A SURVEY OF RETAIL AUTOMOBILE DEALERS' STOCK CONTROL PRACTICES WITH RESPECT TO NEW PASSENGER AUTOMOBILES

Thesis for the Degree of M. A.

MICHIGAN STATE UNIVERSITY

Anthony John Coscia

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A SURVEY OF RETAIL AUTOMOBILE DEALERS' STOCK CONTROL PRACTICES WITH RESPECT TO NEW PASSENGER AUTOMOBILES

by

Anthony John Coscia

An Abstract of a Thesis

Submitted to

The College of Business and Public Service

of Michigan State University of Agriculture

and Applied Science

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

Approved 

Department of General Business

June, 1958

ANTHONY JOHN COSCIA ABSTRACT

A number of times during the relatively short but colorful history of the automobile industry Congressional investigations have aired some of the manifold problems which exist in marketing automobiles. In the wake of such investigations, numerous magazine articles appear discussing various aspects of the industry. Inasmuch as many of the accounts are illuminating but, at the same time, controversial in nature, curiosity is aroused as to what conditions actually exist within the industry.

A problem which may have come to the attention of any consumer in the role of new car buyer is that of trying to get immediate delivery of the exact car he desires. Possibly the dealer may have had the car in stock. On the other hand, it may be that the dealer had a car which fulfilled some of the requirements, but not all. Then either the prospect modified his original desires or waited until the dealer could secure the car. The problem the dealer has of keeping a sufficient number of cars on hand to satisfy the greatest number of prospects and, at the same time, keeping his inventory at a minimum because of the size of each unit and because of capital requirements is a difficult one. This thesis deals with that problem.

This thesis is an exploratory study of the inventory control practices of the retail automobile dealer. It was made with the intent of contributing to the limited amount of existing knowledge in this area so that a better understanding of new passenger automobile distribution might be gained. An attempt was made to determine the effectiveness of some of these practices.

The material was divided into five chapters in the following manner.

Chapter I is introductory. A basis for the project was established, a statement of the problem was made, and the limitations of the study were reported. A glossary of terms was included in this chapter.

Chapter II is a presentation of the characteristics of the respondents. The size and representativeness of the sample was discussed in detail.

Chapter III is a presentation of the factory side of the picture. It was not possible to make an accurate appraisal of the inventory control practices of the retail automobile dealer without including an examination of the dealer resources.

Chapter IV is the main body of the study which deals primarily with the inventory control practices of the retail automobile dealer as revealed by the dealer questionnaire. Factory practices and procedures gathered from the factory questionnaire were interjected in line with the area of study.

Chapter V includes a summary, overall conclusions, suggestions for improvement, and other problems which during the course of the project suggested themselves as interesting areas of investigation.

In order to establish a practical and reasonable basis for the study, interviews were conducted with retail automobile dealers of

various makes and with factory representatives. Pertinent questions concerning the subject area were assembled, and two questionnaires were developed: one to be sent to automobile manufacturers, and one to be mailed to dealers. A mailing list of retail automobile dealers was obtained from current issues of Automotive News. The names and addresses of dealers of all makes of domestic cars, of various size and from all sections of the country, were obtained. The name of one individual of management status in the dealership was also secured. A list of all automobile manufacturers was secured from the April 29, 1957, Almanac Issue of the Automotive News, and questionnaires were mailed to automobile manufacturers of various makes of cars.

In many aspects of the business the dealer operates as an independent businessman, making those decisions which contribute either to his success or failure. The factory he represents is ready and willing to assist him whenever needed, for the retail automobile dealer and the factory are bound together by means of a selling agreement. Thus the factory is only as sound as the dealers that represent it, and the dealers are only as strong as the factory that is backing them.

To take a complicated product such as the automobile, to build it in the quantities in excess of 5,000,000 per year since World War II, to distribute it from one end of the country to the other, and to provide for servicing it in the field so that the quality that is built into it can be enjoyed is a difficult marketing project.

ANTHONY JOHN COSCIA ABSTRACT

Information obtained from this study shows how the retail automobile dealer and the factory operate through a complex marketing situation in meeting customer demand for automobiles.

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The writer wishes to express grateful acknowledgment to those whose contributions of time and information were of great value in completing this project.

Dr. Ward McDowell of Michigan State University was faculty adviser. His guidance and stimulation were of inestimable value from the moment of inception of the study through to its emergence into final form.

In order to obtain the factory viewpoint, questionnaires were mailed to each of the car manufacturers. Interviews were also conducted with factory men. Two men who were especially helpful and to whom I wish to extend grateful acknowledgment are:

Mr. W. L. Webster - Former Zone Sales Promotion Manager of Chevrolet who gave freely of his many years of experience in the field.

Mr. R. K. Victor - Former Zone Business Management Manager and former Assistant General Manager of a Pontiac dealership.

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Mr. W. L. Courage - Executive Assistant to Vice President, Automotive Distribution and Marketing, American Motors Corporation.

Mr. E. A. Karas - Vehicle Programming, Group Marketing Offices, Chrysler Corporation.

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Mr. L. D. Stuart - Public Relations, Pontiac Motor Division, General Motors Corporation.

It was a heartwarming experience to have received help from the many cooperating retail automobile dealers of all car lines throughout the country. Some took time to explain more fully what they thought; others offered words of advice and encouragement.

In order to obtain an understanding of the area of study so that a sound questionnaire could be developed, interviews were conducted with a number of local retail automobile dealers. I am especially grateful to the following dealership men for advice and guidance:

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Mr. Roy Hansen - Sales Manager for Victor L. George, Inc., Plymouth dealership, Flint, Michigan.

Mr. Robert Zink - Sales Manager for Otto P. Graff, Inc., Ford dealership, Flint, Michigan.

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CHAPTER I

INTRODUCTION

Just fifty years ago the automobile industry was a struggling newborn infant. Total registered vehicles numbered only 150,000. Since those early days, the country has grown, the people have prospered, and the ownership of automobile vehicles has risen to approximately 66,000,000. If the sales of allied industries, such as parts and accessories and gasoline service stations, were included, then it can be stated that the retail sales of the automotive industry soared to $55,000,000,000 in 1957. The magnitude and importance of the automotive industry is pointed up by the fact that it provides jobs for 10,500,000 persons. This is one out of every seven employed people in the country.[1]

The effects of this development have been widespread. Mr. Harlow H. Curtice, President of General Motors Corporation, stated recently that "the impact of this growth has brought far-reaching social, cultural and economic benefits on every hand."[2]

Many problems were encountered and resolved along the way in order for this industry to develop to such an extent. Mass production methods had to be developed in order to fulfill the demand and to expedite

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[1]Harry A. Williams, Managing Director, American Manufacturing Association, "Auto Sales Set Record," Detroit Free Press, January 5, 1958, p. 1.

[2]Advertisement, "General Motors Celebrates Its Golden Milestone Anniversary," Automotive News, October 21, 1957, p. 8.

servicing in the field. To enable more people to purchase new passenger cars, radically new methods of financing and insuring were introduced and developed. The rapid growth of the automobile industry was made possible by the combined efforts of those whose responsibility it was to build cars together with those whose responsibility it was to sell cars. The relationship of one phase of this industry with the other was expressed recently by Strom Thurmond, former Senator from South Carolina. The following is an excerpt from an address made before a group of dealers:

> The people who make and sell cars have done the most amazing job of effective manufacture and distribution of a product that the world has ever seen.
>
> You will notice that I did not limit the credit for this job to the manufacturers or to the merchants who sell the cars. The job could not have been done without both segments of the automobile industry. They are as inseparable as Siamese twins. If one dies, the other will also. When one goes hungry, even though the other may be temporarily gorging on the food at the same time, both will be anemic before long.[3]

Since credit for the growth of this industry must be shared by both the production and the distribution phases, since each is dependent on the other, then the better the working relationship that exists, the healthier the industry.

Statement of the Problem.

A number of times during the relatively short but colorful history of the automobile industry Congressional investigations have aired some of the manifold problems which exist in marketing automobiles. In the

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[3]Strom Thurmond, Former Senator from South Carolina, "The Automobile Battle," Vital Speeches of the Day, Vol. XXII-21, August 15, 1956, p. 656.

wake of such investigations, numerous magazine articles appear discussing various aspects of the industry. Inasmuch as many of the accounts are illuminating but, at the same time, controversial in nature, curiosity is aroused as to what conditions actually exist within the industry.

A problem which may have come to the attention of any consumer in the role of new car buyer is that of trying to get immediate delivery of the exact car he desires. Possibly the dealer may have had the car in stock. On the other hand, it may be that the dealer had a car which fulfilled some of the requirements, but not all. Then either the prospect modified his original desires or waited until the dealer could secure the car. The problem the dealer has of keeping a sufficient number of cars on hand to satisfy the greatest number of prospects and, at the same time, keeping his inventory at a minimum because of the size of each unit and because of capital requirements is a difficult one. This thesis deals with that problem.

This thesis is an exploratory study of the inventory control practices of the retail automobile dealer. It was made with the intent of contributing to the limited amount of existing knowledge in this area so that a better understanding of new passenger automobile distribution might be geared. An attempt was made to determine the effectiveness of some of these practices.

Limitations of the Study.

The dealer sample used in this study was small. Therefore, the information presented may not be an accurate indication of the character-

istics of total dealers. Limitations of time and money prohibited a larger and more extensive investigation.

Methodology.

In order to establish a practical and reasonable basis for the study, interviews were conducted with retail automobile dealers of various makes and with factory representatives. Pertinent questions concerning the subject area were assembled, and two questionnaires were developed: one to be sent to automobile manufacturers, and one to be mailed to dealers. A mailing list of retail automobile dealers was obtained from current issues of Automotive News. The names and addresses of dealers of all makes of domestic cars, of various size and from all sections of the country, were obtained. The name of one individual of management status in the dealership was also secured. A list of all automobile manufacturers was secured from the April 29, 1957, Almanac Issue of the Automotive News, and questionnaires were mailed to automobile manufacturers of various makes of cars. This survey was made during the last quarter of 1957.

Organization of the Thesis.

The material for this thesis was divided into five chapters.

Chapter I is introductory. A basis for the project was established, a statement of the problem was made, and the limitations of the study were reported. A glossary of terms was included in this chapter.

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Chapter V includes a summary, over-all conclusions, suggestions for improvement, and other problems which during the course of the project suggested themselves as interesting areas of investigation.

Definitions of Terms.

Accessories. All automobile manufacturers do not classify accessories and options in the same manner. The simplest and clearest distinction is that accessories are those items made available to the public which can be installed either at the factory or at the dealership, such as radios and heaters, while options are items which can be installed on the new car at the factory only, such as automatic transmissions, V-8 or six cylinder engines.

Balanced stock. The textbook definition applies here: keeping inventory balanced with the rate of sale. This term applied to automobile stock has reference not only to total units, but also to varieties of series, models, colors, and options.

Bulk order. An order placed by the dealer in advance of the stock period. It indicates the number and types of cars in total needed for that period.

Demonstrators. Cars used by the dealership, salesmen, or personnel. They are called demonstrators because they are used in making a sales demonstration to prospective buyers.

Dual dealer. A dealer who has a franchise for two or more different makes of cars. Cars may be of the same or a different manufacturer.

Factory. The factory is the manufacturer. As used in this thesis, the manufacturer could be the company itself or a division of the company responsible for manufacturing a particular make of car.

Factory representative. A representative of an automobile manufacturer. The representative calls on retail automobile dealers in the field.

Floor planning. This is the common term for wholesale financing. A dealer may floor plan his stock of new cars by letting a finance company pay the factory for the merchandise. He in turn will pay the finance company as he sells each unit of the stock, paying a low rate of interest for the service.

Individual order. An order placed by the dealer for a specific car. Placing individual orders is part of the regular ordering procedure.

Loaded. The opposite of stripped. A car that is loaded is equipped with a great number of accessories and options.

Model. This term has a dual meaning, so its usage must be examined for specific meaning. It is used to denote a particular model year such as the 1957 model car, and also to indicate the body style of a car, whether it is a two-door, four-door, hardtop, convertible, or station wagon.

Options. Those items made available to the public which can be installed at the factory only, such as automatic transmissions and V-8 or six cylinder engines. (See Accessories also.)

Overallowance. Most deals in selling new automobiles involve a used car trade. The term overallowance means that the dealer has allowed, in lieu of cash, an amount over the market value of the car taken in trade. In effect, the overallowance is a discount from the list price of the new automobile.

Series. Price lines of a particular make of car. Comparable to multiple price lining in other products. For example, Chevrolet was available in the following series in 1957: the Bel Air, 210, and 150 series.

Special order. A supplementary order by the dealer for a specific car for which he has a deal.

Stripped. This term indicates that the car is equipped with few, if any, accessories.

Volume planning. This term as used in the automobile industry corresponds to the term forecasting in other industries.

CHAPTER II

CHARACTERISTICS OF RESPONDENTS

This chapter is a presentation and explanation of the techniques used and the success achieved in securing information for this study. This project was designed to investigate the inventory control practices of the retail automobile dealer. In order to do a satisfactory job it was necessary to take into consideration the contingent practices of their resources. Since it was found that there was a paucity of information on this subject in secondary source material, the two primary sources of information used were the manufacturers and the dealers.

Factory Participation.

During the year 1957, twenty makes of automobiles were manufactured in the United States by the five automobile manufacturers. American Motors Corporation produced three different makes in 1957. The Metropolitan, which is distributed by this company, was omitted because it is not produced in the United States. Chrysler Corporation, Ford Motor Company and General Motors Corporation each produced cars of five separate makes. The Studebaker-Packard Corporation produced two different makes of new cars.

Table I shows the names of the manufacturers together with the makes of automobiles each manufactured.

TABLE I

CAR MANUFACTURERS AND CARS THEY MANUFACTURED IN 1957

Manufacturer	Make of Car
American Motors Corporation	Hudson Nash Rambler
Chrysler Corporation	Chrysler Imperial Dodge DeSoto Plymouth
Ford Motor Company	Ford Lincoln Mercury Continental Edsel
General Motors Corporation	Chevrolet Pontiac Cadillac Buick Oldsmobile
Studebaker - Packard Corporation	Packard Studebaker

The major manufacturers assign the responsibility for the production and distribution of one or more makes of cars to a division. Because of this internal organization wherein each division may operate more or less independently of other divisions, it could not be assumed that all divisions of a major manufacturer had identical practices.

Although twenty separate makes of automobiles were manufactured, only fourteen divisions were contacted. Some divisions produced more than one make of car. All of the various makes of cars were produced by a separate division except the following: Hudson, Nash, and Rambler which were all produced by American Motors Corporation; Chrysler and Imperial produced by the Chrysler Division of Chrysler Corporation; Lincoln and Continental produced by the Lincoln Division of the Ford Motor Company; and Packard and Studebaker produced by the Studebaker-Packard Corporation.

Factory questionnaires were mailed to the sales manager, distribution executive, or marketing director of each manufacturer or car division. Table II shows the manufacturers or separate divisions of manufacturers to whom the questionnaires were mailed. The makes of cars each manufactured are also shown. (A copy of the letter and questionnaire mailed to the fourteen separate manufacturers may be seen in the Appendix in Figures 1 and 2.)

TABLE II

MANUFACTURERS AND CAR DIVISIONS OF MAJOR MANUFACTURERS TO WHOM QUESTIONNAIRES WERE MAILED

Car Manufacturer or Division	Make of Car Manufactured
American Motors Corporation	Hudson Nash Rambler
Chrysler Division	Chrysler Imperial
DeSoto Division	DeSoto
Dodge Division	Dodge
Plymouth Division	Plymouth
Ford Motor Company	Ford
Lincoln Division	Lincoln Continental
Mercury Division	Mercury
Cadillac Motor Car Division	Cadillac
Chevrolet Motor Division	Chevrolet
Buick Motor Division	Buick
Oldsmobile Division	Oldsmobile
Pontiac Motor Division	Pontiac
Studebaker-Packard Corporation	Packard Studebaker

NOTE: At the time the mailings were made, the Edsel Division of the Ford Motor Company, while formed, did not have a car in the field.

NOTE: The Lincoln Division of the Ford Motor Company was combined with the Mercury Division in 1957. At the time of the mailings, they were still separate.

Of the fourteen questionnaires mailed, responses of varying description were received from only eight. Three of the eight answered the questionnaire completely while one answered the first three questions only. One company was very helpful. Even though they did not return the completed questionnaire, they sent the Report on Volume Planning made by Mr. J. H. Sloan of the Chrysler Corporation. This was very helpful as will be seen in a following section of this thesis. Another company promised to fill in the questionnaire at some later date, but no further word was received. Two companies reported that this type of information was confidential and not available to the public.

The amount of information obtained from this source was not as extensive as it was hoped. However, that which was secured was used in the appropriate subject areas throughout the thesis.

Dealer Participation.

Since the bulk of the study was concerned with the retail automobile dealer and since this portion of the study was more exacting, the following steps taken were with reference to the questionnaires mailed to them. A stratified sample design was used wherein the respondents were contacted by mail. It was considered that greater homogeneity would exist in each of several classifications of dealers. Therefore, an effort was made to secure a proportionate sample with respect to the following characteristics: manufacturer represented, location and size of dealership. A random sample was then taken in each group. (A copy of the letter and questionnaire mailed to dealers may be seen in the Appendix in Figures 3 and 4.)

Size of sample. According to Automotive News, the estimated number of retail automobile dealers in the United States in February, 1957, was 39,643.[1] This figure included dealers of all makes of cars, but a dual dealer was counted only once. (The total number of dealers by car make may be seen in the Appendix in Table XXXVIII.)

Two hundred ninety-one questionnaires were mailed. There were 116 returns; so the percentage of returns was 40 per cent and the sample size expressed as a percentage was .2926 per cent.

Automobile manufacturers' dealer representation. It was planned that the study be representative according to the percentage of registrations gained for the year 1956 by each of the five automobile manufacturers: American Motors Corporation, Chrysler Corporation, Ford Motor Company, General Motors Corporation, and Studebaker-Packard Corporation. Imports were excluded from the study. Table III shows the percentage of car registrations for each of the five manufacturers for 1956 and the number and percentage of total responses from dealers of each manufacturer. (A graphical presentation of the information in Table III appears in the Appendix in Figure 5. Table XXXIX in the Appendix shows the percentage of new car registrations in 1956 by particular car make.)

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[1]Table, "Passenger Car Dealers in U. S.," Automotive News, February 11, 1957, p. 1.

