ABSTRACT

QUANTITATIVE METHODS OF MEASURING MERCHANDISING PERFORMANCE IN SELECTED DEPARTMENT STORES

by Douglas J. Dalrymple

Retailers have at their disposal a wide variety of quantitative control factors that can be used to direct merchandising operations. In recent years the traditional control factors such as profits as a percent of sales, gross margin, and markon have been augmented by newer measures such as contribution profits, contribution profits per dollar of inventory, and return on investment. The primary purpose of this study was to investigate the use of these quantitative control factors with the objective of finding ways to improve merchandising efficiency.

The large number of measures that are available to retailers and the wide differences among the factors suggest several problems for investigation. Important questions include: What are the control factors that are currently being used to direct merchandising operations? Are these control factors common to all firms and do executives at different managerial levels use the same performance measures? To what extent have the more recently developed control factors been integrated into retail operations and how does the emphasis on performance measurement change over time? What influence do the merchandising and salary systems have on the activities of individual merchandising executives? This research study sought to resolve these issues.

Douglas J. Dalrymple

The research procedure began with a review of the literature which provided the author with an appreciation for retail control systems and led to the development of a set of working hypotheses. Empirical data to test the hypotheses was collected during personal interviews with department store executives. Department stores were used because of their well developed merchandising control systems and the availability of previously published research.

The individual firms included in the study were drawn from the three major California metropolitan areas of San Francisco, Los Angeles, and San Diego. A total of 11 firms agreed to cooperate in the study and interviews were subsequently conducted with 111 merchandising executives. The firms in the study ranged in size from about $5 million to over $100 million in annual sales.

The data collected in the study provided support for the following conclusions: (1) The eleven firms exhibited a high degree of conformity in the use of merchandising control factors. (2) Executives at three different managerial levels all used the same performance measures. (3) The size of the firm and the type of merchandise handled had little influence on what control factors were employed. (4) Executive behavior was directly influenced by the salary system and by the emphasis placed on particular merchandising control factors. (5) Markon appeared as one of the most frequently used factors in making merchandising decisions. (6) Stock turnover, contribution profits, and return on investment were rarely considered. (7) Traditional merchandising control factors dominated the thinking of the department store merchandising executives interviewed in this study.

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PERFORMANCE IN SELECTED DEPARTMENT STORES

by

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A Thesis

Submitted to Michigan State University in
partial fulfillment of the requirements
for the degree of

DOCTOR OF BUSINESS ADMINISTRATION

Department of Marketing and Transportation Administration

1964

ACKNOWLEDGEMENTS

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Chapter I

INTRODUCTION

Purpose of the Study

The effective design and operation of merchandising control systems[1] are essential to the profitable operation of retail organizations. Retailers have used and are using many different measuring devices to evaluate their merchandising performance. Stock turnover, sales per employee, gross margin, sales per square foot, markon, controllable margin, and profits as a percent of sales are only a few of the many ratios that can be used to guide the efforts of retailers.

The extreme variety of measures available and the subtle differences between them have raised several pertinent questions. Are some of the measures more important than others? Are some measures more appropriate to particular situations or firms? What are the factors that influence the choice of measures? How do the measures influence executive behavior? Will merchandisers who are evaluated on a gross profit basis make the same decisions as merchandisers who are evaluated on a net profit basis? Do any of the commonly used control measures provide outdated, inaccurate, or inappropriate data? These are some of the problems that need to be answered before improvements can be made in the control of merchandising operations.

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[1] The expression "merchandising control systems" is defined on page 10.

This dissertation will report the findings of a study designed to answer these and other questions relating to the measurement of merchandising performance in department stores. The primary concern of the study is to provide some basic data on what control systems are being used and how these systems operate in a department store environment.

Need for Research

The importance of additional research on retail control systems can be emphasized by examining some recent retailing trends. The rapid growth of discount stores[2] and other aggressive merchants has led to a re-examination of the traditional pricing procedures of the established retailers. The use of high markons on some lines of branded merchandise has been challenged by new merchants offering lower prices and fewer services.[3] The new competition has tended to stress smaller profit margins and

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[2]The term discount store is difficult to define precisely and estimates of the growth of these stores is therefore subject to considerable error. One text uses a definition of discount stores similar to that used in this thesis and estimates a 50 percent annual growth rate in the sales of these stores in 1961 and 1962 (Delbert J. Duncan and Charles F. Phillips, Retailing Principles and Methods [Homewood Illinois: Richard D. Irwin, Inc., 1963], p. 14). It is impossible to know how much of this "growth" is from the opening of new stores and how much is the renaming or relocation of existing firms.

[3]The tendency of innovations in retailing to appear as low-status, low-margin, and low-price operators is well documented by Stanley C. Hollander in his article "The Wheel of Retailing," Journal of Marketing, Vol. 25 (July, 1960), pp. 37-42.

higher turnover rates[4] than the traditional department store merchants.

Aside from creating competitive problems, these aggressive merchants have challenged the traditional markon system of merchandise pricing and control. Their low prices have broken some of the old cost and retail relationships and have made it much more difficult to use markon to evaluate the performance of merchandising executives. Is the buyer who obtains the highest gross margin percentage doing a better job than the buyer who obtains a high contribution in gross margin dollars? Further, how should the buyer balance markon against stock turnover to achieve his sales and profit objectives? A careful study of the influence of markon on the management of the merchandising operations in department stores will be a central consideration of this study.

Problems With Profit Margins

For many years there seems to have been a decline in profit margins in American industry.[5] Department stores have followed this trend and one study indicated that profits after taxes declined

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[4]One study has shown that profit margins averaged 2.9 percent of sales for discount stores and 5.4 percent for department stores (David J. Rachman and Linda J. Kemp, "Retail Sales Up, Profits Down," Journal of Retailing, Vol. 39 [Fall, 1963], p. 12). Stock turnover rates in department stores in 1962, averaged 3.58 times ("Management Matters," Stores, [September, 1963], p. 25). Stock turnover in discount stores has been estimated at about 6 times per year (Duncan and Phillips, p. 13).

[5]Internal revenue service data shows a decline from about 6 percent of sales in 1947 to 3 percent 1959. Reported in Rising Depreciation of Assets in Agricultural Marketing Firms (Washington: U.S. Dept. of Agriculture, Economic Research Service, Agricultural Economic Report No. 47), p. 25.

4.2 percent of sales in 1948 to 2.3 percent in 1960. [6] While profit

ratios have fallen in American industry, depreciation expenses as a

percent of sales have increased. [7] Depreciation expenses have also

increased as a percent of sales in department stores. [8]   The in-

creases in deprecation rates appear to have contributed to the gen-

eral decline in profit ratios and also to the stabilization of cash flow

rates (profits after taxes plus depreciation). While accelerated de-

preciation charges help explain the decline in profit margins, the

fact remains that the decline in the profit ratio has made it more

difficult for department stores to make effective use of this ratio in

the control of merchandising operations.

Although net profits as a percent of sales is a widely used

ratio to measure retail merchandising efficiency, it is a device that

must be handled carefully if meaningful comparisons are to be made.

A hint of some of the other problems involved can be shown by some

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[6] Malcolm P. McNair and Eleanor G. May, The American De-
partment Store 1920-1960 (Boston: Harvard Business School, Divi-
sion of Research, Bulletin No. 166, 1963), p. 25.

[7] Rising Depreciation of Assets in Agricultural Marketing
Firms, p. 25.

[8] In 1948, depreciation in department stores amounted to 0.4
percent of sales and in 1960 it had increased to 0.75. These figures
do not include depreciation on real estate. Since real estate ex-
penses, including depreciation, have increased from 2.35 percent of
sales in 1948 to 3.25 percent in 1960, it is possible that some of
this increase may also have been due to higher depreciation.
Malcolm P. McNair, Operating Results of Department and Specialty
Stores in 1948 (Boston: Harvard Business School, Division of Re-
search, Bulletin No. 130, 1959), pp. 3, 48. Malcolm P. McNair,
Operating Results of Department and Specialty Stores in 1961
(Boston: Harvard Business School, Division of Research, Bulletin
No. 163, 1962), p. 9.

recent performance data from Sears, Roebuck and Company and Safeway Stores, Inc. In 1962, Sears had a net profit of about 5 percent of sales, and Safeway produced a profit of about 1.5 percent of sales.[9] It might appear to the uninitiated that Sears did a better retailing job, but there are other factors to be considered.

One important factor is the amount of capital used by each firm. Efficiency in the use of capital can be compared by dividing sales by invested capital to produce a capital turnover ratio. This ratio was 2.7 for Sears and 8.7 for Safeway. The combination of the profit margins and the capital turnover ratios produced returns on invested capital of 13.7 for Sears and 13.5 for Safeway.[10] Thus both firms produced about the same return on net worth with decidedly differing profit and capital turnover ratios. Profits as a percent of sales may give some indication of merchandising efficiency, but it ignores the turnover of assets. Specifically, it fails to consider the stock turnover rate which has an important influence on the rate of capital turnover. This study will examine in some detail how stock turnover is utilized as part of the merchandise control system in department store organizations.

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[9] "The Fortune Directory," Fortune, Vol. 63 (August, 1963), p. 146.

[10] While the returns on invested capital were about the same for the two firms, the inclusion of borrowed funds and the capitalized value of leased assets in the base of the ratio might produce differences in overall performance. A discussion of the desirability of including borrowed funds and leased assets appears on pages 45 and 47.

Deficiencies in Retailers' Returns on Capital

Rather significant differences in returns to capital can be observed among different types of retail firms. One study reports average returns on capital[11] for thirty-three industries including five classifications of retail firms.[12] The retail categories included groups of department stores, variety stores, chain grocery stores, mail order houses, and apparel and accessories chains.[13] Average returns on capital for the stores in these groups ranged from a high of 14.3 percent for the apparel and accessories chains to a low of 7.5 percent for the department stores. Mail order firms achieved a return on capital of 11.0 percent which was about average for the thirty-three industries. The return on capital for the chain grocery stores and variety stores of 8.7 percent was below the average for the study. While this data only represents the average performance of large firms, it does suggest that some retail firms have produced comparatively low returns while others have produced high returns to capital.

[11] Capital was defined as the sum of common stock equity, preferred stock, all noncurrent debt, any subsidiary debt and preferred stock, and minority interest in the common stock.

[12] Sidney Cottle and Tate Whitman, "20 Years of Corporate Earnings," Harvard Business Review, Vol. 36 (May, 1958), pp. 105-108.

[13] The department stores used were Allied Stores, Corp., Associated Dry Goods, Corp., City Stores Corp., Federated Department stores, Inc., Gimbel Brothers, Inc., Marshall Field and Company, and the May Department Stores Co. The variety stores included W. T. Grant Co., S. S. Kresge Co., G. C. Murphy Co., and F. W. Woolworth Co. The grocery stores used were Acme Stores Company, First National Stores, The Kroger Co., and Safeway Stores, Inc. The mail order houses included Montgomery Ward and Co., and Sears, Roebuck and Co. and the apparel and accessories chains included Bond Stores, Inc., Grayson-Robinson Stores Inc., Lerner Stores Corp., and the J. C. Penny Co.

The data from the Cottle and Whitman study also showed an increase in the average return on capital in American industry from 8 percent in 1935-1939 to 11.7 percent from 1951-1955. While the general trend was to higher rates of return on capital, some retail organizations registered declines. The general increase in returns to capital in the face of declining profit margins can be explained by an 89 percent average increase in the capital turnover rate in the postwar period. The five retail groups in the study, however, achieved an average increase in their capital turnover rate of only 37 percent. [14] The slow growth in the capital turnover rate appears to be a major reason why retailers have generally failed to improve their returns on capital.

The extreme differences between retailers on their rates of return raises the question as to what extent the merchandise control system may influence differences in overall performance. The comparatively small improvement in capital turnover rates in recent years in the retail trade poses the question whether this factor has received sufficient attention by retail executives. Further, what is the role of the return to capital concept in measuring the efficiency of merchandising operations at the buyer level? Also, is the traditional emphasis by retailers on profit and expense percentages related to their low returns to capital? A more basic question asks what role should merchandising control systems play in the overall management of retail firms?

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[14] Cottle and Whitman, p. 111.

This section has discussed some of the problems and questions that have led to the development of this study. It is the objective of this investigation to answer some of these questions and in the process to critically examine the measurement and control systems used by department stores.

Hypotheses to be Tested

The following set of hypotheses have been developed from an analysis of published materials on merchandising performance measurement and from preliminary interviews with department store buyers. These hypotheses do not represent an exhaustive listing of all unsolved problems in the area of performance measurement, but they do represent a list of consistent and testable statements worthy of research effort. The hypotheses are:

1. Different firms strive to achieve similar goals while using substantially different measures of merchandising performance.

2. Merchandising executives at higher levels tend to use broad, long run performance measures, such as return on capital, whereas merchandising executives at lower levels tend to use short run measures such as expense and markdown percentages.

3. Department stores are currently stressing different measures of merchandising performance than have been stressed in the past.

4. The methods used to pay merchandising personnel influence the performance measures that are used by these executives.

5. Firms with centralized rather than decentralized buying are more likely to use the newer performance measures such as controllable profits per dollar of inventory.

6. Department stores are currently making only limited use of the newer measures of merchandising performance that emphasize returns to capital and the use of incremental costs to set prices.

These hypotheses will be tested by means of data gathered from merchandising executives in selected department store organizations. Since the buyer and his superiors make the basic profit producing decisions concerning what merchandise to buy, what prices to use, and how to promote the items, it is felt that these individuals are in the best position to explain the operation of the department store merchandising control systems.

Assumptions of the Study

A basic assumption of this study accepts the profit goals of the retail firm as the guiding philosophy upon which merchandising performance is to be judged. The study does not measure the performance of the firm against standards of social efficiency. Maximizing the efficient use of land and labor inputs will not be a central issue of this study except as the control of these factors

contributes to profit maximization of the firm. For example; it might be in the best interests of the firm to raise markons to increase profits, yet the consumer would probably have to pay a higher proportion of his disposable income for distribution costs. The affects of such managerial decisions on the overall efficiency of the distribution system will not be considered. In this study, measures of performance that help maximize returns to the firm will be judged to be the most efficient.

Terms and Definitions

Quantitative Methods - Techniques making use of numbers and numerical ratios to measure merchandise performance (contrasted to subjective evaluations of the buyers.)

Merchandising Performance - Refers to the efficiency of the buying and selling functions in retail stores.

Performance Measures (Measures of Performance) - The criteria by which satisfactory performance is judged.

Merchandising Control Systems - The formalized and integrated collection of performance measures used by a retail firm to manage its buying and selling functions.

Department Store - A large retail organization with a wide variety of merchandise, organized by departments, offering large amounts of services, and operating with fairly high expense ratios (33-35%).

Discount Store - A retail establishment with a large selection of branded and unbranded merchandise at low markons, uses extensive advertising, has relatively limited services, relatively inexpensive buildings, fixtures and sites, uses a minimum of clerk service and operates with a fairly low expense ratio (18 to 25%).

Long Run Performance Measure - Factors or ratios that reflect the company's success which are based on more than one year's results.

Short Run Performance Measure - Numerical ratios that show results based on data from one year or less, such as markup and markdown percentages.

Net Worth - The sum of capital stock, surplus, and retained earnings.

Total Capital - The sum of net worth and long term debt.

Centralized Buying - A single group of buyers does the purchasing for a group of stores.

Decentralized Buying - Each store buys most of its own merchandise.

Purchase Outlay - The invoice price of merchandise to the buyer less cash and other discounts.

Rate of Return on Capital - The ratio of income to capital. Capital usually refers to either invested capital, invested capital plus debt, or to total assets. Capital can be defined in a variety of ways depending on how the ratio is to be used. Income normally refers to net profit. May be abbreviated as Rate of Return.

Net Sales - Gross sales less returns and allowances.

Stock Turnover - The ratio of net sales to the average merchandise inventory, usually calculated on an annual basis.

Capital Turnover - The ratio of net sales to capital. Capital usually refers to either invested capital, invested capital plus debt, or to total assets, however, it may be defined in a variety of ways.

Gross Margin - Net sales less the cost of goods sold. Usually expressed as a percentage of net sales.

Markon - Dollars added to the cost of merchandise to determine the initial retail price. Normally expressed as a percentage of the retail price. Includes allowances for markdowns, shortages, and for employee discounts.

Limitations of the Study

This study has been restricted to an evaluation of the systems used to measure merchandising performance. Other areas of retail store operations such as those concerned with record keeping, the management of real estate, and the physical operation of the . stores have not been included in the study. While these areas are important to the overall operation of the firm, the major profit center is the income generated by the buying and selling operations. The study has focused on this operation in an effort to learn how the system can be improved. It is felt that the concentration of research effort on a relatively narrow area would help produce more meaningful results.

The study has been restricted to an evaluation of the merchandising control systems of department store organizations in the state of California. It has further been restricted to department stores located in the San Francisco, San Diego and Los Angeles metropolitan areas. The empirical data collected from these three areas was limited to 111 interviews with executives from 11 different department store organizations. The sample represents only a limited proportion of the firms and individuals engaged in department store merchandising activities in the three metropolitan areas. Also, the selection of the executives interviewed in each company was made on a non-random[15] basis. This provided an additional source of sample bias.

It is possible that the firms who declined to participate in the study represent different characteristics of operation from those included in the study. It is felt, however, that any sample bias that might occur would be offset by the greater depth that was obtained by interviewing executives in a small sample of firms. This study also had the general limitation common to all research as to the unknown accuracy of the information that the participating executives were able to provide about their operations.

Possible Contributions

This study will compare and evaluate the systems of measuring merchandising performance of a sample of department store

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[15] The sample was non-random because all executives did not have an equal opportunity to be included in the study. The methods used to obtain the sample of executives are explained in Chapter III.

firms. Possibly the most useful result of this study will be the generation of some basic empirical data on how department stores actually measure their performance. The available information on this subject is scattered, dated, and based on very restricted field research. It is expected that this study will reveal significant variations in the types of control systems used in different department stores and in the operational effectiveness of these systems. The study should also show the effects of the merchandising control systems on the behavior of the executives who function within the systems.

Careful study of the different methods of evaluation should help explain why retail profit performance varies so widely between firms. Also the study should reveal ways to improve present measurement and control techniques. Even if some methods cannot be proven to be better than others the study should be very useful as a point of departure for merchants who wish to review their present system of merchandising performance measurement. It is expected that the study will clarify some problems of communications with respect to what performance measures are being used and emphasized. This study should also help to identify the most appropriate measuring tools to facilitate the achievement of retail sales and profit goals. Further, the study should provide a stimulus for further research into an area that has not received as much attention as perhaps it should.

Order of Presentation

The first chapter of this thesis has sought to introduce the reader to this particular research project on merchandising performance. It has pointed out some of the problems and questions related to performance measurement that have been emphasized by recent trends in retailing. It has presented a set of working hypotheses which will be tested against empirical survey data in Chapter IV. The chapter also has defined some of the basic terms that will be used in the dissertation. The limitations of the research study have also been discussed. The chapter concludes with some suggestions as to possible contributions of the research project.

Chapter II is an analysis of existing and proposed methods of evaluating merchandising performance. This material provides necessary background so the reader will be able to understand the development and testing of the hypotheses. The third chapter explains how the study was organized. The selection of the participating retailers, the development and testing of the questionnaires, and the statistical procedures are explained in detail.

The results of the interviews with store personnel are presented in Chapter IV. The survey data are organized to facilitate the discussion of each of the experimental hypotheses. The results of the study are also analyzed in relation to the previously mentioned published materials on retail control. The final chapter discusses the amount of agreement between the experimental hypotheses and the empirical survey data. Arguments are

proposed to support the acceptance or rejection of each of the hypotheses. Consideration is also given to other implications of the study. The chapter concludes with a review of suggested avenues for further research.

CHAPTER II

REVIEW OF PERFORMANCE MEASUREMENT METHODS

Introduction

Over the past few years there have been a considerable number of articles published concerning the evaluation of merchandising performance in retail organizations. It is the author's objective in this chapter to review and analyze some of this material. The appraisal will provide necessary background so that the reader will be able to understand how the present study is related to existing research in this area. The review will also help to explain how the experimental hypotheses were developed from the literature on performance measurement in retail environments.

The Retail System of Merchandise Accounting

The most widely used system of control in large retail stores is the retail system of merchandise accounting.[16] This system has been developed over a period of years to the point where it is deeply ingrained in the thinking of retail executives. The method will be explained in detail and the principal deficiencies will be noted.

How Does the System Work?

The retail system of merchandise accounting developed from accounting techniques designed to produce frequent profit and loss

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[16]Many small stores still use the cost method of control.

statements without the bother of taking physical inventories. [17] The closing inventory is necessary for profit calculations and it is computed from records maintained by the retailer. The retailer totals purchases, inbound freight, additional markons, and the opening inventory to obtain a figure for the goods handled. The sum of sales, markdowns, employee discounts, and estimated shortages yields deductions from stock. The closing inventory at retail is then simply the difference between the total goods handled and stock deductions. The closing inventory is converted to a cost base by the use of the cost compliment of the average markon. [18]

The cost of the goods sold for the particular period is calculated by subtracting the closing inventory from the sum of the opening inventory, purchases, and inbound freight at cost. Gross margin in dollars can then be computed by subtracting the cost of goods sold from net sales. The gross margin is an important figure because this is the amount of money the retailer has available to cover his expenses and hopefully to produce a profit. Expenses and profits in retailing are normally expressed as a percentage of sales in order to facilitate comparisons between firms. Gross margin and markon, which were originally expressed as a percent of cost,

[17]Robert I. Jones, "Objectives and Basic Principles of M.M.A., "Journal of Retailing, Vol. 34 (Spring, 1958), p. 9.

