to expedite one car's introduction through use of extensive overtime, such an approach does not prove practical for expediting the complete restructuring of a manufacturer's products. The prolonged use of extensive overtime (20-30 hours/week) often results in productivity no greater than that achieved in a forty-hour week. A decrease in work quality, which is reflected in the quality and reliability of the new cars, often results.

4.3.2 Manufacturers' Capacity

Aside from the financial constraints, which will be discussed later, it must be recognized that there is a limitation placed on the rate of new model development that is based on manpower levels and facilities in styling, design, testing and development, and manufacturing. With a full commitment to downsize its vehicles, even GM is capable of doing only one major body shell at a time, thus taking 5 to 6 years to restructure its line. Ford, caught behind GM, is making an all-out effort to catch up to GM, but it will take Ford 4 to 5 years to change over all of its car lines and this will keep Ford at a disadvantage vs. GM. The current GM and Ford rate of change is optimal, and should be considered in any future regulatory requirements or incentive program that may be developed.

4.3.3 Supplier Capacity

In addition to its own internal constraints discussed above, the auto industry has become increasingly dependent on key suppliers in order to develop and introduce new models. These suppliers in turn have limited capacity and are not geared to meet an added load that may be contracted to them by the auto manufacturers. The key suppliers include:

(1) Automotive Design Companies and Job Shops

In recent years the auto industry has undergone major cutbacks in its personnel due to the economic impact of the 1973-74 recession. The areas cut the most have been in the styling and

design activities, as it was reasoned that required personnel could be obtained when new model programs dictated. The problem is that all of the manufacturers are hiring from the same limited pool of manpower at the same time. As a consequence, the job shop designers are now being paid high wages and are demanding as much as 58 hours a week to earn substantal overtime premium. There are instances of personnel leaving their place of employment to moonlight in another job shop and being paid time-and-a-half by the second shop for the hours worked.

Intense competition now exists to hire experienced design personnel with personnel being pirated to join a competitor who offers higher wages or more overtime.

(2) Die Models and Tooling

The production of new vehicles requires a process of fabricating full-sized mahogany models of each new body. These die models are then used as the guides from which the tooling is made to fabricate the stampings. Die model construction is a highly skilled art and in most companies all or a part of the die models are done by outside shops. These shops are capacity limited and can affect the ability of a manufacturer to accomplish a new model introduction.

Another potential bottleneck is the tooling itself. Tool making is a skilled trade and there are limitations on available tool hours in the U.S. and abroad. The tool industry is international in scope and U.S. manufacturers have made use of tool shops in Germany, Italy, Spain, Japan, Mexico, and Brazil. Availability of time in these other countries to absorb U.S. programs is dependent on their own home market manufacturers.

(3) Machine Tool Industry

Like other key industries that support Detroit manufacturers, the machine tool industry has capacity limitations. The components that could be limited by this capacity are engines and transmissions. While most of the initial gains in fuel economy are being realized by downsizing, weight reduction, and improved engine

efficiency (detailed changes involving little actual change to the engines), it is likely that the more stringent fuel economy requirements scheduled for 1985 may require more drastic basic redesigns of engines and transmissions. The industry should be in a position to plan its requirements now in order to secure a commitment from the machine tool industry. On the other hand, changes in emission direction that could force last-minute changes by the auto industry, could result in a problem.

4.4 MARKET ANALYSIS AND ECONOMIC FORECASTING

In an effort to gain insights into market analysis and economic forecasting procedures of the auto manufacturers, letters were sent to the Vice Presidents for Public Relations in each company. Only Chrysler and Ford responded.

We asked the manufacturers to respond to the following questions:

1. Forecasting of Market Size
   Do you employ outside consultants, use internal personnel or a combination of both? How frequently to you update the forecasts? What general techniques and tools do you use for forecasting? How is future economic climate projected?

2. Market Research
   In aggregate dollars, how much has been spent in each of the last 5 to 10 years for market research? What specific dollar allocations are made for the development of a typical model?

Of the two companies which responded to our inquiry, both gave general information in response to the first set of questions, and both claimed confidentiality on the second set.

Ford relies primarily on its own economic research. It updates forecasts at least once a month for one year into the future, and once a year for 7 to 10 years into the future. The principal technique used is an econometric model which relates car and truck

volumes to GNP (or industrial production) and the cost of ownership, as measured by a combination of such factors as new car price, gasoline price, fuel economy, repair costs, insurance, etc. These forecasts are combined into a general consensus involving the judgments of knowledgeable people in other departments of the Ford Motor Company. Ford also reviews various aspects of the economic growth, anticipated governmental regulatory requirements, and the international situation.

Chrysler too, uses internal personnel, but it relies more on some of the outside econometric service organizations such as Merrill Lynch, Chase Manhattan, the University of California Macroeconomic Forecast, and the Wharton Quarterly and Long Term Economic Forecast. Chrysler feels that this is less costly than doing original work. It tries, in addition, to incorporate the effects of sociological, technological, and political changes into its analysis of long and short-term demand for its product.

In regard to questions on market research, the Chrysler representative stated that no one division does all the market research for Chrysler Corp. He said that because of this dispersion, it would be very time-consuming to figure out exactly how much was spent company-wide on this function. Finally, he stated that even if the information were available, it would be considered proprietary.

Using these two companies as representative of the industry, it appears that most economic forecasting is a combination of art, human judgment, and science, using fairly sophisticated econometric models.

4.5 FINANCIAL CONSTRAINTS FOR NEW MODEL DEVELOPMENT

In order to meet the 1985 fuel efficiency standards, the automakers will have to spend approximately $45 billion in capital investments, with the bulk of this amount to be spent by 1980. To understand the magnitude of this amount, compare it to the $36 billion the Big Three spent on new models in the past ten years.

The forecast $45 billion is an increase of approximately $1 billion a year over the previous ten-year period.

4.5.1 Ability of Automakers to Make Required Expenditures

In general, the ability of the automakers to make the required capital expenditures depends on earnings. Earnings, in turn, depend on sales, and sales are dependent on a healthy economy. The profitability of the industry has declined in recent years. In a good year, GM can earn 7 percent on sales; Ford 5 percent; Chrysler, 4 percent; and AMC, 2 percent. Nevertheless, given a healthy economy, most industry analysts feel that the automakers will be able to make the necessary expenditures, with the exception of AMC.

4.5.2 Investments by Each Manufacturer

Of the individual companies, GM is one of the largest and most financially sound companies in the world. GM plans to spend $3 billion annually from 1977 to 1980 on capital expenditures, and will finance these investments with internal funds. The $3 billion annual figure represents an increase of nearly $1 billion a year over GM's $2.1 billion average for the 1970-75 period. This increased spending will be used to reduce in size GM's entire passenger car line. The downsizing began with the 1977 full-sized models and is scheduled for completion with the 1980 models.

Ford is planning to spend $2 billion on capital expenditures annually through 1980. This is a very significant increase over Ford's $1.2 billion average for the 1970-75 period. Although Ford is a very large and financially sound company, its ability to make these large expenditures is more dependent on sales and economic conditions than is GM. For example, the recession of 1975 caused Ford to curtail its capital spending sharply (see Figures 2 through 5). Ford is hoping to finance its investments internally, but adverse economic conditions and falling sales may force Ford to seek outside funding.

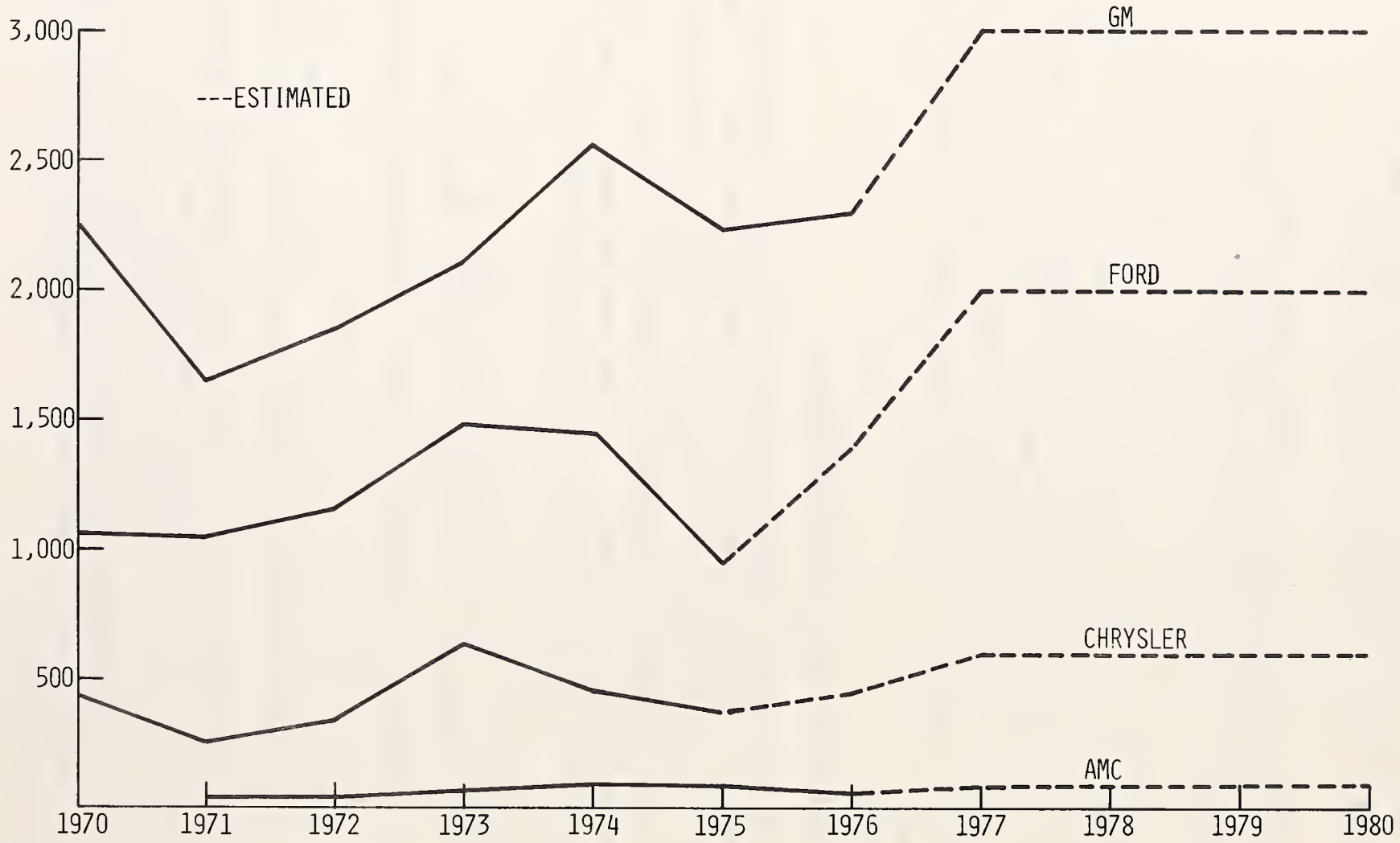

FIGURE 2. TOTAL CAPITAL EXPENDITURES (MILLIONS OF DOLLARS)