TABLE III

SAMPLE REPRESENTATION ACCORDING TO AUTOMOBILE MANUFACTURERS' REGISTRATIONS FOR 1956

Car Manufacturer	Per Cent of Registrations*	Number of Responses	Per Cent of Responses
American Motors Corporation	1.9	5	4.3
Chrysler Corporation	15.5	21	18.1
Ford Motor Company	28.4	30	25.9
General Motors Corporation	50.8	56	48.3
Studebaker-Packard Corporation	1.8	4	3.4
Miscellaneous	1.6	—	—
Total	100.0	116	100.0

*Table, "New Car Registrations By Makes, 1956-1955," Automotive News (1957 Almanac Issue), April 29, 1957, p. 42.

The greatest proportion of responses obtained were from General Motors Corporation dealers. General Motors obtained a 50.8 per cent of industry in 1956 and the questionnaire responses obtained were 48.3 per cent. The second largest sample group was Ford Motor Company dealers. The Ford Motor Company per cent of industry in 1956 was 28.4 per cent. The per cent of responses obtained was 25.9 per cent. Chrysler Corporation dealers were the third largest sample group. Chrysler Corporation accounted for 15.5 per cent of industry in 1956 and the sample size proportion was 18.1 per cent. American Motors Corporation dealers and Studebaker-Packard Corporation dealers accounted for 1.9 per cent and 1.6 per cent of industry respectively in 1956. The sample taken from each was purposely larger than their industry proportion, since a true proportionate sample would have been so small as to be insignificant. The sample proportion taken was 4.3 per cent from American Motors Corporation dealers and 3/4 per cent from Studebaker-Packard Corporation dealers.

Geographic representation. An attempt was made to make the study representative according to territory. The popular nine territory breakdown of the United States was used. Table IV shows the percentage of new car registrations by territory and the number and per cent of total responses by territory. (A graphical presentation of this information on Table IV appears in the Appendix in Figure 6.)

TABLE IV

SAMPLE REPRESENTATION ACCORDING TO NEW PASSENGER CAR REGISTRATIONS BY GEOGRAPHICAL DIVISIONS FOR 1956

Regions	Per Cent of 1956 Registrations *	Number of Responses	Per Cent of Responses
New England	5.5	6	5.2
Middle Atlantic	18.8	21	18.1
South Atlantic	13.0	11	9.5
East North Central	24.4	27	23.3
East South Central	5.1	6	5.2
West North Central	8.3	12	10.3
West South Central	9.7	15	12.9
Mountain States	3.4	6	5.2
Pacific States	11.8	12	10.3
Total	100.0	116	100.0

*Table, "New Passenger Car Sales by Months in States and Geographical Division, 1956," Automotive News (1957 Almanac Issue), April 29, 1957.

The East North Central group of states consisting of Illinois, Indiana, Michigan, Ohio, and Wisconsin accounted for the largest number of registrations in 1956. The per cent of industry attained by this group was 24.4 per cent. The sample size proportion from this group was 23.3 per cent.

The group of states which accounted for the second largest number of registrations was the Middle Atlantic group consisting of New Jersey, New York, and Pennsylvania. These states accounted for 18.8 per cent of total registrations. The sample size proportion taken from this group was 18.1 per cent.

Third in group size by proportion of registrations was the South Atlantic group of states. This group consisted of Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia and West Virginia. This group of states accounted for 13.0 per cent of registrations in 1956. The sample size proportion taken from this group was 9.5 per cent.

The Pacific States consisting of California, Oregon, and Washington accounted for 11.8 per cent of new passenger car registrations in 1956. The sample size proportion taken from this group was 10.3 per cent.

The five other groups of states, namely, West South Central, West North Central, New England, East South Central, and the Mountain states, accounted for less than 10.0 per cent each of registrations in 1956. Their proportionate share of the 1956 market was respectively: 9.7 per cent, 8.3 per cent, 5.5 per cent, 5.1 per cent, and 3.4 per cent. The sample size proportion taken from each group was respectively: 12.9 per cent, 10.3 per cent, and 5.2 per cent for each of the next three groups.

Representation with respect to size of dealerships. An attempt was also made to obtain an equal number of responses from dealerships of various size. The total number of dealers was divided into four groups.

Each dealer was assigned to a particular group on the basis of the number of units he delivered for the year 1956. This four group classification of dealers by size is the one used by the National Automobile Dealers Association for reporting various dealer business activities. Table V shows the four group dealer classification.

TABLE V

SIZE OF DEALERSHIPS BY GROUP CLASSIFICATION

Group Number	Units Delivered In One Year
Group I	1 to 149
Group II	150 to 399
Group III	400 to 749
Group IV	749 and over

Number and per cent of responses by group size is shown on Table VI. (A graphical presentation of the information in Table VI appears in the Appendix in Figure 7.)

TABLE VI

SAMPLE REPRESENTATION ACCORDING TO DEALERSHIP SIZE

	Group I	Group II	Group III	Group IV	Total
Number of Responses	30	31	28	27	116
Per Cent of Total	25.9	26.7	24.1	23.3	100.0

Representation according to manufacturer and group size. Table VII shows a breakdown of the sample according to manufacturer and dealerships by group size.

The total number of responses was 116. The number of responses from each group by size was as follows: thirty for Group I, thirty-one for Group II, twenty-eight for Group III, and twenty-seven for Group IV. The proportion of total sample for each group respectively was 25.9 per cent, 26.7 per cent, 24.1 per cent, and 23.3 per cent.

An attempt was made to secure dealerships of various sizes representing each manufacturer as respondents. No Group III and Group IV respondents, however, were obtained either for American Motor Corporation dealers or Studebaker-Packard Corporation dealers. The proportion of the sample for these two manufacturers was as follows: of the total Group I dealers responding, American Motor dealers had a 6.7 per cent representation, while Studebaker-Packard dealers had a 10.0 per cent representation. Of the total Group II dealers responding American Motors dealer representation was 9.7 per cent, while Studebaker-Packard dealer representation was 3.2 per cent.

Chrysler, Ford, and General Motors dealers were represented in each of the four group sizes as follows: in the Group I size, for Chrysler, 10.0 per cent; Ford, 26.7 per cent; and General Motors, 46.6 per cent. In the Group II size, Chrysler, 19.4 per cent; Ford, 29.0 per cent; and General Motors, 38.7 per cent. In the Group III size, Chrysler, 28.6 per cent; Ford, 17.9 per cent; and General Motors, 53.5 per cent. In the Group IV size, Chrysler, 14.8 per cent; Ford, 29.6 per cent; and General Motors, 55.6 per cent.

TABLE VII

SAMPLE REPRESENTATION ACCORDING TO MANUFACTURERS AND GROUP SIZE

Manufacturer	Group I		Group II		Group III		Group IV	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
American Motors	2	6.7	3	9.7				
Chrysler	3	10.0	6	19.4	8	28.6	4	14.8
Ford Motor	8	26.7	9	29.0	5	17.9	8	29.6
General Motors	14	46.6	12	38.7	15	53.5	15	55.6
Studebaker-Packard	3	10.0	1	3.2	—	—	—	—
Total	30	100.0	31	100.0	28	100.0	27	100.0

CHAPTER III

RESOURCES

In order to gain a better understanding of the retail automobile dealers' practices and problems, it was considered essential to examine first some of the problems which the dealers' resources have in supplying dealers adequately. This chapter is divided into two sections. The first section is an explanation of the factory-dealer relationship while the second section is a presentation and a brief analysis of some of the problems automobile manufacturers are confronted with in merchandise control.

Factory-Dealer Relationship.

The marketing of new automobiles is big business. Since World War II, upwards of five million vehicles have been registered annually. It is a tremendous task not only to manufacture that number of units, but also to distribute them throughout the country.

The franchise dealer system. The retail automobile dealer is an exclusive dealer and is franchised. This method of distribution is used by all car manufacturers. While some manufacturers do operate a few retail outlets, these are in a very small minority. The franchise dealer method of distribution does not give the factory the total control it would have with its own retail outlets, nor does the franchise dealer have the freedom of operation that an independent dealer would have. Yet throughout the years other methods of distribution that have been

tried have given way to it. It has been by means of the franchise dealer system that the industry has grown to its present size.

Under this sytem the dealer operates in many respects as an independent. He capitalizes the business and makes the day to day decisions of management. He is, however, bound to the manufacturer by a selling agreement, renewable periodically, which, among other things, requires that the dealer handle exclusively a particular make of car. Thus the retail automobile dealer is limited to one resource for supply. There are a number of dealers that have franchises for several makes of cars manufactured by the same company. These are called dual dealers. Some points cannot support individual dealers for each make of car, so two or three makes of one company may be represented by one dealer. Only recently has permission been granted by some automobile manufacturers for their dealers to stock cars of a different manufacturer. These additional franchises are for imported cars or cars which could be classified as non-competitive with the dealer's regular car line.

In the automobile industry there are usually three people involved in distribution: the factory, the dealer, and the customer. It is the role of the factory to place offerings each year in the market hoping that it has guessed correctly as to what the public wants. It is up to the new car buyer to approve or reject and to choose that which is most appealing to him. It is up to the dealer to take that which the manufacturer produces, be it good or bad, and do the best he can with it for one model year at least.

Balancing factory production with dealers' orders. Questionnaires were mailed to automobile manufacturers in order to find out how each manufacturer works with its dealers in distributing cars throughout the country. It was hoped that the information gained from the manufacturers would supplement that obtained from the dealers. The following section is a presentation of the information obtained from questions asked with respect to balancing factory production with dealers' orders.

When asked whether automobiles were assembled in advance of dealers' orders or on dealers' orders only, one manufacturer replied that it did manufacture cars in advance of dealer orders while three manufacturers replied that they did not. The manufacturer that reported it did assemble cars in advance indicated that 10 per cent were assembled in advance. Thus only one of the four companies that replied produced cars in advance of dealers' orders, and this company built a relatively small percentage in advance.

Automobile companies project the total number of cars to be built for the next model year. Then it is necessary for them to break down the yearly projection into actual production schedules for each month.

In answer to the question "How do you break down yearly scheduled production to monthly output for dealer orders?", the manufacturers replied as follows:

Company A:

> Monthly schedules are developed from market studies, industry volume, seasonal patterns, projected deliveries, and current and anticipated inventories.

Company B:

For advance planning, it is based on estimated sales. For near planning, it is based on projections received from dealers.

Company C:

Monthly output is increased or decreased based on sales trends. A yearly schedule is a present goal and not a firm schedule.

Company D:

A model year total production is determined well in advance of that year's actual production and also the per cent of each model and body type that we estimate we will produce so that necessary tools, dies, and fixtures can be secured.

The model year total to be built is divided into the number of working days that that model will be produced and the figure arrived at will give you the daily rate necessary to build the model year production. From this figure you can also arrive at the monthly production.

Records are maintained covering the total number of cars that are sold at retail and also the total number of cars in dealer stock. Retail deliveries for future months are estimated and, using the number of cars to be built in future months, dealer stocks can be determined as follows: Stock on hand end of prior month with dealers, plus current month's production, minus estimated retail sales, equals estimated stock end of current month.

It can be seen that systematic and comprehensive statistical means are used by automobile companies in breaking down yearly production schedules to monthly production figures.

The final question asked on this subject was: "How do you determine in advance what per cent of cars for which to plan production with respect to series, models, colors, and options?"

The replies given appear as follows:

Company A:

Based on dealers' forecasts and historical data with close control exercised over usages to quickly determine and evaluate shifts in consumer preferences.

Company B:

By an analysis of recent trends, plus consideration of new models, new options, prior changes, industry trends, etc.

Company C:

We use sales trends plus projections from dealers.

Company D:

A record is maintained covering models, colors, and equipment that our dealers sell at retail and also the number they have in their inventory. A record is also maintained of the orders received. As the model year progresses, we receive from our dealers their estimated requirements by month, and these figures are compiled for the country as a whole so that we can determine just what the dealers estimate they will require to take care of their anticipated retail sales. From this information, charts are maintained and trends are established by using the information which we originally receive from the dealers as to their anticipated requirements, plus their actual retail deliveries to customers, plus actual orders received from the dealer, plus cars that are currently in dealer inventories, and from this information we can determine what particular models and body types to build for any certain month's production. Colors, upholstery material, and options are also kept track of in the same manner.

There are many problems which confront the factory in making projections. It is not the purpose of this paper to examine in detail the procedures and practices involved in forecasting. J. H. Sloan of the Chrysler Corporation presented an excellent paper adequately covering this area to the National Conference of the American Marketing Association in Detroit, Michigan, June 20, 1957. The title of the paper was "Volume Planning in the Automobile Industry." The point that is important here is that in order to provide retail automobile dealers with a variety of cars so that they can maintain a balanced stock, month for month throughout the model year, factories must make plans well in advance. In dealing with the future there is no crystal ball that can be used,

no magic formula, but neither is it just a guess. Statistical methods have been developed by the automobile companies so that the many variables can be considered to arrive at a sound basis for producing the number and types of cars needed.

Problems of Volume Planning.

The term volume planning as used in the automobile industry is similar to the term forecasting as used in other industries, but is more inclusive in that it includes a consideration of future sales together with the financing and facilities needed to meet the projection.

Mr. J. H. Sloan of the Chrysler Corporation has pointed out that there are seven problems which the automobile manufacturer must take into consideration in volume planning.[1] These problems are:

1. Forecasting sales that fluctuate widely from year to year.
2. Long lead time required to design, test and produce a new model.
3. Increasing emphasis on styling.
4. Mounting costs of new model development.
5. Increasing number of options and accessories being offered.
6. Purchasing procedure whereby commitments for material are made months in advance.
7. Automobiles cannot be stored in large quantities.

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[1] J. H. Sloan, "Volume Planning in the Automobile Industry" (Paper read at the National Conference of the American Marketing Association, Detroit, Michigan, June 20, 1957).

Let us examine each of these problems in turn and see how each affects the manufacturing function of the factory and the inventory function of the retail automobile dealer.

First, sales fluctuate widely from year to year. The automobile companies must plan their manufacturing in advance. Facilities must be obtained, materials must be secured, and organizations assembled in order to produce a specific number of cars. The fluctuation of sales from year to year is difficult to predict. There is no way to predict accurately the increase or decrease, not to mention the degree of fluctuation. It is quite probable that a change will occur. The differences year for year in some cases are very great. For example, in 1955 there was a sales increase over 1954 of 30 per cent. (Figure 8 in the Appendix shows year by year registrations of cars.) How many cars should the factory plan to produce next year? How many cars should the factory plan to produce next year? How many can the dealer sell next year? This is the problem of forecasting.

Second, unusually long lead time required to design, test, and produce a new model. Mr. J. H. Sloan reported in June of 1957 that the design of the 1958 models had already been "put to bed" and design work was well along on 1959 and 1960 models. Preliminary design work had already started on 1961 and 1962 models.

The intensity of the distribution problem would be reduced if the produce were one which could be easily and quickly changed to the demands of the buying public.

Third, increased emphasis on styling. Automobiles can be classed as a type of fashion goods. Each year a new and different styling is offered to the public. Of course, like other fashion goods, the consumer does have some distinct preferences with respect to color and design, but until the product is actually seen these preferences are not crystallized into specific desires.

The automobile manufacturer, by means of consumer research, attempts to anticipate the characteristics of the product that will be most desirable to the consumer and commits himself to a model year's run with that product. It is from the offerings of each car manufacturer that the consumers pick and choose. Whenever a prospect buys a particular make of car, it is a vote for that product, and the greater the sales, the more pronounced is the acceptance of that interpretation of the styling of that product. It is needless to say that anticipating desirable results even with the use of the latest techniques of consumer research is uncertain, and no reasonable amount of success can be guaranteed in advance.

Fourth, mounting costs of new model development. Engine tooling and body dies run into millions of dollars; so when the model is set up for a year's run, it is not possible to test the market first and then scrap the dies and start over if not accepted. The model must run its course.

Mr. J. H. Sloan reports that the Chrysler Corporation spent in excess of $300,000,000 in developing its present line of cars.

Since the manufacturer has little or no flexibility in making any major changes during a model-year run, he must do the best he can during that year. This lack of flexibility during the year also applies to the retail automobile dealer because he has an exclusive franchise.

Fifth, increasing number of options and accessories being offered. Not only options and accessories, but also series, models, and colors, all contribute to complicating the problem of production and distribution.

Segmentation strategy is practiced to a high degree in the automobile industry according to a recent marketing report by Alderson and Sessions. This strategy assumes that the "core" markets for a particular product have been exploited to a point where increased efforts yield diminishing returns, but an equal amount of effort applied to fringe markets yield much greater returns. Segmentation as defined more exactly by these market consultants "consists of converting (for purposes of analysis) a heterogeneous market into a number of smaller homogeneous markets, in response to differing product preferences among important market segments. It is attributable to the desires of consumers or users for more precise satisfaction of their varying wants."[2]

The five domestic automobile manufacturers offer at least three series of cars in different price ranges or series. For example, Chevrolet in 1957 had the 150, 210 and Bel Air while Ford had the Custom,

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[2]Wroe Alderson and Robert E. Sessions, "Marketing and Management Counsel Cost and Profit Outlook," June, 1957, Vol. 10, No. 6., Three Penn Center Plaza, Philadelphia, Pennsylvania.

Custom 300, Fairlane, and Fairlane 500 series.

Each series is composed of a number of models such as two-door, four-door, two-door hardtop, four-door hardtop, convertible, and station wagon. Not all models are offered in each series. Usually the hardtops, convertibles, and station wagons are offered only in the higher priced series. (Table XL in the Appendix shows the combinations available for 1957.)

In 1957, 235 different models of cars were made available by the five automobile manufacturers.

Another consideration in trying to satisfy customer wants with manufacturers' offerings is the tremendous number of options from which a consumer may choose. If all the options, series, models, and colors offered by one manufacturer were multiplied mathematically, the manufacturer could produce over one million cars and never have two the same. In 1957, from the lowest priced Chevrolet to the highest, a range of $2,300 existed. The lowest priced car, of course, was "stripped". The highest priced car included expensive options. Generally the lower price line of cars are offered stripped and the higher price lines include options and accessories. Some dealers prefer to offer cars fully equipped and take off what is not wanted. Others prefer to offer the car stripped and add on what is wanted.

In a seller's market it was the practice after World War II to offer cars to the public "loaded" with accessories and to take off as few as possible in making the sale. In a buyer's market, it is not so easy to overcome the problem of selecting options and accessories that customers prefer.

The problem of options is a difficult one for the factory as well as the dealer because many options can be installed only at the factory--for example, Easy Eye glass, automatic or standard transmissions, V-8 or six cylinder engines and power equipment. Options such as radio, heater directional signals, and, in some cases, color and power equipment, to name some of the most popular, can be added or taken away from the car at the dealership. (Table XLI and Figures 9, 10, 11, and 12 in the Appendix show current preference trends for options.)