[18]William R. Davidson and Paul L. Brown, Retailing Management (New York: The Ronald Press Co., 1960), pp. 690-696.

have shifted over time to a percentage of sales as have almost all other retail performance ratios. [19]

Net Sales as a Measure of Performance

The basic objective of a retail firm is to make a profit on the purchase and resale of merchandise. A profitable level of retail operations depends on the achievement of certain minimum volumes of business. The net sales figures measure how well the merchant has accomplished this basic goal. The frequent availability of sales figures also makes them useful in making day-to-day adjustment in the merchandising program.

A second important retail objective is to be able to achieve increases in sales. These increases in volume are necessary to counteract the nagging problem of the growth in the expenses of operating retail firms. [20] The ability of a firm to increase its sales continuously is so important that some organizations have their buyers' bonuses tied to increases in sales. [21] The importance of

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[19]Malcolm P. McNair and Eleanor G. May "Pricing for Profit," Harvard Business Review, Vol. 35 (May-June, 1957), pp. 105-106.

[20]In 1946, the Harvard figures showed department store expenses to be 28.65 percent of sales. By 1960, this had increased to 35.95 percent of sales (Malcolm P. McNair and Eleanor G. May, The American Department Store 1920-1960 [Boston: Harvard Business School, Division of Research, Bulletin No. 166, 1963], p. 24, 25).

[21]Conversation with department store buyer during pre-test of the survey questionnaire.

increased sales to retail firms is reflected by one observer[22] who feels that sales must increase 5 percent per year just to maintain profits at their previous level. Many buyers feel that if they can achieve sufficient sales volume, other problems such as markdowns and expenses will take care of themselves.

Net sales has certain inherent limitations as a measure of retail performance. One problem is how to appraise a net sales figure for a particular store at a particular time. Net sales are reported in dollar amounts which do not lend themselves to simple interpretation. This problem is normally solved by comparing sales with results for previous periods, with planned sales, and with the results of competitors. Because of the many variables influencing sales, comparisons of this sort are not always reliable.

Net sales gives an overall measure of retail performance, but it does not measure the internal efficiency of a retail firm. It is possible for a firm to have an excellent record of sales growth and to operate with low profits or at a loss.[23] Net sales are not the end goal of retail firms, but they are an important intermediate step in the production of profits. The actual creation of profits out of sales volume will be discussed in the subsequent sections dealing with gross margin and net profits.

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[22]Malcolm P. McNair, reported in "Too Little Growth, " Forbes (May 15, 1959), p. 19.

[23]This possibility can be substantiated by the bankruptcy of some high volume discount stores.

Gross Margin and Markon as Merchandising Factors

The primary objective in the use of gross margin calculations is to focus the attention of the merchandising executives on the portion of the sales dollar that is available to pay expenses and to provide profits for the firm. The gross margin percentage provides a useful overall measuring stick for judging performance in the buying and selling of merchandise. The gross margin percentage is also an important planning device. The merchandising budget is designed to achieve a particular gross margin percentage which in turn is made up of planned expense and profit ratios. Knowing the planned gross margin, the merchandising executives can compute the initial markon percentage[24] that is needed to return the desired gross margin. The markon calculation is based on the amount of markdowns, employee discounts, and stock shortages which have historically been required for the particular merchandise under consideration.

The use of gross margin as a guide to the production of merchandising profits means that such factors as markon, markdowns, shortages, cash discounts, and workroom costs which directly influence the size of gross margin, become important secondary performance factors. The objective in using these items is to try to improve on past achievements or at least to be able to maintain the current levels of performance.

Calculating Gross Margin - Gross margin is the difference between the actual cost of merchandise to the retailer and the amount

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[24]Markon is defined on page 12.

received from the customers for the merchandise. For convenience, it is normally expressed as a percent of sales. Two adjustments are made in the cost of the merchandise during the calculation of the gross margin. The basic cost of the merchandise is increased by the amount of workroom costs and decreased by the amount of the cash discounts obtained from suppliers.

The gross margin does not include such items as markdowns, shortages, and employee discounts. The extra margin necessary to allow for these retail reductions is included in the markon. Markon is the amount added to the cost of the merchandise to produce the initial retail price. It is usually expressed as a percentage of the retail price and it is normally larger than the planned gross margin.

Deficiencies with Gross Margin - There are several problems associated with the use of gross margin and markon to control merchandising activities. Possibly the most frequently mentioned criticism is the tendency of buyers to apply average markon percentages to broad classes of merchandise.[25] This policy ignores the possible benefits to be gained by varying the markon depending on the customer's price sensitivity on each item. A second problem is that in their efforts to achieve a planned gross margin percentage, buyers tend to ignore or to de-emphasize merchandise that carries margins lower than average,[26] regardless of the volume of business that may be involved.

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[25]Robert I. Jones, p. 5.

[26]Malcolm P. McNair and Eleanor G. May, "Pricing For Profit," p. 108.

The use of gross margin as a measure of the performance of merchandising executives has naturally led to a search for methods that can be used to increase the gross margin percentage. One method available to merchandising executives is to simply raise their markon. This might appear to be a simple administrative procedure, but in a competitive market situation the buyer has the very real problem of trying to raise his markon and to maintain his sales volume at the same time. One solution is to raise the markons on noncompetitive merchandise. A second possibility is to raise prices on competitive items in the hope that your competitors will follow your lead or that your customers will not notice the difference. A third possibility is to agree with your competitors to raise prices. The use of this last method of raising markon is of course illegal and it could lead to a variety of administrative problems.

Profit Margins as a Measure of Merchandising Performance

The primary purpose of the profit ratio is to focus the attention of the merchandising executives on the portion of the sales dollar represented by profits. The profit ratio converts dollar profits into a numerical form that is useful for comparing performance in different department stores. Profit ratios make it possible to compare different merchandising operations without revealing the actual sales or profits themselves.

Computation of Profit Ratios - The retail accounting system incorporates two different profit ratios. One is the ratio of merchandising profits to net sales, where merchandising profits are

the difference between the gross margin and operating expenses.
The second ratio is the sum of merchandising profits and other-
income compared to net sales.

In recent years there has been a downward trend in the mer-
chandising profit ratios in department store firms. In 1954, profits
on merchandising activities were 1.75 percent of sales and by 1960
they had declined to only 0.45 percent of sales. At the same time
the other-income category became more important. In 1954 it
amounted to 3.55 percent of sales, and by 1960 it was 4.15 percent
of sales. [27] This other-income was made up primarily of profits from
carrying charges on credit sales and an imputed interest charge on
retained earnings invested in the business.

Starting in 1961, the Harvard operating reports reorganized the
treatment of carrying charge income. Instead of treating it as other
income, it is now subtracted from expenses. This has the affect of
increasing the profit ratio. In 1962, the Harvard data reported the
new profit figure, now called net economic profit, to be 2.46 percent
of sales. This figure was in effect made up of 1.96 percent from
carrying charge income and 0.5 percent from profits on merchan-
dising operations. [28]

Two changes in the Controller's Congress Accounting Manual
help explain this reorganization of the net profit calculations. One

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[27]Malcolm P. McNair and Eleanor G. May, The American De-
partment Store 1920-1960, p. 25.

[28]Malcolm P. McNair, Operating Results of Department and
Specialty Stores in 1962 (Boston: Harvard Business School, Division
of Research, Bulletin No. 165, July, 1963), pp. 3, 9.

change proposes that service charge income be deducted from total expenses rather than including this item in other-income. This change is suggested because the cost of granting credit pervades the entire retail expense structure.[29] A second change suggests the elimination of the imputed interest charge as an expense and the exclusion of imputed interest from other-income. Imputed interest was first used in the 1920's to charge retailers for the use of capital. The manual proposes that this objective be met in the future by a calculation of the rate of return on the capital employed in the business. Because of technical problems still to be solved the current manual does not provide for a shift to this new control device.[30] The net result of these two changes will be to reduce the expense ratio and increase merchandising income at the expense of the other-income category. While net profits will be the same under the new system, it is possible that the reduction in the expense ratio may influence the merchandiser in his choice of merchandise and markons.

It appears that these changes were influenced by the trend toward the elimination of merchandising profit that was occurring under the old accounting system. Under the new rules the merchandising profit will be larger and more useful. A merchandising profit ratio of only 0.45 percent does not allow variations and it therefore loses some of its value as a control device.

Imperfections of Profit Ratios - Profit ratios have certain deficiencies that hamper their use as measures of merchandising

[29]Herman Radolf, "Will N.R.M.A.'s New Accounting Manual Lower Markons?" Journal of Retailing, Vol. 39 (Fall, 1963), p. 25.

[30]Ibid., p. 26.

performance. First, it is difficult to isolate the profits produced by the merchandising activities from profits produced by other parts of the business. This is shown by the recent changes that have had to be made in the accounting rules. Another serious deficiency is that profit data is not available frequently enough to be used to make day-to-day decisions on merchandising problems. Another problem is that profit ratios do not measure efficiency in the use of capital. Comparisons of the profit ratios of different departments or stores may not be meaningful if there are differences in the rate of capital turnover. Profit ratios do not consider the turnover of stock and other assets and are therefore only partial measures of merchandising performance.

Stock Turnover as a Measure of Performance

The stock turnover ratio is used by retail firms to measure the rate at which merchandise inventories are sold. The ratio provides a convenient numerical measure which can be used for planning and control purposes. Retailers typically seek to sell their stock as frequently as possible so that profits in relation to their investment in inventory will be maximized. Increases in stock turnover provide retailers with one method of increasing their return on capital.

The stock turnover ratio may be calculated by dividing net sales for a given period by the retail value of the average inventory. It may also be calculated by dividing sales at cost by the average inventory at cost, or by dividing the units sold by the average

inventory in units.[31] The ratio is typically reported as an annual rate although it can be calculated for shorter periods of time.

Problems with Stock Turnover - The use of stock turnover as a control device in department stores has been complicated by the decline in the ratio in recent years. In 1962, stock turnover reached its lowest point in the past twenty years.[32] This decline may be the result of the growth of inventories associated with the opening of new suburban branches. It may also be related to a failure on the part of the merchandising executives to control the number of the items stocked. A third possibility is that the stock turnover ratio has not received sufficient emphasis by the retail system of merchandise accounting.

The extreme variation in stock turnover rates that exists between different items, departments, and stores makes it difficult to intelligently evaluate turnover rates.[33] The practice of comparing turnover rates for a firm with the average turnover rates for the industry appears particularly hazardous. This procedure does not take into account the unique character of the merchandise or the merchandising program of an individual organization. Further, the most desirable stock turnover rate for the individual firm is the one

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[31]John W. Wingate and Elmer O. Schaller, Techniques of Retail Merchandising (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1956), p. 277.

[32]"Management Matters," Stores (September 1963) p. 25.

[33]One study shows stock turnover ranging from a low of 2.8 times per year for men's and boy's clothing stores, to a high of 26.4 times for independent grocery stores ("14 Important Ratios in 12 Retail Lines," Dun's Review and Modern Industry, (November, 1963) p. 39).

that produces the highest profits. This rate may or may not be related to the average stock turnover achieved by other firms.

Other complications develop from attempts to increase turn-over. Stock turnover can be increased by expanding sales without raising inventories. This might be accomplished by enlarging the advertising budget. Stock turnover would increase, but this would not produce an economic gain if the increased advertising expenses lowered total profits. Sales could also be increased by lowering prices. Again the firm would not be better off if stock turnover rose and profits declined.

A better method from the standpoint of the firm might be to maintain sales on a smaller inventory. This could be done by elim-inating slow moving items and by cutting the stocks of some items. The danger with this procedure is the possibility of losing sales due to out-of-stock. A more precise method of reducing inventories and increasing stock turnover is to reduce the size of the order quantity and order more frequently. Since the average inventory is a function of the order quantity, when the order size is reduced the average inventory declines and stock turnover increases. Out-of-stock con-ditions do not have to increase if careful attention is paid to the size of reserve stocks and to accurate forecasts of consumer demand.

Turnover Can Be Too High! - While retailers typically need to increase their stock turnover rate, it is possible to have a stock-turn that is too high. In this situation the retailer is not carrying a large enough inventory in relation to his sales. This could occur where a retailer reorders his merchandise in very small quantities.

Under such conditions he pays excessive ordering, transportation, and handling costs for the small quantities he receives. He also runs a serious risk of out-of-stock due to the normal variation in demand. Retailers can achieve an optimum stock turnover level by the use of the economic order quantity formula[34] for items which have relatively stable demand patterns. This formula minimizes the costs of procuring and carrying merchandise inventories and gives the retailer an optimum reorder quantity. The high proportion of seasonal and fashion merchandise makes it difficult to apply this formula in department stores. Many items are ordered only once for an entire season and there are frequently no opportunities for reorders. Despite these handicaps, the operations research specialists have begun to propose solutions to the problems of the control of style goods inventories.[35]

Expense Control as a Measure of Merchandising Performance

The primary purpose of expense ratios is to provide executives with a standard of performance that can be used for control purposes. Since retail profits are the difference between the gross margin achieved and expenses, effective expense control is vital to the production of satisfactory profits. The operation of the store is planned to allow a certain percentage of the sales dollar for the various

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[34]Thomas M. Whitin, The Theory of Inventory Management (Princeton: University Press, 1953), pp. 32-33

[35]D. B. Hertz and K. H. Schaffir, "A Forecasting Method for Management of Seasonal Style-Goods Inventories," Mathematical Models and Methods in Marketing, ed. Frank M. Bass et. al., (Homewood, Illinois: Richard D. Irwin, Inc., 1961), pp. 461-477.

expense categories and then it becomes the objective of store personnel to keep actual expenses within the budget.

The control of expenses is simplified by expressing them as a percentage of sales. The classification of expenses into "natural" divisions such as payroll, advertising, and rent has been supplemented in recent years with a more detailed system called expense center accounting. This system identifies expenses with specific work areas so that closer control can be maintained. With this system the manager is able to pinpoint areas for improvement by the use of productivity ratios.[36]

Expense control is important to the profitable operation of retail stores but is typically not a vital issue to merchandising executives. This occurs because merchandising executives typically do not have control over a large proportion of the expenses that may be charged to them. As far as the buyer is concerned, rent, labor, and many other expenses are fixed in the short run. It is true that some buyers can control sales expenses by careful scheduling of sales help, but the decision on how many sales people are needed is dictated by store policy. Also wage rates and bonus plans are not under the control of the buyer. Since so many of the retailer's expenses are built into the system, buyers tend to accept the expense structure as given and to operate the buying and selling functions around them. Another factor accounting for this attitude on expenses is the trend toward the separation of buying from selling activities.

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[36]Malcolm P. McNair and Eleanor G. May, "Department Store Expense Control," <u>Harvard Business Review</u> Vol. 31 (May-June, 1953), pp. 113-127.

The growth of the buyer's responsibilities as a result of increased branch store operations appears to have forced department stores to split the buyer's job. The control over operating expenses has been given to sales supervisors in the stores and the buyers have been allowed to concentrate their efforts on staff oriented merchandising activities.

Merchandising Management Accounting

Merchandise management accounting is the name that has been given to a proposed new approach to the control of retail merchandising operations. This new system will be discussed in detail because it represents a signficant departure from the current systems of merchandising accounting.

The purpose of the merchandising management accounting system is to maximize an intermediate income figure called controllable profit. This is basically gross margin less the direct expenses of selling merchandise. The merchandising management accounting system is a procedure used to identify the variable selling costs of specific products so that more effective and more profitable merchandising decisions can be made.[37] The system seeks to move away from average markon procedures which do not consider variations in the costs of handling different items. The system focuses on the control of the direct expenses under the control of the merchandising executive rather than on the fixed overhead expenses.

[37]Kenneth P. Mages, "Item Profitability in Merchandise Accounting," New York Certified Public Accountant, Vol. 28 (July, 1958), p. 497.

Calculating Controllable Profit

The merchandising management accounting concept emphasizes the calculation of an estimated controllable profit for each item before the merchandise is actually sold. The system is based on dollar and percentage estimates of direct costs of handling and selling particular items. Experience in developing these costs has shown that it is not necessary to calculate them for every item because the costs have a tendency to follow similar cost patterns for different items.[38] Fixed costs to the departments such as buying, advertising, and displays are allocated to particular items as a percentage of invoice costs. In order to simplify the calculation of estimated controllable profits for buyers, tables showing controllable profits for items selling at different retail prices with different markons have been constructed.

To avoid the use of markon, another author suggests the use of preprinted work sheets to estimate the amount of contribution for each item.[39] Using this form the buyer estimates the various costs of handling the product on the basis of so many cents per item or as a percentage of the invoice cost. Estimates are also made for markdowns, shortages, and employee discounts. The buyer picks

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[38] Only twelve different cost patterns were necessary for all the items in a major appliance department (Harvey E. Kapnick Jr., "Merchandise Management Accounting," Explorations in Retailing, ed. Stanley C. Hollander, [East Lansing, Michigan: Michigan State University Bureau of Business Research, 1959], p. 337).

[39] Malcolm P. McNair and Eleanor G. May, "Pricing For Profit," p. 112.

a tentative selling price and then subtracts estimated reductions, invoice cost, and expenses to produce an expected contribution in dollars. The buyer then must decide whether the contribution is sufficient in relation to the risks involved, whether the item can carry a higher markon, or whether the item should be dropped.

Contribution profits are apt to be difficult to evaluate because contribution is measured in dollar amounts. One recommended solution is to compare the expected contribution to the amount of money invested in the initial purchase of the item. This return on purchase outlay is a crude return on investment figure. This ratio can be improved if the average investment in the merchandise is considered instead of the initial purchase outlay. The calculation should also consider the turnover factor in order to make the rate of return an annual rate.

Criticisms of Merchandise Management Accounting

The proponents of merchandise management accounting were quite precise in the identification of the elements of variable costs that were used in the system, but they were vague with regard to the influence of stock turnover and demand elasticity. If a buyer were to look at some of the tables of contribution profits that have been developed to assist buyers in the use of the system, he would notice that the items with the highest prices and the highest markons produced the highest contributions.[40] This might suggest to the

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[40]Harvey E. Kapnick Jr., p. 339.

buyer that he should trade-up and use higher markons to improve

his contribution regardless of what might happen to stock turnover.

The importance of stock turnover was recognized by the orig-

inators of the merchandise management accounting system as shown

by a statement made in 1958:

> Although retailers have always stressed the importance
> of good turnover, this factor has never been adequately
> integrated into their financial thinking. Consequently,
> profit experience, particularly at the buyer level, has
> traditionally been viewed in relationship to sales price
> alone. From an economic standpoint, however, real
> profit may be properly measured only in terms of
> earning power on invested capital. To accomplish
> this, the profitability in relation to sales price must
> be combined with the turnover factor. [41]

While turnover was associated with the return to capital it was not

adequately integrated into the merchandise management accounting

system. While some effort was made to show how turnover could

be used to convert the ratio of contribution return on investment to

an annual rate, this part of the system was not developed sufficiently

to allow its use by merchandising personnel.

One article discussing MMA includes a chart showing the total

contribution produced by the sale of different quantities of an item

at different prices. [42]   MMA does not offer any help to the buyer on

how he should calculate the expected sales figures. Yet these

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[41]Robert I. Jones, p. 7.

[42]The chart is attributed by Gordon B. Cross to "the accoun-
tants. " This probably refers to the accounting firm of Arthur
Andersen and Company who helped develop MMA. This chart appears
in Cross' article "A Critical Analysis of Merchandising Manage-
ment Accounting, " Journal of Retailing, Vol. 34 (Spring, 1958),
p. 26.

demand projections are vital to the accuracy of the expected

contributions of the different items. The treatment of demand

causes one critic to say that:

> MMA has been focused so firmly on cost that results
> caused by variations in demand have scarcely been
> considered. [43]

A second author who studied the use of MMA in detail also found the

system deficient in its treatment of demand and came to the follow-

ing conclusion:

> No simple method has been designed to take into account
> demand elasticities and turnover so there is little guar-
> antee that MMA will always lead to profits greater than
> those yielded by current procedures in the hands of
> skillful buyers. [44]

While MMA has not treated turnover and demand elasticity ade-

quately, these factors are not sufficient to explain why MMA has

failed to gain any measure of acceptance. There appear to be

several factors which detract from the system and have prevented

its acceptance.

One set of problems arises from the use of MMA as a pricing

guide. Using this system to set prices might require raising the

prices on some items that were not generating sufficient contribu-

tion. Because of the competitive nature of the department store

industry, buyers are reluctant to be priced higher than their com-

petitors on identifiable items. Further, many nationally advertised

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[43]Ibid., p. 28.