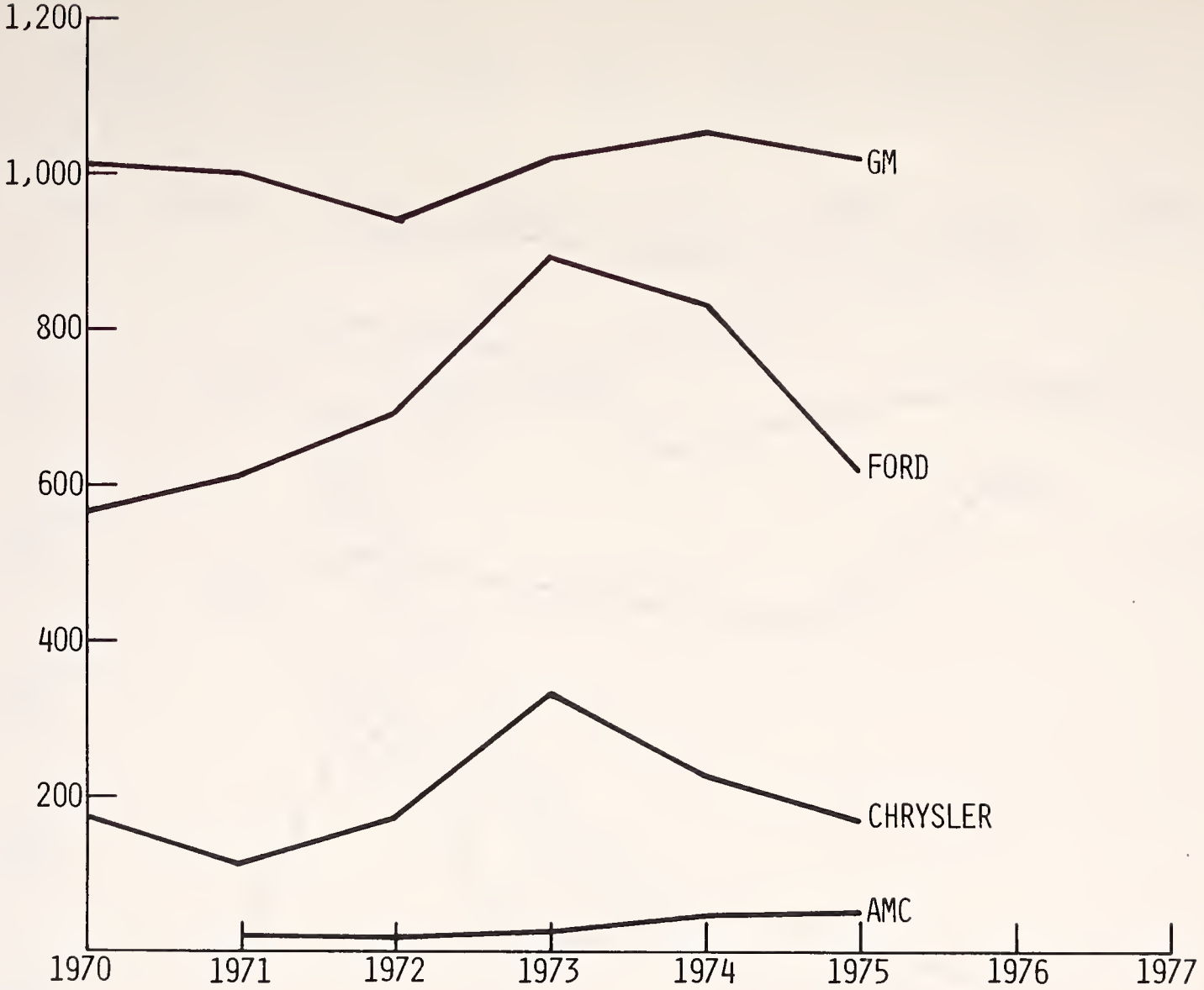

FIGURE 3. EXPENDITURES FOR PLANT AND EQUIPMENT (MILLIONS OF DOLLARS)

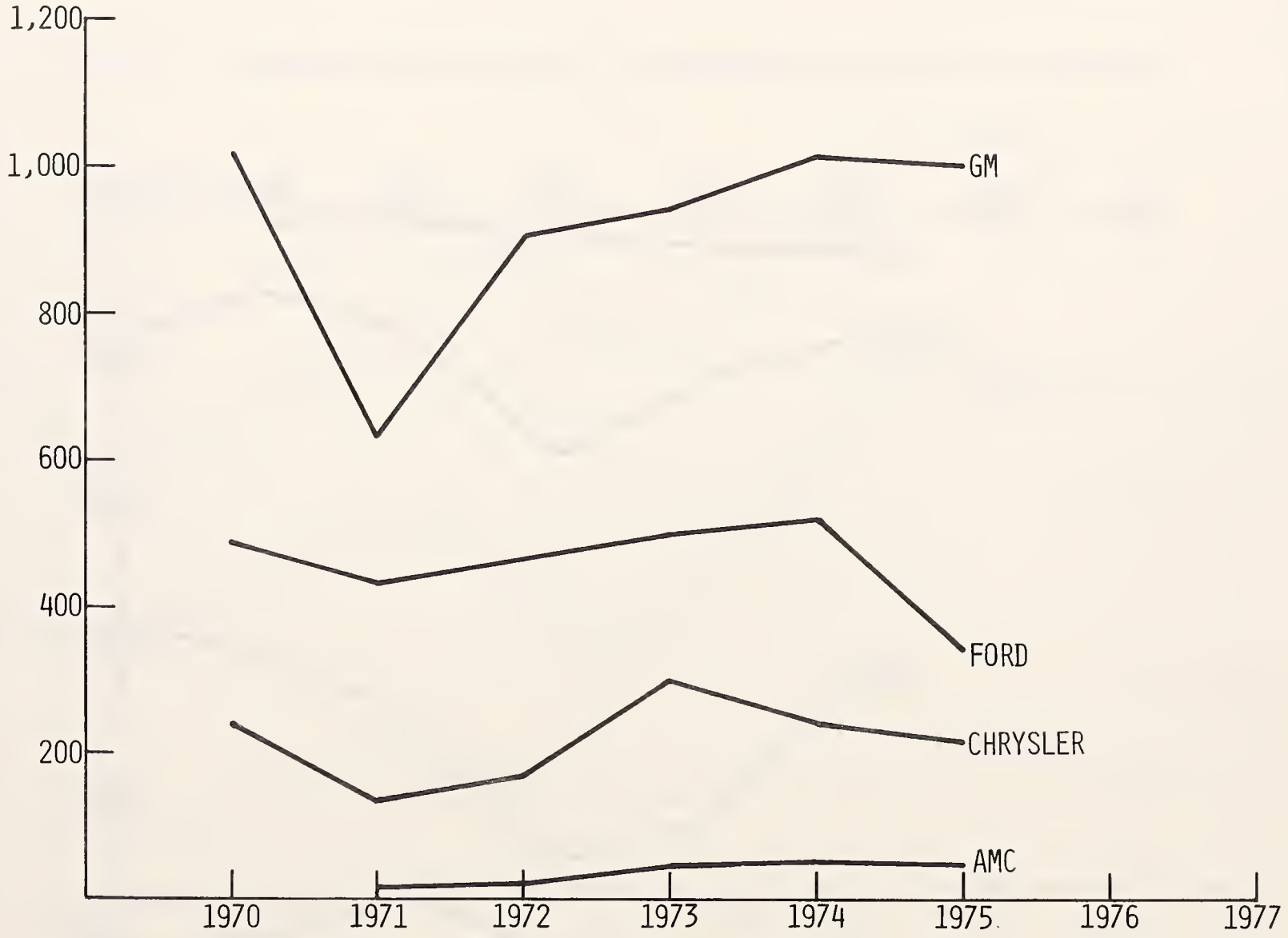

FIGURE 4. EXPENDITURES FOR SPECIAL TOOLS (MILLIONS OF DOLLARS)