A recent article in Business Week revealed the following;

> Edward N. Cole, Vice President and General Manager of the Chevrolet Motor Division, says, "We build for five markets. The five markets are: (1) economy; (2) economy, but something more too; (3) luxury, but modest performance; (4) performance; (5) high performance plus maximum luxury."
>
> At one time cars were manufactured as standard, deluxe, and super deluxe. This is no longer true. Now you deal either with "stripped" models or you deal with options. Variations aren't limited to engine and transmission, power gadgets, body styling, and paint. They are spreading to other mechanical parts, differential, suspension systems, frames, axles.
>
> Victor G. Raviolo, Assistant Director of Engineering, Ford Motor Company, said, "We build standard parts and elements from which we can assemble a great variety of automobiles."
>
> Instead of dramatic new "cars of the future" you'll see more new fixtures sneaking into current models as optional equipment. It's more like buying a prefabricated house. You are offered a standard lot and foundation; then you choose your floor plan and built-in equipment.
>
> That's a long way from the days when Detroit offered even lights and bumpers as optional extras. But few outside the industry realize how far it has moved since Henry Ford's model heyday of "any color as long as it is black." Today's production strategy is: "Make every car sell to the broadest possible market."[3]

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[3] "Optional Extras: Detroit's Way of Making Cars Fit Many Tastes," Business Week, April 6, 1957, p. 112.

Sixth, purchasing procedure whereby commitments for material are made months in advance. The automobile is one of the largest and most complicated products the consumer buys. Time is needed to manufacture and assemble the thousands of parts needed to produce an automobile. These parts are not all manufactured by the automobile factories. For example, General Motors points out that they depend on over 26,000 small suppliers for parts and accessories.

Seventh, automobiles cannot be stored in large quantities. Automobiles, unlike many products, cannot be stored in large quantities. The factory builds and ships them to dealers. Dealers, in turn, cannot store too many cars as they take up too much room, and so cars must be produced and sold on a continuing basis so as not to require too much storage space.

From the foregoing range and magnitude of the major problems confronting the factory, and the dealer too, in making accurate forecasts, the problems can be summed up as follows:

1. The automobile manufacturer attempts to produce sufficient numbers of cars of the types the dealer will want, no more and no less.
2. The dealer, in turn, orders from the factory automobiles he believes his customers will want.
3. Each model year the factory and the dealer must clear out all cars produced.

CHAPTER IV

MERCHANDISE CONTROL

This chapter is devoted primarily to a discussion of the practices used by the retail automobile dealer with respect to inventory control as revealed by the dealer questionnaire. The subject matter is arranged to show what methods are used in (1) ordering stock, (2) determining what to buy, (3) obtaining supplementary stock, and (4) disposing of excess stock.

Interspersed throughout is additional information secured in an attempt to determine the effectiveness of the methods used and to portray the attitude that dealers have with respect to various aspects of inventory control practices.

Ordering Stock.

In this section the importance of dealers having stock on hand and the methods of obtaining it are presented as reported on the questionnaire.

Importance of stock at the retail outlet. Because of the diversity of choice that exists in stocking new cars, since the cost of each unit is so great it might be presumed that automobile dealers would not try to stock cars but would sell from samples as much as possible, certainly the smaller dealers. Such, however, is not the case. The term "Selling from sample" as used here means that a product is shown at the point of sale to a prospective buyer and when a sale is made another unit is ordered from the factory to fill the order.

Table VIII shows the number and per cent of dealers who stock new cars.

TABLE VIII

DISTRIBUTION OF DEALERS THAT CARRIED A STOCK OF NEW CARS DURING THE SELLING SEASON

Annual Unit Sales	Total Number of Dealers	Number Who Stock Cars	Per Cent Who Stock Cars
1 to 149	30	30	100.0
150 to 399	31	31	100.0
400 to 749	28	28	100.0
750 and over	27	27	100.0
Total	116	116	100.0

All dealers, regardless of size, kept a stock of automobiles on hand. This indicates that automobile dealers do not sell from sample. All automobile dealers stock cars even though they might not have the exact cars that customers want.

Floor planning or wholesale financing makes it possible for all dealers to stock cars without tying up capital in inventory. Although a number of dealers pay cash for cars at the time of delivery (a factory requirement), many avail themselves of the services of finance companies and banks who floor plan a designated number of cars, depending on the financial strength of the dealer. Thus automobile dealers can stock cars without tying up their working capital.

Of course, the number of cars stocked by different size dealers varies from a few cars to several hundreds. An idea of the number stocked by dealers can be gained from Table IX.

TABLE IX

APPROXIMATE NUMBER OF CARS CARRIED IN STOCK BY RETAIL AUTOMOBILE DEALERS

	Group I	Group II	Group III	Group IV
Least	2	10	20	50
Most	33	63	100	250
Mode*	12	24	50	100

*Number given most frequently by the group.

While there may be no great significance attached, it is interesting to note that the number given most frequently in each group was twice that of the preceding group.

Demonstrators are used by some dealers to supplement their stock of new cars. Demonstrators are cars that salesmen or dealership personnel use to show to prospective buyers. The demonstration ride is considered the "backbone of the automobile sale." Some smaller dealers assign a different model car to various responsible employes, and even members of their families, so that if the occasion arises that a prospect wants to try out a particular model, it is available for demonstration. Demonstrators may in a sense be regarded as samples. However, use of samples assumes ordering of stock from a central source to fill orders. Demonstrators as used in the automobile industry make it possible for the prospect to

appraise the quality of the product in operation in the same manner as a sample. However, if a car is ordered on the basis of the demonstration ride, the order is, in most cases, filled from dealer stock.

Table X shows the number and per cent of dealers who included demonstrators as part of their new car stock.

TABLE X

DISTRIBUTION OF DEALERS WHO INCLUDED DEMONSTRATORS IN THEIR STOCK FIGURE

Annual Unit Sales	Total Number of Dealers	Number Who Included Demonstrators	Per Cent Who Included Demonstrators
1 to 149	30	6	20.0
150 to 399	31	8	25.8
400 to 749	27*	6	22.2
750 and over	27	3	11.1
Total	115	23	20.0

*One dealer did not answer the question.

Few dealers included demonstrators. The figures shown in Table X indicate that new car stock was regarded as separate from new car demonstrators used by salesmen and other dealership employes.

A total of only 20.0 per cent of the dealers included demonstrators as part of their stock figures. This may be due to the fact that in some cases salesmen must buy demonstrators and in other cases dealers furnish demonstrators. Where dealers provide demonstrators for their salesmen,

they may be regarded by the dealer as part of the new car stock. If salesmen buy their own demonstrators, they may not be regarded as stock and also, they may just not think of them as stock in an ordinary sense.

Although all dealers carry a stock of new cars, depending in number on the volume of sales in the dealership, the question might arise as to the extent the stock carried enters into the picture of satisfying customer demands. The importance of having stock on hand is clearly shown in Table XI.

TABLE XI

DISTRIBUTION OF DEALERS WHO DELIVERED 50 PER CENT OR MORE CARS FROM STOCK

Annual Unit Sales	Total Number of Dealers	Number Who Delivered 50 Per Cent or More Cars from Stock	Per Cent Who Delivered 50 Per Cent or More Cars from Stock
1 to 149	30	23	76.7
150 to 399	31	26	83.9
400 to 749	28	25	89.3
750 and over	27	26	96.3
Total	116	100	86.2

It is apparent that most dealers delivered mainly from stock. As one dealer stated, it would be an ideal situation if a dealer could deliver 100 per cent from stock, but due to the great variety of choices the automobile companies make available for the customers, it is a task of great magnitude on the part of the retail automobile dealer to stock

new cars so that the greatest part of his customers' desires can be fulfilled. A total of 86.2 per cent of the dealers delivered 50 per cent or more cars from stock. It can also be seen that the larger dealer was in a better position to stock cars for immediate delivery.

Table XII is a different breakdown of the data in Table XI, which shows what per cent of their new car orders each dealer filled from stock.

How stock is obtained. The most common trade channel used by automobile manufacturers is to ship directly from assembly areas to their retail dealers throughout the country. Some of the larger manufacturers have in the past shipped first to regional warehouses and from these warehouses to retail dealers. Although all manufacturers maintain regional sales offices, the practice of regional shipping was found to be too costly to be used extensively. The larger manufacturers have established assembly areas throughout the country. The prime manufacturing of parts and assemblies is done in one or more locations and the parts are then shipped to the assembly plants. Cars are shipped from the final assembly plants to the retail dealers in the area.

When the retail dealer places an order for new passenger cars, the orders are routed through the zone sales office, to the regional office, and then to the factory. To expedite delivery copies of the orders, in some cases, are sent direct to the shipping point. In order to understand the method of ordering used generally throughout the industry, it is necessary first to distinguish two terms commonly used. These are "bulk order" and "individual order."

TABLE XII

PER CENT OF RETAIL AUTOMOBILE ORDERS DELIVERED FROM DEALER STOCK

Per Cent	Number of Dealers by Groups				
	Group I	Group II	Group III	Group IV	Group Total
0					
5					
10		2			2
15	1				1
20	1		1		2
25	1		1		2
30					
35					
40	4	1	1	1	7
45					
50	5	2	1	3	11
55					
60	4	2		3	9
65			2	2	4
70	3	4	6	1	14
75	1	4	3	1	9
80	3	4	2	4	13
85	1	1	2	1	5
90	3	6	5	5	19
95 or more	3	4	3	7	17
100					
Total	30	30*	27	28	115

*One dealer did not answer the question.

While policies, procedures, and timing may vary from company to company in actual practice, the systems of the various companies are similar. The bulk order is made out by the dealer in advance of the month for which the merchandise is needed. To the best of his ability the dealer projects the number of various units and the number of various types of options and accessories that he will need for that period. The bulk order is then sent in to the factory, which uses bulk orders as a basis for adjusting their projection of stock requirements. (A copy of a bulk order may be seen in the Appendix in Figure 13.)

Individual orders are, as the name implies, a particular order for a specific car. The form is so designed that a particular car, including all options, accessories, and colors,may be designated. (A copy of an individual order may be seen in the Appendix in Figure 14.)

With the beginning of the period for which the bulk order was intended, the dealer may start sending in individual orders to the factory against his bulk order. The dealer may choose to send in sufficient individual orders to cover the total number of cars ordered in bulk. On the other hand, the dealer may send in individual orders to cover only a portion of the bulk order, allowing the factory to ship against the balance of the units on the bulk order at their discretion. The factory specifies the period of time during the month when individual orders should be sent in. This period generally is the last ten days of the previous month and the first half of the current month. Provisions are made for ordering more or less cars than specified on the bulk order.

Table XIII shows the number and per cent of dealers that ordered 100 per cent of their stock on an individual order basis.

TABLE XIII

DISTRIBUTION OF DEALERS THAT ORDERED 100 PER CENT OF THEIR STOCK ON AN INDIVIDUAL ORDER BASIS

Annual Unit Sales	Total Number of Dealers	Number That Do	Per Cent That Do
1 to 149	30	20	66.7
150 to 399	31	17	54.8
400 to 749	28	18	64.3
750 and over	27	17	63.0
Total	116	72	62.1

A total of 62.1 per cent of the dealers ordered 100 per cent of their stock on an individual order basis.

The majority of dealers preferred to send in sufficient individual orders to cover their total bulk order. To present a complete picture of how dealers order, those who did not cover 100 per cent of their bulk orders with individual orders must be considered. Data is arranged below to show the per cent of bulk orders those dealers covered with individual orders:

Per Cent	10	20	25	30	50	60	75	80	90	95	98	100
Dealers	1	2	2	2	10	2	5	1	6	3	1	

Table XIV shows how dealers reported in answer to the question, "Do you always receive the exact number ordered?"

TABLE XIV

HOW DEALERS FARED ON REGULAR STOCK ORDERS TO FACTORY
WITH RESPECT TO RECEIVING NUMBER OF CARS SHIPPED

Annual Unit Sales	Total Number of Dealers	Number Who Almost Always Get Number Ordered	Per Cent Who Almost Always Get Number Ordered	Number Who Get Less	Per Cent Who Get Less	Number Who Get More	Per Cent Who Get More
1 to 149	30	24	80.0	5	16.7	1	3.3
150 to 399	30*	21	70.0	4	13.3	2	6.7**
400 to 749	26***	22	84.6	4	15.4		
750 and over	27	22	81.5	5	18.5	-	—
Total	113	89	78.7	18	15.9	3	2.7

*One dealer did not answer question.

**Three dealers, or 10 per cent, replied, "It depends on circumstances and time of year."

***Two dealers did not answer question.

The survey revealed that 78.7 per cent of the total dealers almost always receive the exact number of cars they ordered while 15.9 per cent received less than they ordered, and only 2.7 per cent reported that they received more. Conceivably a greater percentage could have reported "less" because in cases where a particular car line is in great demand, shortages could exist to a much greater extent.

Table XV shows the results reported by dealers to the question, "Do you almost always receive the exact cars ordered with respect to series, models, colors, and options?"

TABLE XV

HOW DEALERS FARED ON REGULAR STOCK ORDERS TO FACTORY WITH REFERENCE TO RECEIVING EXACT CARS ORDERED IN SERIES, MODELS, COLORS, AND OPTIONS

Annual Unit Sales	Total Number of Dealers	Number Who Almost Always Received Exact Cars Ordered	Per Cent Who Almost Always Received Exact Cars Ordered
1 to 149	30	29	96.7
150 to 399	31	26	83.9
400 to 749	27*	26	96.3
750 and over	27	24	88.9
Total	115	105	91.3

*One dealer did not answer the question.

A total of 91.3 per cent of the dealers reported that they almost always received the exact cars ordered.

The basic method of ordering stock, together with a report on its degree of effectiveness, has been presented. Before moving on to another area, it might be well to consider another associated aspect of securing stock. In order to end the model year well, it is necessary to begin well. Information was secured with respect to common practices with reference to the initial order. Since no sales experience has been established on the new models, does the factory ship out cars to dealers as they wish, or may the dealer order his initial stock on the same basis as his regular stock order? Table XVI shows the number and per cent of dealers that placed orders for their initial stock.

TABLE XVI

DISTRIBUTION OF DEALERS WHO PLACED ORDERS FOR THEIR INITIAL STOCK OF NEW CARS

Annual Unit Sales	Total Number of Dealers	Number Who Place Orders	Per Cent Who Place Orders
1 to 149	29*	26	89.7
150 to 399	31	24	77.4
400 to 749	28	19	67.9
750 and over	27	24	88.9
Total	115	93	80.9

*One dealer stated that he secured initial stock with purchase of dealership.

More dealers of the smallest and the largest dealerships place orders for initial stock than the dealers of the two middle groups. It can be seen that 80.9 per cent of the total dealers placed their own

orders for the initial stock while only 19.1 per cent received initial stock from the factory without having placed a specific order for it.

While a dealer may place an order for his initial stock requirements, a question may arise as to his latitude in preference selection. There is a great variety of combinations of new passenger cars from which a dealer may order. In a previous section of this study, it was pointed out that a particular manufacturer could produce a great number of cars without duplication. However, those considerations which are of greatest importance in the selection of an assortment of stock could be summarized under the following headings: number of cars, series, models, colors, and options. Tables XVII, XVIII, XIX, XX, and XXI show the dealers' variety of choice with respect to various characteristics of their initial stock orders.

TABLE XVII

DISTRIBUTION OF DEALERS WITH RESPECT TO CHOICE OF NUMBER OF CARS ON THE INITIAL SHIPMENT

Annual Unit Sales	Total Number of Dealers	Number Who Have A Choice	Per Cent Who Have A Choice
1 to 149	30	21	70.0
150 to 399	31	25	80.6
400 to 749	28	16	57.1
750 and over	27	22	81.5
Total	116	84	72.4

TABLE XVIII

DISTRIBUTION OF DEALERS WITH RESPECT TO CHOICE OF SERIES IN THE INITIAL SHIPMENT

Annual Unit Sales	Total Number of Dealers	Number Who Have A Choice	Per Cent Who Have A Choice
1 to 149	30	21	70.0
150 to 399	31	18	58.1
400 to 749	23	13	46.4
750 and over	26*	19	73.1
Total	115	71	61.7

*One dealer did not answer this question.

TABLE XIX

DISTRIBUTION OF DEALERS WITH RESPECT TO CHOICE OF MODELS IN THE INITIAL SHIPMENT

Annual Unit Sales	Total Number of Dealers	Number Who Have A Choice	Per Cent Who Have A Choice
1 to 149	30	21	70.0
150 to 399	31	19	61.3
400 to 749	28	14	50.0
750 and over	26*	18	69.2
Total	115	72	62.6

*One dealer did not answer this question.

TABLE XX

DISTRIBUTION OF DEALERS WITH RESPECT TO CHOICE OF COLORS IN THE INITIAL SHIPMENT

Annual Unit Sales	Total Number of Dealers	Number Who Have A Choice	Per Cent Who Have A Choice
1 to 149	30	24	80.0
150 to 399	31	20	64.5
400 to 749	28	15	53.6
750 and over	26*	18	69.2
Total	115	77	67.0

*One dealer did not answer this question.

TABLE XXI

DISTRIBUTION OF DEALERS WITH RESPECT TO CHOICE OF OPTIONS IN THE INITIAL SHIPMENT

Annual Unit Sales	Total Number of Dealers	Number Who Have A Choice	Per Cent Who Have A Choice
1 to 149	30	23	76.7
150 to 399	31	21	67.7
400 to 749	27*	16	59.3
750 and over	26*	18	69.2
Total	114	78	68.4

*One dealer did not answer this question.

Again it was apparent that the dealers of the smallest and the largest dealerships had greater choice in their initial orders, in this case with respect to various choices which made up the order. The dealers in the third group appeared to have less choice in their initial orders than any other group.

The greatest choice was "number shipped" with a high of 72.4 per cent. The choice of "series" was lowest with 61.7 per cent followed closely by choice of "models" at 62.6 per cent. Dealers had greater choice of color and options on their initial orders for new models.

Determining What to Buy.

The retail automobile dealer, as other retail merchants, endeavors to keep his stock balanced with the rate of sale. The methods automobile dealers employ to accomplish this were investigated and are discussed in the following section.

Buying to meet customer wants. The following quotation on the necessity and importance of effective merchandise control is taken from a widely read retailing textbook.

> In both small and large retail stores, effective methods of merchandise control must be adopted to insure, among other things, the prompt re-order of merchandise that is selling, to prevent the re-order of goods that are not selling, and to minimize the investment in merchandise consistent with the satisfactory fulfillment of customers' wants. The accomplishment of these objectives is no easy matter.[1]

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[1]Delbert J. Duncan and Charles F. Phillips, "Merchandise Control," Retailing Principles and Methods, Chapter XII, p. 318.