[44]Peggy Heim, "Merchandise Management Accounting: A Retailing Experiment in Marginal Calculation," Quarterly Journal of Economics, Vol. 77 (November, 1963), p. 675.

and branded items are either fair traded or priced according to the manufacturer's suggested list. For these items MMA could only be used as a guide in stocking and in promotional decisions. In one department store still using the system, the contribution data is used to determine which items should receive the most promotional emphasis. [45]

A second set of problems arises from the human problems involved in introducing MMA as a new control device. In two of the stores studied by Heim, buyers resisted the new technique and it is no longer used. Experience with the system has shown that the cost data on particular items is expensive to collect, and even the merchandising personnel who helped collect the information would not accept the accuracy of the data. It has also been suggested that MMA may have been resisted by merchandising personnel because the system would have required the elimination of familiar old methods and the "establishment of new standards for the evaluation of departmental performance."[46] It appears that the advantages of this new system have not been sufficient to overcome the natural resistance to change. Another possible explanation for the slow acceptance of MMA is that buyers' salaries were not tied to the new contribution system. [47]

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[45]Ibid. , p. 673.

[46]Ibid. , p. 675.

[47]Kenneth P. Mages, "M. M. A. Should Supplement Expense Center Accounting, " Journal of Retailing, Vol. 34 (Spring, 1958), p. 34.

Another type of problem occurs when one set of standards is substituted for another. Contribution profit as a percent of average investment is probably a better control device than gross margin percentages and markon, yet both can be used incorrectly. If the contribution return on capital is used as a measure of merchandising performance, it can be expected that an average figure will be developed to use as a guide. The buyer may tend to accept only those items that have expected returns above the average and to reject items with low rates of return. This procedure would tend to raise the average rate of return and might impair its usefulness if the average becomes unattainable. [48] It appears that average markon figures have been used in this manner in the past.

Relating Merchandising Performance to Assets Employed

The evaluation of managerial performance by comparing returns produced to the assets employed has gained widespread acceptance in American industry. [49] Increasingly the concept has been proposed for use in evaluating retail merchandising performance. The basic objective of return on asset ratios is to focus the retailer's attention on efficient utilization of his capital resources. The present system of retail accounting provides a good measure of a retailer's ability to control expenses and achieve a net profit percentage, but it does not adequately incorporate the turnover

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[48] Gordon B. Cross, p. 28.

[49] "Return on Capital as a Guide to Managerial Decisions," N.A.A. Bulletin, (December, 1959), p. 34.

factor. Return on asset ratios emphasize the interaction between profit percentages and turnover to provide a more complete measure of overall managerial performance. The different return on asset ratios that have been developed will be examined to see how well they are adapted to the retail environment.

Sales Per Unit of Space

The ratio of net sales to the square feet of floor space in a retail store is a crude measure of the retailer's return on his assets. Sales are a rough measure of the retailer's return and the amount of floor space can represent his investment. Sales per square foot is normally calculated on an annual basis and would appear to be particularly suited to making space allocations between products and departments.

A basic question that must be answered is whether the ratio of sales to floor space should be maximized in a retail firm. There appear to be minimum sales to space ratios for different stores which represent a break-even volume. The ratio thus provides a convenient and quick measure of whether a store is producing sufficient volume in relation to its size. Although there would appear to be a minimum value for sales to space ratios, there is obviously no reason to maximize this ratio in the long run. An extremely high sales to space ratio would simply imply that too little space was being used and that total sales might be increased by the use of more space. Sales to space ratios are difficult to use for comparative purposes because of the many other variables that influence the

rate of sales of products. Also sales volume does not reflect the variations in the costs of achieving sales of different items. Finally space is only a crude measure of a firm's investment in inventories. There are other more accurate return on asset ratios that can be used and these are discussed in subsequent sections.

Gross Margin Return on Assets

The sales to space ratio could be improved by subtracting the cost of goods sold from net sales to produce a gross margin return on space. A further refinement could be made by relating gross margin to the dollars invested in the average merchandise inventory. This ratio measures efficiency in the use of the inventory investment. The ratio also shows the interaction of the gross margin percentage and the stock turnover rate. For example, departments such as millinery which have high gross margins (49 percent) and high stock turnover (9.4), produce very high ratios of gross margin to inventory (9.0). Other departments such as toys with relative low gross margins (34 percent) and stock turnover rates (3.2), have a fairly low gross margin to inventory ratio (1.62).[50]

The gross margin to inventory ratio has been available for use by department stores for many years, but it does not appear to be widely employed. The lack of emphasis on this ratio is suggested by the decline in the ratio from a high of 3.08 in 1945 to a low of 1.86 in 1960. This decline in inventory productivity parallels a

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[50] Sam Flanel, "The Unproductive Inventory Dollar," Stores, (September, 1961), p. 7.

decline in stock turnover rates (from 4.9 in 1945 to 3.3 in 1960).[51] It appears fairly obvious that the ratio of gross margin to inventory could not have received any serious attention from merchandising executives if it was allowed to decline 39 percent over a fifteen year period. The fact that the gross margin percentage did not change during this period suggests that merchandising executives placed greater emphasis on the control of this factor.

A slightly different approach to gross margin is offered by Wayne Lee who hypothesizes that gross margin dollars will be maximized when the marginal returns to space are equal for all items stocked. This means that the addition of a shelf facing to product "A" would increase gross margin by the same amount as an additional facing for item "B." Marginal returns to space are calculated by multiplying the profit capacity of an additional facing times the expected frequency of additional sales. The probability that additional sales would be made would be determined by the out-of-stock frequencies with existing space allocations.[52] Lee is primarily concerned with the allocation of existing space as it may effect total gross margin. Lee's analysis is much too complicated to be used by retail stores for merchandising decisions and the emphasis on gross margin maximization ignores variations in the costs of selling.

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[51] Ibid. , p. 6.

[52] Wayne Lee, "Space Management in Retail Stores and Implications to Agriculture, " Marketing Keys to Profits in the 1960's, ed. Wenzil K. Dolva, (Chicago: American Marketing Association, 1960), pp. 523-533.

Net Profit Contributions of Individual Items

Realizing the deficiencies of gross margin figures, an attempt has been made to generate net profit figures for individual grocery products. The technique was based on the division of store costs into fixed and variable components. Variable costs (mostly labor) were allocated to items on the basis of so many cents for each case of the product that was handled. The fixed expenses were allocated to the items on the basis of the cubic volume of inventory of each item carried in the store.[53] The net profit figures generated could be used for space allocations and advertising purposes. The system resembles MMA in its emphasis on the costs of selling different merchandise.

The accuracy of the net profit figures produced by this study is subject to serious doubt because of the necessarily crude and arbitrary nature of the expense allocations. In addition the net profit figures generated by this system were in dollar amounts which hampers their use in comparative evaluations. Also profits were not related to the capital invested in inventories, although it would appear that the calculations could have been extended to include this ratio. Finally the orientation of the system to standardized grocery products raises doubt whether this system could actually be adapted to department store merchandise.

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[53] "Study Guides Retailers to Improved Cost and Profit Picture, " Food Topics, (May, 1961), pp. 6-16.

Return on Net Worth as a Measure of Merchandising Performance

The ratio of net profits to net worth measures profits in relation to the stockholders' equity. The ratio appears to have been developed primarily for use by stockholders, stockbrokers, and other financial analysts. Capital included in the denominator of one version of the ratio includes all preferred stock, common stock, and earned surplus less intangible assets such as goodwill, patents, and copyrights.[54] The ratio is typically computed on an annual basis.

There are several types of problems with measuring merchandising performance with a net worth ratio. One complicating factor is that returns to the net worth of retailers have been declining in recent years as a result of declining profit margins and a fall in the rate of stock turnover.[55] The comparative value of the net worth ratio is also subject to some reservations. Studies have shown that discount stores have high returns on net worth and high capital turnover ratios.[56] What is often ignored is that discount stores may have large proportions of debt capital which are not included in the return to net worth ratio. More realistic comparisons could be made if the differing capital structures of different retailers could be

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[54]"14 Important Ratios in 12 Retail Lines," Duns Review and Modern Industry, Vol. 82, (November, 1963), p. 39.

[55]Since 1947, profit margins for department stores have declined from 7.3 percent of sales to 4.6 percent, stock turnover rates have declined from 4.85 to 3.8 times per year, and returns on net worth have declined from 25.5 percent to 11.5 percent (Malcolm B. NcNair and Eleanor G. May, The American Department Store 1920-1960, pp. 24-25).

[56]Modern Retailer, (January 26, 1962), p. 11.

converted into some common basis for calculating rate of return on investment.

The most serious deficiency of the net worth ratio is that it is a measure of the overall performance of the firm. It is too broad to be used to evaluate the merchandising activities within a firm. It also is not available frequently enough to be particularly useful to merchandising executives.

Returns to Capital as a Measure of Performance

The ratio of net profits to capital provides a measure of a manager's ability to create profits with the financial resources placed at his disposal. The ratio stresses the interaction between the profit ratio and the capital turn ratio to produce a return on capital. The return to capital ratio is the end result of the inter- action of many control factors that have been discussed and it pro- vides in one number a measure of many aspects of managerial performance.

Calculating Returns to Capital - The return on capital ratio was first popularized by the DuPont Company who organized its planning and control procedures as early as 1919 to produce an annual return on investment of 10 percent. [57] The basic computation was based on multiplying the ratio of profits to sales times the ratio of sales to capital to yield a return on capital. [58]

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[57]Porrin Stryker, "P&C for Profit, " Fortune, Vol. 45 (April, 1952), p. 129.

[58]Robert A Lineberger, "A Method of Determining Return on Investment, " N. A. A. Bulletin, Vol. 42 (June, 1961), p. 55.

$$\frac{\text{Profits}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Capital}} = \frac{\text{Profits}}{\text{Capital}}$$

Sales cancel out leaving a ratio of profits to capital. The profit ratio and the capital turn ratio are both calculated and multiplied together to help show their interaction. If, for example, sales of a store were $10 million, profits were $1 million, and total capital $5 million, the return on capital would be:

$$\frac{\$1 \text{ m Profits}}{\$10 \text{ m Sales}} = 10\% \text{ Profit Margin}$$

$$X = 20\% \text{ Return on Capital}$$

$$\frac{\$ 10 \text{ m Sales}}{\$5 \text{ m Capital}} = 2 \text{ Capital Turnover}$$

This system points out that a high return on capital may be the result of a high profit margin (like Sears) or a high turnover of capital (Safeway Stores).

The income figure used in return on capital calculations may be before or after taxes. Many companies calculate both ratios. The before tax return would be of more interest to operating management and the after tax return of more interest to stockholders. [59] Since the tax rates are subject to change, it would appear desirable to have the return figure before taxes so that time series comparisons would be more meaningful.

The capital base of the return to capital ratio can be calculated in a variety of ways. It may be restricted to invested capital or it

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[59] Return on Capital as a Guide to Managerial Decisions (New York: National Association of Accountants, Research Report No. 35, December, 1959), pp. 19-23.

may include invested capital plus long term debt. An alternative procedure is to sum the assets such as cash, government securities, receivables, inventories, prepaid expenses, real estate, equipment, land, capitalized values of leased assets, [60] intangibles and subtract short term liabilities. A ratio using this base ignores the sources of capital and concentrates on how well the capital is being used.

The particular types of capital that are included in the bottom of the return to capital ratio influence the calculation of the income that appears in the numerator. If the ratio is only concerned with the productivity of invested capital, then income after interest expense would be used. However, if the return to capital ratio seeks to evaluate the productivity of borrowed as well as invested capital then income before interest expenses would be used. This figure would include all of the income produced by the borrowed capital and not just earnings in excess of the cost of borrowing the funds. The same reasoning applies if the capitalized value of leased assets are included in the base of the return to capital ratio. Income before lease expense would be used, because it includes all of the earnings produced by the leased asset.

Problems of Evaluating Assets - Inflation becomes a problem with return on capital ratios when they are used as a time series. Assets purchased in the past have lower book values than the same equipment purchased in later periods. Thus, an investment in an old store could be producing a high apparent rate of return compared

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[60]The desirability of including the capitalized value of leased assets in the base of the return to capital ratio is discussed on page 47.

to a new facility, whereas conversion to equivalent dollar values would make the rate of return the same. Most firms, however, do not correct for price inflation because of the small differences it would make in year to year results.[61]

The treatment of depreciable tangible assets is subject to widely varying interpretation. In a study mentioned previously, eighteen of twenty-eight firms deducted the depreciation from the gross asset value. The problem with net asset value is that the rate of return has a tendency to increase over the life of an investment. Assuming income constant, the asset base for the return on capital calculation declines each time an allowance for depreciation is deducted. Thus, while the income is the same, the asset appears more productive when actually its usefulness to the company is declining. If the original cost is used as a base, the rate of return per year will be the same as long as the income does not change. With this system the declining earnings at the end of an asset's useful life will be reflected in lower return on investment instead of an unrealistically high return on a very small asset base.

The conflict between the two methods can be partially resolved by considering the size of the unit for which the return on capital is being calculated. For a return to the company as a whole, the depreciated value would appear to be the best base. The net asset base reflects the tendency for capital generated by one asset to be reinvested in other assets. Thus, depreciation on some assets is offset by new investment in other assets, with the result that the

[61]Return on Capital as a Guide to Managerial Decisions, p. 18.

rate of return would not have a tendency to rise unless no new investment was being made. Where the concern is for a separate division or store, the return on original investment would be the best method because the rate of return would be unaffected by time.

A serious problem with asset base determination occurs when leased assets are important to a firm. Retailing is one industry where leasing is an important source of capital. Retail store leases are typically long lasting and can be called financial leases in contrast to short term equipment leases. Several authors have said that the long term lease is strictly a way of raising money.[62] The question whether to finance a transaction by means of a lease or by borrowing is a matter of the costs associated with each method in relation to the financial position of the firm. Whether to lease or not is thus a financial decision to those retail firms who must decide whether to build their own facilities or to lease space for their stores. If the lease is a method of raising capital, its capitalized value should be treated the same way debt is treated and included in the asset base for return on investment calculations.

The use of capitalized values of leased property would assume important stature if meaningful comparisons were to be made between firms that followed different policies about leasing. A recent USDA study considered this issue when it evaluated the impact of leased assets on the returns to capital for large food retailers and

[62]Robert J. Anthony, "Some Fallacies in Figuring Return on Investment," <u>N. A. A. Bulletin</u>, Vol. 42 (December, 1960), p. 12, Donald R. Gant, "Illusion in Lease Financing," <u>Harvard Business Review</u>, Vol. 37 (March-April, 1959), p. 123.

processors. In this case, leased assets comprised 39 percent of the retailer's capital, but only 4 percent of the processor's capital. On the basis of invested capital alone, the retailers had a significantly higher rate of return. When the return was calculated on total assets, the retailers still achieved a higher rate of return, but the difference between the two groups was reduced. When the capitalized[63] values of leased assets were included, the processing firms achieved a rate of return of 12.0 percent and the retailers only 9.6 percent. [64] This study suggests that failure to consider all sources of capital may lead to unrealistic return on capital comparisons.

Limitations to Return on Capital - The return on capital ratio is a valuable overall measure of managerial performance. It is particularly well suited to measuring the performance of company presidents and division managers who may be responsible for producing profits with the assets placed at their disposal. The measure is deficient when attempts are made to measure the performance of merchandising personnel in subordinate positions in the firm. The concept of return on capital is useful to retailers, but there are serious computational problems when attempts are made to calculate return to capital ratios for departments and divisions. The most serious problem is the accurate identification of income and capital

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[63]Leased assets capitalized at 10 percent.

[64]Stephan J. Hiemstra, "Lease-Financing and Returns to Capital of Food Marketing Firms," Agricultural Economics Research, Vol. 14, No. 1 (January, 1963), pp. 20-26.

by divisions and departments.[65] The use of return on capital to measure merchandising performance appears to be hampered by the lack of simplified procedures to integrate the control measure into the accounting system. It is possible that greater use of electronic data processing equipment in department stores will eventually simplify the introduction of this concept. A simplified return on capital calculation that is currently available may help introduce the rate of return concept to retailing executives. This ratio compares contribution profits to inventory investment and is discussed in detail in the following section.

Contribution Return on Inventory Investment

Currently the most appealing single ratio to measure the performance of merchandising executives is the ratio of contribution profits to the dollars invested in merchandise inventories. This ratio provides a measure of a merchant's ability to generate contribution margin with the funds at his disposal. The ratio is of particular merit because it reflects the rate of sale, the turnover rate, gross margin, the direct costs of handling merchandise and the dollars invested in inventory. Also the maximization of contribution returns on investment is directly related to the maximization of profits for the firm.[66]

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[65]C. Robert McBrier, "Basing the Buyer's Bonus on Return on Investment," Retail Control, (March, 1960), p. 54.

[66]Richard H. Holton, "A Simplified Capital Budgeting Approach to Merchandising Management," California Management Review, Vol. 3, (Spring, 1961), pp. 86-87.

Contribution return on inventory investment for a single item is calculated by dividing the item contribution by the average investment, and multiplying by the annual turnover. This procedure is similar to the MMA technique mentioned earlier except that this method incorporates the turnover factor directly in the computation. Tables of expected rates of return for different selling prices and rates of turnover can be constructed to assist the buyer in his pricing and promotion decisions.

The ratio of contribution margin to inventory investment is critized by one author because it fails to consider investments in accounts receivable and real estate. [67] This author estimates that inventories represent about 15 percent of sales, accounts receivable 16 percent, and real estate 30 percent. A rate of return ratio that does not consider investments in accounts receivable or real estate would, therefore, measure the use of only part of a retailer's total capital. The author proposes to consider all three capital investments by calculating a ratio of contribution margin to space and charging the various departments for the use of capital invested in inventory and accounts receivable. Holton offers a simpler solution in his calculation of the contribution ratio. He includes the accounts receivable investment with the inventory investment and takes up space efficiency as a separate problem. [68] If a retailer is willing to make adjustments in his space allocations, Holton suggests that

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[67]Robert Kahn, "Controllable Margin," Stores, (October, 1957), pp. 13-15.

[68]Richard H. Holton, pp. 97, 103.

profits can be maximized when contribution margins per square foot of space are equal for all departments.

Holton's capital budgeting approach presents several practical problems which detract from its theoretical appeal. The calculation of contribution returns on inventory investment for particular products depends on the accurate identification of selling costs by individual items. This is an expensive and difficult task at best and there is some doubt among retail executives whether the costs that are obtained are meaningful. There is also the problem of how to convert merchandising executives to an entirely new set performance standards to evaluate merchandise and departmental performance. This must be accomplished despite the fact that there is no evidence that the proposed new system will lead to better results than those being achieved by the present retail system of merchandise accounting.

The contribution return on inventory investment is an improvement on many of the other measures of merchandising performance that have been discussed. This ratio, however, is not a panacea for problem solving at all levels in the retail organization. It could be a valuable tool for decision making in the merchandising divisions, but it is not suited to the evaluation of total store operations or to comparisons of different retail organizations. The ratio appears particularly useful in situations where the executive has control over both the direct expenses of operating his department and the amount of the inventory investment involved. Where buying and selling responsibilities are being separated (as in many department stores) the buyer no longer has control over direct expenses or inventory

levels. When the buyer only has the staff responsibility of acquiring and pricing merchandise, contribution return on inventory has little application as a measure of his performance. The contribution return on inventory figures could still be used, however, to evaluate the performance of the executives charged with selling the merchandise in the stores.

Summary

This chapter has discussed some of the various types of control factors that can be used to control and evaluate retail merchandising activities. The approach has been purposely critical so that the reader may better understand the problems involved in the measurement of merchandising performance in retail stores. The analysis indicates that there is no single control factor that can be used under all circumstances. All of the performance measures that have been discussed have their own particular advantages that make them useful in particular situations.

Two of the control factors discussed did have a combination of elements not available in the other ratios that made them particularly attractive. For overall evaluation of managerial performance at high levels, return on assets appears to be a desirable measure. For comparisons of departments and divisions within a store the contribution return on inventory investment has definite advantages. These two ratios are favored because of their stress on the interaction between profit margins and stock turnover.

The literature reviewed in this chapter has shown a definite shift away from the traditional markon approach to a consideration of contribution profits, turnover rates, and comparing profit performance to the assets employed. One of the objectives of this study will be to investigate the extent to which these newer control procedures have been accepted and utilized by merchandising executives in today's department store organizations. The issues and problems that have been discussed in this chapter had an important influence on the development of the experimental hypotheses. The procedures that were used to test these hypotheses will be described in the following chapter on research techniques.

CHAPTER III

RESEARCH TECHNIQUES

General Research Procedure

In this section the methods that were used to collect and
analyze the survey data will be described briefly. Discussion
under succeeding headings will explain the research procedure in
greater detail.

The basic background materials for this study were assem-
bled from a review of the literature concerned with retail perfor-
mance measurement. Several hundred articles and books were
examined to obtain an appreciation of the methods and problems
involved with controlling merchandising operations. The results
of this investigation have been summarized in Chapter II. The
review of the published materials on performance measurement
fostered the development of a set of tentative hypotheses. A
research program was then developed to assure that the data
necessary to test the hypotheses would be collected.

Following a discussion of different possible research
methods, it was decided that personal interviews would provide
the most accurate and reliable data. The adoption of this tech-
nique called for the use of an interview questionnaire. An inter-
view schedule was subsequently designed and field tested. The
author's experience with the questionnaire in the pre-test sug-
gested several revisions in the questionnaire and in the tentative

hypotheses. After these changes had been made, a list was prepared of potential retailers that might be included in the study. A sample of firms was selected from this list and initial contacts were made by the National Retail Merchants Association. Discussions were held with the firms expressing interest in the study and interviews were later conducted with executives from eleven firms. The executives' responses were coded and the data transferred to IBM cards. The final step in the research process was the interpretation and analysis of the survey data.