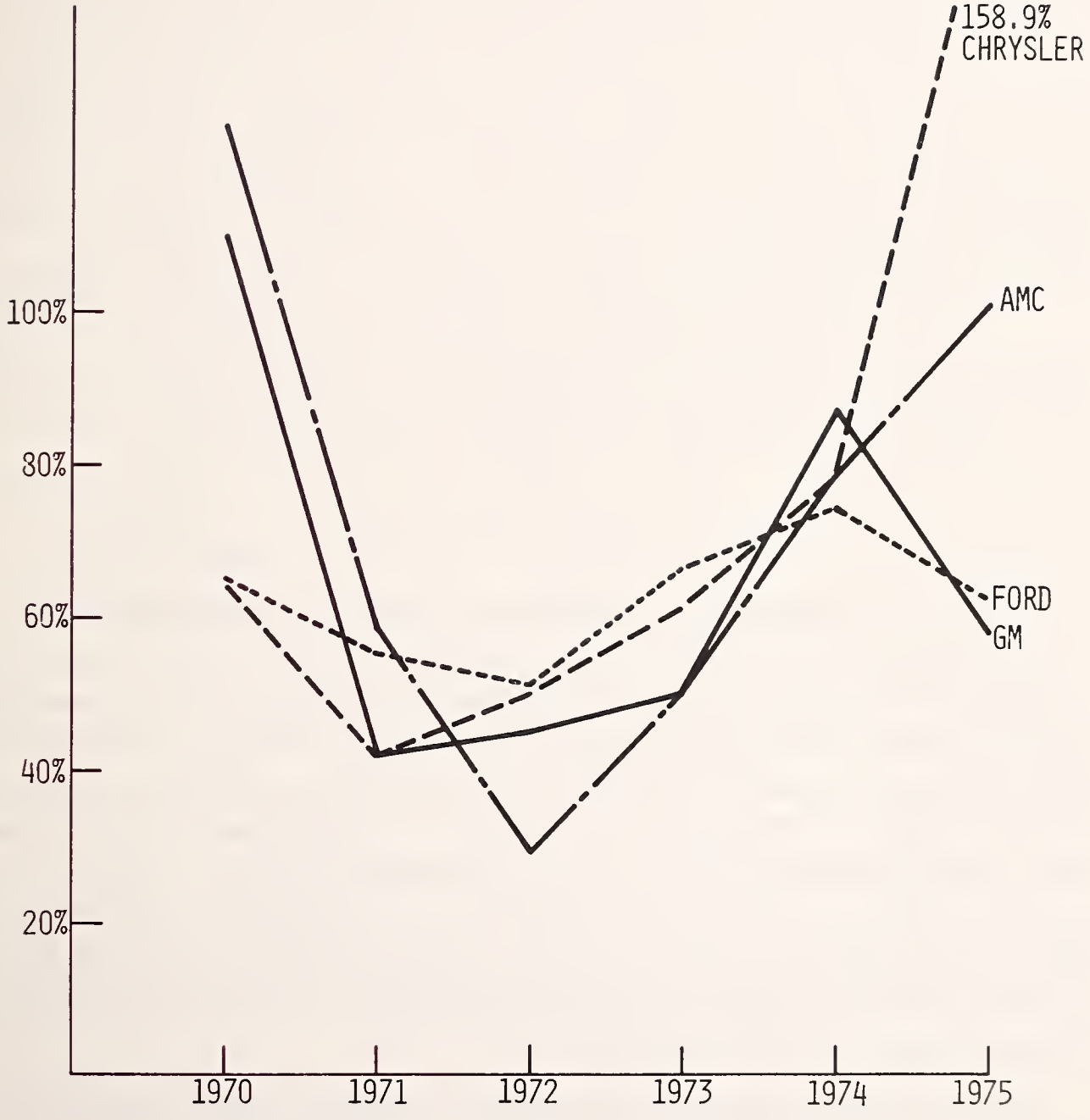

FIGURE 5. PERCENT OF CAPITAL FUNDS USED FOR CAPITAL EXPENDITURES

The picture at Chrysler is not as bright. Chrysler is just emerging from a period of financial difficulties. The hardest hit of the Big Three in the recent recession, Chrysler suffered losses in 1974 and 1975. An ambitious expansion program made Chrysler particularly vulnerable to the economic downturn. Although Chrysler earned a profit in 1976 and has weathered its financial crisis, it is still not as strong as it was before the recession. In fact, each recent business downturn has hit Chrysler the hardest of the automakers, and each recovery has left it weakened. Chrysler's long-term debt has more than quadrupled in the last decade, and it is the most highly leveraged of the automakers. Its profit margin shrank from 4.5 percent in 1965 to 2.2 percent in 1973, and 1973 was the best year ever for the auto industry. Moreover, these financial difficulties have hindered Chrysler's new model program. It has been unable to introduce a subcompact to compete with GM, Ford and AMC subcompacts, which has hurt its market position. The result of these financial difficulties is that Chrysler is limited in its ability to increase capital spending to meet the fuel efficiency standards. Capital spending at Chrysler is planned to be $600 million annually through 1980 compared to an average of $413 million for the 1970-75 period. Due to the lack of funds, Chrysler is not planning to develop and produce everything necessary to meet the standards. Chrysler has integrated its product planning for foreign and domestic operations and will rely heavily on its overseas operations for smaller models, tooling, and components. As an example, Chrysler is currently importing a subcompact from Japan. The names of big cars are being moved to smaller models which already exist, and some big models will be discontinued if demand diminishes or if their fuel penalties become too costly. Chrysler will also purchase some companents from other automakers and has recently made arrangements to purchase a four-cylinder engine from Volkswagen.

AMC must spend $90 million annually through 1980 to meet the fuel efficiency standards. This compares with an average of $62 million annually for the 1961-75 period. Although AMC has approached $90 million in capital spending in recent years, many

industry analysts doubt that it will be able to raise the necessary funds through 1980. In fact, a recent interview with two dozen auto industry insiders and analysts by the Associated Press, found them agreeing that AMC will likely cease its passenger car operations by 1980. Although AMC Chairman Roy Chapman, Jr. strongly denies this, the feeling among the analysts is that AMC will stop automobile production so that it can concentrate on its non-passenger car operations, which now account for more than half of its business. AMC's auto sales peaked in 1973 and have declined steadily since. Recently, its market share has declined to below 1.8 percent, the lowest since the company was formed. AMC was able to stay in the market as long as the Big Three were producing big cars. Now, however, the fuel efficiency laws have thrust the Big Three into the small car market, and, due to more financial resources, they can develop more innovative and more fuel efficient small cars. Even if AMC manages to hang on in the passenger car market, it will be hard-pressed to raise the capital funds it needs.

4.5.3 Conclusions

The implications of the fuel efficiency standards to the automakers are clear. The changes the industry must make in its products to meet the 1985 standards will constitute the greatest change in its history. Huge sums of money are being committed to make these changes. The automakers must choose now the approaches they will use, and they will have little opportunity to alter their course. Depressed economic conditions or a rejection of the newer smaller models by the buying public could have a severe impact on the industry, as could any tightening of fuel efficiency or pollution standards after the automakers have committed themselves.

5. INDUSTRY APPROACH TO PRICING

5.1 IMAGE PRICING

The automakers use both image and cost pricing for their products. Image pricing is more profitable and is used whenever possible. Two examples of image pricing are the Cadillac Seville and the evolution of the Maverick/Comet into the Lincoln Versailles.

Case Study 1 - Cadillac Seville

When Cadillac Seville was being developed, the concept was to produce a smaller, lower-priced vehicle. At one time there was strong consideration for naming the vehicle the LaSalle - a name indicative of an image and price below the full sized Cadillac. Marketing strategy led to the name Seville and the higher price.

Cadillac positioned the Seville as a "conquest" model to take away some of the market from the imported luxury cars such as the Jaguar XJL models, the BMW 3.0 Sc, the Rolls Royce Silver Shadow, and the Mercedes Benz 450-SE and SEL. Cadillac also visualized the Seville as holding current Cadillac owners who might otherwise defect to the luxury imports. Combined sales of all the luxury imports total about 20,000 units a year in the United States.

Seville was introduced during the middle of the 1975 model year with Cadillac having hopes of selling 20,000 to 25,000 units during the first year and 55,000 units in 1976. First year sales of 26,531 units exceeded expectations, but sales of 41,248 units in 1976 were somewhat below expectations. It would be instructive to see if sales of the imported luxury models fell with the introduction of the Seville. If they did not, then this could partially account for the fact that the Seville did not achieve 1976 expectations. Unfortunately, a model breakdown of imported sales is not available.

A Cadillac spokesperson emphasized that the Seville is not a response to the energy crisis although it does get better mileage than other Cadillac models. In every dimension except height, it

is considerably smaller than other Cadillacs. The wheelbase and length of the new entry are slightly shorter than a Chevelle sedan. The Seville weighs 4,341 pounds which is 854 pounds less than the DeVille's curb weight of 5,195 pounds. The one respect in which the new car is not smaller than the full sized Cadillac is in its price, currently $13,359 for the Seville vs. $9,864 for the DeVille.

GM used image pricing to establish the Seville as the top of their line and significant advertising efforts to convince buyers that the Seville was "the" prestige car to own.

Case Study 2 - Maverick to Versailles

Planning for the Granada/Monarch began in the late 1960's when marketing research indicated Ford should introduce a new compact model in the mid-70's. According to Ford Motor Company Chief Engineer, J.V. Chabot, the object was to design "small-sized vehicles with great spaciousness, comfort, and elegance." Using the existing Maverick/Comet four-door wheelbase of 109.9 inches, Ford improved trunk volume, interior roominess, ease of entry and exit, and visibility. Originally, the Granada and Monarch were to be restyed versions of Maverick and Comet, but when small car sales began increasing, Ford decided to keep the Maverick and Comet and to introduce the Granada and Monarch as new and separate lines.

After Ford's Luxury Decor Option on the Maverick (which added $400 to the price) proved a big seller, Ford became convinced that buyers want luxury and comfort in small cars. Accordingly, Ford decided to position the Granada/Monarch above the Maverick/Comet and emphasize luxury and comfort. In fact, Ford aimed at the Mercedes and the top-of-the-line models of other imports, such as Audi.

A survey of 926 Granada and Monarch owners, conducted by J.D. Powers & Associates, consultants in marketing planning and research, revealed some interesting facts. Powers found that appearance and styling were the number one reason for buying makes of cars, with size and fuel economy second and third. Although Ford had hoped

the Granada and Monarch would be effective competition for imports, over half those who bought the Granada and Monarch did so to replace a Ford product. One out of 5 had owned a GM product, and only one out of 10 had owned an import.

According to Barry Robertson, Powers Vice President, "the typical buyer of the Granada and Monarch is a Ford owner who sits in front of the box... The television commercial plods on... He says, 'That's good. It's got the right size and the fuel economy is good!' So, the next day, he drops down to the dealership... and buys one."

Another interesting fact is that three-fourths of the buyers opted for the larger V-8 engine rather than the standard six-cylinder engine. Moreover, most of the buyers bought one or more power options.

In response to the success of the Cadillac Seville, Ford carried the evolution of the Maverick one step further with the introduction of the Lincoln Versailles. Built on the 109.9 inch Maverick chassis, the Versailles is basically a Monarch, differing only in the Continental hood ornament, grille, deck lid, mirror-finish paint job, interior trim - and the price. Not only is the Versailles $11,500 price tag nearly three times that of the Monarch, it is higher than a Lincoln Continental Mark V at $11,396. This price is needed to appeal to that segment of the car buying public looking for the snob appeal of a high priced car. At a lower price, it is doubtful that the Versailles would enjoy any greater sales success.

A comparison of the Granada/Maverick and Versailles/Monarch/Comet is presented in Table 1 to show the profit potential of image pricing.

Image pricing will undoubtedly provide auto manufacturers the opportunity to develop more profitable small fuel-efficient vehicles and no effort should be made to discourage such higher-priced fuel-efficient vehicles. Customer acceptance of fuel-efficient vehicles must be the paramount concern.

TABLE 1. IMAGE PRICING - MAVERICK TO VERSAILLES

LINCOLN - MERCURY

YEAR	Comet	Monarch	Difference*	Monarch Ghia	Difference*	Versailles	Difference
1975	$3113	$3764	$651	$4291	$1178	-	-
1976	3250	3773	523	4265	1015	-	-
1977	3342	4026	684	4619	1277	11,500	8,158

*Note: Difference represents the price of the model in question minus the price of the Comet.

FORD

YEAR	Maverick	Granada	Difference*	Granada Ghia	Difference*
1975	$3025	$3698	$673	$4225	$1200
1976	3117	3707	590	4331	1214
1977	3272	3960	688	4390	1118

*Note: Difference represents the price of the model in question minus the price of the Maverick

5.1.1 Cost Pricing

Cost pricing is used in two ways. First of all, when the manufacturers set out to develop a new vehicle, a target price is established based on the prices of equivalent competitive vehicles. Shortly before introduction time, a detailed review of cost is made, and the original target price is re-appraised and adjusted as appropriate.

The second role of cost pricing is in the annual or semi-annual hike in new car prices. The average price change for each maker's entire car line is based on changes in production costs. However, over the past five years, the manufacturers have used selective pricing to distribute the price increase. Some models, usually the larger cars, have had minor price increases, while others, particularly the smaller models, have had large price increases. The result is that there is very little fifference in price among the different-sized models sold by each dealer. This accounts in part for the inability of the U.S. manufacturers to sell small fuel efficient vehicles.

5.1.2 Dealer Discounts

Another reason the industry has problems selling small cars is related to its dealer discount structure. The dealer discount is the percentage of the "sticker" price the dealer receives as his gross margin. A typical array of base prices and dealer discounts for a full line GM dealer - a Pontiac dealer - is shown in Table 2. Note the difference in the dealer discount for the subcompacts Astre and Sunbird (17 percent) compared to the full size Bonneville (24 percent). This difference means that the dealer can reduce the price of the bigger models by a much larger amount than he can on the smaller models, thus offering the buyer a better "deal." To show the practical effects of this, cars were priced at several different dealers. The following list of "sticker" price vs. "deal" price for selected models is shown in Table 3.