Table XXII shows the methods dealers reported using to keep their stock balanced with the rate of sale. (A detailed breakdown of this data appears in Table XLII in the Appendix.)

TABLE XXII

HOW DEALERS RANKED METHODS OF INVENTORY CONTROL

Method	Group I	Group II	Group III	Group IV	Group Total
Your own experience	1st	1st	1st	2nd	1st
Your own stock control system	2nd	2nd	2nd	1st	2nd
Factory representative assistance	3rd	3rd	4th	3rd	3rd
Factory stock control	4th	4th	3rd	4th	4th

Most automobile dealers relied on their own experience to replenish stock. Their own stock control systems were the next most common method of usage. Assistance of the factory representative was reported third while use of factory control system was ranked fourth.

The question may arise as to why factory control systems are not used to any great extent. A number of answers may be made to this question.

First, small dealers do not need a detailed control system to keep stock in balance. Quoting again from a basic retailing text:

> Although stock control is needed in stores of all sizes, the methods employed to attain this goal differ widely. In small stores the desired relationship between stocks and sales is sought through close and constant supervision by the proprietor, who studies his records and inspects his stock at various periods. As stores grow in size, however, and as the assortments of merchandise they handle become greater, the maintenance

> of a balanced relationship between stocks and sales becomes increasingly difficult. Consequently, personal inspection becomes less practicable; and more written merchandise records of various types are required as aids to the judgment of the buyer. These records constitute an important phase of merchandise control.[2]

Second, not all manufacturers make stock control plans available to their dealers. Of the three manufacturers who answered in reply to the question, "Do you make a new car stock control plan available to your dealers?", one reported that they did make a stock control plan available while two reported that they did not.

Third, while a stock control plan as such may not be made available for dealers, other means of assistance in ordering may be offered. In answer to the question, "What assistance do you give dealers in ordering new cars?", manufacturers made the following replies:

Company A:

> Our field men contact dealers personally and assist them in forecasting their needs.

Company B:

> District sales representatives periodically contact the dealer and counsel with him on all phases of the ordering procedure and aid the dealer in completing individual specifications.

Company C:

> Our wholesale men counsel with the dealer when he makes his monthly projection.

Automobile manufacturers have widespread field organizations. The nation is divided into regions, and the regions further broken down into zones. Factory representatives at the zone level call on dealers in the area to assist them with various operational problems.

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[2] Ibid.

Guides for ordering. It was reported previously that the retail automobile dealers must anticipate their stock requirements for future periods on their monthly bulk order. The guides dealers use to enable them to do this were determined by means of the survey and are presented below. These guides are ranked in their order of importance in Table XXIII. (A detailed breakdown of this data appears in Table XLIII in the Appendix.)

TABLE XXIII

HOW DEALERS RANKED GUIDES FOR ORDERING

Guides	Group I	Group II	Group III	Group IV	Group Total
Last month's sales	1st	2nd	1st	1st	1st
This year's sales	2nd	1st	2nd	2nd	2nd
Last ten days' sales	4th	4th	3rd	3rd	3rd
Last year's sales	3rd	3rd	4th	4th	4th

The returns ran quite close for all categories. There was no particular favorite. This would indicate that no general system for ordering is in current use.

One manufacturer makes available to its dealers a control system in which it is suggested that the dealer record monthly sales for eleven months of a model year. It is pointed out that these figures would be of great value in helping the dealer to project his future months' requirements on the bulk order.

From inquiries made to dealers and manufacturers it appears that all manufacturers do not make new car stock control programs available for their dealers. These same manufacturers provide their dealers with comprehensive parts control systems. It would seem that provisions would be made to make available for dealers equally good new passenger car stock control programs.

Frequency of ordering. Finally, in order to complete the picture of stock control, the following question was asked: "How often do you place a regular stock order for cars--daily, weekly, ten days, monthly?"

Table XXIV shows the ordering periods ranked in order of use.

By far the greatest number of dealers placed regular monthly orders for new passenger automobiles. Sixty-seven or 57.8 per cent of all dealers contacted placed monthly orders. The second most common ordering period was the "ten-day" period followed closely by the "weekly" ordering period. The percentage of responses was 17.2 per cent and 16.4 per cent respectively. The least common ordering period reported was "daily" with a 3.4 per cent occurrence.

Although in each group the great majority of dealers placed monthly orders, and in each group an extremely small proportion of dealers place daily orders, no pattern is apparent in each group with respect to the number placing orders on a ten-day or weekly basis. Three or 2.6 per cent of the dealers reported that they ordered cars "when needed." Two or 1.7 per cent of the dealers reported that they ordered cars "semi monthly," while one dealer or .9 per cent reported that he ordered cars "anytime."

TABLE XXIV

DISTRIBUTION OF DEALERS WITH RESPECT TO FREQUENCY OF PLACING REGULAR STOCK ORDERS

	Group I		Group II		Group III		Group IV		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Monthly	23	76.7	15	48.4	13	46.4	16	59.3	67	57.8
Ten days	3	10.0	5	16.1	7	25.0	5	18.5	20	17.2
Weekly	2	6.7	7	22.6	7	25.0	3	11.1	19	16.4
Daily	1	3.3			1	3.6	2	7.4	4	3.4
When needed			3	9.7					3	2.6
Semi-monthly			1	3.2			1	3.7	2	1.7
Any time	1	3.3	—	—	—	—	—	—	1	.9
Total	30	100.0	31	100.0	28	100.0	27	100.0	116	100.0

In light of the previous explanation of bulk orders and individual orders, it may be that this question might have been misinterpreted by some of the dealers. Reference should have been made to bulk order or individual order.

Effectiveness of stock control. There are many choices that a prospect must make in selecting a car, and though he may compromise on some, still on others he will stand fast. An attempt was made to find out how many deals dealers lose because they do not have the right car in stock. The replies to the question, "About how many deals did you lose last year because you did not have the right car in stock?" are summarized in Table XXV.

TABLE XXV

NUMBER OF DEALS LOST LAST YEAR

	Group I	Group II	Group III	Group IV
Least	0	5	0	0
Most	50	50	100	100
Mode*	4	10	15	10

*Number given most frequently by the group.

This question was a difficult one to answer because it would not be possible for a dealer to keep an accurate record of deals lost. Returned deposits for inability to deliver a car in time would be very tangible evidence of lost deals. The answers as shown reflect the dealers'

judgment with respect to what they consider a lost deal whether a deposit was made or not.

It might be that even though the car was in stock, the customer would not buy it or perhaps could not buy it because of lack of credit, insufficient down payment, or various other reasons.

The mode indicates that in most dealers' judgment they are not losing many deals because they did not have the right car in stock.

Table XXVI shows the most common reasons for not being able to deliver a car from stock. (A detailed breakdown of this data appears in Table XLIV in the Appendix.)

TABLE XXVI

HOW DEALERS RANKED REASONS FOR NOT BEING ABLE TO DELIVER CARS FROM STOCK

	Group I	Group II	Group III	Group IV	Group Total
Colors	1st	1st	1st	1st	1st
Options	3rd	2nd	2nd	2nd	2nd
Models	2nd	3rd	3rd	3rd	3rd
Series	4th	4th	4th	4th	4th

Dealers were asked to show order of importance by numbering. It can be seen that color was judged the most trouble by all groups.

Changing the color of a car at the dealership is possible and could be practical from a cost standpoint depending on the profit possibilities in the deal. It would seem that the choice which could most easily be

changed at the dealership should not be the number one cause of not being able to deliver a car from stock.

Obtaining Supplementary Stock.

Locating stock needed. If a dealer does not have the particular car in stock the customer wants, then the dealer has a choice of (1) trying to get the prospect to take the one that comes closest to filling his requirements or (2) trying to get the prospect to wait until he can secure one.

Deals may be lost to competition if the dealer cannot deliver from stock immediately.

If the dealer does not have the particular car in stock that a customer wants and the customer is willing to place his order and wait for it, to whom does the dealer turn to get one as soon as possible?

Table XXVII shows the methods ranked in order of most common usage that dealers use to locate needed cars. (A detailed breakdown of this data appears in Table XLV in the Appendix.)

TABLE XXVII

HOW DEALERS RANKED METHODS FOR LOCATING CARS NEEDED

Methods	Group I	Group II	Group III	Group IV	Group Total
Contact other dealers	2nd	1st	1st	1st	1st
Contact factory representative	1st	2nd	3rd	2nd	2nd
Contact factory	3rd	2nd	2nd	3rd	3rd
Contact car locating service	4th	4th	4th	4th	4th

It can be seen that most dealers preferred to contact other dealers first when they were trying to locate a particular car. The Group I dealers preferred to contact the factory representative. It may be that the smaller dealers in less populated areas did not have many dealers near by to assist them whereas the larger dealers in more populated areas found it more convenient to contact dealers that were close by.

Car locating service was fourth choice. This is a service which dealers may call when in need of a particular car. Each dealer sends in current lists of cars to a central location. When a dealer calls, he is notified which dealers have the required car. The dealer pays a small fee for the service and saves time and expense of making long distance calls to find the car he wants.

When a dealer has a firm order for a new car but does not have that car in stock, it has been seen that he tried to obtain this car from other dealers. Failing to do this, his second choice was to see if the factory representative or the factory could locate one for him.

In answer to the question, "What provisions do you make to transfer cars from dealers who have them to dealers that need them?", three manufacturers replied as follows:

Company A:

> We invite the dealer to contact our zone office for information on cars in the stocks of other dealers.

Company B:

> None. However, district offices assist dealers in locating particular cars required for immediate delivery.

Company C:

We offer to re-purchase from owning dealer and re-sell if dealer is agreeable. We also assist dealer in locating cars at other dealers, but cannot force dealer to sell to other dealer against his wishes.

In this section one final question was asked with reference to factory assistance: "Does the factory give you sufficient help in locating cars you need?"

Table XXVIII shows the number and per cent of affirmative and negative replies to this question.

A total of eighty-three of 116, or 71.5 per cent of the dealers reported that the factories did give them sufficient help in locating cars needed. Twenty-four or 20.7 per cent reported that they did not receive sufficient help, while nine or 7.8 per cent did not answer the question. The number and per cent of dealers who did not answer this question is shown because it was thought this type of question might be avoided. A greater percentage, 83.3 per cent of Group I dealers answered affirmatively to this question, while the smallest percentage, 54.8 per cent, occurred in Group II dealers. No explanation is readily apparent for this occurrence.

Group III and Group IV dealers reported on this question in approximately the same proportion. The totals were 75.0 per cent, and 74.1 per cent respectively in the affirmative. Four dealers in Group II or 12.9 per cent did not answer this question, while only two dealers in Group I and two in Group III failed to do so. Only one dealer in Group IV did not answer the question. Again there is no explanation of why more Group II dealers did not answer the question.

TABLE XXVIII

DEALERS' OPINION OF WHETHER FACTORY GAVE THEM SUFFICIENT HELP IN LOCATING CARS

Annual Unit Sales	Total Number of Dealers	Number Who Answered Yes	Per Cent Who Answered Yes	Number Who Answered No	Per Cent Who Answered No	Number Who Did Not Answer	Per Cent Who Did Not Answer
1 to 149	30	25	83.3	3	10.0	2	6.7
150 to 399	31	17	54.8	10	32.3	4	12.9
400 to 749	28	21	75.0	5	17.9	2	7.1
750 and over	27	20	74.1	6	22.2	1	3.7
Total	116	83	71.5	24	20.7	9	7.8

Special order procedure. Special order is used here in the sense that a customer would place an order with the dealer and wait for the dealer to procure the car. If the specific car cannot be located, then an order must be placed for the car. If the plant is in production of that particular series at the time, then immediate delivery to the dealer can be assured. A dealer is not always that fortunate. To get a view of how well the factory serves the dealer on special orders, the following question was asked: "Do you get cars on special order from the factory in time to complete the deal? Most of the time? Sometimes? Seldom?

Table XXIX shows the dealers' response to this question.

A total of 100 or 86.2 per cent of the dealers reported that they received special orders from the factory in time to make the deal. Twelve or 10.3 per cent reported that they received cars from the factory "sometimes" in time to close the deal, and four or 3.5 per cent reported that they "seldom" received cars from the factory in time to close the deal. Group II and Group III dealers reported greater success under this category than Group I and Group IV dealers. Group I dealers reported the lowest incidence of success. The proportionate breakdown by group was as follows: Group I, 80.0 per cent; Group II, 90.3 per cent; Group III, 89.3 per cent; and Group IV, 85.2 per cent. The smallest dealers showed the lowest percentage. This was probably due to the fact that they use special order procedures more often than larger dealers.

TABLE XXIX

HOW DEALERS FARED ON SPECIAL ORDERS TO THE FACTORY
WITH RESPECT TO RECEIVING CARS
IN TIME TO CLOSE DEALS

Annual Unit Sales	Total No. of Dealers	Number Who Received Cars in Time "Most of the time"	Per Cent Who Received Cars in Time "Most of the time"	Number Who Received Cars in Time "Sometimes"	Per Cent Who Received Cars in Time "Sometimes"	Number Who Received Cars in Time "Seldom"	Per Cent Who Received Cars in Time "Seldom"
1 to 149	30	24	80.0	5	16.7	1	3.3
150 to 399	31	28	90.3	2	6.5	1	3.2
400 to 749	28	25	89.3	3	10.7	0	
750 and over	27	23	85.2	2	7.4	2	7.4
Total	116	100	86.2	12	10.3	4	3.5

It is of interest to note the number of days required to get a car on a special order basis. Table XXX shows the length of time required to receive special orders as reported by the dealers.

TABLE XXX

NUMBER OF DAYS REQUIRED TO SECURE SPECIAL ORDERS

	Group I	Group II	Group III	Group IV	Group Total
Least	8	10	10	10	8
Most	45	60	45	40	60
Mode	21	20	21	20	20.5

It takes generally about a 20 to 21 day wait for a customer if an order for a car is placed with the factory.

The manufacturers were asked a similar question: "Generally, how long does it take to fill a special order for a dealer?"

Their replies are listed below:

Company A:

Twenty-one days.

Company B:

Varies, depending on model and specifications. Assuming "special" refers to standard and optional equipment and accessories, approximately ten days.

Company C:

This time would depend on what special feature is desired. We require approximately two weeks for regular production orders.

It can be seen that the automobile companies do a relatively good job of getting the cars needed into the dealers' hands in time to close deals.

Disposing of Excess Stock.

The measures taken by dealers to secure needed stock have been presented. On the other end of the scale it becomes necessary at times for a dealer to dispose of excess stock in order to keep his stock in balance. The term, excess stock, is used to indicate stock that is either slow-moving or more than a normal amount of fast moving merchandise. The normal supply of new passenger automobiles as recommended by a particular manufacturer is a fifteen to thirty day supply. Since the automobile is a large stock unit, some dealers stock less than the recommended days' supply because of space limitations. As in other businesses, demand may be heavy for a particular model, series, color, or option at the beginning of the season and then for no apparent reason change abruptly to other types. Thus a dealer in one area could have an excessive supply of cars of a particular type and a dealer in another area could be in need of that particular type. In retailing marking down the merchandise is a common method of disposing of excess stock.

Table XXXI shows the methods used by retail automobile dealers to dispose of excess stock. These methods are ranked in order of usage. (A detailed breakdown of this data appears in Table XLVI in the Appendix.)

TABLE XXXI

HOW DEALERS RANKED METHODS FOR DISPOSING OF EXCESS STOCK

Methods	Group I	Group II	Group III	Group IV	Group Total
Overallowance	1st	1st	1st	2nd	1st
Bonus to salesmen	2nd	2nd	2nd	1st	2nd
Other dealers	3rd	3rd	3rd	3rd	3rd
Factory help	4th	4th	4th	4th	4th

The most common method reported of moving slow stock was by means of making overallowance on deals, followed closely by giving bonuses to salesmen. The least used method was asking for factory help.

Manufacturers were asked the following question on the same subject: "What assistance do you give dealers in disposing of excess stock?"

Their replies were as follows:

Company A:

Special plans which vary with circumstances.

Company B:

By sales incentive programs, promotional materials, etc.

Company C.

Re-purchase offer is available. Sales contests with bonuses for making quotas. Liquidate through other dealers who may be short of cars.

The assistance given in this area varies with each factory. It is of concern to the factory as well as the dealer when excessive numbers of old models are in the dealer's hands; so this problem is given attention

depending on the extent and gravity of the condition.

Initial order excess stock. One area which may give the dealer unusual difficulty is disposing of his initial order since the stock was either shipped out from the factory without an order from him or, if he placed the order, he did so without having previous knowledge of this acceptance of the new model by the public. Table XXXII shows the number and per cent of dealers who reported difficulty in disposing of their initial stock of cars.

TABLE XXXII

DISTRIBUTION OF DEALERS WHO USUALLY HAVE DIFFICULTY IN SELLING THE INITIAL SHIPMENT

Annual Unit Sales	Total Number of Dealers	Number Who Have Difficulty	Per Cent Who Have Difficulty
1 to 149	30	9	30.0
150 to 399	31	7	22.6
400 to 749	28	7	25.0
750 and over	27	6	22.2
Total	116	29	25.0

It must be kept in mind that "difficulty" as used in the question might mean one car or many. It is each dealer's own interpretation that is reflected in the answers.

Nine of thirty, or 30.0 per cent of Group I dealers reported difficulty in moving their initial order of new passenger cars.