Development of Working Hypotheses

Hypothesis 1 states that different firms use different measures of merchandising performance to control their merchandising operations. This hypothesis developed from the assumption that although retail firms may have similar profit goals, the unique character of each firm is represented in its merchandising control system. Also it was felt that the broad selection of retail performance measures that can be used to control retail operations would prompt retailers to combine these factors in a wide variety of operational patterns.

The second hypothesis proposes that the utilization of various retail performance measures changes with the job level of the merchandising executive. Executives at the buyer level, for example, would be expected to use short-run control measures such as sales volume, while executives at higher levels would tend to use broad long-run measures such as return on capital. This

hypothesis developed from the belief that the job functions and the aspirations of the buyers differed from those of their superiors. Buyers were thought to be primarily interested in advancement which would probably be based on short-run performance. Their superiors, having advanced to higher levels of management, might be expected to have a broader view of the managerial function and a better understanding of long-run performance measures.

Hypothesis 3 suggests that department stores are currently stressing different measures of merchandising performance than have been emphasized in the past. This hypothesis is a result of the continuous development of new methods to regulate retail performance and the conviction that some of these techniques are being integrated into retail control systems. In addition, a study of the changes in control factors would help measure the rate of acceptance of new procedures and to predict the future development of retail performance measurement systems.

The methods used to compensate merchandising personnel have been associated in hypothesis 4 with the performance measures used by these executives to control merchandising activities. The existence of this relationship has been proposed by one author as a reason why markon and gross margin have become important merchandising control factors. [69] Also, the failure of the merchandise management accounting to gain any measure of acceptance

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[69]Malcolm P. McNair and Eleanor G. May, "Pricing For Profit," p. 108.

has been linked to the absence of emphasis on MMA in the salary

system.[70] The possibility that personal financial gain may influ-

ence merchandising executives in their choice and utilization of

control factors appears to be a reasonable assumption considering

the relatively low wages paid to some merchandising personnel.[71]

This study will attempt to measure the strength of the relationship

between the salary systems and the use of performance measures

by executives in department stores.

The fifth hypothesis suggests that centralized rather than

decentralized buyers are more likely to use the newer performance

measures such as controllable profits. This hypothesis developed

from the belief that changes in methods could be more easily

introduced to a small group of central buyers than to a larger

group of decentralized buyers. Also firms that have adopted the

chain system of central buying may have modified their control

system compared to the firms who have kept the traditional

department buyer organization. This hypothesis seeks to find

out whether centralization is an important determinant of the per-

formance measures that are being used in department stores.

The proposition that department stores are currently making

only limited use of the newer measures of merchandising perfor-

mance is suggested by hypothesis 6. This hypothesis is the result

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[70]Kenneth P. Mages, "M. A. A. Should Supplement Expense Center Accounting," p. 34.

[71]When the buyers interviewed in this study were asked what changes they would suggest in their salary system, the most frequently mentioned answer was that they felt underpaid.

of the researcher's experiences during the pre-test of the questionnaire. The executives that were interviewed demonstrated an apparent lack of appreciation for some of the newer control procedures that have been described in Chapter II. This raised the question about the extent of the resistance among merchandising executives to the newer control techniques and to changes in general. Careful testing of this hypothesis might reveal weaknesses in the new techniques that could help explain their current slow rate of acceptance.

An additional hypothesis stating that the reported rate of return to capital was influenced by the choice of performance measures was originally proposed for this study. This hypothesis has considerable research merit, but it presents several testing problems. First, the small sample of firms that was used would have seriously limited the accuracy of any profit comparisons. Considering the large number of variables that influence profits, it is probable that a large sample of firms would have been necessary to provide a precise evaluation of this hypothesis. Other problems were the impracticality of obtaining profit data from privately owned firms and the difficulty of isolating the effects of performance measures on profits. Because of the serious problems of data collection, sample size, and testing, this alternative hypothesis was not included in the study.

Design of the Study

Following the formulation of the hypotheses, a specific research program was prepared to collect the research data. It quickly became apparent that sufficient secondary data to test the experimental hypotheses were not available. This indicated the need for a field survey to gather information directly from mer- chandising executives. The mail questionnaire and the personal interview were two alternative procedures considered to obtain the necessary data. The use of a mail questionnaire would have allowed the inclusion of a large sample of firms and the data could have been obtained quickly at relatively low cost. Gathering the data by personal interviews would have been more expensive, slower, and would have limited the study to a small number of firms. The interview procedure had several other advantages, however, that prompted its adoption in the study.

It was felt that the interviews would produce more complete and accurate answers to the survey questions. The mail ques- tionnaire might have encouraged superficial and hurried responses to the questions. Interviews allowed the researcher to explain the study and the questions in detail and to follow up on individual responses. Personal interviews also provided the author with a "feel" for the problem by allowing him to talk to the respondents and to observe their individual reactions to the questions. This technique also allowed the tabulation of aside comments that would have been lost if the mail questionnaires had been used. It was expected that the unsolicited remarks would be quite valuable in

providing insight into the workings of the merchandising control system.

The interviews utilized a prepared questionnaire to help guide and structure the individual discussions. The use of the questionnaire assured that the same questions would be asked of all of the respondents in a standardized manner. The questionnaire also made it easier to code, tabulate, and analyze the data. Except for question 7, all the responses to the questions were personally recorded on the questionnaire by the interviewer. Question 7 required the executives to choose between matched pairs of performance measures and it proved to be the most difficult survey question. The executives were allowed to read this question and to select their answers from the pairs of performance measures.

Developing and Pre-Testing the Questionnaire

The first step in the preparation of the questionnaire was the accumulation of a list of all of the information that would be needed to test the experimental hypotheses. Questions were formulated to supply this information and then combined into an interview sched- ule. This preliminary interview schedule was tested in interviews with executives in a Los Angeles area department store.[72] Some of the questions were difficult for the executives to understand and the questionnaire was awkward to administer.

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[72] The responses provided by the executives in the pre-test stores were similar to those provided by the executives in the stores used in the study except that the executives in the pre-test stores appeared to be somewhat more concerned with return on capital.

Revisions were made to simplify the questions and to make them more closely related to the jobs being performed by the executives. It was felt that the executives would be better able to discuss the merchandising control system when it was related to the activities performed in their jobs. The revised questionnaire was tested in a second department store and proved to be a satisfactory data collection instrument. The department stores and the data collected during the pre-test of the questionnaire were not included in the study.

Interviewing Department Store Executives

The interviews were restricted to executives in department store organizations. The selection of department stores as the basic source of data for the study was favored by the well developed merchandising control systems which are used by these organizations. The use of an established merchandising operation with definite lines of authority and responsibility would allow research that would be impossible with less formally organized firms. The selection was also influenced by the availability of previously published research work on merchandising control systems in department stores. An equally important reason to use department stores was the interest and financial support of the National Retail Merchants Association. The association solicited and obtained the cooperation of many of its member department stores. It is doubtful that the study would have been as successful without the support of this department store trade association.

Within the department store organization the study focused its attention on the buyer and his superiors because of their strategic position in the operation of the merchandising function. These

individuals make the day-to-day decisions on what merchandise is bought, how it is priced, and how it is displayed and promoted, which are basic to profitable merchandising operations. The buyer who makes these decisions is therefore in an excellent position to describe and evaluate the workings of the merchandise control system.

The interviews were scheduled during the summer since this was a slow season for the stores and it was a free period for the interviewer. The interviews were completed during the four month period from June through September, 1963. The collection of data beyond September was impractical due to the extremely busy Fall schedules of merchandising executives in department stores.

Selection of Participating Retailers

The procedure used to select the companies in the study will be explained in detail at this point. The total number of firms included in the study was restricted by the desire of the researcher to conduct the interviews personally and by the limits of the time available to collect the data. All of the firms included in the sample were from the state of California. The large number of department stores in California made it possible to obtain a representative sample of firms without going to other areas. It was felt that the extension of the study to nearby states would not have improved the accuracy of the data collected. Also, if stores from other states had been included, travel expenses would have quickly exhausted the funds available for the study.

The sample of firms was restricted to department stores in the three major metropolitan areas of San Francisco, Los Angeles, and San Diego. This restriction did not seriously bias the sample because these three areas include the major department stores in the state and a generous sample of smaller firms. The use of the three metropolitan areas simplified travel to the stores and allowed greater efficiency in the collection of the data.

The specific department stores to be included in the study were selected with the help of department store directories. A basic list of forty-four California firms with assets in excess of $1 million was selected from the directories. From this list twenty-seven firms were selected for initial contacts. The list of twenty-seven firms included the largest firms in the state and a sampling of the smaller firms. Letters of introduction were then sent by the National Retail Merchants Association to the firms that were members of the association. These were followed by letters of inquiry from the researcher soliciting cooperation in the study and requesting an opportunity to explain the study in greater detail. Six of the twenty-seven firms did not reply to the letters of inquiry, and seven others declined to participate in the study for a variety of reasons. Fourteen firms agreed to cooperate in the study and interviews were subsequently conducted with executives from eleven firms.

The eleven different firms included in the study represented a variety of sizes and organizational types. The firms ranged in size from about $5 million to over $100 million in annual sales.

Five of the firms might be described as relatively large organizations and six of the firms might be classified as small to moderate in size.

Selection of Individuals to be Interviewed

The individual executives that were interviewed were selected on a nonrandom basis. Only those executives who were in their offices on the days when the interviewer visited the companies had an opportunity to be included in the study. Buyers and merchandise managers who were out of town on buying trips, on vacation, or at one of the branch stores were eliminated from consideration. The visits of the interviewer were scheduled so that a miximum number of buyers would be in town but it was not possible to pick a time when everyone could be available.

The researcher requested that the buyers and merchandising managers who were selected for the study represent a variety of merchandise lines. The actual selection of the persons to be interviewed was done in most cases by the management of the participating stores. There is some evidence to believe that the managers directed the interviewer to their more articulate and alert executives. This was shown on several occasions when the interviewer selected executives to be interviewed and found them to have greater difficulty understanding the questions and in communicating about their jobs. The selection of better than average executives for the

interviews appears to have been a normal reaction on the part of the stores to create as good an impression as possible.

The study was helped by this activity since data was obtained from those who had the best understanding of the merchandising operation. The sample of executives that was obtained, however, would not appear to be entirely representative of the average department store buyer.

Statistical Procedures

The data from the completed survey questionnaires were coded and punched onto IBM cards. This facilitated the tabulation of the results and made it possible to manipulate the data in a variety of ways. Differences in responses were studied by sorting the answers to the questions by firms, by job type, by the type of merchandise bought, and by the sex of the buyers. Answers to the open end questions were summarized by the use of counts, rank orders, and percentages.

Question 7 was the only question that lent itself to the use of statistical tests of significance. In this question the executives were asked to choose between two measures of merchandising performance. If there had been no real difference between the two measures, each would have been chosen about fifty percent of the time. The executives did show preference for some of the measures and the chi square test was used to see if these differences were greater than what chance along would explain.

Summary

This chapter has reviewed the research procedures that were used to gather the empirical data for this study. The development of each of the research hypotheses has been discussed in detail. Also an explanation of the questionnaire and interview procedure was presented and a description was given of the methods used to select the firms and the individuals included in the study. The data that were collected by these procedures are summarized in the following chapter.

CHAPTER IV

RESEARCH RESULTS

Chapter IV will present and discuss the survey data collected to test the working hypotheses. Consideration will also be given to the survey results related to the influence of merchandising control systems on executive behavior. The chapter will conclude with a discussion of additional data that was obtained during the interviews.

Research Results - Hypothesis 1

The first part of this hypothesis states that different firms strive to achieve similar goals. This proposition will be analyzed using data from question 5 on the interview schedule. The executives were asked what they felt were the three or four most important overall objectives of their company and their answers were compared among the eleven firms in the study. The last part of hypothesis 1 states that different firms use substantially different measures of merchandising performance. Interfirm comparisons of answers to question 3 will be used to test this part of the hypothesis.

Department Store Goals as Stated by Merchandising Personnel

Profit was the organizational goal most frequently mentioned by the merchandising executives in this study. It was cited by 70 of the 111 executives interviewed (Table 1). Ranking second among the organization goals was sales growth mentioned by about one

TABLE 1

RANKINGS OF OVERALL COMPANY GOALS BY
MERCHANDISING EXECUTIVES IN ELEVEN
DEPARTMENT STORE ORGANIZATIONS

Ranking	Stated Company Goals	Number of Mentions
1	Profits	70
2	Sales growth	54
3	Customer service	49
4	Development and maintainance of store image	32
5	Fashion emphasis	22
6	Community service	14
7	Trade up	10
8	Greater share of market	10
9	Integrity and reliability	9
10	Good value	8
11	Broad lines of merchandise	6
12	Responsibility to employees	5
13	Higher markon percentage	5
14	Right merchandise	4
15	Fewer markdowns	4
16	Proper stock turnover	4

half of those interviewed. Customer service was a close third with forty-one mentions. Rankings of these three frequently mentioned goals have been tabulated by individual companies (Figure 1). It would appear from this analysis that there was fairly close agreement among executives of different firms with regard to their perceptions of company objectives (Figure 1). This was particularly true with respect to profits. This factor ranked as the most frequently stated goal by executives of six firms and was the second most frequently mentioned goal in four other firms. Executives from one company ranked profits fourth behind customer service, sales growth, and fashion leadership. This may mean that this firm had already achieved satisfactory profit levels, and in fact it was one of the most profitable firms in the study.

There was less agreement among executives of the eleven firms concerning the relative importance of sales growth and customer service. In one firm sales growth ranked as the most frequently mentioned goal, in five firms it was second, and in two firms it was in third place. Customer service showed a pattern similar to that of sales growth. It was ranked as the most important goal of four firms, it ranked third in one firm, and fourth in three other firms. One firm did not mention customer service as a goal and in two others it ranked in sixth place. The relative rankings of these goals appeared to be influenced by the size of the firm. The largest firms showed more agreement as to the relative importance of the stated goals than did the smaller firms.

The ranking of overall company goals that was compiled as a result of the answers given by the executives to question 5 is

FIGURE 1

RANKINGS OF PROFITS, SALES GROWTH, AND CUSTOMER SERVICE AS COMPANY GOALS
BY MERCHANDISING EXECUTIVES IN ELEVEN DEPARTMENT STORE ORGANIZATIONS
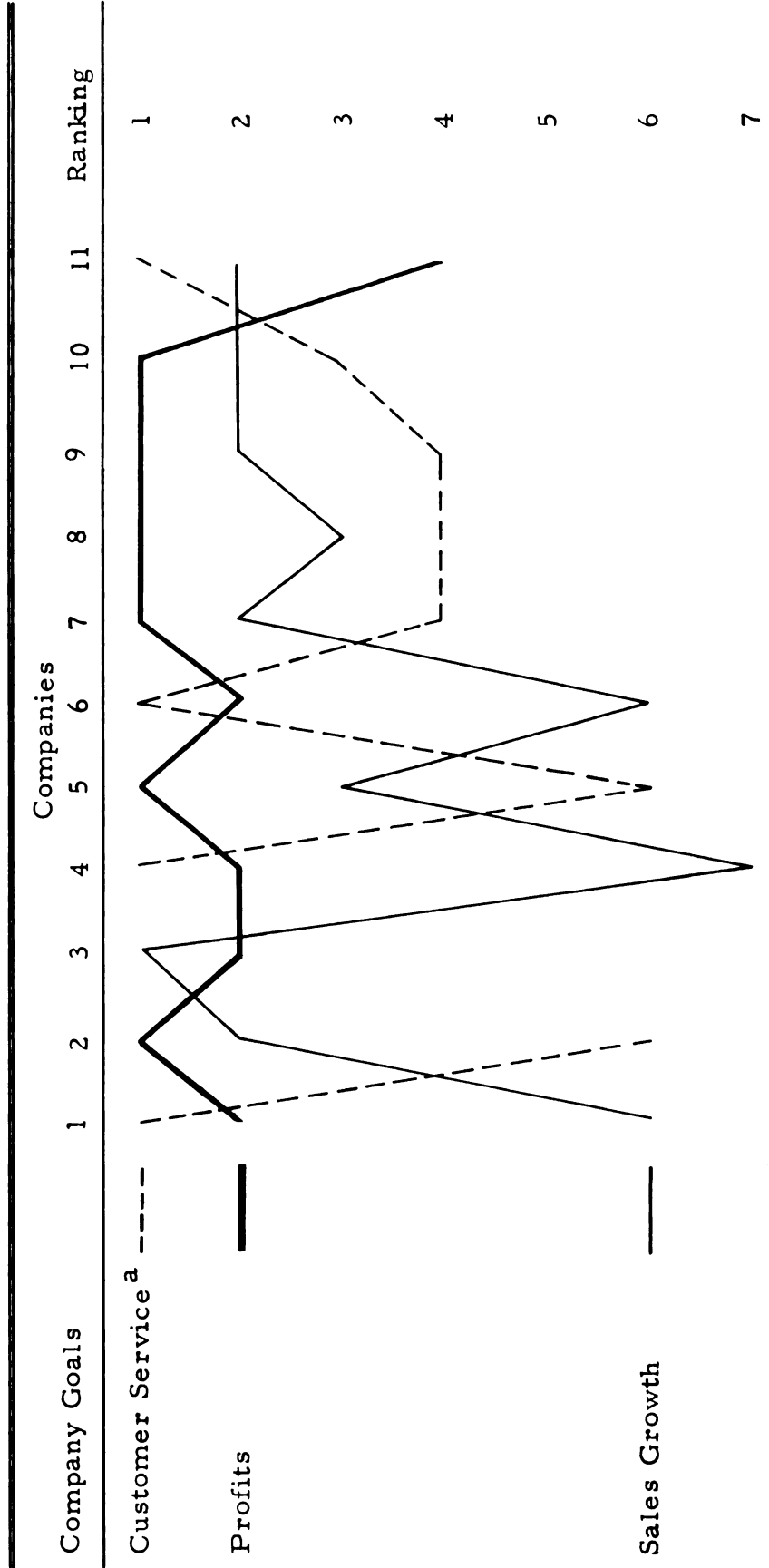
aCustomer service was not mentioned by the executives of company 3

partially substantiated by the answers given to question 7 (Table 2). In this question the executives were asked to choose between matched pairs of performance measures. Four of the factors that appeared as answers to question 5 were included in the comparisons in question 7. These were profits, sales growth, stock turnover, and gross margin. [73] The executives significantly preferred profits when it was paired with gross margin. Gross margin in turn was significantly favored over stock turnover. Since profits and sales growth were also preferred to stock turnover, the four factors were evaluated in almost the same order as they were ranked in question 5.

Measures of Performance Used by Merchandising Executives

The hypothesis that merchandising executives use different measures of performance will be examined using data from question 3. The executives interviewed in this study mentioned a wide variety of merchandising control factors in response to this question. Sixty-four different answers were recorded (Table 3-Q, Appendix B). The answers were concentrated on a few responses, however, and eight factors received about 60 percent of the mentions. Sales volume was clearly the most frequently discussed control factor and it was mentioned by 59 of the 111 executives interviewed (Table 3). The five next most frequently mentioned factors were cited by thirty-five to forty-six of the executives interviewed.

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[73]For the purposes of this comparison gross margin and markon are judged to be similar.

TABLE 2

PREFERENCES OF DEPARTMENT STORE EXECUTIVES FOR PAIRED MERCHANDISING CONTROL FACTORS

Pair Number	Paired Merchandising Control Factors	Numbers of Executives Preferring Each Factor			
		Buyers (71)	Divisional Merchandising Managers (20)	General Merchandising Managers (7)	Total All Executives (98)
1	Realized Gross Margin Percentage	22	5	3	30
	Net Profits as a Percent of Sales	44	14	4	62[a]
	No Preference	1	1	0	2
	No Answer	4	0	0	4
2	Net Profits Per Sq. Foot of Selling Area	19	5	3	27[a]
	Net Profits Per Dollar of Inventory	47	14	4	65[a]
	No Preference	1	1	0	4
	No Answer	4	0	0	2
3	Sales as a Percent of Previous Year	31	14	5	50
	Stock Turnover	35	6	2	43
	No Preference	1	0	0	1
	No Answer	4	0	0	4
4	Net Profits as a Percent of Sales	37	17	6	60[b]
	Net Profits as a Percent of Invested Capital	29	3	1	33
	No Preference	0	0	0	0
	No Answer	5	0	0	5

[a] Significantly preferred to paired control factor at the .001 level
[b] Significantly preferred to paired control factor at the .01 level

TABLE 2 – Continued

Pair Number	Paired Merchandising Control Factors	Numbers of Executives Preferring Each Factor			
		Buyers (71)	Divisional Merchandising Managers (20)	General Merchandising Managers (7)	Total All Executives (98)
5	Realized Gross Margin Percentage	44	12	7	63[a]
	Stock Turnover	21	6	0	27
	No Preference	2	2	0	4
	No Answer	4	0	0	4
6	Net Profits Per Dollar of Inventory	44	13	5	62[b]
	Controllable Profits Per Dollar of Inventory	23	6	2	31
	No Preference	0	1	0	1
	No Answer	4	0	0	4
7	Stock Turnover	15	4	1	20
	Net Profits as a Percent of Sales	50	14	6	70[a]
	No Preference	2	2	0	4
	No Answer	4	0	0	4
8	Net Profits as a Percent of Invested Capital	34	10	4	48
	Net Profits as a Percent of Total Capital	22	8	3	33
	No Preference	1	0	0	1
	No Answer	14	2	0	16

a Significantly preferred to paired control factor at the .001 level
b Significantly preferred to paired control factor at the .005 level

TABLE 3

RANKINGS OF MERCHANDISING CONTROL FACTORS
BY EXECUTIVES IN ELEVEN DEPARTMENT
STORE ORGANIZATIONS

Ranking	Control Factor	Number of Mentions
1	Sales volume	59
2	Stock control	46
3	Promotions	44
4	Markdowns	40
5	Profits	36
6	Markon percentage	35
7	Stock turnover	23
8	Expense control	20
9	Fashion	15
10	Merchandise display	13
11	Gross margin	13
12	Merchandise lines and items	11
13	Sales planning	10
14	Company policies	9
15	Basic in-stock position	8

Differences in the use of these control factors were examined by tabulating the data from question 3 by separate companies (Figure 2). This analysis showed that there were few differences among the eleven firms with regard to the ranking of sales as a control factor. Sales was the most frequently mentioned factor in five of the firms, it was second in five other firms, and it ranked third in one firm.