TABLE 2. STICKER PRICE, DEALER DISCOUNTS AND DEALER COSTS FOR ALL PONTIAC MODELS (SHEET 1 OF 2)

	MODEL	BASIC MODEL	DISCOUNT	DEALER COST
A.	Astre (17%)			
	2 door coupe	$4,160.55	$707.29	$3,453.27
	2 door hatch	4,285.55	728.54	3,557.01
	Safari Wagon	4,450.55	756.59	3,693.96
B.	Sunbird (17%)			
	2 door coupe	4,557.55	774.78	3,782.77
C.	Ventura (18%)			
	2 door hatch-coupe	4,719.61	849.53	3,870.08
	2 door coupe	4,524.45	814.40	3,710.05
	4 door sedan	4,900.45	882.08	4,018.37
	Ventura SJ			
	2 door hatch-coupe	5,052.61	909.47	4,143.14
	2 door coupe	4,873.45	877.22	3,996.23
	4 door sedan	4,900.45	882.08	4,018.37
D.	Firebird (18%)			
	2 door coupe	5,022.80	904.10	4,118.70
	Esprit 2 door coupe	5,303.80	954.68	4,349.12
	Formula 2 door coupe	5,729.80	1,031.36	4,698.44
	Trans Am 2 door coupe	6,209.06	1,117.63	5,091.43
E.	LeMans (20%)			
	2 door coupe	5,012.85	1,002.57	4,010.28
	4 door sedan	5,060.85	1,012.17	4,048.68
	LeMans Safari			
	4 door wagon (2 seat)	5,844.95	1,168.99	4,675.96
	LeMans Sport Coupe			
	2 door coupe	5,171.85	1,034.37	4,137.48
	Grand LeMans			
	2 door coupe	5,572.85	1,114.57	4,458.28
	4 door sedan	5,697.85	1,139.57	4,558.28
	Grand LeMans Safari			
	4 door wagon (2 seat)	5,610.95	1,122.19	4,488.76
F.	Grand Prix (20%)			
	2 door coupe	5,518.85	1,103.77	4,415.08
	"SJ" 2 door coupe	6,151.65	1,230.33	4,921.32
	"LJ" 2 door coupe	5,881.85	1,176.37	4,705.48
G.	Pontiac Catalina (24%)			
	2 door coupe	5,543.65	1,330.48	4,213.17
	4 door sedan	5,540.65	1,329.76	4,210.89
	Safari 4 door wagon (2 seat)	5,982.75	1,435.86	4,546.89
	Bonneville			
	2 door coupe	5,901.80	1,416.43	4,485.37
	4 door sedan	5,947.80	1,427.47	4,520.32
	Grand Safari			
	4 door wagon (2 seat)	6,262.75	1,503.06	4,759.69
	Bonneville Brougham			
	2 door coupe	6,387.80	1,533.07	4,854.73
	4 door sedan	6,482.80	1,555.87	4,926.93

TABLE 2. STICKER PRICE, DEALER DISCOUNTS AND DEALER COSTS FOR ALL PONTIAC MODELS (SHEET 2 OF 2)

Notes:

1. All prices are quoted for the basic model in each class.
2. All models are comparably equipped. Equipment includes:
   a. Power steering
   b. Power brakes
   c. Radials
   d. Automatic transmission
3. Dealer discount is listed in parentheses by each model.
4. Dealer discount figure includes a 3% year-end rebate.

TABLE 3. STICKER PRICE VS. DEALER PRICE

	MODEL	STICKER PRICE	DEALER PRICE	DISCOUNT
A.	Sunbird (loaded)	$6,850	$6,300	$ 550
	Impala (loaded)	7,500	6,000	1,500
	Impala (basic)	6,000	5,000	1,000
B.	Mercury Marquis	7,500	6,800	700
	LTD (basic)	6,000	5,300	700
	Granada (basic)	4,700	4,200	500
	Maverick (basic)	4,600	4,200	400
	Pinto (basic)	4,700	4,200	500
	Chevette 1.6 (basic)	3,600	3,300	300
	Vega	3,725	3,375	350
	Monza	3,850	3,500	350
	Nova	4,700	4,200	500
	Mercury Bobcat	4,600	4,100	500

The prices in Group A were gathered in an "auto row" area of Los Angeles where one would expect prices to be more competitive. The prices in Group B were gathered in Santa Barbara, a city with only one of each vehicle line dealer, hence, deal prices for this group are probably biased upward.

It is interesting to note that a Chevrolet Impala (loaded) can be purchased in Los Angeles for less than a comparably equipped subcompact Sunbird. This might well explain why many of the larger models are moving faster than the fuel efficient subcompacts.

It is suspected that the deal price on a Ford LTD would be about the same as a comparably equipped Impala if the pricing were to be done in Los Angeles since the two have the same sticker price and approximately the same discount.

The Chevy salesman in Santa Barbara was definitely pushing the Chevette. Even when asked about other small and intermediate models, he kept steering us back toward the Chevette. He also claimed that the discount on this model was only 10 percent. The Ford and Mercury salesmen made similar claims for the Pinto and Bobcat which seem inconsistent with the actual discount data that was obtained. The discount structure is fairly universal throughout the industry, suggesting that either the salesmen do not know the true discount or, more likely, they are leaving themselves maneuvering room with the customer.

5.1.3 Cost Pricing Cost Study - Volkswagen vs. U.S. Small Cars

The current discount with its bias against the smaller cars came about when the automakers introduced the Corvair, Valiant, and Falcon to compete against Volkswagen. Since the Volkswagen was selling for $1,545 in 1959, the Big Three wanted to bring their compacts to market at a price under $2,000. They found that the only way they could do this was to lower the dealer discount on these models. Thus, the tiered dealer discount structure was born.

It is also interesting to note that since their introduction, the price of U.S. small cars has been tied to Volkswagen prices (see Table 4).

TABLE 4. PRICES OF VW VS. U.S. SMALL CARS

Year	VW	Chevy II	Valiant	Vega	Gremlin	Pinto	Maverick
1967	$1639	$2182	$2163				
1968	1699	2314	2301				
1969	1799	2345	2354				
1970	1839	2443	2250		$1879		$1995
1971	1845	2376	2313	$2090	1999	$1919	2175
1972	1999	2351	2287	2060	1999	1960	2190
1973	2199	2377	2376	2087	2098	2021	2240
1974	2625	2811	2829	2505	2481	2527	2790
1975	2895	3205	3243	2786	2798	2769	3025
1976	3499	3248	3241	2984	2889	2895	3117

6. MARKETING TECHNIQUES USED BY MANUFACTURERS

This last section examines the investigations and analyses that are required to obtain an understanding of the marketing techniques available to and used by the auto manufacturers.

6.1 MARKET SEGMENTATION AND PRODUCT POSITIONING

The role of market segmentation and product positioning is a constantly moving base that must be carefully studied by manufacturers. A simple three tier classification system that applied in the late 1940's through the mid 1950's sufficed at that time. Cars were in either the low, medium, or high priced market segment and each manufacturer aimed his products at what he considered to be the optimum price level. For the next decade, these market segments became further refined with the addition of compact cars to the previous split. With further product offerings, market segments were identified for imports, subcompacts, compacts, small specialties, intermediates, full sizes, and luxury specialties. Each manufacturer had to determine the market segments in which he wanted to be represented and the positioning of his entry vs. others on the market.

The process of segmenting the market and evaluating the potential of each segment is a function normally shared between marketing and product planning personnel of the companies. Over a period of time, the new market segmentation becomes adopted universally by the industry, and registration and other market statistics are so recorded.

The goal of the profit game in the auto industry is to find a niche in the market not being met by competition and to move dramatically with a new product offering. The original Ford Mustang is an excellent example of what a manufacturer can accomplish.

Other examples of product positioning were evaluated under Task B: the Cadillac Seville, the Ford Granada, the Mercury Monarch

and the Lincoln. The Versailles, unlike many other products, should be easily and relatively quickly positioned in the market to improve profits. As shown previously, cars are often priced based on image and status rather than cost.

6.2 INCENTIVES

In the retailing of automobiles, the manufacturer uses financial incentives as the basis for achieving retail sales of his products.

The franchised dealer system has been in effect since the early days of the auto industry and has proved to be a satisfactory arrangement for dealers and manufacturers. The dealers are independent businessmen who can keep their franchise by effectively representing the manufacturer in his areas. Dealers have sales targets to meet, and those that fall consistently behind can find their franchise canceled.

The dealers operate on a profit margin determined by the price of the car and the factory discount. As indicated in Task B, these discounts range from 14 percent on subcompact cars, 15 percent on compacts and specialty sports, 17 percent on intermediates and 21 percent on full-sized cars. In addition to these discounts, the dealer receives a 3 percent year-end rebate on all cars. For the dealer and his salesmen, the fuel efficient subcompact cars are the least desirable to sell because of low profits. Discount structure is an incentive for the sale of full-sized cars. The other recent trend is for the manufacturer to offer cash rebates to the buyers of the slow moving cars. This appeals to the bargain hunting instinct in customers and has been proven to be effective in some instances. The manufacturer prefers rebates to lowering prices as the lower prices cannot be turned on and off as can the rebates, and if price controls were to be applied at an unknown future date, the lower price could be the controlled base price.

The rebate program used by the auto industry was started by Chrysler in February, 1975. Chrysler overbuilt in the Fall of

1974, even though sales were falling. As a result, Chrysler found itself with a 136-day inventory of cars on January 1, 1975. The industry average at this time was 96 days, against a desired level of 60 days. The small car situation was even worse: the industry average was 130 days.

In response to its huge inventory, Chrysler started a sales compaign called Chrysler's Car Carnival Clearance. Over a five-week period, the Car Carnival Clearnace featured rebates, trade-in bonuses, and free offers backed by a $10,000,000 advertising and sales promotion campaign. The program offered $200 to $400 rebates from the factory on specified models. The customer made the best deal he could with the dealer and then got the rebate direct from Chrysler. Basically, the program was aimed at increasing small car sales. For example, during the first week of the campaign, rebates were offered on Plymouth Dusters and Dodge Darts, and the extra deal of the week was $100 for trading-in a Pinto or Vega.

One week later, Ford began a factory rebate program designed to last six weeks. As with Chrysler, the program was aimed at small car sales. Rebates offered were:

$200 on a Pinto, Maverick or Comet
$300 on a Mustang II hardtop or 2+2
$500 on a Mustang II Mach 1 or Ghia
$350 on a Supercab light truck.

Shortly thereafter, GM and AMC initiated similar rebate programs, also aimed at the small car market. Moreover, the rebate fever caught on among dealers, banks, and other companies who had an interest in a healthy auto industry. Many dealers offered rebates of their own. Banks offered lower interest rates. Other companies offered incentives to their employees. For example, J. Walter Thompson Company offered its employees $100 to buy a Ford.