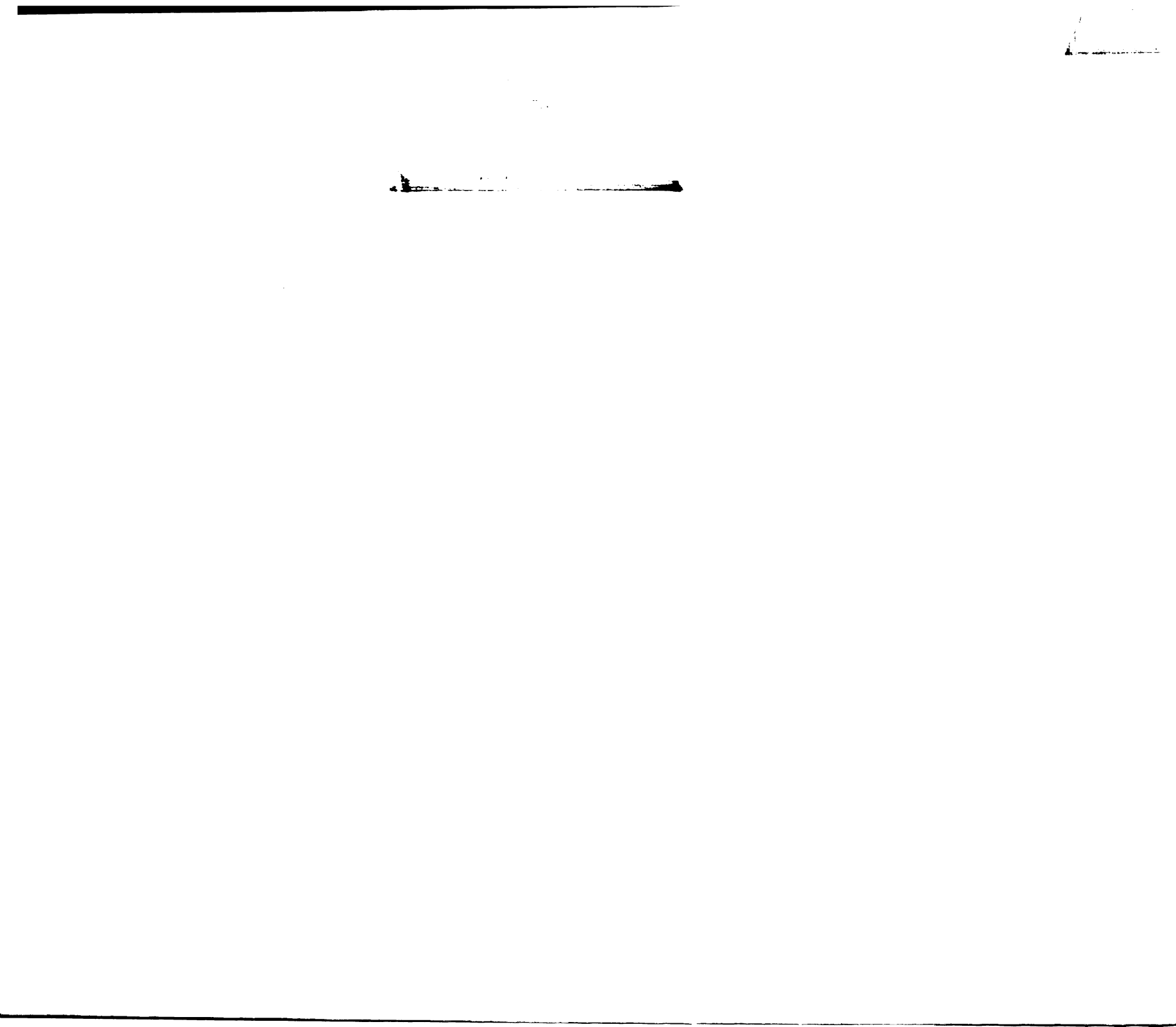

TABLE XXXIII

PER CENT OF INITIAL ORDERS
DEALERS HAD DIFFICULTY
IN MOVING

	Number of Dealers by Groups				
	Group I	Group II	Group III	Group IV	Group Total
Per Cent					
2			1		1
5		2		1	3
10	1	1	3		5
15				1	1
20	1	2		1	4
25	2		2	2	6
33	1				1
40	1	1			2
45			1		1
75	1				1
Miscellaneous Answers					
1 or 2 cars	2				2
8 or 10 cars				1	1
No answer	—	1	—	—	1
Total	9	7	7	6	29

NOTE: Only 29 of 114 reported difficulty. The results include only answers given by the 29.

Seven of thirty-one, or 22.6 per cent of Group II dealers reported difficulty. Seven of twenty-eight, or 25.0 per cent of Group III dealers and six of twenty-seven or 22.2 per cent of Group IV dealers also reported difficulty in moving their initial stock of cars.

The data shown on Table XXXIII is the same that was used for Table XXXII; however, the data is rearranged so that a more complete picture may be presented. Of the twenty-nine dealers that reported having difficulty in moving their initial shipment, twenty had difficulty in moving at least 25.0 per cent of the stock while nine had difficulty in moving over 25.0 per cent of their initial stock.

One car that is difficult to move in a small dealership may create a greater problem than a number of cars in a larger dealership. However, any businessman that stocks products for sale, particularly new products, at times experiences difficulty in moving them. It would seem that the overall problem of selling out the initial order is not a great one for most automobile dealers.

End of model year excess stock. Another area of even greater importance than the beginning of the model year in the retail automobile dealers' merchandise control picture is disposing of excess stock at the end of the model year. While no retail dealer would wish to have an excessive supply of merchandise at any time, the survey revealed that all retail automobile dealers do not consider it good business to sell completely out of stock by the end of the model year. Table XXXIV shows the number and per cent of dealers' attitudes on clearing out of stock at the end of the model year.

TABLE XXXIV

DEALER OPINIONS WITH RESPECT TO CLEARING OUT
PREVIOUS YEAR'S CARS BEFORE
NEW CAR ANNOUNCEMENT

Annual Unit Sales	Total Number of Dealers	Number Who Feel It Is Better To Clear Out Old Models	Per Cent Who Feel It Is Better To Clear Out Old Models	Number Who Feel It Is Better To Carry Some Over	Per Cent Who Feel It is Better To Carry Some Over
1 to 149	30	17	56.7	11	36.7*
150 to 399	31	20	64.5	11	35.5
400 to 749	28	16	57.1	12	42.9
750 and over	27	16	59.3	11	40.7
Total	116	69	59.5	45	38.8**

*Two dealers, or 6.6 per cent - other. One dealer undecided. One dealer said it depends on the amount of change.

**Other - 1.7 per cent.

It can be seen that the majority of dealers preferred to sell out their old stock before the new models arrived. When asked why, the most common reply was, "To concentrate on new models." The second most popular answer was, "Can make more money on new models," and the third was, "Last year's model is one year old."

A surprisingly large percentage preferred to carry some old models over. The most common reasons of the many given were: First, "Better deals with more profit made on old models carried over." Second, "There are always some customers that prefer the old models after seeing the new." Third, "Because of the rising prices on new models, old models can be sold more easily."

Even though a dealer might consider it good policy to sell out of stock completely at the end of the model year, it may be that he was unable to do so. On the other hand, a dealer might prefer to carry some stock over into the next model year but sold out of stock in advance and was unable to secure more of the types he desired. The survey revealed that most dealers usually clear out stock at the end of the model year. Table XXXV shows the number and per cent of dealers who do.

There may be an explanation for the reason why the Group I dealers rank highest; being small, they are careful not to overstock. There is no apparent explanation of why the Group II dealers rank lowest. Over 75 per cent of all dealers usually clear out their old stock at the end of the model year, thus eliminating the chance for any problem in this area.

TABLE XXXV

DISTRIBUTION OF DEALERS WHO USUALLY CLEARED OUT THEIR STOCK AT THE END OF THE MODEL YEAR

Annual Unit Sales	Total Number of Dealers	Number Who Clear Out Their Stock	Per Cent Who Clear Out Their Stock
1 to 149	30	27	90.0
150 to 399	31	20	64.5
400 to 749	28	22	78.6
750 and over	27	20	74.1
Total	116	89	76.7

Dealers were questioned concerning their usual past performance in selling out of stock at the end of the model year. Table XXXIV shows that 59.5 per cent of the dealers thought it best to sell out of stock at the end of the model year. In actual past performance as shown on Table XXXV, 76.7 per cent of the dealers reported that they usually sold out of stock at the end of the model year.

In order to get a better idea of actual performance at this critical period of the model year, dealers were asked: "What per cent of stock did you carry over to the new model year last year (1956-1957)?" Table XXXVI shows the dealer response to this question. Varying percentages of total new passenger car stock carried over is shown together with the number and per cent of dealers who carried over those amounts. These percentages are of total new passenger car stock for the year.

TABLE XXXVI

HOW DEALERS FARED IN CLEARING OUT STOCK AT END OF 1956 MODEL YEAR

	Group I		Group II		Group III		Group IV		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Per Cent of Stock Carried Over										
0	15	50.0	13	46.4	13	52.0	8	34.8	49	46.2
1	1	3.3	5	17.9	4	16.0	3	13.0	13	12.3
2	5	16.7			1	4.0	2	8.7	8	7.6
3	2	6.7	2	7.1					4	3.8
4										
5	4	13.3	3	10.7	4	16.0	2	8.7	13	12.3
6										
7			1	3.6					1	.9
8										
9							1	4.3	1	.9
10			3	10.7	1	4.0	1	4.3	5	4.7
Other										
2 to 6 cars	3	10.0	1	3.6	1	4.0			5	4.7
Miscellaneous	—	—	—	—	1	4.0	6	26.2	7	6.6
Total Answering	30	100.0	28	100.0	25	100.0	23	100.0	106	100.0
No Answer	—		3		3		4			
Totals	30		31		28		27			

NOTE: Percentages based on number answering - 106.

At the end of the 1956 model year, 46.2 per cent of the retail automobile dealers reported that they had sold out completely before the new models came out. Another 12.3 per cent carried over only 1 per cent of stock while a total of 82.2 per cent had carried over less than 5 per cent of stock. The largest dealers scored lowest.

In the event that dealers do have an excessive supply of cars at the end of the model year, then steps must be taken to dispose of this stock so that the dealer will bein a good position to handle the new model. Table XXXVII shows the methods employed by dealers to dispose of excess stock at this period of the model year. (A detailed breakdown of this data appears in Table XLVII in the Appendix.)

TABLE XXXVII

HOW DEALERS RANKED METHODS OF MOVING EXCESS STOCK AT END OF MODEL YEAR

Methods	Group I	Group II	Group III	Group IV	Group Total
Overallowance	1st	1st	1st	1st	1st
Heavier advertising	2nd	2nd	2nd	2nd	2nd
Bonus to salesmen	3rd	3rd	3rd	3rd	3rd
Factory help	4th	4th	4th	4th	4th

The survey revealed that the most popular method used was making overallowances on deals. The second was increased advertising; third, bonus to salesmen; and fourth, factory help.

The foregoing shows the most popular methods of moving an excessive supply of new cars at the end of the model year. In addition to the

effort of the dealer in moving an excessive supply of cars, all automobile manufacturers now allow an additional discount (of 4 per cent or 5 per cent) on all old models carried over into the new model year.[3] This helps the dealer's profit picture in disposing of his old models.

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[3] "Dealer Contracts, Factory Concessions," Automotive News, April 29, 1957, p. 1.

CHAPTER V

SUMMARY AND CONCLUSIONS

This final chapter consists of a summarization of the findings, conclusions, and recommendations of this survey. Areas which would make interesting subjects for further research are suggested.

The objective of this thesis was to conduct an exploratory investigation of the current inventory practices of retail automobile dealers in order to gain a better understanding of their inventory practices and problems. An effort was made also to determine the effectiveness of some of these practices.

In Chapter I, Introduction, the background of the subject area was presented. The points of greatest interest and importance expressed were that the automobile industry is a relatively young industry, being a little over fifty years old. Its rate of growth has been exceedingly rapid. The total unit registration fifty years ago was only 150,000 units compared to a total registration in 1957 of nearly 66,000,000 units. Credit for this amazing growth can be attributed not only to methods of production, but also to methods of distribution.

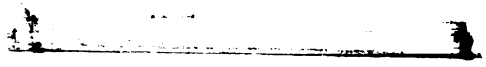
In the next phase of the Introduction, the problem was formulated and expressed as it appears at the beginning of this chapter. The limitations of the study were then pointed out. It was noted because of the small size of the dealer survey, only .2926 per cent of total dealers, the findings and conclusions should be considered as tentative rather than final.

The methodology procedure was reported. Information on the survey subject from secondary sources was extremely limited. Therefore, desired information was secured by two basic methods: Interviews were conducted with factory men and dealers, and questionnaires were developed and mailed to car manufacturers and a selected number of retail automobile dealers. The questionnaires mailed to the manufacturers differed from those sent to dealers. The data secured from these sources were then analyzed and organized for presentation.

The pattern of presentation was set up in this order: Chapter I, Introduction; Chapter II, Characteristics of Respondents; Chapter III, Resources; Chapter IV, Merchandise Control; and Chapter V, Conclusions. A glossary of terms used in this thesis and commonly used in the automobile industry was included in the Introduction.

Chapter II, Characteristics of Respondents, was divided into two main areas, factory participation and dealer participation.

The pertinent points with respect to factory participation were then reported. These points are summarized below. There were twenty different makes of cars on the market in 1957 offered by the five automobile manufacturers, American Motors Corporation, Chrysler Corporation, Ford Motor Company, General Motors Corporation, and Studebaker-Packard Corporation. The twenty makes of cars were manufactured by various divisions of each manufacturer. The smaller manufacturers were not organized in divisions. Some divisions manufacture more than one make of car. Thus questionnaires were mailed to the sales manager, distribution executive, or marketing director of only fourteen different



manufacturers. Replies of various types were received from eight manufacturers. It was hoped that the information gathered from this source would be more ample and complete, but that which was received was useful.

The dealer questionnaire required more attention since a sample was used of total retail dealers of various size, selling twenty makes of cars and located throughout the United States.

There was a total of 39,643 retail automobile dealers operating in the United States as of February, 1957. This figure does not include exclusive import dealers, and dual dealers are counted only once. Questionnaires were mailed to 291. There were 116 returns so that the percentage of returns was 40 per cent and the sample size percentage was .2926 per cent.

The sample selected was representative with respect to the five automobile manufacturing companies and geographically. Returns proportionate to 1956 passenger car registrations by company and to 1956 passenger car registrations by territory were received. Tables III and IV in Chapter II show the number and per cent of questionnaire returns to registration figures. Total dealers were divided into four groups according to size. Registration figures for 1956 were used. Group I dealers registered 1 to 149 cars; Group II, 150 to 399; Group III, 400 to 749; and Group IV, 750 and over. It was desired to secure an equal number of returns from each group size. Table VI in Chapter II shows the number and per cent of returns from the questionnaire by group size. Table VII in Chapter II shows the breakdown of the sample according to car manufacturing company and group size.

In order to gain a better understanding of the retail automobile dealers' practices and problems, some knowledge of the relationship of dealer to manufacturer was considered necessary; so Chapter III, Resources, was devoted to pertinent information concerning this relationship. The first part of this chapter deals with the distribution organization, and the second part is a presentation of the problems the manufacturer is confronted with in inventory control practices. The exclusive franchise dealer method of distribution was the method used by all car manufacturers for the marketing of new passenger cars. A dealer could have franchises for several makes of cars. Each dealer then can look only to the manufacturer he represents as a source of supply. Each dealer must take the product manufactured by the company he represents and do the best he can with it for the model year regardless of its degree of acceptance by prospective customers.

With respect to inventory practices, the factory questionnaire revealed that one of the four manufacturers that replied to the particular question assembled cars in advance of dealer orders. One manufacturer stated that it produced 10 per cent of its stock in advance.

It was reported by the manufacturers that systematic and comprehensive statistical means are used to project the total number of cars to be built for the next model year. Past records, surveys, and trends are used to break down the total number of projected cars into types by series, models, options, and colors. Past performance records are used to determine potential demand of individual dealers. Current records of registrations are kept to adjust projections to actual conditions.

In order to produce a sufficient number of cars for a model year, a great deal of advance planning must be done with respect to facilities, materials, and organization. This is called volume planning. No crystal ball can be used to foretell the future nor can production be based on a guess. Statistical methods have been developed by automobile manufacturers to assist in making sound forecasts. The problems which are peculiar to forecasting in the automobile industry were discussed in a presentation by Mr. J. H. Sloan[1] of the Chrysler Corporation. They are summarized below:

1. New passenger car sales fluctuate widely from year to year.
2. A long lead time is required to design, test, and produce a new model.
3. There is an increasing emphasis on styling.
4. Costs of new model development are mounting.
5. There is an increasing number of options and accessories.
6. Purchasing procedure requires that commitments be made months in advance.
7. Automobiles cannot be stored in large quantities.

The seven items listed above constitute the major problems that confront the automobile manufacturer in volume planning.

The manufacturer attempts to build a sufficient number and types of cars to satisfy dealer requirements, no more, no less. The dealer

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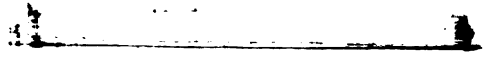
[1] J. H. Sloan, "Volume Planning in the Automobile Industry" (paper read at the National Conference of the American Marketing Association, Detroit, Michigan, June 20, 1957).



working from the other end must order from the factory those cars which he believes his customers will want. Each model year both the factory and the dealer must clear out of all stock for that year.

Most of the information presented in Chapter IV, Merchandise Control, was obtained from the data gathered from the dealer questionnaires. Some information was obtained from the factory questionnaire. Chapter IV was divided into four areas. These were: (1) obtaining stock, (2) determining what to buy, (3) obtaining supplementary stock, and (4) disposing of excess stock.

Obtaining Stock.

With respect to ordering stock, the survey revealed that all retail automobile dealers, regardless of size, carry a stock of cars during the selling season. Using the mode, the number which occurs most often, it was found that Group I dealers stock 12 cars, Group II dealers stock 24, Group III dealers stock 50, and Group IV dealers stock100 cars. Each group doubled the stock carried by the next lower group.

While demonstrators can be used to supplement stock on hand, it was found that only 20 per cent of the dealers reporting included demonstrators as part of stock. Although dealers may not consider demonstrators as part of new car stock, in actual practice if a prospect desired a particular demonstrator, it could be purchased. Some smaller dealers in order to increase their variety of stock assign different types of cars to each of their key employes so that they will have on hand and be able to show the particular type in which the prospect is interested.

The survey revealed that stock carried on hand is of great importance in satisfying customer demands. The larger the dealership, the larger the per cent of new cars delivered from stock. A total of 76.6 per cent of Group I dealers deliver 50 per cent or more of their orders from stock whereas 96.3 per cent of the Group IV dealers deliver 50 per cent or more of their orders from stock. In total, 86.2 per cent of the dealers deliver 50 per cent or more of their orders from stock.

The retail automobile dealer, regardless of the multiplicity of choice in types of cars, regardless of their high initial cost and large unit size, delivers merchandise from stock at the time the sale is made. He does not sell from sample but plans to deliver orders from stock at the point of sale.

It was found that it is general practice for dealers to place bulk orders monthly, in advance of the period for which the stock is needed. The bulk order specifies the total number and types of cars needed. The manufacturers use the bulk order to adjust their projections for the particular inventory period. The factory may ship at their discretion the difference between the total ordered on the bulk order and the total ordered on individual orders, if any. Then immediately preceding and during the first part of the inventory period individual orders are sent in by the dealer to apply against his bulk order. The dealer may order a specific car for each of the total number ordered on the bulk order.

It was revealed that 62.1 per cent of the dealers place individual orders against 100 per cent of the total bulk order while 37.9 per cent of the dealers do not send in individual orders in a number sufficient

to cover the total bulk order entirely although they could if they chose to. Thus the retail automobile dealer may stock the number and types of cars he considers best for his operation.

Several questions were asked in order to determine the degree of success that dealers experience in securing the number and types of cars ordered.