Agreement on Secondary Factors - The extent of the agreement on the factors ranking second through sixth can be seen by reference to the relative rankings of these factors in each firm (Figures 2 and 3). There was considerable agreement among the firms on the general importance of these five factors, yet exact positions in the rankings varied somewhat between firms. Stock control was the second ranking control factor overall and it varied in ranking from first to seventh place among the eleven firms. Promotions showed an even more erratic pattern. It ranked as the most important factor in two firms, it ranked eighth and ninth in two other firms, and it was not mentioned at all by a fifth firm. Markdowns, profits, and the markon percentage which ranked fourth, fifth, and sixth for all firms also showed some variation among firms. Each of these three control factors were ranked in first place by one firm and in ninth or tenth place by other firms.

Other Findings - Another unique result was that while profits were the most important overall goal as seen by merchandising executives, sales volume was the most frequently mentioned measure used to control merchandising operations. Profits ranked

FIGURE 2

RANKINGS OF SALES, STOCK CONTROL, AND PROMOTIONS AS MERCHANDISING CONTROL
FACTORS IN ELEVEN DEPARTMENT STORE ORGANIZATIONS
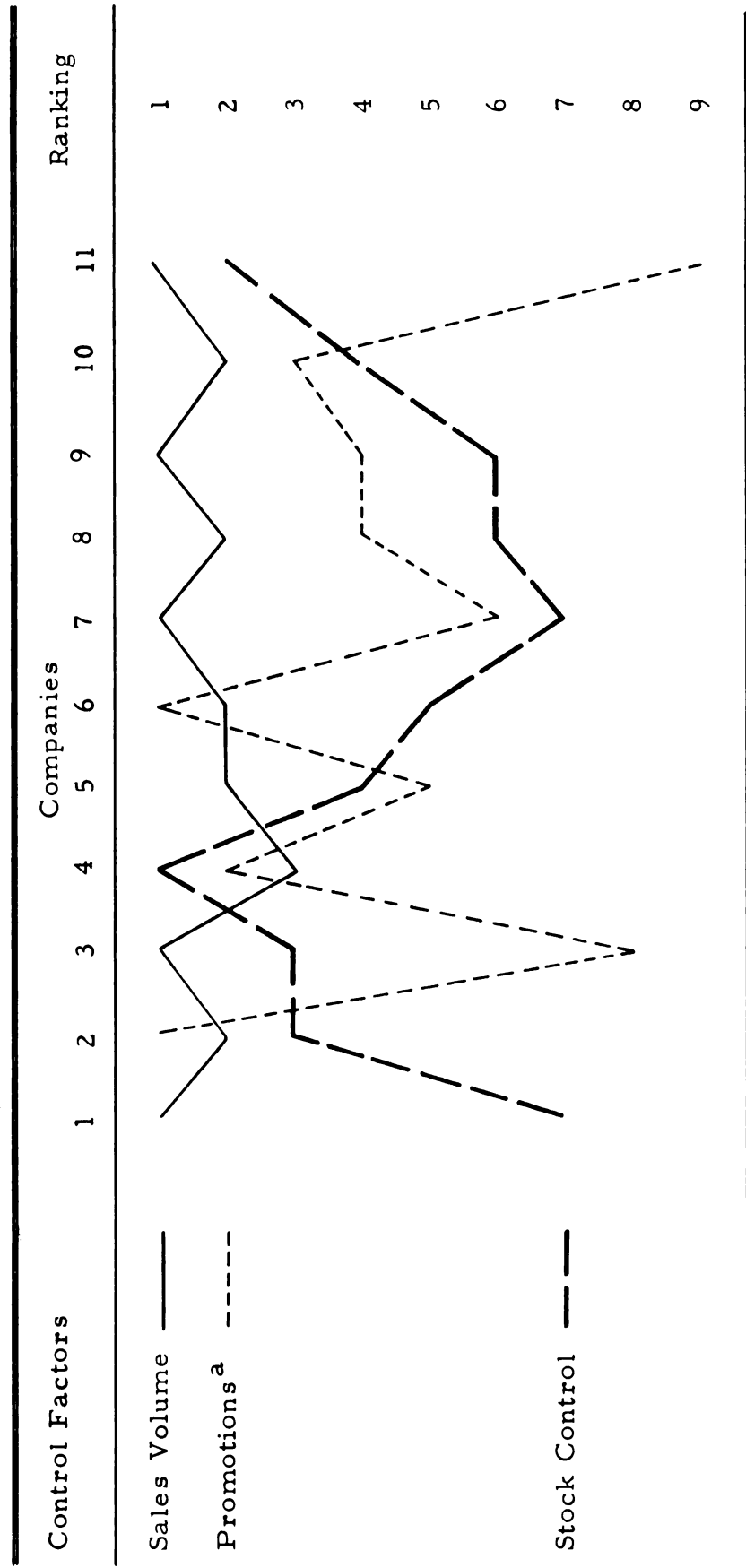
aPromotions were not mentioned as a control factor by the executive of company 1

FIGURE 3

RANKINGS OF PROFITS, MARKDOWNS, AND MARKON AS MERCHANDISING CONTROL FACTORS IN ELEVEN DEPARTMENT STORE ORGANIZATIONS
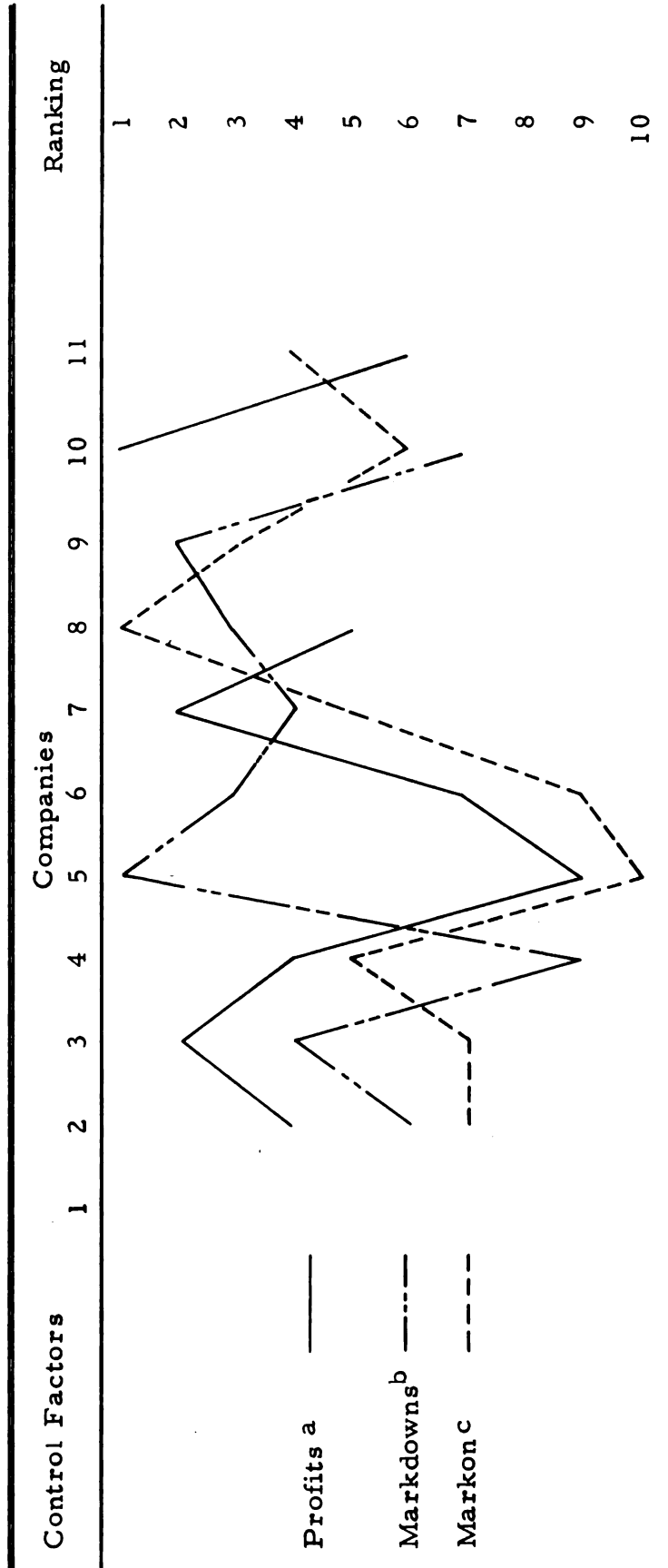
[a] Not mentioned as a control factor by the executives in companies 1 and 9
[b] Not mentioned as a control factor by the executives in companies 1 and 11
[c] Not mentioned as a control factor by the executives in company 1

fifth behind sales, stock control, promotions, and markdowns as a control technique to measure merchandising performance.

During the interviews buyers frequently discussed the sales volume they had achieved the previous day and compared it to the previous week or to the same day the year before. Sales data were being used constantly by the buyers in controlling their day-to-day operations. Net profit data, however, were only available every few months and were usually two or three weeks old when they were published. Profit data were considered to be "ancient history" and were not particularly useful to the buyers.

Profit data also had a certain ominous quality. These figures were prepared by someone outside the merchandising group and were therefore viewed with suspicion. Also a review of the profit data called for a special meeting between the buyer and his superior. In these meetings the buyers found out how well they had done in the previous accounting period and plans were made for the future. The buyers did not appear to look forward to these meetings because if the results were unfavorable a promotion, a bonus, or their job might hang in the balance. Profit data appeared to be primarily used by merchandise managers to control the activities of the buyers and not to help the buyers in their merchandising decisions.

Only one of the eleven firms in the study showed a pattern of control factor emphasis that was different from the other firms in the study. The executives in this firm mentioned only two of the six factors that have been discussed. This result may be related to the fact that this company was one of the smaller firms included in the

study and merchandising control procedures may have been more informal than in the other firms.

Summary of the Data on Hypothesis 1

The executives interviewed in this study showed close agreement concerning the goals of department store organizations. The most frequently mentioned goals were profits, sales growth, and customer service and these objectives were important to almost all of the firms in the study. The executives also showed close agreement on the use of merchandising control factors. Most of the firms used the six most frequently mentioned factors and ranked them among the ten most frequently mentioned answers. Although the control factors showed some variation in the frequency of mention, the general relationship was one of common usage among the firms.

Research Results - Hypothesis 2

The second hypothesis proposes that merchandising executives at different levels in department store organizations use different control factors to evaluate merchandising performance. This hypothesis will be studied by sorting the answers given to questions 3, 6, and 7 according to job classifications.

Tabulation of Question 3 by Job Level

In general the answers given to this question by the 111 executives were the same for the three levels of merchandising executives (Figure 4). The seven most frequently mentioned control factors reported by the buyers were also the seven most frequently

FIGURE 4

RANKING OF MERCHANDISING CONTROL FACTORS BY DIFFERENT MANAGEMENT LEVELS
IN ELEVEN DEPARTMENT STORE ORGANIZATIONS
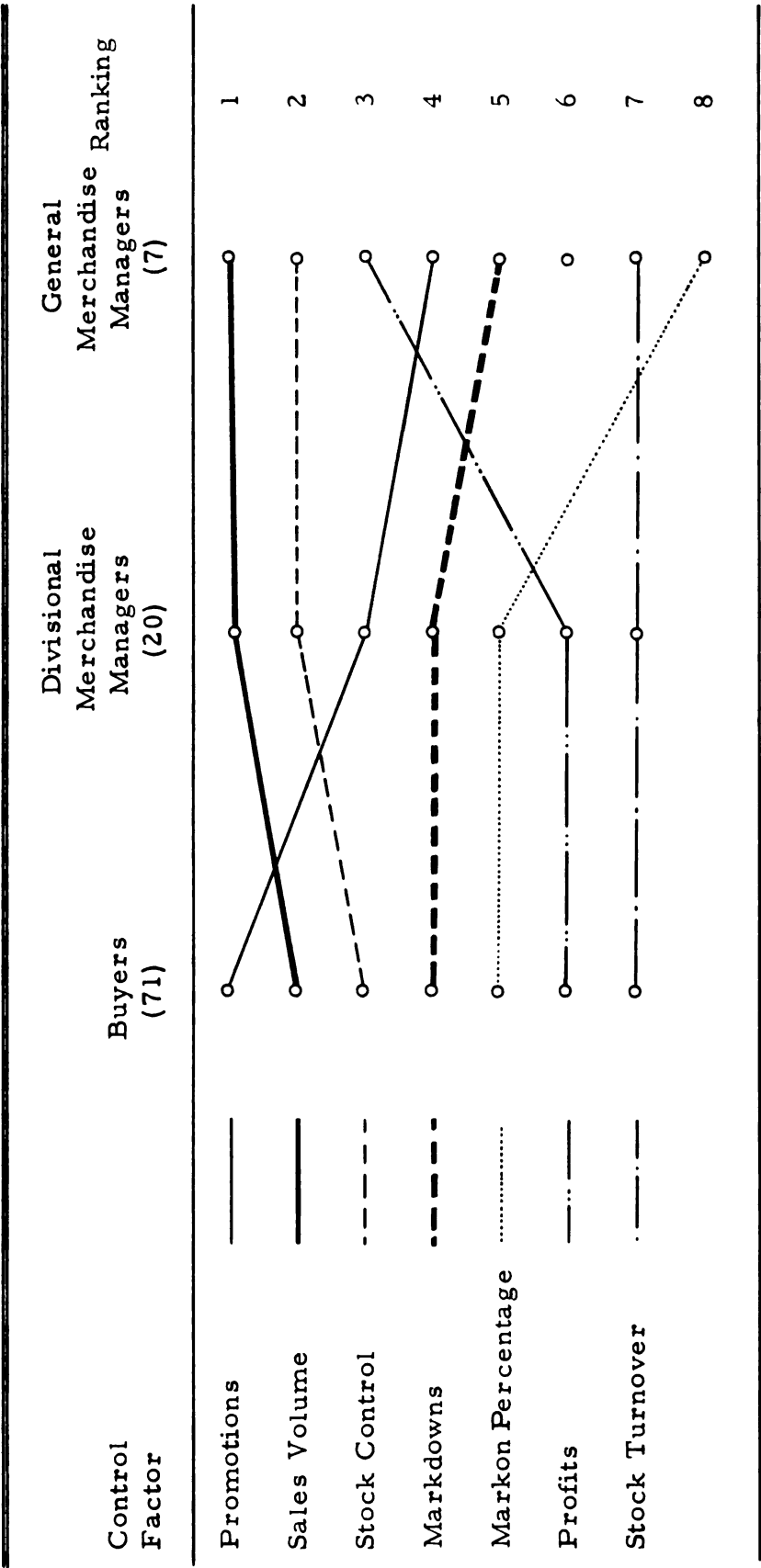
mentioned by the divisional merchandise managers. Also these same seven factors occupied seven out of the first eight rank positions mentioned by the general merchandise managers. Although the factors were almost identical at the different levels, there were several switches in relative rank positions.

In moving from the buyer to the divisional merchandise manager level, promotions fell two rank positions and markon percentage moved down one. Sales volume, stock control, and profits rose one rank position. In the step from the divisional to the general merchandise manager level, promotions, markdowns, and markon percentage slipped one or more positions and profits moved up two rank positions. The shift of the profit factor from sixth place with the buyers to third place with the general merchandise mangers may be due to the fact that the general merchandise manager's bonus is usually based on profits while the buyer's bonus is more typically tied to gross margin or sales. The decline in the rankings of promotions and markon percentage from the buyer to the general merchandise manager level may be an indication that the buyer's job is more closely tied to pricing merchandise and developing advertising programs.

It might also be observed that the three factors which ranked at the top for the general merchandise managers (sales, stock control and profits) are the broadest and most general of the factors listed. The buyers ranked the more specific control factors such as promotions, markdowns, and the markon percentage higher than the general merchandise managers. The executives' attitude on

stock turnover was unanimous and it ranked in seventh place with all three levels of mangement.

Results of Question 6 by Job Level

This question reports the factors used by merchandising executives when talking to their subordinates (Table 4). Buyers' subordinates were primarily sales clerks and supervisors and their jobs varied sharply from those of buyers and other merchandise managers. It is not surprising that the factors stressed to these people were considerably different from the factors stressed to buyers and to division merchandise managers. The item most frequently stressed to sales people was merchandise information. Other factors emphasized were customer service, courtesy, fashion trends, and discovering customer wants. The factors stressed at this level were action oriented and designed to help these people do a better job of selling merchandise to individual customers.

The jobs of buyers and other merchandise managers are considerably different and an entirely different set of factors was employed. With divisional merchandise managers sales volume, stock control, markon percentage, profits, and markdowns were the most frequently mentioned performance measures. General merchandise managers stressed a list of performance factors similar to that mentioned by the divisional merchandise managers. It included stock control, stock turnover, sales volume, and in-stock on basics.

TABLE 4

PERFORMANCE FACTORS STRESSED TO THE SUBORDINATES OF MERCHANDISING EXECUTIVES IN ELEVEN DEPARTMENT STORE ORGANIZATIONS

Ranking	Performance Factors Emphasized by Buyers (71)	Number of Mentions	Performance Factors Emphasized by Divisional Merchandise Managers (20)	Number of Mentions	Performance Factors Emphasized General Merchandise Managers (7)	Number of Mentions
1	Merchandise Information	32	Sales Volume	8	Stock Control	4
2	Customer Service	16	Stock Control	6	Stock Turnover	3
3	Courtesy	12	Markon Percentage	5	Sales Volume	2
4	Display	11	Profits	5	Markon Percentage	2
5	Fashion Trends	11	Markdowns	5	In Stock on Basics	2
6	Customer Wants	8	Customer Service	3	Fashion Leadership	2
7	Selling Techniques	7	Stock Turnover	2	Move Out Old Stock	2
8	Trading Customer Up	6	In Stock on Basics	2	Quality Merchandise	2
9	Sales Volume	6	Fashion Trends	2	Stimulate Subordinate	2
10	Suggestion Selling	5	Customer Wants	2	Training Subordinates	1

Comparison of Answers to Questions 3 and 6

Differences in the use of control factors at different managerial levels can be studied by examining the factors mentioned by the divisional and general merchandise managers as answers to questions 3 and 6. A comparison has been made between the factors stressed by superiors and the factors the subordinates said were being stressed to them (Tables 5 and 6). There appears to be very close agreement between what the buyers said the divisional merchandise managers were emphasizing and the factors that the divisional merchandise managers said they were stressing to buyers (Table 5). Six out of the first seven factors mentioned by the buyers were also mentioned by the divisional merchandise managers, and the factors appeared in approximately the same rank positions on each list.

The only significant difference between the lists mentioned by the buyers and the divisional merchandise managers was that buyers had promotions ranked first and divisional merchandise managers did not report this item as a factor stressed to buyers. The importance of promotions may have been influenced by the wording of question 3. The question included the phrase "when you talk to your boss" which may have encouraged the buyers to include in their answer things that the buyers and the divisional merchandise managers discussed but were not quantitative control factors. It is possible that the buyers and the divisional merchandise managers talk about past and future promotions as a standard topic of conversation and the divisional merchandise managers did not feel that promotions were a specific performance factor to be stressed.