The results of the rebate programs were mixed at best. The programs did reduce inventories. The industry average on February 1 was 92 days, compared to 96 days on January 1. Chrysler, in

particular, lowered its inventory from 136 to 90 days. The reduction in small car inventories for the industry was much more significant, 83 days on February 1 compared to 130 days on January 1. The consensus of auto industry analysts, however, was that the increase in sales was accomplished at the expense of future sales. Polls indicated that buyers bought earlier than they intended to in order to take advantage of the rebates. Sales data confirms this position. The programs expired at the end of February and sales in the first 10 days in March were down 31.5 percent from the last 10 days of February.

Financially, the program was a disaster. Including total advertising, rebates and other expenses, the program cost the industry $100 million and the monthly sales were raised only by 8 percent over the 16 year low sales of December 1974.

Chrysler, on the other hand, was the only auto maker pleased with the program. Chrysler had set out to reduce its inventories and therefore, considered the program a success. The reduction in inventories saved Chrysler about $1.7 million in carrying costs over the 6 week period. Moreover, Chrysler Chairman, Lynn Townsend, claimed that Chrysler picked up enough additional volume to more than offset the cost of the program. Many analysts doubted this. Chrysler did, however, run 2 more rebate programs in 1975, indicating they considered the programs worthwhile. Rebates were offered in March (1975) on some compact models, and a more ambitious rebate program was used in May (1975). The May program offered a $200 rebate on any Dodge or Plymouth compact, and advertising for the program was tied to the government's tax rebates.

Industry observers had predicted the results of Chrysler's rebate programs. The earlier rebate program in February had reduced Chrysler's December 31, 1974 136-day inventory of cars to 73 days at the end of February. By the end of April, however, inventories had risen to 118 days for the Plymouth Valiant and 125 days for the Dodge Dart.

6.3 RECENT USE OF REBATES

In late 1976, due to slow sales and a growing backlog of cars, GM again began using rebates on selected Chevrolet and Pontiac models. GM divisions were doing well in medium and large car sales with less than average inventories, but small cars were hurting with more than double the usual 60 day supply on hand, despite production cut-backs. It was hoped that the program would not only reduce inventories, but also stimulate production to a more efficient level. GM offered $200 rebates on Vegas and Chevettes as well as on Pontiac Astres in hopes of expanding the size of the small car market. Chevrolet used broadcast advertising time previously allocated to promoting the downsized big cars. AMC followed suit with a $253 price cut on the Gremlin and a $253 rebate on the Pacer, both slow movers. They also began offering discounts to the elderly, ranging from $25 to $175 plus $50 off on air conditioning. This program was carried out through the National Retired Teachers Association and the American Association of Retired Persons, using a direct mail campaign. Ford and Chrysler chose not to jump on the rebate bandwagon.

The results were mixed for the first 10 day sales period (November 11-20) of the rebates (see Table 5). AMC said sales were up 20 percent for Gremlin with no figures available for the Pacer. They concluded that lower prices were the key for bringing new customers back into the small car market. In the second 10 day period, however, total sales fell from that of the previous year.

For the Chevette, sales were almost double those of the previous year but down slightly from those in the 10 day period before the rebates started. Results for the Vega were about the same.

Pontiac Astre sales were down 11 percent from the previous year, but up substantially (50 percent) from the 10 day period before the rebate. Pontiac's feeling was that customers were coming from the traditional small car market, rather than being won over from big cars.

TABLE 5. SALES REBATES STARTED NOVEMBER 11, 1976

MODEL	1976 Nov. 1-10	1976 Nov. 11-20	1976 % of Change Before-After	1975 Nov 11-20	1975 to 1976 % of Change Nov 11-20 each year
I Cars Offering Rebates					
Chevette	5,235	5,262	.52	2,791	88.53
Vega	5,606	4,560	-18.66	2,586	76.33*
Astre	844	1,248	47.87	1,262	- 1.11
Gremlin	N/A	N/A	20.00*	-	-
Pacer	N/A	N/A	20.00*	-	-
		Weighted Average	-5.26		
II Cars NOT offering Rebates					
Pinto	5,510	5,602	1.67	8,797	-36.32
Volare	8,289	9,226	11.30	o	-
Aspen	6,270	6,954	10.91	o	-
		Weighted Average	8.54		

N/A - Not available (AMC does not issue nameplate breakout for 10 day periods)

* - Manufacturer's estimate

o - Insignificant since model had just been introduced

At Ford (no rebates), Pinto sales were down substantially from the previous year, but up slightly from the 10 day period prior to the rebates. Chrysler had sales gains in the 10 day period after rebates began, compared to the 10 day period before, despite the absence of any rebate on their cars. No figures were available for the previous year since the models had just been introduced.

One industry analyst felt that the rebates attracted buyers away from other cars in the line, rather than bringing new buyers; i.e., the mix was changed without leading to substantially higher overall sales.

Ignoring the incomplete AMC data, those companies offering the rebate fared worse than their counterparts who did not. The weighted average change in sales from before to after showed a decline of -5.26 percent for the rebaters while that of the non-rebaters climbed by 8.54 percent. Due to the range and weights of the data (Vega having both the largest weight and the largest decline), inclusion of actual AMC sales would have been extremely unlikely to reverse this trend. However, the averages hide the fact that certain companies, AMC and Pontiac, apparently did better than both rebating and non-rebating competitors.

6.4 REBATE IMPLICATIONS FOR FUEL-EFFICIENT VEHICLES

Perhaps the most important implication of the rebate schemes, from the standpoint of regulatory activity, is that they are somewhat successful in changing the price structure of the industry. When applied to smaller fuel efficient vehicles, the price difference between these cars and others in the line becomes large enough to induce consumers to purchase the smaller automobiles. If a permanent rebate (or price cut) were implemented on fuel-efficient vehicles, there would be an incentive for increased sales.

6.5 ADVERTISING

6.5.1 Introduction

The auto industry is a major advertiser in all media. Multi-million dollar budgets are established for each car line and funds are used for national and local advertising. Dealers are encouraged to advertise by receiving partial cost recovery from the manufacturers. Any means of getting a message to the buyers is used. New cars are provided to movie makers and to TV program producers to get exposure.

When motivated, the auto industry is able to develop innovative programs to promote cars. GM, for example, has done an outstanding job promoting their scaled-down full-sized cars. A similar effort may be needed to get the industry to promote the purchase of fuel efficient cars. The only problem is that manufacturers lack the financial incentive to do so since the profit is in the bigger cars. When they must sell small cars to achieve their fuel economy standards, they will find a way to promote and advertise the virtues of small car ownership.

6.5.2 Recent Campaigns

After the 1973 Arab oil embargo, manufacturers were faced with a glut of big cars while small models were being purchased as fast as they came off the line. An industry-wide summer "clean-up" campaign was waged during the summer of 1973 to reduce big car inventories.

During the next couple of years, the advertising emphasis shifted to fuel economy as evidenced, for example, by Ford's 1975 and 1976 mpg campaigns. In June 1975, Ford launched its biggest June advertising budget ever, estimated at about $15 million. It was aimed at recovering some of the import's share of the U.S. market. The basic theme was "34 mpg high ... Pinto $2,769," with copy mentioning specific imports which didn't do as well. Also in 1975, Ford waged an intensive advertising campaign, the most intense since the original Mustang, on the new compact Granada.

The results were that Pinto, Maverick, and Granada combined to outsell the big Fords. In fact, Granada alone outsold the big Ford 306,517 to 205,332.

Similar results were experienced at Lincoln-Mercury, which had taken on the imports with its subcompact Bobcat, and had similarly spent a lot of advertising dollars on the new Monarch.

By late 1976 and 1977 however, the scare of the oil embargo had become diminished or forgotten by car buyers. As a result, people started moving back toward the intermediate and large cars. Ford began to put its money on luxury compacts such as Granada, which continued to do well. It also began to funnel more advertising money to the intermediates such as the repositioned Thunderbird and the LTD II. Apparently the mpg type advertising was not enough to keep consumers from moving into the larger cars once the threat of no gasoline receded. The story might have been different had the net price structure not been so similar for small and intermediate sized automobiles.

General Motors, meanwhile, tried to push the Vega as its response to the energy crisis. Although sales achieved a high point of 459,626 in 1973, they have declined steadily ever since, reaching only 133,251 in 1976, which led to a GM decision to drop the Vega/Astre. Poor quality, high cost of ownership, fuel efficient cars cannot be successful. The Pinto, with quality, reliability, and good economy, has been a big success. GM's 1975 entry into the subcompact market, the Chevette, sold 42,204 models during its mid-year introduction and despite heavy advertising and promotion in late 1975 and early 1976, sales rose only to 140,974 for 1976. Again, this may well have been due to a diminished fear of gasoline shortages combined with the auto industry price structure and lack of appeal of the Chevette vs. imported fuel efficient cars.

Because of similar unspectacular results for most other GM small cars, such as the Monza, Skyhawk and Starfire, the various divisions began putting advertising dollars into what was selling: the full-sized, the intermediate, and the specialty cars.

Buick continued with the "Free Spirt" campaign originally developed for the Skyhawk. In 1976 they applied it to the intermediate Century with good results. They continued with this theme in 1977, only now the emphasis was on the downsized big cars such as the Electra 225. The advertisements concentrated on the intelligent design and total newness. They talked about size, but without mentioning words such as "shorter" or "smaller." For example, the cars were said to be "designed for maneuverability and leanness on the outside, but are even roomier and more luxurious inside." In contrast, the Buick small cars received little advertising coverage during the 1977 introductory period. Pontiac also concentrated its introductory advertising on the new downsized models during the 1977 introductory period.

In fact, a large percentage of all GM divisions' 1977 model advertising went for the new downsized models. With 1977 car prices climbing, the emphasis was on "more" -- more headroom, more legroom, and more trunk space. The idea was to convince consumers that they were not getting less for their money. A great deal of emphasis was being placed on the engine, stressing quietness, fuel efficiency, and reliable performance. This same idea was pushed in promotional literature to GM sales staff. The definition of performance has changed from the "muscle" car days to include things such as handling, suspension, etc., and salespersons must keep up with the times.

Probably the best example of GM's downsizing campaign can be seen in the 1977 Chevrolet. An initial newspaper ad placed in Sunday newspaper magazines provided 8 pages of information about the new Chevy. "Designed and engineered for a changing world" was the theme, and details were given of what happened under the skin. The mpg, quiet, comfort, and security expected of big cars were emphasized. The ads also stressed the idea of conserving natural resources in a changing world.

The ad went on to talk about structure, computer designed and tested bodies, corrosion protection, interior and trunk space, and serviceability. It finished up with examples of mpg ratings for

the various cars. Extensive additional copy was then provided showing engineers at work, test procedures, and computers. The ad showed neither any one car nor all five, but talked of all 5 GM divisions in general. The final page invited consumers into the showrooms for a test drive and closed with: "GM Mark of Excellence. We want you to drive what you like and like what you drive."

An animated TV commercial was also prepared which graphically depicted a car being constructed from the inside out. Later, in October, a shorter 4 page version of the big ad was run in news-weeklies and enthusiast magazines.