The answers to these questions revealed that with respect to the number of cars shipped 78.7 per cent of the total dealers reported that they "almost always" received the exact number ordered. A total of 15.9 per cent reported they received less, and 2.7 per cent reported they received more. Conceivably the percentage reporting "less" could be greater, especially if a particular model were in great demand.

The survey further revealed that 91.3 per cent of the dealers "almost always" received the exact cars they ordered with respect to color, series, models, and options.

If comparable information were available, it would be of interest to compare the degree of success experienced by retail automobile dealers with other types of retail merchants in obtaining merchandise from suppliers.

Special consideration was given to how dealers secure their initial shipment of stock since no history of past sales can be used to determine stock requirements. It was found that 80.9 per cent of the total dealers place orders for their initial shipment of cars for the new model year and that 66.4 per cent of the total dealers can make choices on this shipment with respect to number shipped, series, models, colors and options.

Determining What to Buy.

The most common methods of stock control, listed in their order of reported use, are: (1) own experience, (2) own stock control system, (3) factory representative assistance, and (4) factory stock control system.

Some of the dealers were small so that no comprehensive stock control plan would be needed for adequate stock control. The dealer would be able to keep track of individual transactions and thus be able to order needed stock properly. As a business becomes larger, it is difficult for one individual to keep track of all transactions; so some system must be devised to keep track of them. Inquiry revealed that not all manufacturers make inventory control systems available to their dealers. Perhaps in the past when it was necessary to keep track only of units, series, and models, no system or a very elementary one was needed for inventory control purposes. It would seem that because of the current nature of the product (the multiplicity in choice of types), even though they make their factory representatives available to the dealer to assist in ordering, the manufacturers should also provide a new passenger car inventory control system.

Past sales is one of the important guides for ordering. Some periods of past sales could be more indicative than others. When dealers were questioned as to which period of past sales was of greatest importance to them in forecasting future requirements, the returns tallied as follows: first, last month's sales; second, this year's sales; third, last ten days' sales; and fourth, last year's sales.

There was no great difference among these four choices. It would seem that some uniform basis for ordering new passenger cars should be established. If one exists, then it can only be concluded that the dealers are not aware of it.

The survey further disclosed that 57.8 per cent of the dealers place regular orders monthly, 17.2 per cent every ten days, 16.4 per cent order weekly, and 3.4 per cent order daily.

It was pointed out by one large dealer that regardless of the ordering period it was necessary for him to keep track of his stock daily so that he would be in a position to order stock properly, especially so since the market is a competitive one making it necessary to have the right car in stock so that a deal can be finalized on the spot.

The survey revealed that the average dealer lost between four and fifteen deals a year because he did not have the right car in stock and that the most common reasons for not being able to deliver a car from stock were reported as follows: first, color; second, options; third, models; and fourth, series. If a prospect desires a different series, model, or factory installed option from that on the cars that a dealer has in stock, then it can be accepted that there is nothing the dealer can do but try to obtain a car equipped as the prospect desires. However, it does not appear reasonable that the one factor, color, which can be changed at the dealership should be the number one cause for loss of a deal.

Obtaining Supplementary Stock.

When a dealer does not have a car in stock that a prospect wants and is unable to influence him to compromise on a second choice, an

attempt is made to secure a car that is acceptable to the customer. It was found that the most popular methods of securing a car that is needed, listed in order of use by the dealers, are: first, to contact other dealers; second, to contact the factory representative; third, to contact the factory; and fourth, to use the car locating service.

It was found that the larger dealers were more prone to contact other dealers first for needed cars, and the smaller dealers were more prone to seek assistance from the factory representative or the factory. The reason for this may be that smaller dealers located in smaller marketing areas have little opportunity to contact other dealers because of distances and because neighboring dealers most likely are small also and the chances are that they would not have the car needed in stock.

The car locating service is an independent operation that functions by obtaining current lists of cars in stock from dealers of a particular area. Dealers needing cars call the car locating service office and are informed which dealers may have the car they seek. A fee is charged for this service. This service appears to be little used. This may be due to the fact that the factory functions in the same manner in trying to locate cars for dealers and without charge.

The survey revealed that most dealers feel the factory gives them sufficient assistance in locating cars needed. A total of 71.5 per cent acknowledged that the factory does give them sufficient help while 20.7 per cent reported the factory does not. A total of 7.8 per cent of the dealers did not reply to this question.

If a car cannot be located for the customer, the dealer must place a special order for it from the factory. The car must be manufactured. When special orders are placed with the factory, 86.2 per cent of the dealers reported that they received their orders "most of the time" in time to close the deal. A much smaller per cent of the dealers, 10.3 per cent, reported that they "sometimes" received cars in time to close the deal while only 3.5 per cent reported that they "never" got a car on special order in time to close the deal.

Dealers reported that a 20.5 day wait was necessary on special order cars. Information provided by the manufacturers substantiated this fact.

If the manufacturer is in production on the particular type of car ordered on special order by a dealer, then immediate shipment can be made. Otherwise the dealer must wait until that type is scheduled for production.

The retail automobile dealer functions not unlike other retail dealers in his attempt to satisfy the customer. Because the product he handles is such a large, complicated, and expensive mechanism, concessions must be made in size and variety of stock carried to satisfy all customers. The measures he adopts to secure stock needed are practical and productive. The factory, it can be assumed, desires to assist its dealers in obtaining the cars needed, for one more car leaving the dealer's stock means one more car to be replaced by the factory.

Disposing of Excess Stock.

The practices used by dealers to secure supplementary stock have been examined. While the need exists for securing supplementary stock at times, by the same token the need exists for some dealers at times to dispose of excess stock.

The survey revealed that the most common methods for disposing of excess stock, ranked in order of use by dealers, were: first, overallowance; second, bonus to salesmen; third, other dealers; and fourth, factory help. Overallowance was found to be the most common method. It is in reality a discount. Inasmuch as most new car transactions involve a trade, the term overallowance signifies that the dealer offered more than the estimated resale value for the used car being traded. The manufacturers assist dealers in various ways to dispose of excess stock. Some reported methods are sales incentive plans, information concerning dealers who need particular cars, and re-purchase plans.

The end of the model year can be a critical period in new passenger car marketing as stock must be cleared out in order to make room for the new model. In order to end right, it is necessary to start right. It has been pointed out that in most cases the retail automobile dealers can place their own orders for the initial stock of new cars. It was found that whether they place their orders for it or the factory ships the initial stock without a specific order from them, the dealers have relatively little difficulty in selling the initial shipment.

It was revealed that 75 per cent of the dealers do not have difficulty in moving the initial shipment and that "options" constituted the

main source of trouble in moving out the initial shipment with models, series, and colors following in that order.

If dealers start the year right and do a good job of keeping inventory balanced with the rate of sale throughout the year, they will be in a good position at the end of the model year to clear out their remaining stock and concern themselves with the new model.

The survey revealed that 59.5 per cent of the dealers felt that it was best to sell out of stock completely before the new models are shown whereas 38.8 per cent of the dealers felt it was best to carry some over into the next model year. The main reason given for those dealers who wished to sell out of the old model completely was so that they could concentrate on the new models. The most common reason given by the dealers who desired to carry some of last year's new passenger car stock into the new model year was that better deals could be made on last year's models after new car announcement rather than just before. It was pointed out that there are always bargain hunters looking for special deals on last year's models.

A total of 76.7 per cent of the dealers reported that they usually sell out of stock before new car announcement time. The 23.3 per cent of the dealers that reported they do not usually sell out of stock before new car announcement time reported that they carried over about 5 per cent of total stock at the end of the 1956 model year.

In case a dealer does find himself with an excessive supply of cars at the end of the model year, the survey revealed that his most common means of disposing of them were, in the order of choice: first,

overallowance; second, heavier advertising; third, bonus to salesmen; fourth, factory help; and fifth, contact other dealers. All manufacturers provide an additional discount plan on cars the dealers carry over into the next model year.

In every aspect of the business the dealer operates as an independent businessman, making those decisions which contribute either to his success or failure. The factory he represents is ready and willing to assist him whenever needed, for the retail automobile dealer and the factory are bound together by means of a selling agreement. Thus the factory is only as sound as the dealers that represent it, and the dealers are only as strong as the factory that is backing them.

To take a complicated product such as the automobile, to build it in the quantities in excess of 5,000,000 per year since World War II, to distribute it from one end of the country to the other, and to provide for servicing it in the field so that the quality that is built into it can be enjoyed, is a difficult marketing project. The present distribution system which makes this possible is one which has been developed throughout the years. Information obtained from this study shows how the retail automobile dealer and the factory operate through a complex marketing situation in meeting customer demand for automobiles.

Areas for Further Study.

An area that would be of especially great interest and of great value would be to set up a project to determine what preconceived choices the new car buyer entered the dealership with and what concessions were made after actually buying a new car.

Another project of interest would be to find out where dealers obtained the supplementary stock needed for the past year and then examine each source with a view to improving the process of getting cars from the dealers that have them to the dealers that need them.

Still another project of interest would be to analyze the stock control plans made available by passenger car manufacturers for dealers. It would be of interest to examine more closely the ordering practices and procedures used by the various car manufacturers.

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APPENDIX

I am taking graduate work at Michigan State University and am writing a thesis on "Inventory Control Practices in the Automobile Industry."

I would like to gain an understanding of how the various automobile companies handle this important function and so would appreciate it very much if you would supply me with the information entailed in the questions on the attached sheet.

There are a few questions under each of these headings: Balancing Production with Dealers' Orders; Assisting Dealers in Stock Control; Assisting Dealers to Dispose of Excess Stock.

Cordially yours,

FIGURE 1

COPY OF LETTER MAILED WITH QUESTIONNAIRE
TO AUTOMOBILE MANUFACTURERS

A. Balancing Production with Dealers' Orders.

1. Do you assemble cars

   a. In advance of dealers' orders? Yes ____ No ____
   b. On dealers' orders only? Yes ____ No ____
   c. What per cent are assembled in advance? ____

2. How do you break down yearly scheduled production to monthly output for dealer orders?

3. How do you determine in advance what per cent of cars for which to plan production with respect to series, models, colors, and options?

B. Assisting Dealers in Stock Control.

1. Do you make a new car stock control plan available to your dealers? Yes ____ No ____

2. What assistance do you give dealers in ordering new cars?

3. Generally how long does it take to fill a special order for a dealer? ____ days.

4. What provisions do you make to transfer cars from dealers that have them to dealers that need them?

C. Assisting Dealers to Dispose of Excess Stock.

1. Do you extend an additional discount for cars in dealers' hands after announcement of new models? Yes ____ No ____

2. What assistance do you give dealers in disposing of excess stock?

Any additional information relative to this problem, and copies of forms used, would be greatly appreciated.

FIGURE 2

COPY OF QUESTIONNAIRE MAILED TO
AUTOMOBILE MANUFACTURERS

I Need Your Help

It is of great importance to me to have the benefit of your experience and comment.

As a student engaged in graduate work at Michigan State University, my thesis is "Inventory Control Practices in the Automobile Industry."

This being an industry-wide study, would you give me a few moments of your time and check the answers to the questions on the following pages?

Cordially yours,

FIGURE 3

COPY OF LETTER MAILED WITH QUESTIONNAIRE
TO RETAIL AUTOMOBILE DEALERS

A. Initial Order for New Model Year.

1. How do you get your initial stock?

   a. Do you place an order for it? Yes ____ No ____

   b. Does the factory make the initial shipment without a specific order from you? Yes ____ No ____

2. Do you have a choice with respect to

   a. Number shipped? Yes ____ No ____
   b. Series? Yes ____ No ____
   c. Models? Yes ____ No ____
   d. Colors? Yes ____ No ____
   e. Options? Yes ____ No ____

3. Do you usually have difficulty in moving any of the initial shipment? Yes ____ No ____

4. About what per cent do you have difficulty in moving? ____

5. What is the most common cause of difficulty in selling all of the initial shipment? (Please show order of importance by numbering 1, 2, 3, 4.)

   Series ____
   Models ____
   Colors ____
   Options ____

6. What methods do you use to get rid of slow moving models? (Please show order of importance by numbering.)

   Overallowance ____
   Bonus to salesmen ____
   Factory help ____
   Other dealers ____

FIGURE 4

COPY OF QUESTIONNAIRE MAILED
TO RETAIL AUTOMOBILE DEALERS

B. Supply of Cars During Selling Season.

1. Do you carry a stock of new cars on hand during the selling season?
   Yes ____ No ____

2. What is the approximate number carried in stock? ____

3. Did you include demonstrators in your stock figures?
   Yes ____ No ____ How many? ____

4. In selling cars

   a. Do you deliver mainly from stock Yes ____ No ____
   b. Mainly from special order? Yes ____ No ____
   c. What per cent are delivered from stock? ____
   d. What per cent are sold on special order? ____

5. About how many deals did you lose last year because you did not have the right car in stock? ____

6. When you do not have the car a prospect wants in stock, what means do you use to locate one? (Please show the order of importance by numbering.)

   Contact factory ____
   Contact factory representative ____
   Contact other dealers ____
   Use car locating service ____
   Other ____ (Please specify.)

7. Do you get cars on special order from the factory in time to complete the deal? (Please check one.)

   Most of the time ____
   Sometimes ____
   Seldom ____

   How many days does it generally take? ____

8. Does the factory give you sufficient help in locating cars you need?
   Yes ____ No ____

(Figure 4, continued)

9. What is the most common reason for not being able to deliver a car from stock? (Please show order of importance by numbering.)

Series ____
Models ____
Colors ____
Options ____

10. Please indicate size of your dealership by checking one of the following:

Group I - 1 to 149 units sold last year ____
Group II - 150 to 399 units sold last year ____
Group III - 400 to 749 units sold last year ____
Group IV - 750 and over units sold last year ____

C. Controlling Stock.

1. In ordering new cars

a. Do you order all of the cars on an individual order?
Yes ____ No ____

b. Order a certain number of cars only (bulk order)?
Yes ____ No ____

c. Send in individual orders on part of the total order?
Yes ____ No ____

d. Other? ____ (Please specify.)

2. On what per cent of your total do you specify preferences? ____

3. How often do you place a regular order for cars?

Daily ____
Weekly ____
Ten days ____
Monthly ____

4. In order to replenish your supply, what methods do you use to determine what series, models, colors, and options to order? (Please show order of importance by numbering.)

Factory stock control system ____
Factory representative assistance ____
Your own stock control system ____
Your own experience ____
Other ____ (Please specify.)

(Figure 4, continued)

5. Which do you consider the most important guide to ordering? (Please show order of importance by numbering.)

   This year's sales ____
   Last year's sales ____
   Last month's sales ____
   Last ten days' sales ____

6. Do you almost always receive from the factory the exact cars you order with respect to series, models, colors, and options?
   Yes ____ No ____

7. Do you almost always receive the exact number you order?
   Yes ____ No ____

   Do you receive more? ____
   Do you receive less? ____

D. End of Model Run.

1. Do you usually clear out your stock of new cars at the end of the model year? Yes ____ No ____

2. What per cent did you carry over into the new model year last year?
   ____

3. Do you feel it is better to clear out all previous year's cars before new car announcement? Yes ____ No ____

   If your answer is yes, why?

4. Do you feel it is better to carry some over into the next year?
   Yes ____ No ____

   If your answer is yes, why?

5. What means do you use to dispose of an excessive supply at the end of a model year? (Please show order of importance by numbering.)

   Reduce prices ____
   Increase advertising ____
   Bonus to salesmen ____
   Factory help ____
   Other ____ (Please specify.)

Any additional information would be greatly appreciated.

(Figure 4, continued)

TABLE XXXVIII

PASSENGER CAR DEALERS IN U. S. - 1957*
(Estimated by Automotive News)

American Motors Corporation	4,042
Hudson	797
Nash	1,224
Rambler	2,021
Chrysler Corporation	19,386
Chrysler	2,856
DeSoto	2,454
Dodge	3,616
Imperial	1,834
Plymouth	8,626
Ford Motor Company	12,061
Continental	462
Ford	7,040
Lincoln	1,411
Mercury	3,148
General Motors Corporation	20,745
Buick	3,576
Cadillac	1,753
Chevrolet	7,587
Oldsmobile	3,857
Pontiac	3,972
Studebaker-Packard Corporation	4,292
Packard	2,190
Studebaker	2,102
Total U. S. Franchises	60,526
Minus Dual Franchises	20,883
Total U. S. Dealerships	39,643

*Automotive News, February 11, 1957, p. 1.

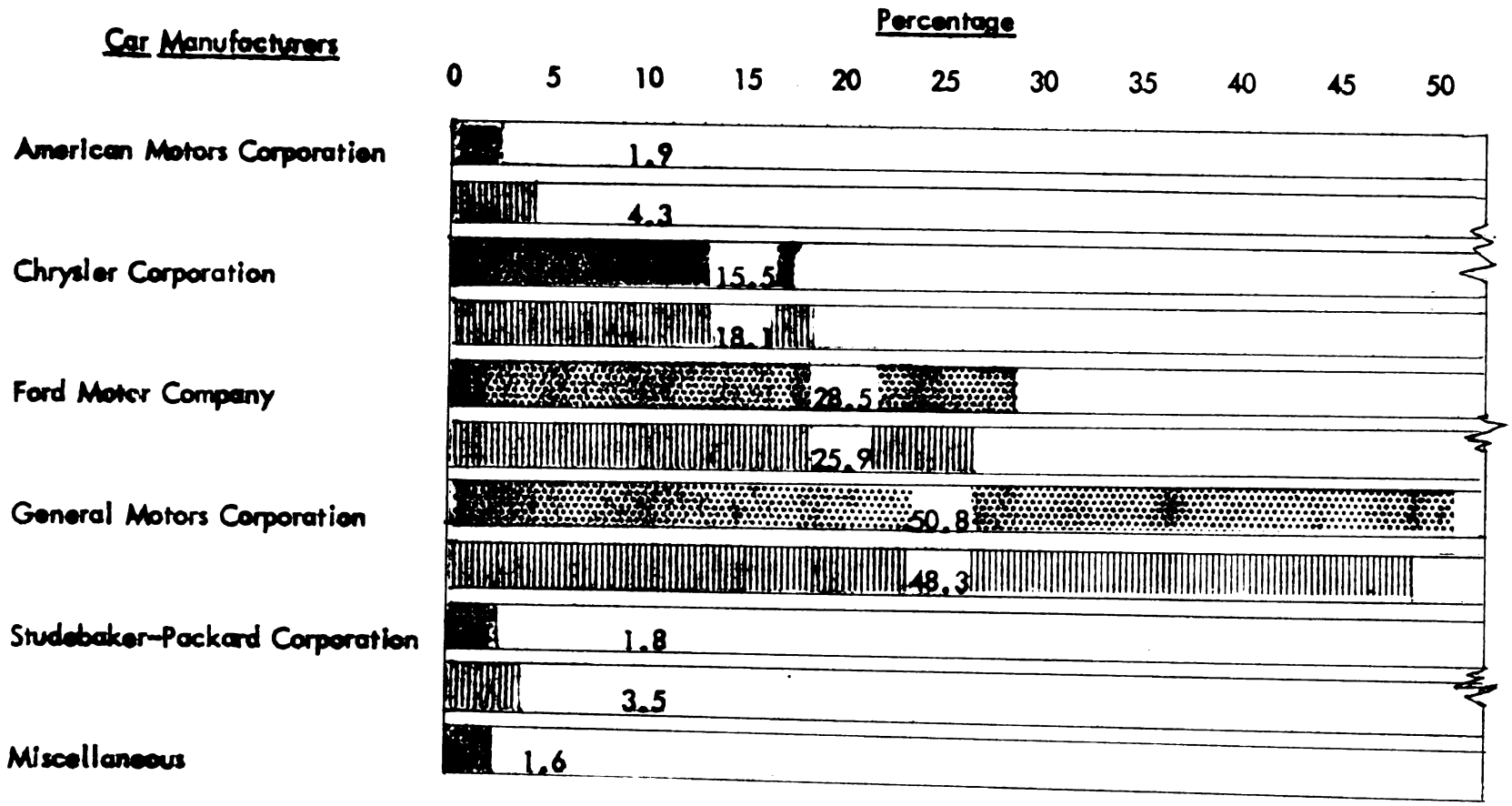


FIGURE 5

QUESTIONNAIRE REPRESENTATION ACCORDING TO CAR MANUFACTURERS' REGISTRATIONS

Per cent of total registrations in 1956. Per cent of total responses.