TABLE 5

AGREEMENT BETWEEN BUYERS AND DIVISIONAL MERCHANDISE MANAGERS ON THE USE OF PERFORMANCE FACTORS IN ELEVEN DEPARTMENT STORE ORGANIZATIONS

Ranking	Performance Factors Mentioned by Buyers that were Discussed with Divisional Merchandise Managers[a]	Number of Mentions	Performance Factors Stressed by Divisional Merchandise Managers to Buyers[b]	Number of Mentions
1	Promotions	34	Sales Volume	8
2	Sales Volume	29	Stock Control	6
3	Stock Control	29	Markdowns	5
4	Markdowns	26	Markon Percentage	5
5	Markon Percentage	24	Profit	5
6	Profits	21	Customer Service	3
7	Stock Turnover	17	Stock Turnover	2

[a] Data from question 3
[b] Data from question 6

TABLE 6

AGREEMENT BETWEEN DIVISIONAL MERCHANDISE MANAGERS AND
GENERAL MERCHANDISE MANAGERS ON THE USE
OF PERFORMANCE FACTORS IN ELEVEN
DEPARTMENT STORE ORGANIZATIONS

Ranking	Performance Factors Mentioned by Divisional Merchandise Managers as being Discussed with General Merchandise Managers[a]	Number of Mentions	Performance Factors Stressed by General Merchandise Managers to Divisional Merchandise Managers[b]	Number of Mentions
1	Sales Volume	9	Stock Control	4
2	Stock Control	9	Stock Turnover	3
3	Promotions	7	Sales Volume	2
4	Markdowns	6	Markon Percentage	2
5	Profits	5	In-Stock on Basics	2
6	Markon Percentage	5	Move Out Old Stock	2
7	Stock Turnover	3	Fashion Leadership	2

[a] Data from question 3
[b] Data from question 6

The agreement between divisional merchandise managers and general merchandise managers as to what factors were being stressed (Table 6) is weaker than at the buyer-divisional merchandise manager level (Table 5). The first four factors mentioned by the general merchandising managers, stock control, stock turnover, sales, and markon percentage were all mentioned by the divisional merchandise managers. Promotions, markdowns, and profits which were mentioned by the divisional merchandising managers did not appear as factors mentioned by the general merchandise managers. This smaller amount of agreement may have been related to the small number of general merchandise managers that were included in the study (7). Another factor that may explain the lack of complete agreement was the generally lower response given to question 6 as compared to question 3. In question 3 the first eight responses received a total of 303 mentions and in question 6 the first eight responses received only 153 mentions. It appeared to the interviewer that some of the executives interpreted question 6 as a repeat of question 3, and as a result they did not give complete answers.

The small number of executives together with the small number of factors mentioned by each executive provided only limited data on the factors stressed by general merchandise managers. The fact that four of the most frequently mentioned factors stressed by general merchandise managers were reported by the divisional merchandise managers supports the view that the same factors are important to the different managerial levels.

Tabulation of Question 7 by Job Level

Question 7 was a forced choice question asking the respondents to pick one of two paired performance measures. Possible differences in the importance of the selected control factors between managerial levels can be observed by sorting the data by job categories (Table 2). An inspection of the data shows that in general, the buyers agreed with the divisional and general merchandise managers on the relative importance of the performance measures. Buyers' preferences corresponded with their superiors' choices in seven of the eight pairs of performance measures. In the fourth pairing the buyers agreed with the divisional and general merchandise managers as to which of the measures was most valuable, but the buyers' preference was not as strong. In this pairing, 56 percent of the buyers preferred profits as a percent of sales to profits as a percent of invested capital. Divisional and general merchandising managers, however, picked profits as a percent of sales 85 percent of the time. In the third pairing, buyers showed a slight preference for stock turnover; and the divisional and general merchandise managers picked sales growth 70 percent of the time.

The observed agreement between the managerial levels concerning the importance of the selected control factors was substantiated by the use of a chi square test of significance. Because of the small number of general merchandise managers that were included in the study, their answers were combined with those of the divisional merchandise managers for the purposes of this test.

The test evaluated the null hypothesis that managerial level had no influence on executives' preferences for control factors. The values of the test statistics that were obtained for six of the eight comparisons were not large enough to reject the null hypothesis at the 5 percent level.[74] In the fourth pairing the merchandise managers' very strong preference for the profit ratio was significantly different from the buyers' preference for this same ratio. In spite of this difference the fact that both groups preferred the profit ratio supports the argument that different managerial levels use the same control factors. The third pairing was the only comparison where buyers and the merchandise managers preferred different control factors. In this comparison the merchandise managers' preference for sales growth was significantly[75] different from the buyers' preference for stock turnover.

Summary of the Data on Hypothesis 2

The executives interviewed in this study used the same control factors at the buyer, divisional merchandise manager, and general merchandise manager levels. This was shown by the analysis of the responses obtained to questions 3, 6, and 7. The fact that the three levels of executives showed close agreement on the use of control factors in three separate questions is strong evidence that all the executives had the same attitude on merchandising performance measures.

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[74]The calculation of the chi square values is shown in Appendix C, page 184.

[75]At the .05 level.

Influence of Merchandise Lines on the Use of Control Factors

Relatively few differences have been observed in the use of merchandising control factors among firms or between managerial job levels. An additional question that might be raised is to what extent does the type of merchandise handled influence the usage of the merchandising control devices? To explore this problem the buyers were divided into hard and soft goods categories and their answers to question 3 were tabulated separately (Table 7). It is readily apparent that hard and soft goods buyers used almost exactly the same control factors. The seven most frequently mentioned control factors suggested by hard goods buyer were also the seven most frequently mentioned by the soft goods buyers. Several shifts in relative rank positions between the two groups did occur that deserve comment.

The most obvious shift was the change in the ranking of profits from second place with the hard goods buyers to sixth place with the soft goods buyers. This change may be related to the more aggressive price competition that department stores face on hard goods from discount stores, supermarkets, and other stores. Price competition would tend to lower the markon percentages that could be used and make it more difficult to produce profits. This chain of events would naturally increase the emphasis on profits as a control device. Soft goods in department stores, however, have a strong fashion element that tends to obscure price comparisons. Also the branded lines of soft goods in department stores appear to have more resale price maintenance than do most hard lines. With

TABLE 7

RANKING OF MERCHANDISING CONTROL FACTORS BY HARD AND SOFT GOODS BUYERS IN ELEVEN DEPARTMENT STORE ORGANIZATIONS

Rankings	Hard Goods Buyers[a] (27)		Ranking Comparisons	Soft Goods Buyers[b] (44)	
	Number of Mentions	Factors		Factors	Number of Mentions
1	11	Promotions		Sales Volume	25
2	11	Profits		Promotions	23
3	9	Sales Volume		Stock Control	20
4	9	Stock Control		Markdowns	20
5	8	Markon Percentage		Markon Percentage	16
6	7	Stock Turnover		Profits	10
7	5	Markdowns		Stock Turnover	9
8	5	Expense Control		Display	7
9	4	Merchandise Problems		Expense Control	6

[a]Includes appliance, furniture, lamp, toy, china, cosmetic, and notion buyers.

[b]Includes women's and men's ready to wear, foundation, infant, and shoe buyers.

less price competition the soft goods buyers would be able to stress increased sales rather than profits.

The shift in the position of markdowns from seventh among the hard goods buyers to fourth place among soft goods buyers can be explained by the greater use of fashion and seasonal merchandise in soft goods lines. Changes in fashions and seasons make it necessary that more attention be given to the taking and control of markdowns.

Another factor that may influence the ranking of the control factors used by the hard and soft goods buyer is the sex of the executives. The answers given to question 3 have been tabulated by men and women buyers to study the influence of this variable (Table 8). The men and women buyers show even more agreement on the importance of the various control factors than did the comparison of the hard and soft goods buyers. The men and women buyers agreed on the exact rank positions of three factors and the hard and soft goods buyers agreed on only one factor. The only real difference between Table 7 and Table 8 was the appearance of fashion as a control factor. The importance of fashion to women buyers does not appear unusual considering that many women buyers are hired for their fashion knowledge. Profits were more important to men buyers than to women, but this may be a result of the types of merchandise typically bought by the two groups.

It would appear that differences in the types of merchandise and in the sex of the buyer have relatively little to do with the

TABLE 8

RANKINGS OF MERCHANDISING CONTROL FACTORS BY MEN AND WOMEN BUYERS IN ELEVEN DEPARTMENT STORE ORGANIZATIONS

Rankings	Men Buyers (37)		Ranking Comparisons	Women Buyers (34)	
	Number of Mentions	Factors		Factors	Number of Mentions
1	20	Sales Volume		Sales Volume	16
2	18	Promotions		Promotions	16
3	16	Profits		Stock Control	15
4	15	Markon Percentage		Markdowns	13
5	14	Stock Control		Markon Percentage	10
6	13	Markdowns		Fashion	9
7	8	Stock Turnover		Stock Turnover	9
8	7	Expense Control		Profit	5
9	5	Merchandise Lines		Display	5
10	5	Gross Margin		Expense Control	4

control factors that are used by merchandising executives. Aside from a somewhat greater emphasis on profits by hard goods buyers and greater stress on fashion by women buyers there were very few differences to be observed.

Research Results - Hypothesis 3

Hypothesis 3 suggests that department stores are currently stressing different measures of merchandising performance than have been emphasized in the past. An accurate test of this hypothesis would have required the measurement of the performance factors being used in department stores at different points in time. This survey was not organized to obtain time series data and the testing of this hypothesis had to be done with the data obtained from question 4. This question asked the executives if they had observed any changes in the emphasis on control factors over time. Seventy-three percent of those interviewed said that there had been a change in the emphasis on performance measures. While the majority felt that there had been a change in emphasis, the executives showed very little consensus on what changes had occurred.

This lack of agreement may have been related to the fact that question 4 was not a very productive question. The first eight answers received only 142 mentions (Table 9) compared with 303 mentions for the first eight answers in question 3 (Table 3). The most frequently mentioned response in question 4 was the need for a higher markon percentage. Thirty-four executives followed

TABLE 9

CHANGES IN PERFORMANCE MEASURES REPORTED BY
MERCHANDISING EXECUTIVES IN ELEVEN
DEPARTMENT STORE ORGANIZATIONS

Rank Position	Performance Measures	Number of Mentions
1	Higher markon percentage needed	46
2	Expenses higher as a percentage of sales	34
3	Trade up to better merchandise	15
4	More emphasis on profit	14
5	More fashion	13
6	More emphasis on stock turnover	9
7	Multiple store operation increases work load	7
8	More competitive	5
9	Automatic stock control	5
10	Merchandise has changed	5
11	More concern with expense control	4
12	Want a larger segment of market	4
13	More promotions	4
14	More basic merchandise	3
15	More emphasis on store image	2

this answer with the remark that expenses of doing business had increased as a percent of sales. This response supports the need for higher markon percentages, but it does not prove that a change has occurred in the use of this control factor.

A more serious problem is whether the executives' emphasis on higher markon percentages represents a real shift in the usage of this factor or just represents a change in the amount of markon that is acceptable. It can be argued that the desire for higher markon percentages by department stores has probably existed for some time. This was shown by the executives' own statements that increased expenses have made it necessary to seek higher markons. Since department store expense ratios have been rising since World War II, it can be assumed that department stores have been working for higher markon percentages for the past eighteen years. If the markon percentage is becoming more important as a control device it might also have been expected that it would rank higher than fifth among the executives' answers to question 3. It is possible that the fifth position represents an improvement in the ranking of this factor over what it might have been in the past. In any event there is no way to be sure that fifth position represents a change without time series analysis.

The first two responses to question 4 account for 40 percent of all of the answers given to this question. The remaining answers received so few mentions that it is doubtful that they represent any agreement among the executives interviewed. Fourteen executives mentioned a current increased emphasis on profitability. Five of these executives were from one company which had recently

attained its major growth objectives and had made a definite shift to emphasizing profits. Trading-up to better merchandise and more fashion ranked third and fifth among the answers to question 5, but these responses do not appear to reflect real changes in emphasis on control factors. They merely reflect changes in the type of merchandise the stores are selling.

The executives interviewed in this study indicated that the markon percentage was currently receiving greater attention than it had in the past, but there is some question whether this represents a real shift in emphasis or just a change in the amount of markon. The greater emphasis on the markon percentage was not substantiated by other survey questions and it may be that a test of this hypothesis will require additional empirical data.

Research Results - Hypothesis 4

Hypothesis 4 states that the methods used to reimburse merchandising executives influence the performance measures that are used by these executives. The relationship between methods of compensation and merchandising control will be studied by examining the performance measures stressed by executives and the payment systems used in the different firms. Additional data relating to this hypothesis will be presented from answers given to survey questions 12, 13, and 14.

Executive Compensation Plans

The eleven firms in the study all employed salary plus bonus plans for their merchandising executives. The different firms exhibited considerable variety of methods for calculating the bonus at the buyer and divisional merchandise manager levels (Table 10). Seven different plans were used for buyers and five plans for divisional merchandise managers. At the general merchandise manager level the bonus typically depended on profits. It appears that the bonus plans observed in this study were based on either sales volume, gross margin percentage, profits, or some combination of these factors. The factors used in the discretionary bonus plan are not known, but it is probable that sales volume, gross margin percentage, and profits enter into the calculation. Other factors, however, are considered and the computation does not follow any set formula. It is interesting to note that although one firm included inventory levels and stock turnover rates in the calculation of salaries for store managers, these factors did not appear to be used in the calculation of the bonuses of buyers and merchandise managers.

Payment Methods and Performance Measurement

In general the payment plans used by the firms in this study for their merchandising executives emphasized either sales, gross margin, or some measure of profits. These three factors were also frequently mentioned as merchandising factors in questions 3 and 6 (Tables 3 and 4). Sales volume, for example, was the control

TABLE 10

BONUS PLANS USED TO PAY MERCHANDISING EXECUTIVES IN
ELEVEN DEPARTMENT STORE ORGANIZATIONS

Executive Positions	Bonus Payment Factors	Firm Number										
		1	2	3	4	5	6	7	8	9	10	11
Buyers	Sales Volume	x										
	Gross Margin Percentage					x	x					
	Sales and Gross Margin									x		
	Contribution Profits				x							
	Sales and Profits		x									
	Net Profit							x			x	
	Discretionary Bonus			x					x			x
Divisional Merchandise Managers	Sales Volume	x										
	Gross Margin Percentage							x		x		
	Contribution Profits				x							
	Sales and Profits								x			
	Net Profit										x	x
General Merchandise Managers	Sales Volume	x										
	Net Profits		x	x		x	x	x			x	

factor mentioned most often as a response to question 3. Profits

ranked fifth and gross margin percentage tenth as answers to this

same question. Several other control factors which are directly

related to the production of sales volume, gross margin percentage,

and profits were frequently mentioned as answers to question 3.

This data suggests that the factors used in calculating executive

bonuses are also important control measures employed by mer-

chandising executives in the execution of their jobs.

Additional support for the relationship between the salary and

merchandising systems is provided by a tabulation of the rankings

of control factors in firms emphasizing different elements in their

bonus plans (Table 11). Executives in three firms that emphasized

profits in their salary system ranked profits higher as a measure

of merchandising performance than the average of the eleven firms.

Profits ranked first, second, and fourth for these firms and fifth

for the eleven firms together. The use of gross margin percentage

in the salary system was not as closely related to the performance

factors emphasized by executives. In two of the three firms that

used the gross margin percentage in their salary system, execu-

tives ranked gross margin higher as a performance measure than

the average for all the firms.

Additional Data on the Salary Hypothesis

The direct questions on salary issues (12, 13, and 14) did not

produce particularly enthusiastic responses on the part of the execu-

tives interviewed. The questions were answered with some

TABLE 11

RANKINGS OF MERCHANDISING CONTROL FACTORS BY
EXECUTIVES IN FIRMS USING DIFFERENT
EXECUTIVE INCENTIVE PLANS

Control Factors Emphasized by Bonus Plan	Firm Number	Ranking of Gross Margin Percentage[a]	Ranking of Profits[a]
Gross Margin Percentage	6	24	3
	5	6	9
	9	9	-
	All Firms	10	5
Profits	7	22	2
	10	10	1
	4	11	4
	All Firms	10	5

[a] From question 3.

reluctance and inquiries on this subject appeared to be an invasion of privacy. The general secrecy surrounding salary matters is shown by the fact that one firm in the study requested that the salary questions not be used.

Outwardly the executives expressed general satisfaction with the present salary systems. Eighty percent of those answering question 12 thought that the system in use was a fair and accurate measure of their worth to their company. Question 13 asked for suggestions of possible ways to improve the salary system. Most of the executives had very little to say and 77 percent thought no changes were necessary. For those answering this question, the most frequently mentioned response was that they felt underpaid (Table 12). The fact that seventeen buyers wanted more money does not, however, support the hypothesis that the methods of compensation influence executive usage of control factors.

Several other answers to this question, however, suggest that some of the buyers do consider the factors emphasized by the salary system. Nine buyers whose bonus was paid on a discretionary basis indicated that they would like to know how their bonus was calculated. This may be mere curiosity or it may represent a desire to know what items are important so that they can stress these factors and try to improve their chances for promotion and a bonus. Another buyer indicated that with branch operations, the net profit salary system lost accuracy because others were controlling the expenses. This buyer was clearly concerned with the relationship between his salary and the merchandising control system. Another buyer

TABLE 12

SUGGESTED IMPROVEMENTS FOR SALARY SYSTEMS
MENTIONED BY EXECUTIVES FROM ELEVEN
DEPARTMENT STORE ORGANIZATIONS

Ranking	Suggested Changes	Number of Mentions
1	Feels underpaid	17
2	More information on how bonus is determined	9
3	They pay only what they can get you for	5
4	Would like percent of the profit in addition to percent of volume	3
5	System should include qualitative evaluation	3
6	Tie bonus to increase in sales or profits	2
7	Base salary should be tied to the cost of living	1
8	Need base salary since percentages do not cover all the work	1
9	Base pay not an accurate measure of the work done	1
10	Bonus plan is accurate	1
11	Present system rewards seniority, may be overpaid	1
12	More salary less bonus	1
13	Method of determining base salary penalizes best buyers	1
14	Women paid less than men	1
15	With branches net profit system loses accuracy when others control expenses	1
16	We are charged for inventory controlled by others	1
17	Volume subject to outside influences not under the control of the buyer	1
18	Should pay bonus for lower MD or higher markon percentage	1
19	Put sales people on commission	1

operating under this same salary system resented being charged for inventories controlled by others. This buyer appeared to want to control the factors that influenced his salary. A third buyer whose bonus was based on sales volume remarked that sales volume is subject to variation caused by external factors not under the control of the buyer. This buyer felt that sales may not be an entirely accurate measure of a buyer's worth. This remark shows the buyer's concern for the close tie that exists between the salary system and merchandising control factors. Another buyer's suggestion that the bonus should be tied to the achievement of lower markdowns or higher markon percentages shows the close relationship that prevails between the performance measures stressed by merchandising executives and the salary system used to remunerate employees.

Question 14 asked if merchandising executives could increase their own salaries at the expense of company profits. It was designed to see if merchandising personnel could see any conflict between the salary system, company goals, and individual actions. Sixty percent of those responding to the question felt that merchandising executives could not manipulate the performance factors under their control to raise their own salaries. Of those who thought that this might be possible, most agreed that it was not likely because of the close control that was maintained. Many executives expressed the view that the bonus system was so closely tied to company sales and profit objectives that when the buyer tried to maximize his own salary he automatically maximized the company's return.

Summary of the Data on Hypothesis 4

In general the survey data supported the hypothesis that the salary system influenced executive behavior. This was shown by the close relationship between the factors used to calculate bonuses and the factors mentioned by executives as performance factors (Tables 3 and 10). It was also shown by the rankings of performance factors in firms using different bonus plans (Table 11).

Research Results - Hypothesis 5

Hypothesis 5 was concerned with the influence of centralization on the introduction and use of newer performance measures. The influence of centralized versus decentralized buying responsibility on performance measurement methods was analyzed by a comparison of firms using each system. Unfortunately for this hypothesis only one of the eleven firms in the study used decentralized buying. All of the other organizations used a centralized system of merchandise acquisition. When the survey results for the decentralized firm were compared with those for the centralized firms it was obvious that virtually the same performance factors were being used by both groups. There were a few differences in rank positions in the answers given to question 3 and 5 but these would appear to be of only minor consequence. Because of the limited data available, a more complete analysis of this hypothesis was not possible.

Research Results - Hypothesis 6

This hypothesis suggests that department stores are currently making only limited use of some of the new measures of merchandising performances that were discussed in Chapter II. The validity of this hypothesis will be examined by references to survey data from questions 1, 3, 7, and 11.

Executive Duties and Responsibilities

The first question on the interview schedule attempted to find out what the executives believed were the most important parts of their jobs. Sixty different answers were recorded and almost all of them emphasized the traditional approach to merchandising control (Table 1-Q, Appendix B). Factors that were frequently mentioned by the executives included such familiar merchandising control factors as profits, promotions, stock control, sales volume, stock turnover, and markon percentage (Table 13). Only two of the sixty answers given to this question reflected a definite contemporary approach to merchandising control. These answers were to "achieve a fair return on the investment" and "to plan and control the investment of the company's money. " The two answers were combined into a single category which ranked seventeenth in importance as an answer to question 1. These responses were mentioned by only 9 of the 111 executives interviewed in the study.