Another successful GM campaign was conducted for the 1976 Olds Cutlass. Each 1976 Olds got its own ad in contrast to previous across-the-line campaigns. The plan was to peg each car to the needs and lifestyles of target buyers. The unifying element for all models was the theme "Can we build one for you?"

Most of the 1976 expenditures were on the Cutlass with much of the remainder on the Toronado "98," and full-sized Delta 88. The compact Omega got relatively little of the advertising dollar.

Life style commercials were made for the Cutlass, the Delta 88 and the Omega. Some examples of this strategy follow:

1. "We built this Cutlass S for Jim Cramer, who wanted a car that would turn some head, preferably blonde."
2. Another was built around the idea that Omega appeals to younger buyers, especially women ... "We built this Omega Brougham for Julie Severs, who thought no compact could be comfortable enough for her twice-daily 45 minute commute."
3. The Delta 88 is for families ... "We built this Delta 88 for John Andersen, who needed a car that could stand up to his ultimate endurance test, his three kids."

The ads also picked up on the 1975 theme that some of the little things (features) "... help make it a good feeling to have an Olds around you." There was also a pitch in black-oriented magazines such as, "We built this Delta 88 Royal Crown Landau for Don Richards, who likes his cars strong but beautiful."

Finally, AMC launched the successful Buyer Protection Plan (BPP) in 1971. Their research found that the consumer wanted reliable, troublefree automobiles, better guarantees and service, the use of "loaners," and a means of resolving problems quickly. AMC's response was to manufacture a basically good car, back it with a 12 month/12,000 mile unconditional guarantee, provide better pre-delivery service, make loaners available, and create a more direct line to the factory.

The results were increased sales over the 1971 to 1974 period. Surveys showed that 1 out of 4 persons visiting an AMC showroom did so because of the BPP, 82 percent knew about it before visiting the showroom, 47 percent said that it was an important factor in prompting their visit, and 80 percent said that it was an important reason for selecting an AMC product. Apparently, the BPP has improved the image of AMC, its cars, and its dealers. By not keeping current with its products, AMC is now finding that the Buyer Protection Plan, advertising, and an aggressive rebate program are not adequate.

The lesson to be gained from all of these experiences is that advertising plays a crucial role in the marketing of automobiles since the cars themselves are not all that dissimilar. However, advertising is not the ultimate deciding factor in new vehicle sales. Rather, the entire package, including price and design, reliability, and quality, must be compatible with real or perceived needs if the product is to be successful. Again, we return to the conclusion that the net price of fuel efficient vehicles relative to others must be reasonable, or all of the advertising in the world will not sell them. The Chevette is a good example of this. Despite heavy advertising and promotion, their sales have been disappointing. Similarly, the high quality of certain imports such as Honda, also serves to substantiate this claim.

The solution for the domestic manufacturer thus seems clear. Build a quality product, price it competitively, and conduct an effective advertising campaign similar to GM's downsizing effort. To date, domestic manufacturers have not allocated adequate

advertising dollars for the sale of their smaller fuel efficient vehicles. Efforts are made to move such cars after sales falter and stocks build up, and the method most frequently used is to offer sales rebates. The Government might enhance sales efforts for fuel efficient vehicles by providing public service type advertisements stressing the advantages and desirability of small car ownership in general.

6.6 SALES TRAINING PROGRAMS AND PROMOTION

Over the years, the industry has developed very effective sales training programs for dealers and salesmen. Training aids are printed and provided to dealership personnel and training programs are conducted throughout the United States.

It will take a major shift in this training emphasis to get the dealer's salesmen interested in selling the smaller fuel-efficient vehicles. Training is an important area to be addressed in order to achieve a more fuel effective car population and may be one of the areas where the federal government can provide assistance and direction.

Most of the material in this section is excerpted from an interview with the sales manager of a local GM dealer. In addition, some information has been gathered from various articles in Automotive News. Finally, some of this information is related to comments made to us during the dealer interviews.

When questioned concerning GM's training and promotional policies, the sales manager stated that one commonly used device is the comparison chart which shows mpg, price, wheelbase and other characteristics of the Pontiac model compared to competing vehicles. Presumably, the characteristics chosen for comparison are those which would present the Pontiac model as being superior overall.

He mentioned that GM also sponsors training sessions. Each dealer must send two salespersons to these sessions, generally the newest members of the staff, according to our sales manager. The

impression given was that he was somewhat skeptical of the value of these sessions, referring to them as "a bunch of propaganda," to use polite prose.

Other training devices include visual aids and movies which the dealer must purchase and show to the sales staff. This technique is heavily relied on for the introduction of the new models each year. One of the primary purposes of these films is to make the salesmen aware of newly introduced features such as the plug which allows for electronic diagnosis of the electrical system, complete with a computer printout. The films thus enable the salesmen to use the new features as sales features. GM also furnishes a facts book with answers to the most frequently asked technical questions. Customers who desire more information are referred to the service manager or a mechanic. This particular dealer also sells Honda and Volvo and, according to the sales manager, the training and promotion techniques of those companies are similar.

The sales manager also provided information on selling strategies, some of which probably reflect his own personal style, more than GM suggestions. He stated that a salesman must be able to communicate to the potential customer how a GM product can satisfy what motivates him. He mentioned three primary motivators which he said influence people to buy automobiles in particular, and most durable goods in general. They are vanity, fear, and greed. One of the keys to consummating the sale is that the salesman must be able to determine which of these motivates the customer in question, and then, he must be able to communicate how a particular new car can satisfy the customer's needs.

Currently, he said, GM has been emphasizing the smaller cars in its promotional flyers to the dealers since the smaller cars have not been selling well at all. Regarding the problem of the manufacturers forcing cars on the dealers, the sales manager stated that if the dealer inventory of small cars gets too high, the manufacturer may withhold some of the faster moving large cars. He also agreed that there is a tendency to move the customers up when

they come in looking for a smaller car. Aside from the obvious reason that the salesperson's commission increases with the price of the car sold, there are other reasons to encourage the sale of larger cars, namely, the discount structure and the good fuel economy on some of the bigger cars. For example, with a larger discount on the bigger car, the dealer can offer the potential customer a bigger trade-in value, a problem discussed under the dealer interviews. The other example is the mpg on the Grand Prix (an intermediate) vs. the Ventura (a compact). The mpg is essentially the same for the Grand Prix, so the customer is not spending much more to purchase this larger model (see price schedule).

Some promotional schemes which have been tried in the past include rebates and contests of various types for salespersons and dealers who sell slow moving vehicles. For example, in the spring of 1975, Ford paid up to $500 on every Lincoln or Mark IV sold. Similarly, they paid up to $175 for every Mercury. Other smaller bonuses were paid on sales of Mustangs, Pintos, and Mavericks. All of these were paid to the dealer, who presumably spread the wealth among the sales staff.

In the same year, Oldsmobile and Chevrolet offered trips to both dealers and sales staff. This contest was based upon achieving some total unit objective with each dealer free to push the sale of those models which it chose. However, much of the cost of this promotion had to be borne by the dealer in the form of an entry-type fee. This feature was criticised by many dealers. Another complaint was that it was a "winner-take-all" proposition rather than one which rewarded personnel relative to their sales.

By summer of 1975, Chrysler had jumped on the bandwagon by offering salespersons rebates on selected models sold. Again, the dealer had to pay part of the cost of the rebate.

More recently, in late 1976 and early 1977, Ford began its "Fortune Four" incentive program during which each salesperson received $50 for every sale of a 1976 or 1977 Pinto, Maverick, Mustang II, or Granada. A common dealer complaint on this program was that Ford was paying the bonus directly to the sales staff

rather than funneling it through the dealership. Apparently, the dealers do not mind these types of programs as long as they do not have to pay for them and as long as they have control over the money going to their sales staff. In addition, the Chrysler dealer we interviewed claimed that they do not work in the long run. Frequently though, the programs have accomplished the objective of reducing unwanted inventory.

Conclusions about the promotional and training aspects of the study are not so readily apparent. Combining some sort of financial incentives to the dealer and/or sales staff with some concentrated training programs to dispell some of the myths about small cars is a possibility. An example of such a myth is the often heard comment in our interviews that the reason small cars are popular in Europe is because driving conditions there are different. In fact, this is not the case at all; rather, the popularity of small cars is explained by the relation of auto insurance cost to horsepower, the high price of gasoline, and higher annual registration fees based on horsepower.

A type of financial incentive proposed to the dealers in our survey consists of a rebate to the salesperson for selling fuel efficient vehicles. This could come from the Federal Government, or as in the examples cited above, from the manufacturer. As the evidence above shows, this type of incentive has been successful in reducing inventories in the past. Many dealers feel however, that customers would simply try to get the salesperson to trade on this rebate to consummate the sale, hence eliminating its income advantage. One possible way around this dilemna would be to give salespeople a tax credit for selling small cars rather than a fixed cash rebate per car. However, this might be too cumbersome to administer.

Another alternative might be to make it financially attractive for sales staff to purchase and drive small cars rather than the big luxury cars that most of them seem to drive now. This would make them more knowledgeable concerning small car features and advantages.

A final alternative might be to subsidize through a tax credit or some other method, fleets and rental companies which purchase only fuel efficient vehicles. This would be a feasible way to get the product before the public.

6.7 STRUCTURE AND IMPLICATION OF THE FRANCHISE SYSTEM

6.7.1 Introduction

As stated previously, the franchise system for the sale of new vehicles is a well established and enduring part of the auto industry.

With the exception of a few fleet sales to the government, the manufacturers sell virtually all of their cars through independent dealers. These dealers, operating under a factory franchise, are entitled to purchase new cars and replacement parts at specified discounts. Their obligation, in turn, is to achieve a reasonable market share and provide competent, honest, and reasonable service to their customers.

The retail auto business is a potentially lucrative business and dealers attempt to avoid losing their franchise. As independent businessmen, the dealers have the theoretical right to order the mix of new cars they want. In practice, they are sometimes forced or pressured into taking slower moving vehicles.

The importance of the franchise system to the fuel economy program lies in the fact that there is a need to close the loop and get dealers thinking and selling fuel efficient automobiles.

6.7.2 Franchising

The primary reason for the development of the franchised dealer system in the auto industry is to spread the risk and costs involved in production and marketing. In effect, the dealer absorbs the costs of the retail facilities, including the provision of management personnel, and the financing of inventory. The existence of numerous "independent" dealers thus spreads the risk among a greater number of people.

In addition, franchising gives the manufacturers an element of control. Prior to World War II, they were able to specify exclusive dealing arrangements only, although the courts have since invalidated this practice. There is still a great deal of formal and informal control over such things as target sales levels, type of facilities, etc.

Because an automobile manufacturer can cancel a franchise and therefore, has ultimate control over the dealer, the manufacturer is able to "force" often unwanted models on the dealer. An obvious advantage of this is that more cars are sold than might have been sold otherwise, as the dealer has an incentive to shave prices to get rid of unwanted inventory. To some extent, the consumer may be benefitted since the dealer, who is under pressure to sell otherwise unwanted models, can lower prices somewhat, although perphaps not as much as if the industry itself priced cars to dealers at more competitive levels. But, from the standpoint of dealer-manufacturer relations, a conflict is created, in that rather than selling a few less cars at a higher monopoly-like profit, the dealer must cut profit margins to get rid of unwanted extra vehicles. The economic effect is that some of the total profit is redistributed from the dealer to the manufacturer.