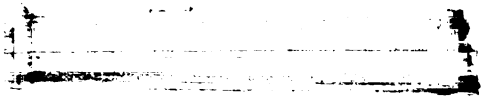
NOTE: 1956 registration figures taken from Automotive News (1957 Almanac Issue), April 29, 1957, p. 42.

TABLE XXXIX

NEW CAR REGISTRATIONS BY MAKES - 1956*

	Percentage Share of Market	
American Motors Corporation		1.93
Hudson	.51	
Nash	1.42	
Chrysler Corporation		15.48
Chrysler	1.79	
Imperial	.16	
DeSoto	1.69	
Dodge	3.70	
Plymouth	8.12	
Ford Motor Company		28.45
Ford	23.09	
Lincoln	.72	
Mercury	4.61	
Continental	.03	
General Motors Corporation		50.78
Buick	8.89	
Cadillac	2.23	
Chevrolet	26.29	
Oldsmobile	7.35	
Pontiac	6.02	
Studebaker-Packard Corporation		1.76
Packard	.48	
Studebaker	1.28	
Miscellaneous		1.60

*Compilations from R. L. Polk & Company data, Automotive News (1957 Almanac Issue), April 29, 1957, p. 42.



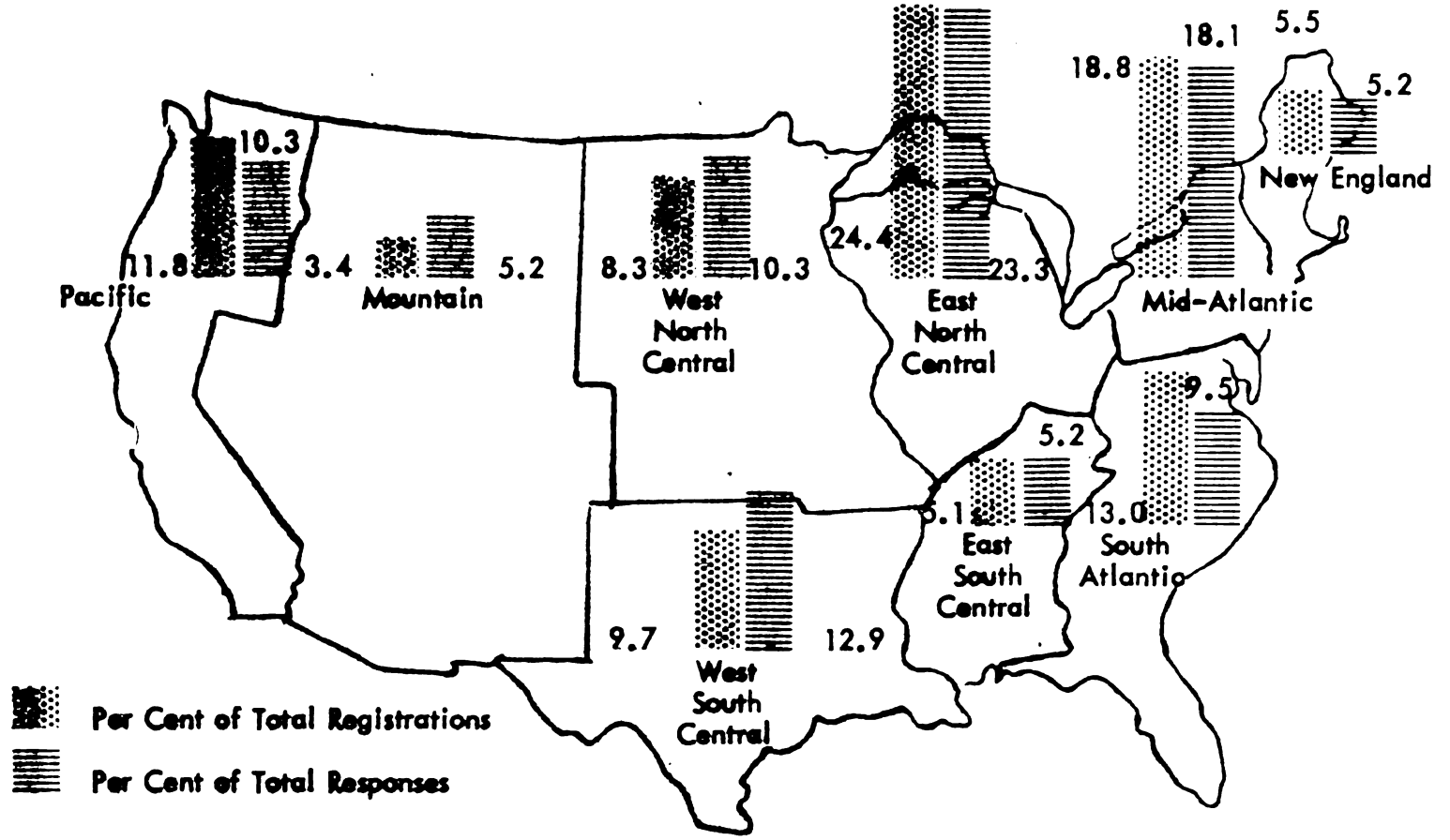


FIGURE 6

QUESTIONNAIRE REPRESENTATION ACCORDING TO NEW PASSENGER CAR REGISTRATIONS BY GEOGRAPHICAL DIVISION FOR 1956

NOTE: 1956 registration figures taken from Automotive News (1957 Almanac Issue), April 29, 1957, pp. 50-51.

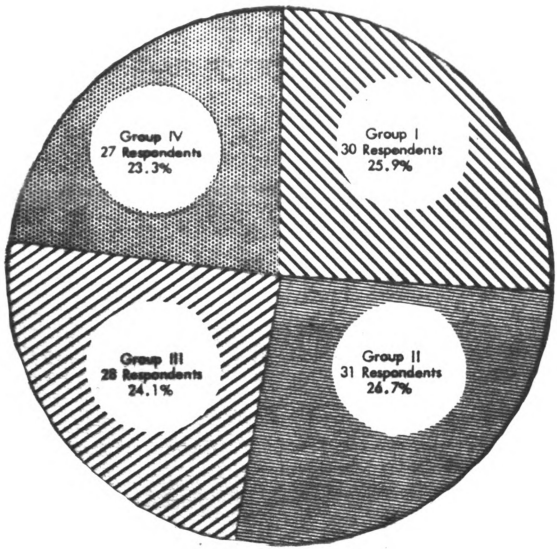


FIGURE 7

QUESTIONNAIRE REPRESENTATION ACCORDING TO SIZE OF DEALERSHIP
(By Number and Per Cent)

NOTE: Dealerships grouped according to size as shown.

Group Number	Number of New Cars Registered in 1956
Group I	1 to 149
Group II	150 to 399
Group III	400 to 749
Group IV	750 and over

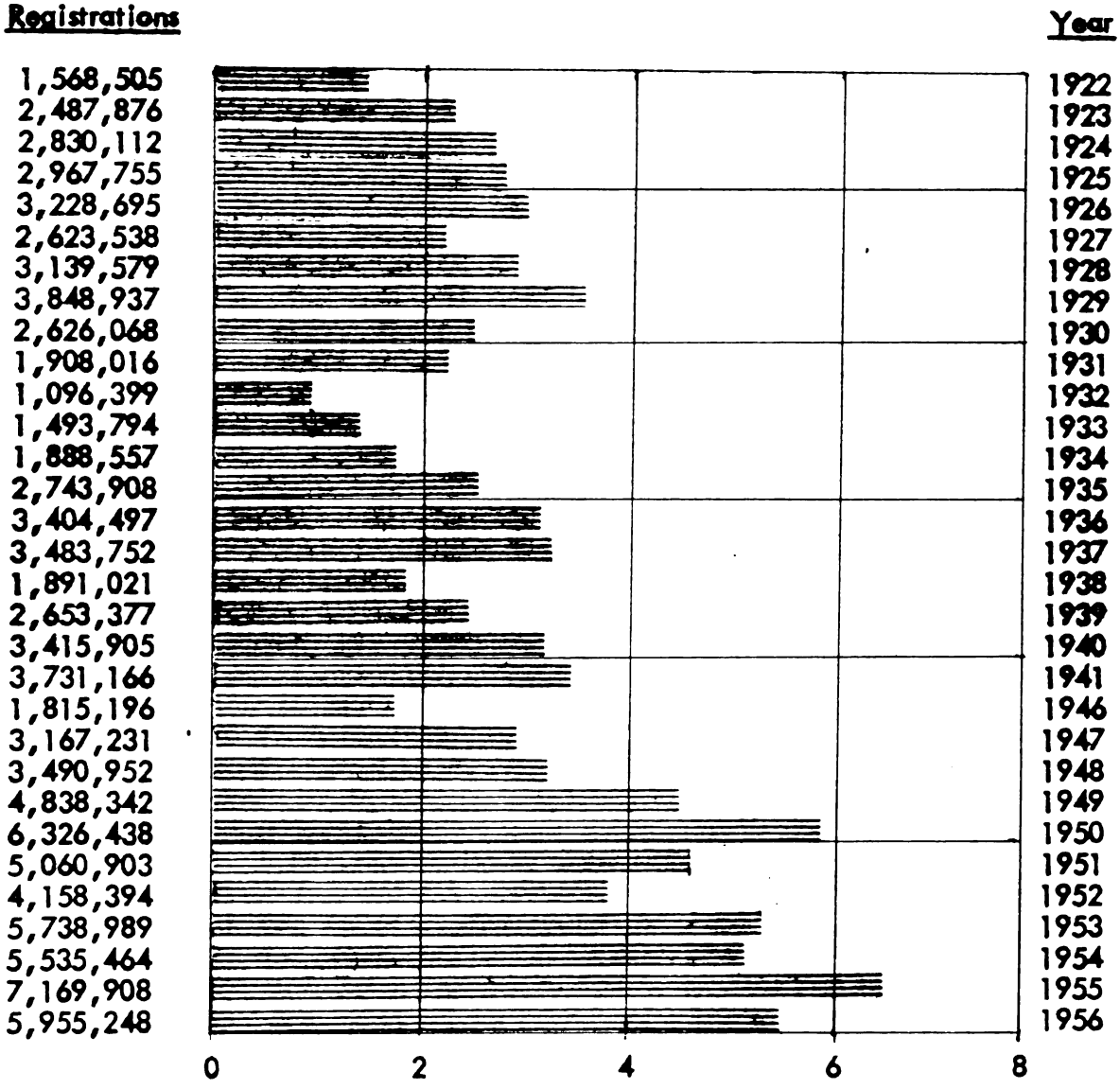


FIGURE 8

NEW CAR REGISTRATIONS BY YEAR - 1922 TO 1956*

*Automotive News (1957 Almanac Issue), April 29, 1957, p. 41.

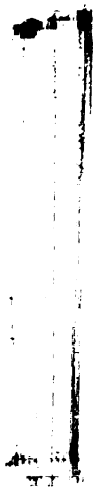


TABLE XL

MODELS AND BODY STYLES AVAILABLE FOR 1957*

	2-Dr. Sedans, Coupes	4-Dr. Sedans	2-Dr. Hard-tops	4-Dr. Hard-tops	Conv.	Stat. Wagons	Total Models
General Motors							
Buick	1	1	4	4	4	3	17
Cadillac	0	2	3	3	2	0	10
Chevrolet	5	3	3	2	1	6	20
Oldsmobile	2	3	3	3	3	3	17
Pontiac	1	4	3	3	1	4	16
Ford							
Continental	0	0	1	0	0	0	1
Ford	5	4	3	2	1	5	20
Lincoln	0	2	2	2	1	0	7
Mercury	1	2	2	2	2	6	15
Chrysler							
Chrysler	0	3	3	3	1	2	12
DeSoto	0	3	3	3	2	4	15
Dodge	2	4	3	3	2	5	19
Imperial	0	5	2	2	1	0	10
Plymouth	4	3	2	1	1	6	17
American Motors							
Hudson	0	2	2	0	0	0	4
Nash	0	2	2	0	0	0	4
Rambler	0	5	0	2	0	6	13
Studebaker-Packard							
Studebaker	7	6	1	0	0	4	18
Totals	28	54	42	35	22	54	235

*John K. Teahen, Jr., "Makers Shoot the Works to Revive Boom", Automotive News, December 3, 1956, p. 23.

TABLE XLI

CUSTOMER PREFERENCE TRENDS
PASSENGER CAR PRODUCTION
BY MODELS AND SERIES
FROM 1947 TO 1956*
(Per Cent of Total Production)

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
4-Door Sedans	49.04	50.37	49.22	48.71	50.82	52.28	50.35	46.64	38.43	34.62
2-Door Sedans, Coaches, Coupes	40.89	39.77	42.83	40.57	33.23	28.12	27.69	26.63	21.18	19.34
Business Coupes	2.33	1.62	1.61	1.34	1.01	.67	.60	.30	.17	.18
Hardtop Coupes and Sedans			.21	4.00	9.14	12.49	13.76	17.11	27.38	31.22
Convertibles	4.89	5.03	4.21	3.12	2.69	2.32	2.60	2.80	3.03	3.42
Station Wagons	2.24	2.62	1.73	2.13	2.80	3.91	4.86	6.29	9.59	10.98
Chassis	.61	.59	.19	.13	.31	.21	.14	.23	.22	.24

*Automotive News (1957 Almanac Issue), April 29, 1957, p. 9.

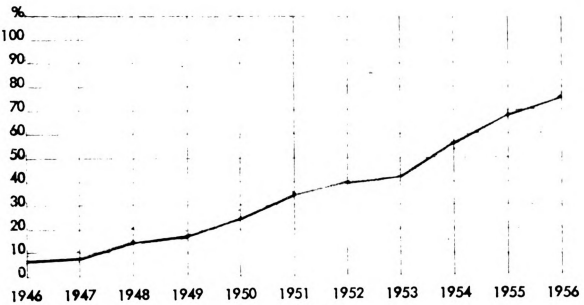


FIGURE 9

CUSTOMER PREFERENCE TRENDS--AUTOMATIC TRANSMISSIONS*
(Per Cent of Total Output)

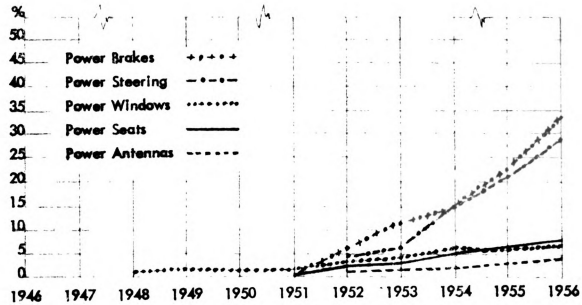


FIGURE 10

CUSTOMER PREFERENCE TRENDS—POWER OPTIONS*
(Per Cent of Total Output)

Automotive News (1957 Almanac Issue), April 29, 1957, p. 9

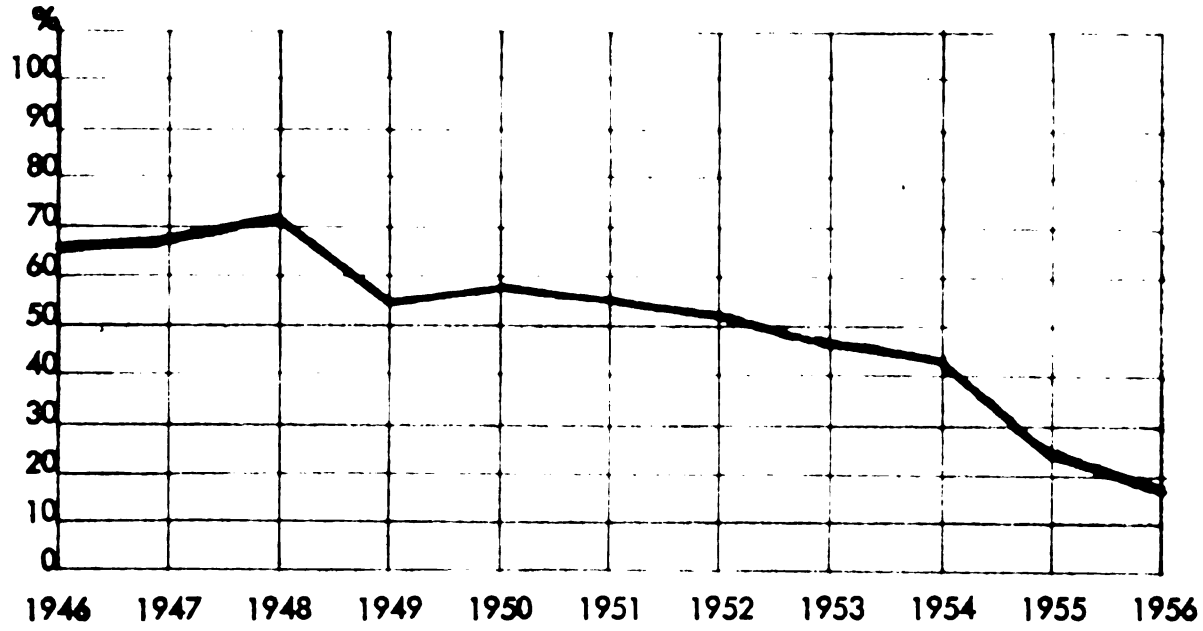


FIGURE 11

CUSTOMER PREFERENCE TRENDS—6-CYLINDER ENGINES*
(Per Cent of Total Output)