Merchandising Control Factors Mentioned by Executives

Question 3, which has been discussed earlier, recorded the factors that were being used by merchandising executives to control

TABLE 13

PRIMARY DUTIES AND RESPONSIBILITIES REPORTED BY
MERCHANDISING EXECUTIVES IN ELEVEN
DEPARTMENT STORE ORGANIZATIONS

Ranking	Duties and Responsibilities	Number of Mentions
1	Selection of the right merchandise	62
2	Training and supervision of subordinates	53
3	To make a profit	27
4	Sales promotion and advertising	25
5	Stock control	24
6	Achieving sales volume	20
7	Selling merchandise to customers	16
8	Sales planning	15
9	Maintaining and developing store image	15
10	Selection of good help	15
11	Merchandise display	14
12	Keeping up on fashions and new developments	13
13	Stock turnover	12
14	Inspiration and stimulation of subordinates	11
15	Finding out customer wants	11
16	Achieving good markon percentage	10
17	Plan and control investment of company's money, achieve a fair return on the investment	9
18	Customer service	9
19	Watch competitor's items and prices	9

their operations. A wide variety of answers were also recorded to this question, but only one answer could be described as reflecting a new approach to control. This was to "control the investment of the company's funds" (Table 3-Q, Appendix B). This answer was mentioned by only one buyer and ranked forty-ninth out of sixty-four answers. This response was clearly different from the typical buyer's emphasis on sales, stock control, promotions, markdown, profits, stock turnover, and expense control. Considering the attention given to MMA it is surprising that controllable or contribution profits were not mentioned as answers to either question 1 or to question 3. This absence is particular confusing since one of the firms in the study based its executives' bonuses on contribution profits.

Preferences for Selected Control Factors

Question 7 asked executives to choose between eight pairs of performance measures to see if any significant preferences existed among merchandising personnel. Seven of the pairs matched relatively modern control factors against more traditional control devices. The traditional performance measures were preferred in six of these seven test pairs (Table 2). The first set of merchandising control factors paired the gross margin percentage with the profit ratio. The profit ratio was significantly preferred, but both of these factors are traditional in orientation. The third through eighth comparisons provided the main data in support of hypothesis 6.

In the second comparison, sixty-five merchandising executives preferred net profits per dollar of inventory to twenty-seven others who preferred net profits per square foot of selling area.[76] This was the only comparison where the more modern control factor was preferred.[77] The third pairing grouped sales growth and stock turnover. On an overall basis there was a slight preference for sales growth, however, this difference was not statistically significant. Buyers had a slight preference for stock turnover and divisional and general merchandising managers showed a fairly strong preference for sales growth. It might have been expected that executives at higher managerial levels would have had greater preference for stock turnover since stock turnover is important in producing return on capital which is typically used at higher managerial levels.

The fourth comparison was between net profit as a percent of sales and net profit as a percentage of invested capital. There was a significant preference for the traditional profit ratio on a total basis.[78] The divisional and general merchandising managers picked the profit to sales ratio 85 percent of the time compared to 56 percent for the buyers. It might have been expected that the higher level managers would have had the stronger preference for the return on capital ratio since the merchandise managers are closer to the general manager level where return on capital is more apt to be used.

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[76]Significantly preferred at the .001 level.

[77]Return on space is judged to be a more traditional measure of performance than return on inventory.

[78]Significantly preferred at the .01 level.

The fifth pairing grouped the gross margin percentage and stock turnover. The executives showed a strong preference for the traditional gross margin figure.[79] In the sixth comparison the merchandising executives demonstrated a strong preference for net profits[80] rather than the more recently developed controllable profit figure.[81] The seventh comparison was between stock turnover and net profits as a percent of sales. Since stock turnover is important to the production of high returns to capital it might have been expected that stock turnover and the profit ratio would be preferred about equally. Instead the executives showed their strongest preference for the profit ratio[82] of any of the eight pairs of factors. A total of 77 percent of the executives selected the profit ratio over the stock turnover ratio. The stock turnover ratio, which has been so important to the growth of discount department stores, was not preferred in any of the test pairings.

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[79]Significantly preferred at the .001 level.

[80]Significantly preferred at the .01 level.

[81]For the purposes of this comparison controllable profits were defined as gross margin dollars less direct expenses. The executives' preference for the net profit figure may reflect a valid judgement that charging merchandising divisions for all expenses is more desirable than just considering the variable expenses.

[82]Significantly preferred at the .001 level.

The last comparison paired net profit as a percentage
of invested capital to net profit as a percentage of total capital
including debt. This comparison was not meaningful to many
of the buyers and a total of sixteen executives did not answer
this question. Of those who did answer, there was a preference
for the ratio of profits to invested capital over profits to total
capital, however, the difference was not statistically significant.
This question demonstrated the low level of acceptance that
the return to capital concept has achieved among merchandising
executives.

This tendency was also shown by some additional comments
that were recorded while the executives were answering question
7. Five buyers indicated that the controller or the stockholders
would be more interested in profits as a percent of invested
capital (Table 14). Another buyer said that as a merchandising
man he was more interested in profit as a percent of sales
than profit as a percent of invested capital. These remarks
illustrate the lack of understanding of the merits of the return
on capital concept as a measure of managerial performance
in retail environments.

Using Variable Selling Costs in Pricing

Question 11 asked the executives if the variable costs
associated with the selling of merchandise were considered in

TABLE 14

MISCELLANEOUS UNSOLICITED REMARKS RECORDED
DURING INTERVIEWS WITH MERCHANDISING
EXECUTIVES IN ELEVEN DEPARTMENT
STORE ORGANIZATIONS

Ranking	Executive Comments	Number of Mentions
1	Stock turnover is where you make your money	9
2	Bring item in at high markon percentage and if it sells, take ad and have good price compairson at lower price	5
3	Controller or stockholders more interested in profit as a percent of invested capital	5
4	Put open-to-buy money in active selling areas	4
5	In planning assortments, the merchandiser must balance markon percentage against volume goals	3
6	We are all record keepers here. When hiring new employees, we ask, "Is he a good accountant?"	3
7	Higher markon percentage achieved by changing product mix	3
8	All department stores are caught in the same bind and are pushing markon percentage up on regular merchandise	2
9	Try for unique items and own brands	2
10	Push to get volume to take care of increased expenses	2
11	Develop volume at right markon to produce healthy profit	2
12	Buyers sometimes do not have enough markdowns	1

TABLE 14 - <u>Continued</u>

Ranking	Executive Comments	Number of Mentions
13	Word-of-mouth advertising better than any newspaper ad	1
14	It is good to work with a few suppliers so that you can be important to them	1
15	Rising salaries have forced markon percentage up	1
16	There is a break-even point in a department's operations	1
17	There is no money in case goods, money is in upholstered covers	1
18	Newspaper advertising not worth a damn	1
19	Classification reports are the most important profit tool	1
20	Policy of adding more basic merchandise ties up open-to-buy and leads to over-bought condition	1
21	Machines won't take the place of the buyer	1
22	Profits come from bird dogging expenses	1
23	Need low markon percentage to get volume	1
24	Controller more interested in net profits per dollar of inventory	1
25	As a merchandising man, I am more interested in profit as a percent of sales than profit as a percent of invested capital	1
26	Other department stores are taking excessive markons, we sell the same items for less	1
27	Pursue fashion and price objectives at the same time	1

TABLE 14 - <u>Continued</u>

Ranking	Executive Comments	Number of Mentions
28	The department store industry is terribly primitive	1
29	We like to buy items that can be reordered	1
30	The buyer has to be a seller, any damn fool can buy	1
31	In my merchandise, selection is not as important as being in-stock on sizes and items	1
32	Sales girls sell what they like	1
33	Pre-ticketing doesn't allow very high markon percentages	1
34	Want productivity in advertising as well as labor productivity	1
35	Manufacturers force you to trade-up by not offering low end merchandise	1
36	Anybody can buy for a $1 and sell for a $1	1
37	Smaller stores survive off the traffic of larger stores and can get by with lower prices because of more limited services	1
38	Markon percentage is the big thing in the profit picture	1
39	Comparative prices move goods	1
40	I question the validity of percentage markons	1
41	We pay for some merchandise only two times per year	1

pricing as has been suggested by the new merchandise management accounting system. About one-half of those persons answering this question said that expenses were considered in pricing. When asked how these expenses were determined, fifty-seven said that expenses were considered as part of the markon percentage (Table 15). The executives did not typically associate expenses with individual items and expenses were usually considered only as part of the markon percentage necessary for particular lines of merchandise. Seventeen other buyers expressed concern for in-bound transportation expenses in responding to this question. Transportation is not a variable selling expense, but rather an addition to the basic cost of the merchandise. This response may show that the buyer did not understand the question. That fact that the word "deliver" was used in the question to mean delivery to the customer may have been confused with delivery from the manufacturer.

Five of those interviewed said that prices were adjusted for some items to take into account special advertising. One other buyer said that it was difficult to load advertising into the price of items. Another buyer indicated that the use of expenses in pricing would lead to noncompetitive retail prices. It appears that expenses of storage, advertising, and selling were not considered directly when setting prices in the department stores in this study. There was no evidence to suggest that the new procedures

TABLE 15

THE INFLUENCE OF EXPENSES ON PRICING PROCEDURES
AS REPORTED BY EXECUTIVES IN ELEVEN
DEPARTMENT STORE ORGANIZATIONS

Ranking	Executive Comments	Number of Mentions
1	Expenses covered by markon percentage	57
2	Consider inbound transportation costs	17
3	Raise prices to cover special advertising	5
4	Cooperative advertising is important	2
5	Trade discount covers these expenses	2
6	Where expenses are large, such as appliance delivery, they are considered	2
7	Expenses are considered on high and low markon items	1
8	We ask whether the price of the item can carry advertising costs	1
9	It is hard to load advertising into prices	1
10	Consider expenses only in special cases	1
11	We watch selling expenses	1
12	If you use expenses to price you will be out of line competitively	1

advocated by MMA to use costs in pricing have been accepted in any way by the merchandising executives interviewed.

Summary of the Data on Hypothesis 6

The executives' responses to the open end questions included in this study failed to indicate any appreciation for the newer control factors discussed in Chapter II. When forced to choose between traditional and more recently developed control factors the executives showed a strong preference for the familiar performance measures. The survey data provided strong support for the hypothesis that department stores are making only limited use of new measures of merchandising performance.

Control Factors and Executive Behavior

The relationship between performance factors and the merchandising activities of executives will be analyzed using data from questions 1, 4, 8, 9, 15 and from unsolicited additional comments collected during the interviews.

Merchandising Responsibilities and Executive Action

Question 1 asked merchandising executives what they considered were their most important duties and responsibilities. The two most frequently mentioned answers to this question were the selection of merchandise and the training and supervision of subordinates (Table 13). Both of these responses would appear to be related to the jobs occupied by many of those interviewed rather than to performance factors emphasized by the firms.

The answers which ranked third through sixth, however, are directly related to the performance measurement system. These four factors were profits, promotions, stock control, and sales volume and they were among the most frequently mentioned performance factors in question 3. Other control factors mentioned in question 1 that also appeared in question 3 were turnover, markon percentage, markdowns, and display. It is significant that five factors that appeared in question 1 (profits, sales, stock turnover, markon percentage, and markdowns) also appeared as answers to question 4 which was concerned with overall company goals. The fact that the executives gave the same answers to three different questions would seem to indicate that the control factors that are stressed to merchandising personnel have been internalized and actually dominate the thinking of merchandising executives.

Changes in Performance Measures and Executive Behavior

Question 4 was designed to detect changes in the emphasis on performance measures. In the process of studying these changes, the question provides insight on how performance factors influence executive behavior. The second most frequently mentioned response to question 4 was a statement that expenses were increasing as a percent of sales. This remark was made in support of a frequently expressed need for a higher markon percentage. While this answer provides no proof that expenses caused the increased concern for markon it would appear that the executives responded to the problem of higher expenses by striving for a higher markon percentage. This seems to be a clear case of

how the use of one control factor, the expense ratio, directly influenced the behavior of the merchandising executives in their emphasis on higher markon percentages.

Pricing Procedures and Executive Behavior

Questions 8 and 9 inquired about pricing policy and the pricing methods used by the department stores in the study. The answers given to these questions were most significant for the information they provided on the influence of control factors on executive behavior. The questions have been analyzed on a combined basis because of overlap in the questions and in the answers that were obtained.

The most frequently mentioned answer to the pricing questions was to be competitive (Table 16). The relationship between this answer and the merchandising control factors stressed in question 3 was not particularly strong. To be competitive was not among the most frequent answers to question 3, but it was mentioned by six executives and by nine other executives in question 1. Some of the other responses to questions 8 and 9 reveal stronger ties between executive action and merchandising performance measurement systems.

The second most frequently mentioned pricing procedure was the practice of using higher markon percentages on confined, owned, or imported merchandise. This appears to be related to the desire of department stores to be competitive on identifiable merchandise even if they obtain lower than average margins on these items. In order to improve their overall markon and gross margin percentages they use higher markon percentages on confined,

TABLE 16

PRICING POLICIES AND METHODS OF MERCHANDISING
EXECUTIVES IN ELEVEN DEPARTMENT
STORE ORGANIZATIONS

Ranking	Executive Comments	Number of Mentions
1	Be competitive	63
2	Use higher markon percentages on confined, owned, or imported merchandise	55
3	Use a markon percentage that is traditional with the type of merchandise	51
4	Follow the manufacturer's suggested list	45
5	Try to obtain a planned average markon percentage	25
6	Price the item according to its' worth	16
7	Price according to what the traffic will bear	15
8	If an item doesn't have an average markon percentage or better we do not buy it	14
9	Follow fair traded prices	12
10	Will use lower markon percentage if there is prospect of high turn	11
11	Price to points and lines	11
12	Price secondary to fashion	10
13	Follow markup chart	10
14	Lead competitors on price	9
15	Give value	8
16	Variable markon percentages are used	7
17	Markon percentage is increasing	7
18	Some items carried at low markon and lose money on them	7

TABLE 16 - Continued

Ranking	Executive Comments	Number of Mentions
19	Consider transportation to arrive at a landed cost	6
20	Bring item in at high markon percentage and if it sells we take an ad and have a good price comparison at a lower price	5
21	Use fair prices	5
22	Trade up to higher priced merchandise	4
23	Since we can't raise prices on competitive items, we may ask manufacturer to raise the suggested list to allow more markon percentage. Other firms will follow the manufacturer where they might not follow one store in its quest for a higher markon percentage.	4
24	Price to sell	3
25	Price to produce a good net profit	3
26	Use a reasonable margin	2
27	Use moderate price lines	2
28	Price to get volume	2
29	Price to income of community	2
30	Have manufacturer redesign to allow better markon percentage	2
31	Negotiate for better prices	2
32	Do not buy volume items for less than average markon percentage	2
33	Push high markon merchandise	2
34	List prices are meaningless	2
35	Buy end-of-season merchandise and bring it in early at regular markon percentage	2

TABLE 16 - <u>Continued</u>

Ranking	Executive Comments	Number of Mentions
36	Use higher markon percentage on higher priced merchandise	1
37	Selection of merchandise influences the markon percentage achieved	1
38	Do not use 98 cent endings; class versus mass appeal	1
39	Use several price lines	1
40	Volume doesn't make up for low markon percentages	1
41	Do not promote low markon percentage merchandise	1
42	Do sell items below cost; once we own it costs are sunk	1
43	Inflation makes it difficult to maintain price points and manufacturers have to cut quality to do so	1
44	When pricing who is to say what the value is?	1
45	We don't know where the top markon percentage is yet	1
46	Balancing markon percentages against volume is too difficult	1
47	The public can and will pay higher markon percentages	1
48	Buy close outs	1

private label, and imported merchandise where customers lack pricing knowledge. This practice of using higher markon percentages on "blind" items would appear to be a direct result of the stress on gross margin and markon as merchandising control factors.

The importance of the markon percentage as a pricing procedure is shown by the forty-nine executives who mentioned it in response to the pricing questions. The high ranking of this factor among the answers to the pricing questions would seem to be a function of the stress it receives as a control factor and to its importance in the retail system of merchandise accounting. This system focuses on the production of a planned gross margin percentage. Markon percentages are therefore useful control devices to assure that the desired gross margin will be attained. The influence of the accounting system is shown by one buyer who indicated that the accounting system used by his buying group made it difficult to sell low markon merchandise (Table 17). The fact that twenty-five other executives expressed a need to achieve a planned markon or gross margin percentage shows that executive action is influenced by the accounting system. The importance of the markon percentage was also strengthened by the practice of requiring the buyers to put the planned markon percentage on all orders so that the merchandise manager could check the markon when he signed the orders.

The influence of the markon percentage on purchasing decisions is shown by fourteen buyers who indicated that if an item did not allow an average or better markon they did not buy it. Several indicated that

TABLE 17

SUGGESTED IMPROVEMENTS IN OPERATING PROCEDURES
MENTIONED BY MERCHANDISING EXECUTIVES IN
ELEVEN DEPARTMENT STORE ORGANIZATIONS

Ranking	Suggested Changes	Number of Mentions
1	Faster and more detailed merchandising reports	19
2	Electronic inventory control	17
3	Make receiving and marking more efficient	13
4	Simplify paper work and accounting procedures	10
5	More help to keep records	8
6	Better warehousing	7
7	More space for merchandise display	6
8	Separation of buying from selling activities	6
9	More efficient stock control	5
10	Improved advertising	5
11	Improved communications between branches and buyers	5
12	Department package wrapping	4
13	More automation	4
14	More research	3
15	More turnover	3
16	Better physical handling of merchandise	3
17	Fewer bosses	3

TABLE 17–<u>Continued</u>

Ranking	Suggested Changes	Number of Mentions
18	Better communications between buyers, warehouse and receiving room	3
19	Get merchandise on floor faster	2
20	Simplified transfer of merchandise between stores	2
21	Pay sales help higher wages	2
22	Better display and presentation of merchandise	2
23	More open to buy flexibility	2
24	Simplify purchase form	2
25	Increased stock room space and help	2
26	Need traffic manager to route inbound freight	1
27	Decentralized buying yields higher prices for merchandise	1
28	Need standardized boxes for merchandise to simplify handling and storage	1
29	Need standardized manufacturer's invoices	1
30	Prefer department rent on a ft^2 basis rather than on sales	1
31	Questions value of sales person wrapping	1
32	More clearly defined buyer responsibilities	1
33	Buy basic items centrally	1
34	Broader lines of merchandise	1
35	More centralization of management	1

TABLE 17 – Continued

Ranking	Suggested Changes	Number of Mentions
36	Divisional merchandising managers may not be needed	1
37	Better packaging and preticketing	1
38	Classify credit customer and appeal by direct mail	1
39	Buying group accounting system makes it hard to sell low markon items	1
40	Growth has brought bureaucracy and rigidities	1
41	Improved marking procedures	1
42	More flexibility in moving sales help around store	1
43	More enthusiastic buyers	1
44	Increased emphasis on fashion image	1
45	Remodel the store	1
46	Improve hours and working conditions for employees	1
47	Buy fewer foreign goods	1
48	Eliminate over lap between accounting and merchandising divisions	1
49	More premarking of merchandise	1
50	Too much control from the top	1
51	More exchange of merchandising information between stores	1
52	Simplify sales transaction	1
53	Allocate transport costs on sales rather than on use	1

they wanted a high profit as a percent of sales and low markon merchandise would not help them produce it. The markon percentage also influences advertising decisions and one buyer said that low markon merchandise was not promoted. Three other buyers said that they dropped low markon merchandise.

Other answers that show the influence of the markon percentage on executive action include two buyers who do not buy volume items at less than average markon percentages and two others who push high markon merchandise. Fifteen buyers indicated that they try to get all "the traffic will bear." One other buyer said that department stores had not approached an upper limit as far as markon percentage was concerned. The fact that ten buyers used markon charts shows the extent to which the markon percentage has been built into the merchandising system. One buyer indicated that the selection of merchandise was directly related to the markon percentage that was achieved. Another scheme that was used to raise the markon percentage was to buy end-of-season merchandise at special prices and bring it into the store early and sell it at regular prices. Buyers were also not above having the manufacturer redesign a product to allow a higher markon percentage or to ask that the manufacturer raise the suggested list price to allow more markon.

Summary of Data on Executive Behavior

The survey data provided strong support for the proposition that executive behavior is influenced by the merchandising control system. This was shown by the frequent mentioning of control factors in response to a question on job responsibilities and by the

quest for higher markon percentages as the result of increased expenses. The strongest supporting evidence was provided by the executives' answers to questions 8 and 9 where a wide variety of merchandising decisions depended on the size of the markon percentage. The results of this study have furnished extensive support for the belief that the performance measurement system directly affected the behavior of merchandising executives.

Sales and Profit Orientations and Executive Action

Information from questions 1, 4, 8, and 9 has indicated that executive behavior appears to be influenced by the merchandise control system. The possibility that sales and profit oriented executives may react differently to the control system will be examined using this same data tabulated in a different manner. Separate groups of executives with sales and profit orientations were selected on the basis of answers given to question 3. The answers to questions 1, 4, 8, and 9 were then compiled for the two groups.