The ability to use force is especially valuable if the manufacturer would like to maintain a smooth flow of production. Fluctuations in final demand can then be met by changes in retailer inventories, rather than by frequent changes in the manufacturer's rate of production. In addition, the manufacturers' production mix is limited by assembly plant and component tooling. By forcing the retailer to pay the interest on inventories, the manufacturer creates a greater incentive for more rapid sales. This presents another bone of contention among the parties.

However, there are other factors which mitigate total dominance by the manufacturer. To the extent that there exists for the customer a dealer rather than a car line loyalty, it becomes important to the manufacturer not to push dealers to the point where the dealers will give up the franchise. A high turnover of dealers

might cause a significant sales loss. Customer-dealer loyalty gives the dealer some bargaining power with which to resist forcing, particularly if the recalcitrant dealer occupies a desirable location. Otherwise, the dealer could cancel the franchise and easily obtain a new franchise with another manufacturer.

The auto companies have never denied their use of forcing practices, though they prefer to label the practices as "sales quotas" or "performance targets." Yet dealer performance, as judged by volume standards set by the manufacturers, has always been an important aspect in retaining a franchise. In fact, almost every lawsuit brought by dealers over worongful cancellation has involved manufacturer-set performance standards that the dealer has failed to meet. In two recent suits, Kotula v. Ford Motor Company, and American Motor Sales Corporation v. L.G. Semki, explicit forcing of unwanted cars was involved. The companies would not ship all the cars ordered until other unwanted cars were also ordered.

The auto companies also have a preference for exclusive dealership arrangements (see newest approach in latest GM sales agreement), although legally, they have not been able to require this since the late 1940's. Still, the manufacturers have made clear their preference for exclusive dealing in cars and parts. In 1968 for example, in Congressional Hearings on Unfair Competition and Discriminatory Automobile Marketing Practices, GM indicated that:

> "...if the dealer's other business activities result in any failure of performance of the terms and conditions of the (franchise agreement), divisional representatives may discuss such failure of performance."

It is not unlikely that if the dealer handles another company's cars, that could become the source of real or imagined ills that the company representative might find, and therefore, could deter a dealer's decision to handle another make. Note however, that a dealer handling only one make is in a weaker bargaining position, hence less able to resist forcing, if he has no other source of sales income.

From a consumer perspective, exclusive dealing encourages product differentiation and discourages price competition since the potential customer can look at only one company's cars at a time. This makes comparison shopping more difficult.

Historically, the manufacturers have responded slowly to dealer complaints and then usually only under the threat of external pressure. Many of the problems already mentioned prompted suits in the 1930's which were uniformly unsuccessful. In the boom in car sales following World War II, complaints became secondary, but as things tapered off in the mid 1950's, many of the same old complaints emerged again. Manufacturers managed to sabotage several attempts at legislation, so the National Automobile Dealers Association (NADA) began a push for Congressional hearings. The ensuing bad publicity prodded the manufacturers into offering concessions in the hopes of saving face and staving off potential legislation. Most of the concessions were relatively costless to the manufacturers (e.g., renewing franchises every 5 years rather than annually), and those that were not, were absorbed by price increases.

The first piece of legislation to emerge from all the controversy was the Automobile Dealers Day in Court Act, a rather vaguely worded document passed in 1956 which gave dealers the right to sue and recover damages for failure on the part of the manufacturers to act in "good faith" regarding the terms, cancellation, or renewal of franchises.

After this flurry of activity, things settled down for a while even though many of the grievances were left unresolved. Most dealers seemed to resign themselves to the continuance of forcing and performance goals. Many felt that dealer-manufacturer relations had improved, since much of the arbitrariness in manufacturers' actions had been curbed.

The actual effect of the hearings and legislation of the 1950's was mostly in the publicity they generated concerning manufacturer's practices. Until the late 1960's, the manufacturers had little difficulty in proving their "good faith" in canceling

dealers. In fact, the franchise agreements changed little since the late 1950's. By the late 1960's, the most important complaints were: 1) the establishment of factory-owned outlets, 2) dissatisfaction over reimbursement for warranty work, 3) increased direct company sales to fleets and rental concerns, 4) favoritism among dealers as to distribution of popular models at the beginning of a model year, and 5) the differing nominal discounts on different types of cars. Through a search of the recent court rulings and a series of dealer interviews we will attempt to discover the current state of the art.

6.7.3 Recent Developments

By the 1970's, most of the previously mentioned complaints remained unresolved and a few new ones emerged in response to circumstances peculiar to the times, such as rapid inflation and increased public and governmental pressure on the industry in general. Frequently, it seemed as if domestic squabbles between dealer and manufacturer were relegated to a secondary position as the two united in the face of a common enemy such as government intervention or encroachment on the franchise system.

The question of leasing was still a source of problems, with many of the smaller dealers feeling that the policy of the manufacturer favored the large dealers with big leasing operations. Also, distribution was still viewed as a major problem. In 1973, dealers complained of a scarcity of best sellers and that the larger dealers were favored over the small. Many dealers complained that they were not getting enough cars to meet overhead expenses, despite the fact that consumer demand for the product was high. It was also felt that favoritism and shortages were being used to keep recalcitrant dealers in line. At the 1973 NADA convention, distribution was billed as the number one problem.

There was also the usual number of complaints and lawsuits over the decision by Chrysler to market another version of the Dodge Sportsvan through its Chrysler-Plymouth outlest. There was some attempt at legislation in response to this and other franchise

complaints in the form of a bill introduced by Senator Hart, which would offer reimbursement to franchises "unfairly" terminated by the parent company. However, the legislation got nowhere.

Problems which emerged in 1974 concerned parts, floor planning, billing, and pricing. Dealers were becoming concerned over the apparent willingness of the manufacturers to supply parts to discount houses and other non-franchise operations. This problem remains unresolved to date. Dealers also wanted short-term loans from the manufacturer because of the high cost of floor planning (due partially to the 1974 slump of big car sales in response to the energy crisis).

As another aid to financially pressed dealers, NADA called for a 60-day billing cycle during model year changeovers. A 15-day cycle had been instituted in 1962, with an increase to 20 in 1969. NADA wanted the 60-day cycle only during changeover with a 30-day cycle the rest of the year. They pointed out that billing cycles as long as 6 months were common in other industries.

A final complaint was price increases, with dealers fearing that too large an increase would drive potential buyers from the market. Also, the dealers were forced to absorb much of the increase through cuts in their margin.

On the judicial front in 1974, there was a ruling in the case of Mariniello v. Shell Oil which sent ripples of concern through NADA. Previous court rulings had indicated that a manufacturer had an obligation to continue a franchise "until or unless the dealer breached accepted performance standards." But in this case, the judge ruled against the dealer, citing the Lanham Trademark Act of 1946, which protects the exclusive right to license a trademark. The judge said that this act took precedence over the New Jersey state law under which the suit was filed. It was felt by NADA that this ruling jeopardized the franchise protection laws in the 25 or 30 states which had them, leaving the dealers with only the protection of the federal laws. Further, NADA felt that there would be a return to shorter franchise agreements and longer and costlier

litigation, both of which would benefit the manufacturer. The former at least, has apparently not happened.

By 1975 it seemed that dealer-manufacturer problems were overshadowed by public and governmental response to the energy crisis, and also by the problems of unemployment combined with inflation. But soon the old problems, as well as some new ones, emerged into the arena of debate.

In an attempt to moderate price increases, the companies began to shave dealer discounts, particularly on small cars. Dealers claimed this made it difficult to make a profit, a complaint echoed by our interviews in the Santa Barbara, California area. Part of the reason for the erosion of the historic 17 percent discount on small cars down to the current 14 percent, was the federal law which prohibited the mark-up of safety and emissions equipment. The price of these items was added at the wholesale but not to the retail level, which had the effect of reducing the discount. However, there were others in NADA ranks who felt that if discounts were maintained at the old level, the resulting prices would be high enough to choke all sales.

Another problem was a proposal by GM to allow non-dealers to buy crash parts. It was felt that this too would have deleterious effects on dealer profits. The reason for the initiative on the part of GM was to head off pending anti-trust suits for monopolization of the crash parts business.

One of the more significant events of the year, and one which ultimately led to a barrage of dealer complaints, was the so-called "Motorgate Affair." This involved warranty fraud and kickback schemes on the part of several GM dealers and zone office personnel. One of the accused dealers, Richard's Chevrolet, sued GM to keep its dealership, claiming innocence on all counts. An out of court compromise was eventually reached, but not before the judge had gotten a chance to reinterpret the Dealer Day in Court Act. He said that it "does not require notice of termination before such termination becomes effective." This was a reversal of previous interpretations. The most immediate effect of this ruling,

so the dealers felt, was the new GM franchise agreement, announced in October, 1975. Some of the more incendiary provisions were:

1. That a dealer could be terminated immediately for any false claims, a lack of knowledge of the activities of employees being no excuse.
2. That GM could force dealers to participate in advertising or sales promotion.
3. That GM could force the dealer to change locations.
4. That GM could force the dealers to disclose other purposes for which the premises were being used.

The dealers felt that this pact was unnecessarily harsh and unjust retribution for Motorgate. In addition, it was felt that the fourth point would allow GM to force dealers to expand their facilities when carrying other makes, thus increasing for the dealer the financial burdens of such a venture.

Other dealers felt that GM was intentionally putting on pressure to upgrade and expand facilities and increase financial safety margins in an attempt to close down marginal dealers. The reasoning given was that GM felt that the smaller profit margins on the smaller cars of the future would require larger, high-volume dealers. Dealer resentment of the new GM agreement was so strong that NADA participated in meetings proposing the establishment of an umbrella-like franchise confederation, representing franchises from all industries with mutual problems, in order to promote the common interests of them all. Their primary goal was to establish that the franchisee owned something of value which should not be terminated on a whim. This group viewed the new GM agreement as a document which threatened to wipe out any past gains of franchisees in general. The Ford Dealer Alliance joined in the protest, saying that if there were no negotiated sales agreements, the manufacturers would be taken to court. Both groups called for passage of new legislation, the Mikua Franchise Reform Bill, which would codify the goals of the franchise confederation.

In the wake of all this turmoil, GM recanted on its previous hard-line positions on the eve of the NADA convention in early 1976,

agreeing that termination of a dealership would be effected only after a review of the case. GM also modified the requirement of dealership participation in advertising campaigns, and it also agreed to resist FTC attempts to get the manufacturer to distribute crash parts through independent body shops. However, dealers were still irked by the fact that discount outlets often paid less for parts than dealers, sometimes retailing them below dealers' cost.

Other recent complaints seemed basically to be warmed-up versions of unresolved earlier complaints; e.g., warranty reimbursement, distribution, forcing, etc. A new problem was a suit by a Minnesota dealer to force GM to pay interest on the 2 percent holdback which the manufacturer retained for up to 12 months.