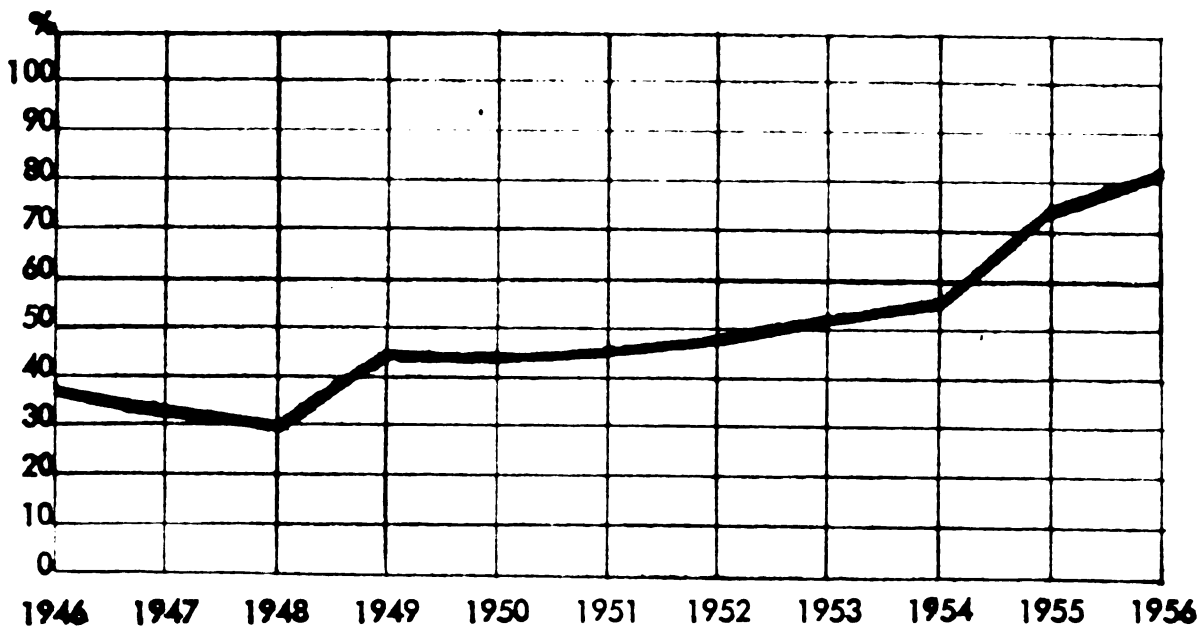


FIGURE 12

CUSTOMER PREFERENCE TRENDS—8-CYLINDER ENGINES*
(Per Cent of Total Output)

*Automotive News (1957 Almanac issue), April 29, 1957, p. 9.

DEALER CAR ORDER FORM

(DEALER NAME) (LOCATION) (DATE)

MODEL ORDER	MODELS	RECORD OF MODELS ORDERED	OPT. EQUIP ORDER	OPTIONAL EQUIPMENT	RECORD OF OPTIONAL EQUIPMENT ORDERED
	1121 Utility Sedan 1221		ENGINE	Super Turbo-Fire V-8	
	1141 2-dr. Sed. 1241			Turbo-Thrust V-8	
	1541 2-dr. Sed. 1641			Super Turbo-Thrust V-8	
	1741 2-dr. Sed. 1841			Dual Exhaust	
	1149 4-dr. Sed. 1249		TRANS.	Powerglide	
	1549 4-dr. Sed. 1649			Turboglide	
	1749 4-dr. Sed. 1849			Overdrive	
	1731 Spt. Cpe. 1831		HEATER	Deluxe	
	1739 Spt. Sed. 1839			Recir.	
	1747 Impala Cpe. 1847		RADIO	Push Button ANTENNA	F R
	1767 Impala Conv. 1867			Manual ANTENNA	F R
	1191 2-dr. STW. 1291			Power Steering	
	1193 4-dr. STW. 1293			Power Brakes	
	1593 4-dr. STW. 1693			White Wall Tires	
	1793 4-dr. STW. 1893			E-Z-I Glass	
	1594 4-dr. STW. 9 Pass. 1694			Inst. P. Pad	
	6 Cyl. TOTAL 8 Cyl.			Ram Jet Fuel Inj.	SCHEDULE ONLY ON
				Power Seat	SPECIFIC ORDER
				Power Windows	
				Air Cond.	
				Level Air Suspension	

TO: MOTOR DIVISION, ZONE OFFICE

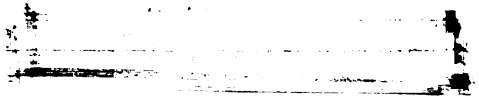
Please enter our order for Passenger car models and factory installed accessories and optional equipment in the quantities indicated above for delivery beginning in We will furnish individual orders on form GSD-803 cross-referenced against this commitment specifying colors and factory installed accessories and optional equipment combinations in sufficient time to meet production schedules for said month and to provide an orderly flow of shipments to us. If such individual orders are not so furnished by us, you are authorized at all times to schedule the models hereby ordered for shipment to us in such combinations of the factory installed accessories and optional equipment hereby ordered and in such colors you may determine to be most appropriate for sale in our area. Any units remaining on this commitment on the last day of said month which have not been covered by individual orders on GSD-803 forms or which you have not scheduled with the factory for production are to be automatically cancelled.

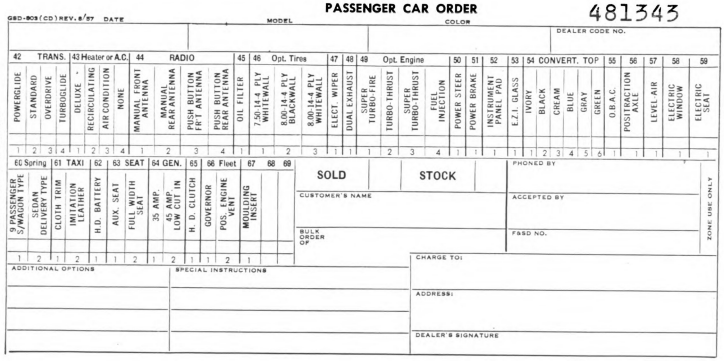
GSD 799-DIS REV 10-57

Signed

FIGURE 13

COPY OF DEALER'S BULK ORDER





ZONE OFFICE COPY

FIGURE 14

SAMPLE OF INDIVIDUAL ORDER

TABLE XLII

HOW DEALERS RANKED STOCK CONTROL METHODS

Methods	Rank	Annual Unit Sales: Group I No.	Group I Per Cent	Group II No.	Group II Per Cent	Group III No.	Group III Per Cent	Group IV No.	Group IV Per Cent	Total No.	Total Per Cent
Factory Control System	1					1	1.6			1	.4
	2					2	3.1			2	.8
	3			1	1.4	2	3.1			3	1.2
	4	6	9.3	6	8.5	5	7.7	5	8.8	22	8.5
	5										
Factory Representative Assistance	1	1	1.6	1	1.4			1	1.7	3	1.2
	2	4	6.2	3	4.2	1	1.6	1	1.7	9	3.5
	3	5	7.7	6	8.5	6	9.3	5	8.8	22	8.5
	4	1	1.6	1	1.4	1	1.6			3	1.2
	5			2	2.8	1	1.6	3	5.3	6	2.3
Own Stock Control System	1	12	18.5	7	9.9	7	10.7	16	28.1	42	16.3
	2	8	12.0	10	14.1	8	12.0	3	5.3	29	11.2
	3	2	3.1	1	1.4	2	3.1			5	1.9
	4										
	5			4	5.6	3	4.6	5	8.8	12	4.6
Own Experience	1	13	20.0	17	23.9	15	23.0	4	7.0	49	19.0
	2	13	20.0	5	7.0	5	7.7	8	14.0	31	12.0
	3					1	1.6	1	1.7	2	.8
	4										
	5			7	9.9	5	7.7	5	8.8	17	6.6
Total		65	100.0	71	100.0	65	100.0	57	100.0	258	100.0

NOTE: A total of three dealers in Group I, one in Group II, one in Group III, and two in Group IV did not check schedule as requested.

NOTE: Rank 5 indicates dealers that checked more than one item without indicating rank.

TABLE XLIII

HOW DEALERS RANKED SOURCES OF INFORMATION FOR ORDERING

Sources of Information	Rank	Annual Unit Sales: Group I No.	Group I Per Cent	Group II No.	Group II Per Cent	Group III No.	Group III Per Cent	Group IV No.	Group IV Per Cent	Total No.	Total Per Cent
This Year's Sales	1	7	9.2	12	14.1	7	8.0	8	11.2	34	10.6
	2	8	10.6	2	2.3	7	8.0	5	7.1	22	6.9
	3	3	3.9	5	5.9	7	8.0	5	7.1	20	6.3
	4	2	2.6	4	4.7	2	2.3	1	1.4	9	2.8
	5			1	1.2			1	1.4	2	.6
Last Year's Sales	1	5	6.6	5	5.9	2	2.3	2	2.8	14	4.4
	2	4	5.3	4	4.7	1	1.1	3	4.2	12	3.8
	3	3	3.9	5	5.9	4	4.6	3	4.2	15	4.7
	4	6	7.9	6	7.1	12	13.6	5	7.1	29	9.1
	5							3	4.2	3	.9
Last Month's Sales	1	12	15.8	8	9.4	9	10.1	12	16.9	41	12.8
	2	2	2.6	8	9.4	10	11.4	3	4.2	23	7.2
	3	6	7.9	6	7.1	3	3.4	3	4.2	18	5.6
	4					1	1.1			1	.3
	5							2	2.8	2	.6
Last Ten Days' Sales	1	4	5.3	2	2.3	8	9.1	1	1.4	15	4.7
	2	5	6.6	6	7.1	3	3.4	5	7.1	19	5.9
	3	2	2.6	3	3.5	7	8.0	2	2.8	14	4.4
	4	7	9.2	8	9.4	5	5.6	5	7.1	25	7.8
	5							2	2.8	2	.6
Total		76	100.0	85	100.0	88	100.0	71	100.0	320	100.0

NOTE: A total of two dealers in Group I and three in Group II did not check schedule as requested.

NOTE: Rank 5 indicates dealers that checked more than one item without indicating rank.

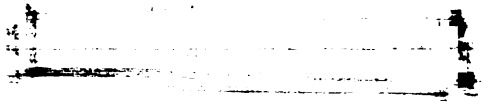


TABLE XLIV

HOW DEALERS RANKED REASONS FOR NOT BEING ABLE TO DELIVER CARS FROM STOCK

Reasons for Not Being Able to Deliver	Rank	Annual Unit Sales: Group I No.	Group I Per Cent	Group II No.	Group II Per Cent	Group III No.	Group III Per Cent	Group IV No.	Group IV Per Cent	Total No.	Total Per Cent
Series	1	5	4.8	3	2.9	3	3.4	1	1.2	12	3.2
	2	3	2.9	5	4.9	4	4.6	3	3.6	15	4.0
	3	7	6.7	9	8.7	6	6.8	1	1.2	23	6.1
	4	10	9.6	6	5.8	6	6.8	11	13.3	33	8.7
	5							1	1.2	1	.3
Models	1	6	5.8	3	2.9	5	5.6	2	2.4	16	4.2
	2	7	6.7	8	7.8	3	3.4	3	3.6	21	5.6
	3	11	10.6	6	5.8	8	9.1	10	12.0	35	9.3
	4	2	1.9	5	4.9	4	4.6	2	2.4	13	3.4
	5							1	1.2	1	.3
Colors	1	15	14.4	13	12.6	13	14.8	11	13.3	52	13.8
	2	4	3.9	4	3.9	4	4.6	4	4.9	16	4.2
	3	2	1.9	3	2.9	1	1.1	4	4.9	10	2.6
	4	7	6.7	7	6.8	5	5.6	2	2.4	21	5.6
	5			3	2.9	3	3.4	2	2.4	8	2.1
Options	1	4	3.9	8	7.8	3	3.4	9	10.8	24	6.3
	2	12	11.5	9	8.7	10	11.4	10	12.0	41	10.8
	3	4	3.9	4	3.9	4	4.6	3	3.6	15	4.0
	4	5	4.8	4	3.9	3	3.4	1	1.2	13	3.4
	5			3	2.9	3	3.4	2	2.4	8	2.1
Total		104	100.0	103	100.0	88	100.0	83	100.0	378	100.0

NOTE: One dealer in Group IV did not answer question.

NOTE: Rank 5 indicates dealers that checked more than one item without indicating rank.

TABLE XLV

HOW DEALERS RANKED METHODS FOR LOCATING SUPPLEMENTARY CARS NEEDED

Methods	Rank	Annual Unit Sales: Group I No.	Group I Per Cent	Group II No.	Group II Per Cent	Group III No.	Group III Per Cent	Group IV No.	Group IV Per Cent	Total No.	Total Per Cent
Contact Factory	1	6	8.0	7	9.2	5	6.3	1	1.5	19	6.4
	2	3	4.0	4	5.3	4	5.1	7	10.4	18	6.0
	3	9	12.0	4	5.3	7	8.8	6	9.0	26	8.8
	4	1	1.3	2	2.6	1	1.3	2	3.0	6	2.0
	5	1	1.3	3	3.9	4	5.1	3	4.5	11	3.7
Contact Factory Representative	1	11	14.7	3	3.9	4	5.1	3	4.5	21	7.1
	2	12	16.0	5	6.6	6	7.6	5	7.4	28	9.4
	3	2	2.7	7	9.2	6	7.6	5	7.4	20	6.7
	4					2	2.5			2	.7
	5	3	4.0	4	5.3	4	5.1	1	1.5	12	4.0
Contact Other Dealers	1	11	14.7	11	14.5	10	12.6	14	20.9	46	15.5
	2	7	9.3	9	11.8	10	12.6	5	7.4	31	10.4
	3	4	5.4	1	1.4	3	3.8	1	1.5	9	3.0
	4			2	2.6	2	2.5			4	1.4
	5	2	2.7	6	7.9	2	2.5	4	6.0	14	4.7
Use Car Locating Service	1	1	1.3	3	3.9	4	5.1	4	6.0	12	4.0
	2					2	2.5	2	3.0	4	1.4
	3	1	1.3	2	2.6	1	1.3			4	1.4
	4	1	1.3	2	2.6	1	1.3	2	3.0	6	2.0
	5			1	1.4	1	1.3	2	3.0	4	1.4
Total		75	100.0	76	100.0	79	100.0	67	100.0	297	100.0

NOTE: Rank 5 indicates dealers who checked more than one item without indicating rank.

TABLE XLVI

HOW DEALERS RANKED METHODS FOR MOVING EXCESS STOCK

Methods	Rank	Annual Unit Sales: Group I No.	Group I Per Cent	Group II No.	Group II Per Cent	Group III No.	Group III Per Cent	Group IV No.	Group IV Per Cent	Total No.	Total Per Cent
Overallowance	1	19	35.3	15	23.5	10	15.3	6	14.3	50	22.2
	2			4	6.2	6	9.3	3	7.1	13	5.8
	3					1	1.6			1	.4
	4										
	5	2	3.8	4	6.2	4	6.2	6	14.3	16	7.1
Bonus to Salesmen	1			8	12.6	6	9.3	10	23.8	24	10.7
	2	8	14.8	12	18.8	8	12.0	6	14.3	34	15.1
	3	3	5.6			1	1.6			4	1.8
	4	1	1.8							1	.4
	5	1	1.8	4	6.2	4	6.2	7	16.6	16	7.1
Factory Help	1	1	1.8							1	.4
	2										
	3	1	1.8	4	6.2	1	1.6			6	2.7
	4	6	11.1	4	6.2	10	15.3	1	2.4	21	9.3
	5										
Other Dealers	1			1	1.6	1	1.5			2	.9
	2	6	11.1			2	3.1			8	3.6
	3	5	9.3	5	7.8	9	13.8	2	4.8	21	9.3
	4			3	4.7	1	1.6			4	1.8
	5	1	1.8			1	1.6	1	2.4	3	1.4
Total		54	100.0	64	100.0	65	100.0	42	100.0	225	100.0

NOTE: A total of four dealers in Group I, one in Group II, five in Group III, and two in Group IV did not answer this question.

NOTE: Rank 5 indicates dealers who only checked more than one item without indicating rank.

TABLE XLVII

HOW DEALERS RANKED METHODS OF DISPOSING OF AN EXCESSIVE SUPPLY AT THE END OF THE MODEL YEAR

Methods	Rank	Annual Unit Sales: Group I No.	Group I Per Cent	Group II No.	Group II Per Cent	Group III No.	Group III Per Cent	Group IV No.	Group IV Per Cent	Total No.	Total Per Cent
Overallowance	1	19	31.1	16	24.2	11	18.6	8	18.2	54	23.4
	2	3	4.9	6	9.1	8	13.5	2	4.5	19	8.3
	3	1	1.6	4	6.1	3	5.0	4	9.1	12	5.2
	4					1	1.7	1	2.3	2	.9
	5	3	4.9	1	1.5	3	5.0	2	4.5	9	3.9
Increase Advertising	1	2	3.3	6	9.1	7	11.9	8	18.2	23	10.0
	2	7	11.5	11	16.7	7	11.9	4	9.1	29	12.6
	3	4	6.7	4	6.1	3	5.0	5	11.3	16	7.0
	4	2	3.3	2	3.0					4	1.7
	5	3	4.9	1	1.5	2	3.4	3	6.8	9	3.9
Bonus to Salesmen	1	1	1.6			1	1.7			2	.9
	2	2	3.3			1	1.7			3	1.3
	3	3	4.9	5	7.6	4	7.1	1	2.3	13	5.7
	4	6	9.9	10	15.1	3	5.0	4	9.1	23	10.0
	5	1	1.6			2	3.4	1	2.3	4	1.7
Factory Help	1	1	1.6			1	1.7			2	.9
	2					1	1.7			1	.4
	3	2	3.3							2	.9
	4	1	1.6			1	1.7			2	.9
	5							1	2.3	1	.4
Total		61	100.0	66	100.0	59	100.0	44	100.0	230	100.0

NOTE: One dealer in each group reported "no problem." A total of two dealers in Group III and three in Group IV did not check schedule as requested. A total of two dealers in Group I, two in Group II, one in Group III, and one in Group IV did not answer question.

NOTE: Rank 5 indicates dealers who checked more than one item without indicating rank.

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