In summary, it appears that many dealers still feel the franchised dealer distribution primarily benefits the manufacturer. It provides a distribution network; relieves the factory of supervisory personnel and the need to negotiate labor contracts; assures the company of a fixed wholesale price income; helps to promote the manufacturer through franchise paid advertising; acts as a buffer to handle customer complaints; helps to pay for inventory, insurance and the costs of complying with state and local laws; and even reaps the benefit of holdback money from the franchisees themselves.

6.7.4 Dealer Interviews

During this phase of the study we solicited comments from one representative dealer from each of the Big Four in the Santa Barbara, California area. Topics discussed included warranty work, direct sales to fleets and rental companies, distribution, and the discount structure. We also solicited general comments concerning the efficacy of fuel efficient autos and suggestions for implement incentives to sell these types of vehicles. The following is a transcript of these interviews:

GM Dealer

This dealer feels that the current situation where there are 3 types of fuel delivery and emission systems--California, 49 states, and high altitudes--is untenable, mainly because he claims the California cars require more maintenance, have a higher price, and are not as fuel efficient. (This is true in most cases with respect to fuel economy.)

On the question of discounts and pricing, he says that a constant discount on all models or a straight sticker price would be preferred to the usual arrangement but that it would take time to implement since people are used to getting inflated trade-in prices and they become angry if they think they're getting gypped by too small a trade. He also comments that the price of a car has nothing to do with its size.

He does not have too many complaints about warranties except for the paperwork that goes with them. GM gives him 100 percent reimbursement on labor and cost plus 10 percent on parts, so GM does not make as much on parts as it does on no-warranty work. Things are better than they used to be.

On distribution, he admits that things could be rough on a new dealer or on one who had a bad year, since new model availability is based on the previous year's sales, which tends to favor the dealer who sells a lot of cars. Sometimes it is possible to get extras from the traveling representative. Forcing is not a problem for this dealer as he generally gets what he orders. He claims that part of the reason for improvement here is that the manufacturer's market research is much better these days, hence, there is not so much year-end overbuilding.

He also feels that many of the fuel-efficient engines found in foreign cars (e.g., the CVCC engine) do not work in the larger U.S. cars. He says there are two types of car buyers, foreign and domestic, and that the markets have little cross-over between them.

The dealer's general comments on this study are that while the government can mandate the production of small cars, it cannot

mandate consumer acceptance. Further, he says that the response to new proposals such as Carter's Energy Package is one of general uncertainty. During a prolonged period of uncertainty, people just stop buying, this dealer feels that could put the economy into a recession.

Chrysler-Plymouth Dealer

This dealer echoes the point made by the GM dealer that California cars are not as good as the others. He also feels that the manufacturers are doing as much as possible to market fuel efficient vehicles, although he says, dealers don't "sell" cars anymore, but must have what the consumer wants.

On the question of forcing, he says that it is still being done, with the small, reliable dealer often being short-changed. Like the GM dealer, he agrees that it would be easier to sell at sticker price or with a uniform mark-up on all models. Claiming that fleet and rental company sales promote cars sales to all dealers, he feels that discounts to these outlets are no longer an issue. This "advertising" effect is the standard defense proposed by the companies for this practice. Again agreeing with the GM dealer, he sees the main warranty problem as being one of paperwork. Overall, his opinion is that the California state laws have improved dealer relations.

This dealer feels that GM and Ford can influence the public much more than Chrysler or AMC. He says for example, that if Chrysler had tried downsizing, it would have failed. Also, he thinks that higher gas prices (not taxes) will get people away from big cars. In the same vein, he believes the government should ease pollution regulations. In general, he seems to believe that the manufacturers are doing the best that they can, and he comments that production bottlenecks and varying governmental regulations often slow change. He says that frequently, the factory is afraid to take the necessary steps for fear of recall if there is failure, and he cites the problems with the lean burn engine as an example. Finally, he states that government bureaucrats lack an understanding of cost constraints.

In regard to this study, he feels that it is an exercise in futility. In response to a suggestion that part of Carter's proposed tax rebate be given to salesmen who sell fuel efficient vehicles as an incentive to promote such sales, the dealer says it would not work. He notes that Chrysler had tried such a scheme for slow moving vehicles in the past without success. (Dealers appear to feel strongly that incentive or bonus payments for sale of cars should not be paid directly to their sales force. Such payments could prove counterproductive to a dealership profit if too many low profit margin cars are sold.)

Ford Dealer

The Ford dealer we interviewed says there are still many problems with warranty work. As an example, he cites the recent tire strike. Since many new cars had come in without spare tires, the dealers had to call them all back in when tires were available, issue spares, record serial numbers, etc. He says it would have been much easier just to issue certificates and let people take their cars to a tire dealer. He also says that Ford seldom reimburses labor costs at the going rate for the area.

He states that most favoritism on new car distribution is toward fleet buyers and rental companies. The company claims that this is good advertising for all dealers. Sales to these types of outlets are done through the dealer but Ford sets the price lower than usual. He also notes that smaller dealers tend to receive less consideration on vehicle distribution.

On the question of discounts, he states that a uniform discount on all models would give the dealer more trading room, since "the public expects generous trade-ins." He seems irked that Ford keeps raising the price and lowering the discount on smaller models, and claims that the Pinto only carries a 10 percent discount. Regarding the above mentioned suggestion of sharing the proposed tax rebate with the salesman, he feels that consumers would just try to trade on the salesman's rebate to lower the purchase price. He prefers the idea of a tax on the sticker price of the car.

In the way of general comments, he feels that one reason imports sell better than domestic small cars is that they are of higher quality. He likes the idea of a gas tax to reduce consumption but feels there should be a mileage deduction according to the distance one must drive to work, etc. He also points out that American owned auto companies currently sell in foreign markets fuel efficient, quality small cars which are not sold here. Why not sell them here too? His sentiments on the Presidential announcements are similar to those of the GM dealer in that he feels that the uncertainty over what laws will actually go into effect has put a lid on car sales.

Finally, on a somewhat different subject, he states that the Lincoln Mark V cost only a few hundred dollars more to build than the Thunderbird, yet sells for thousands more. The only difference, he says, is in the sheet metal.

American Motors Dealer

This dealer has few, if any, problems with warranties, and he states that AMC pays for everything with equitable reimbursement. His big problem, rather, is a lack of enough gross profit in the smaller sized AMC automobiles, particularly since he does not have enough volume to compensate for it. There is not enough room in the margin to promote the small cars, so he would favor a higher uniform margin. He also does not think it fair that rental companies can buy for less than the dealers, and he claims that the price differential is considerable.

In the way of general comments, he feels that there will be natural attraction towards smaller cars, but that the best way to solve the problem is to establish national goals in the form of laws. There should be no rebates, rather, the industry should be given a legal goal that they must meet any way they can. Not surprisingly (given that AMC sells small cars) he feels that DOT should establish a minimim mpg rather than a fleet average. The legislation should then be followed up with a massive advertising and public relations program by the manufacturer, the dealer and the government. He envisions an old-fashioned flag-waving

campaign for better gas mileage. In conjunction with this, he claims that the Carter rebate program would not be worth the cost, and that the money would be better spent on advertising.

6.7.5 Summary

In summary, this part of the report provides a wealth of background information which we believe supports conclusions drawn in other portions of the study. One possible suggestion for improving sales of fuel efficient cars might be to provide alternatives to exclusive dealership distribution of low profit margin, fuel efficient, small cars. Perhaps these vehicles could be marketed in sufficient volume to make them profitable through selected K-Mart, J.C. Penny, Sears or other such retail outlets which have auto service capabilities. This would allow some of the current dealers to concentrate sales on other lines, although many of the more marginal outlets might be forced out of business, particularly as smaller cars begin to capture a larger share of the market. This alternative would undoubtedly be strongly reisted by NADA, and perhaps by the manufacturers as well.

APPENDIX A

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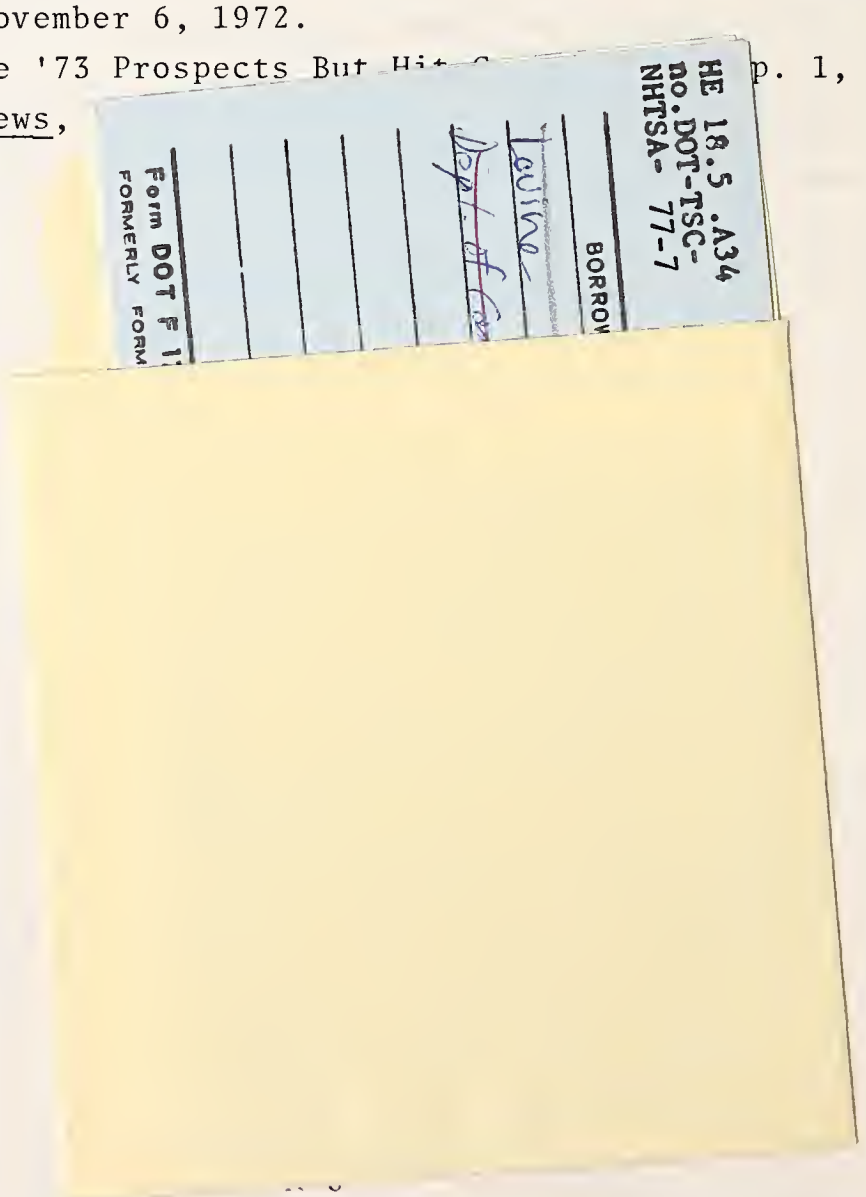

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