In general the answers given to question 1 showed that merchandising control factors have been internalized to the point where some executives consider them their most important duties and responsibilities. A comparison of the answers of sales and profit oriented executives indicates that these executives also follow this pattern (Table 18). Both groups mentioned as important duties five of the most frequently mentioned control factors given in response to question 3. There does not appear to be any significant

TABLE 18

PRIMARY RESPONSIBILITIES OF SALES AND PROFIT
ORIENTED MERCHANDISING EXECUTIVES IN
ELEVEN DEPARTMENT STORE ORGANIZATIONS

Rank-ing	Sales Oriented Executives [a] (30)		Profit Oriented Executives [a] (13)	
	Duties [b]	Number of Mentions	Duties [b]	Number of Mentions
1	Select merchandise	17	Select merchandise	9
2	Training and super-vision of subordinates	14	Training and super-vision of subordinates	9
3	Achieve sales volume	7	Merchandise promotion	5
4	Make a profit	7	Make a profit	4
5	Stock turnover	7	Stock control	4
6	Markon percentage	6	Maintain and develop store image	3
7	Stock control	5	Merchandise display	3
8	Maintain store image	5	Stimulate subordinates	2
9	Selection of good help	5	Sell clerks on merchan-dise	2
10	Control markdowns	5	Effective presentation of merchandise to customers	2
11	Pass information to subordinates	4	Sell merchandise to customers	2
12	Merchandise display	4	Stock turnover	1
13	Timing of purchases	4	Control markdowns	1
14	Keep basics in stock	4	Selection of good help	1
15	Merchandise promotion	4	Employee relations	1
16	Plan and control the investment of company's money	4	Pass information to subordinates	1
17	Unit inventory control	3	Work with suppliers on items	1
18	Customer service	3	Customer service	1
19	Gross margin percentage	2	Gross margin percentage	1

[a] Executives selected on the basis of answers given to question 3
[b] Data on duties is from question 1

difference in the emphasis on the control factors between the sales
and profit oriented groups of executives.

In question 4 the first five factors mentioned by the sales
group were the same as those mentioned by the profit group (Table
19). The most frequent response of both groups was that a higher
markon percentage was needed. The sales group supported this
need with a second answer stating that expenses were rising. The
profit oriented executives had more emphasis on profit in second
place and rising expenses was in third place. The answers to this
question also indicate that sales and profit oriented executives
agreed on changes in performance factors except for minor switches
in relative rank positions.

The most comprehensive survey data on the influence of the
control system on executive behavior came from the executives'
answers to the pricing questions. These answers have also been
tabulated into two groups representing profit and sales oriented
executives (Table 20). A careful examination of the answers given
by the executives shows that both groups gave virtually the same
answers to the pricing questions. In fact, sixteen out of the first
eighteen answers were mentioned by both groups and the rankings
of eight factors were identical.

One difference that did appear was that the profit oriented
executives were somewhat more prone to use higher markon per-
centages than the sales group. The profit group had "use higher
markon percentages on confined, owned, or imported goods" in
second place and with the sales group this answer was in fourth
place. The profit group had price to "what the traffic will bear" in

TABLE 19

CHANGES IN PERFORMANCE MEASURES REPORTED BY SALES AND PROFIT ORIENTED MERCHANDISING EXECUTIVES IN ELEVEN DEPARTMENT STORE ORGANIZATIONS

Rankings	Sales Oriented Executives[a] (30)		Profit Oriented Executives (13)	
	Performance Measures[b]	Number of Mentions	Performance Measures	Number of Mentions
1	Higher markon percentage needed	12	Higher markon percentage needed	6
2	Expense percentage rising	8	More emphasis on profit	3
3	More fashion	5	Expense percentage rising	2
4	Trade up to better merchandise	5	Trade up to better merchandise	2
5	More emphasis on profit	3	More fashion	1

[a]Executives selected on the basis of answers to question 3
[b]Data on changes in performance measures from question 4

TABLE 20

PRICING POLICIES OF SALES AND PROFIT ORIENTED MERCHANDISING EXECUTIVES
IN ELEVEN DEPARTMENT STORE ORGANIZATIONS

Ranking	Sales Oriented Executives[a] (30)		Profit Oriented Executives (13)	
	Pricing Policies[b]	Number of Mentions	Pricing Policies	Number of Mentions
1	Be competitive	20	Be competitive	9
2	Use traditional markon percentage	17	Use higher markon percentage on confined, owned, or imported merchandise	9
3	Use manufacturer's suggested list	13	Use manufacturer's suggested list	6
4	Use higher markon percentage on confined, owned, or imported merchandise	11	Use traditional markon percentage	5
5	Use fair prices	5	Strive for planned markon or gross margin percentage	5
6	If an item does not have an average markon percentage or better we do not buy it	4	If an item does not have an average markon percentage or better we do not buy it	3
7	Follow industry practice	4	What the traffic will bear	3

[a]Sales and profit oriented executives selected on the basis of answers given to question 3.
[b]Data on price policies is from answers given to questions 8 and 9.

TABLE 20 - Continued

Ranking	Sales Oriented Executives[a] (30)		Profit Oriented Executives (13)	
	Pricing Policies	Number of Mentions	Pricing Policies	Number of Mentions
8	Follow industry practice	4	Variable markon percentages are used	3
9	Strive for planned markon or gross margin percentage	3	Lead competitors on price	3
10	Follow fair trade prices	3	Follow fair trade prices	3
11	Price according to the worth of the item	3	Price according to the worth of the item	3
12	Markon percentage is increasing	3	Use fair prices	1
13	Trading up to higher priced merchandise	3	Price secondary to fashion	1
14	Give value	3	Give value	1
15	Variable markon percentages are used	2	Follow industry practice	1
16	Lead competitors on price	2	Price to sell	1
17	Follow markon chart	2	Follow markon chart	1
18	Consider inbound transportation	2	Consider inbound transportation	1

seventh place and the sales group had it in twenty-first place.
Aside from these minor differences sales and profit oriented
executives gave virtually identical responses.

It is possible that sales and profit oriented executives react
differently to the merchandise control system used in department
stores, but this study did not reveal any evidence to support this
hypothesis. The data that was available suggests that both groups
use the same factors and react in the same ways. This may mean
that sales and profits are so closely related in the minds of
department store executives that analyzing responses on a separate
basis is meaningless.

Trading Up and Executive Action

In response to questions 8 and 9 several buyers mentioned
that part of their pricing policy was to trade up to higher priced
merchandise. Trading up was also mentioned as a response to
questions 1, 3, 4, and 5 and it may represent a desire to upgrade
the quality of department store merchandise. What may be more
likely is that this simply represents a desire to obtain the higher
markon percentages that are available on higher priced merchan-
dise. The desire for higher markon percentages seems to be a
reasonable explanation for trading up considering the stress placed
on markon and gross margin by the retail system of merchandise
accounting.

The stress on trading up raises the question whether the
executives emphasizing this factor believe that expenses are a
function of prices. If expenses change with prices, then higher

prices would mean higher expense ratios and under these conditions the only reason to trade up would be to change the merchandise mix. If expenses are relatively fixed, however, trading up to higher priced merchandise could produce higher profits.

The attitudes of the executives who mentioned trading up were analyzed by sorting the answers these executives gave to question 11. This question asked the executives if they considered expenses when setting prices. Forty-nine percent of all the executives interviewed said they considered expenses when pricing, whereas only 35 percent of the executives that stressed trading up said they considered expenses. This lack of concern for expenses among merchandising executives suggests that expenses and prices are relatively independent. The statement by one executive that a consideration of expenses would lead to noncompetitive prices (Table 15) also supports this appraisal.

Even among those who said they considered expenses when pricing, expenses were handled in a superficial manner. The most frequent comment in response to this question was a statement that expenses were known on a percentage basis and were included as part of the markon percentage. Expenses were not identified by item and only in unusual cases was any consideration given to their influence on prices. In several of the companies in the study, selling expenses were under the control of sales supervisors. Under these circumstances the buyers probably would be even less concerned with the effect of selling expenses on prices. In general there was no indication that the executives gave much thought to

the possibility that higher priced merchandise would cost more to sell.

Markdowns and Executive Behavior

The importance of markdowns in department store operations was vividly illustrated by one of the buyers interviewed in the study. He referred to a company that was experiencing financial troubles and indicated that part of the problem was that management had instructed the buyers to keep markdowns within a certain fixed percentage. This was accomplished by simply not taking as many markdowns as perhaps were needed. Stock that should have been cleared out was kept in the store with the result that when it was finally sold, extremely large markdowns were required.

Most of the buyers in this study realized the necessity of taking markdowns quickly. They looked upon merchandise that had to be marked down as an example of a buying error. Their attitude was to take a fairly substantial initial markdown to move the items out so that the money invested in the goods could be reinvested in new merchandise that might offer greater sales potential. Additional data on the influence of markdowns on executive behavior was obtained from the second part of question 9.

This question asked the executives how they arrived at prices for sale merchandise (Table 21). It was apparent that there were basically three types of merchandise used for sales. First there were items bought at special prices. This merchandise might carry lower, regular, or higher markons depending on acquisition cost. A second type of merchandise was the standard items that the store

TABLE 21

PRICE POLICIES FOR SALE MERCHANDISE MENTIONED BY
EXECUTIVES FROM ELEVEN DEPARTMENT
STORE ORGANIZATIONS

Ranking	Pricing Policies	Number of Mentions
1	Sale merchandise bought cheaper	67
2	Smaller markon percentage used on sale merchandise	57
3	For clearance use one third off	29
4	For clearance use one half off	19
5	Use regular or higher markon percentage for sales	16
6	Buy from regular suppliers for sales	8
7	What is needed to sell the item	6
8	First markdown is the cheapest	6
9	Try not to sell below cost	4
10	Follow standard dollar markdowns	2
11	Twenty percent or more off for clearance	2
12	Sell at cost	1

carried at all times which were occasionally marked down for sales. Several buyers said that they did not think that this was a good policy since the merchandise could be sold without any trouble at standard markon percentages. A third type of sale merchandise was clearance items which for one reason or another had not been sold. Markdowns were used to sell this merchandise and twenty-nine buyers indicated that they started with a 33 percent reduction. Another group of buyers started with 50 percent and two buyers used an initial markdown of 20 percent.

A question might be raised concerning the buyers' use of advertising as an alternative to taking markdowns. Buyers appeared to be very careful in the use of their limited advertising funds and they attempted to pick the best possible items for promotions. They typically spent a great deal of time looking for items for ads and the items selected normally had some special features or fashion elements and frequently represented a special price. One popular type of item was a special purchase of a well known brand. This type of item became an easily identifiable value to the customer. Promotions did not appear to be used to encourage the sale of slow moving merchandise. Items were typically promoted when they first came in and if they did not sell, markdowns were then used to move the merchandise out. Ads were sometimes used in conjunction with markdowns of staple or clearance merchandise, but ads and markdowns did not appear to be used as substitutes for each other. It appeared that in general the buyers preferred markdowns to clear out slow moving merchandise and used ads for new and special purchase merchandise.

Other Research Results

This section will discuss the survey data that pertains to some of the general problems related to the implementation of merchandise control systems. The data that is used is drawn from some of the questions that have been discussed earlier and from the unsolicited remarks recorded during the executive interviews.

Research Data Concerned with Stock Turnover

It was clear from the survey data that stock turnover was only of secondary importance to merchandising executives in department store organizations. Although stock turnover appeared as an answer to questions 1, 3, 4, 5, 6, 7, 8, and 9 it received so few mentions it could not be considered an essential control factor. In question 1 concerning duties and responsibilities, turnover ranked fifteenth among the answers given and it was mentioned by only 12 executives. In question 3, which was the most productive survey question concerning control factors, stock turnover ranked seventh and was mentioned by only 23 of the 111 executives interviewed in the study.

Among changes in performance measures recorded in question 4, "more emphasis on stock turnover" ranked sixth with nine mentions. Question 5 was concerned with the executives' interpretation of company goals. Stock turnover ranked twentieth among the answers given to this question with only four mentions. In question 6 stock turnover did somewhat better and it was the second most frequently stressed factor mentioned by general merchandising managers. With divisional managers it ranked seventh and it was

nineteenth among factors stressed by buyers to their subordinates.

In question 7, the executives were asked to indicate their preferences between two paired performance factors. Stock turnover was matched with sales growth, gross margin percentage, and with the net profit ratio and it was not preferred by the executives in any of the pairings. In fact, gross margin percentage and the net profit ratio were significantly preferred to stock turnover.

The pricing questions and the unsolicited remarks provided some support for stock turnover as an important control factor. Nine buyers in budget and small appliance departments said that they would buy low markon merchandise if the item had a potential for high turnover. One other buyer said that volume could not make up for low markon and he preferred the markon percentage to turnover as a guide in making his merchandising decisions. Among the miscellaneous remarks, nine merchandising executives said that turnover is where you make your money (Table 14). One indicated that competitors prevented increases in markon percentages and that more turnover was the only way to increase profits. Several other buyers indicated that the "dissection" reports were important profit tools because they allowed the buyers to identify high turnover merchandise areas so that additional money could be invested in these areas. The fact that nineteen executives expressed a desire for faster and more detailed merchandising reports (Table 17) suggests that these executives were also concerned with the stock turnover rate of their merchandise. It would appear that

a small minority of the merchandising executives interviewed in this study believed that stock turnover was an important control factor, but to most executives it was only a vague concept of secondary consequence.

Additional Pricing Data

The pricing questions that were included in this study were designed to study markon procedures and to determine if the pricing procedures suggested by MMA were being employed. The study was not designed to obtain data on the competitive pricing practices of department store firms. However, a few responses from the pricing questions deserve consideration.

There was considerable interest among merchandise executives interviewed in this study to follow manufacturers' suggested list prices. This may reflect an interest in obtaining the usually good markon percentage suggested by the manufacturer or it may reflect a tacit understanding among the stores to reduce price competition. Additional information on the use of suggested list prices was provided by several executives who said that in some cases they ask the manufacturer to raise the suggested list price on an item to allow higher markon percentages. They pointed out that other firms would follow changes in the manufacturer's suggested list where they might not follow an individual store in its quest for a higher markon percentage. Several other remarks made by the merchandising executives also implied that some department stores did not try to compete on a price basis. This

limited data on inter-firm pricing practices would appear to suggest that pricing is not an entirely independent activity.

Qualitative Merchandising Control Factors

One of the main uses of merchandising control factors is to measure the achievement of company goals. Quantitative control factors such as sales, profits, markdowns, and stock turnover would appear fairly well suited to measure the achievement of company financial objectives. Many of the responsibilities mentioned by merchandising executives as part of their jobs, however, do not lend themselves to evaluation by quantitative control techniques.

Question 1 asked the executives to name their most important duties and responsibilities and the most frequently mentioned duty was the selection of merchandise (Table 1?). Successful performance of this job can be partially evaluated by subsequent sales and markdown records, but these will not tell how well the buyer is getting along with his suppliers or how well he is covering his market. Training and supervision of subordinates was a frequently mentioned executive responsibility that also does not lend itself to evaluation by quantitative techniques.

Other responsibilities mentioned in question 1 that require subjective evaluation include sales planning, store image, selection and scheduling of help, display, fashion sense, customer service, employee relations, leadership, and stimulation of subordinates. The many factors that have been mentioned by merchandising executives which require subjective evaluation suggest

that quantitative control factors cannot be used as the sole measure of the performance of merchandising executives.

Time Available for Quantitative Control Procedures

The number of executive working hours devoted to the use of quantitative control devices can be approximated by analyzing the executives' answers to question 2 (Table 22). This question asked the executives how they divided their time among their present activities. The largest proportion of the merchandising executives' time (32 percent) was spent supervising selling activities in the stores. This reflects the strong desire of merchandising people to find out what is happening on the selling floors. It also indicates the amount of control some buyers still exert over selling activities.

Twenty-four percent of the executives' time was devoted to merchandise selection and this was about equally divided between buying trips and salesmen's store calls. Meetings, advertising coordination, telephoning, inventory, and other miscellaneous activities accounted for 21 percent of the available time. The remaining 22 percent of the executives' working hours were devoted to office work concerned with writing orders, making plans, pricing merchandising, and reviewing item performance. It would appear that merchandising personnel devote relatively small amounts of their time to the quantitative decision process advocated in the discussion on MMA. Most of the executives' time is presently spent acquiring merchandise and supervising its

TABLE 22

TIME ALLOCATIONS OF MERCHANDISING EXECUTIVES
IN ELEVEN DEPARTMENT STORE ORGANIZATIONS

Executive Functions	Average Hours Per Week	Percentage of Total Hours
Direct supervision of merchandising activities in the stores	14.9	31.7
Office work; writing orders, planning and reviewing item performance	10.4	22.2
Buying trips	5.9	12.5
Meeting salesmen in own office	5.6	11.9
Meetings with subordinates	2.6	5.4
Telephone time	2.5	5.3
Advertising; planning and coordination	2.2	4.7
Meetings with superiors	1.8	3.9
Checking inventories and receipts	0.6	1.3
Other activities	0.5	1.0
Totals	48.4	99.9

sale and not in manipulating prices and margins to maximize contribution in relation to inventory investment.

Suggested Improvements in Merchandising Control Systems

Question 15 was included in the questionnaire to solicit the executives' ideas on how to improve the present merchandising control systems. Of the 111 executives interviewed, 86 felt that changes could be made to increase efficiency. Careful study of the suggested responses shows that most proposed changes were in operating procedures rather than in the merchandising control system itself (Table 17).

The most frequently mentioned changes were related to stock control. Nineteen executives expressed a desire for faster and more detailed merchandising reports. Seventeen others mentioned a need for electronic inventory control and five buyers wanted more efficient stock control. A second problem area appeared to be the physical handling of the merchandise. Thirteen executives suggested that receiving and marking could be made more efficient and seven others wanted better warehousing. Several buyers said that the physical handling needed improvement and two buyers thought that merchandise could be moved to the floor faster. One buyer thought the problem of moving goods through the warehouse and receiving rooms was due to poor communications.

Several answers to question 15 showed some dissatisfaction with the organizational relationships between the buyer and his superiors. Three buyers suggested that fewer bosses would

increase efficiency. Other buyers said they would like more clearly defined responsibilities and less control from the top. One executive went so far as to indicate that divisional merchandising managers were not needed.

The growth of branch store operations among department stores is increasing the work load of the buyers. Six buyers suggested increased separation of buying from selling was needed to ease the work load on the buyers. Typically this would mean hiring sales supervisors for departments located in the main store which are currently being managed by the buyer. Two of the firms in the study had achieved considerable separation of buying from selling and several of the other stores were moving in this direction.

Most of the suggestions to improve merchandising operations made by the executives interviewed in this study were limited to operational changes. Buyers were concerned with getting better handling for their merchandise and in receiving faster and more detailed merchandising reports. Very little attention was directed at changing the control system istelf.

CHAPTER V

CONCLUSIONS

This final chapter will discuss the agreement between the survey data and the working hypotheses. It will also suggest additional conclusions that can be drawn from the data collected from the merchandising executives. The chapter will include a discussion of proposals for further research and it will end with a summary of the results of the study.

Evaluation of the Hypotheses

Hypothesis 1

Hypothesis 1 states that different firms strive to achieve similar goals while using substantially different measures of merchandising performance. The first part of this hypothesis indicating that different firms strive for similar goals was supported by the survey data presented in Figure 1. The second part of the hypothesis concerned with the use of different control factors in different firms was not substantiated by the survey results. Instead of differences, the information presented in Figures 2 and 3 shows fairly close agreement among the firms concerning the performance factors that were being used to control merchandising operations. The survey data failed to support this hypothesis and the hypothesis is rejected.

Hypothesis 2

This hypothesis states that merchandising executives at higher levels tend to use broad long run performance measures, such as return on capital, whereas, merchandising executives at lower levels tend to use measures such as expense and markon percentages. Survey data presented in Figure 4 and Tables 3 and 4 failed to support this hypothesis. The data showed instead that the three levels of merchandising executives exhibited fairly close agreement concerning the use of merchandising control factors in department stores. Since the survey data failed to support this hypothesis, the hypothesis is rejected.

Hypothesis 3

Hypothesis 3 states that department stores are currently stressing different measures of merchandising performance than have been emphasized in the past. This hypothesis was tested with data gathered from a question which asked executives if they had observed any changes in performance measures (Table 9). While a majority of those interviewed believed that changes had occurred, the only response that received a significant number of mentions was that higher markon percentages were needed. It is difficult to decide whether this represents an actual change in emphasis or just a change in the amount of markon that is acceptable. The frequent mention of increased expenses suggests that the quest for higher markon percentages was only a change in the amount of markon that was needed. The survey data were inconclusive with regard to hypothesis 3 and this hypothesis

is neither accepted nor rejected. It would appear that the only accurate procedure to test this hypothesis would be the use of time series data.

Hypothesis 4

This hypothesis states that the methods used to pay merchandising personnel influence the performance measures that are used by these executives. The hypothesis is supported by survey data showing close agreement between the factors used to calculate executive bonuses and the control factors used by these executives (Tables 3 and 10). The influence of the factors used in the salary plans on the executives rankings of profit and gross margin also supported the hypothesis (Table 11). In addition, answers given to question 13 on methods to improve the salary system showed that buyers' actions were influenced by the salary system (Table 12). Based on the data shown in these four tables, hypothesis 4 is accepted.

Hypothesis 5

Hypothesis 5 states that firms with centralized rather than decentralized buying are more apt to use the more recently developed performance measures such as controllable profits. Data from the survey indicated that no major differences existed between the one decentralized company and the other firms in the use of merchandising control factors. With only one decentralized firm included in the study there was not enough data to adequately test this hypothesis. Therefore, the hypothesis is neither accepted nor rejected.

Hypothesis 6

This hypothesis states that department stores are currently

making only limited use of some of the more recently developed

measures of merchandising performance that emphasize returns

on capital and the use of incremental costs to set prices. The

hypothesis is supported by the almost complete absence of these

control factors in the executives' answers to questions 1, 3, 4, 5,

6, 8, 9, and 11 (Tables 1, 3, 4, 9, 13, 15, and 16). Also in

question 7 the executives were asked to choose between pairs of

performance measures and the executives preferred traditional

performance measures in six out of seven pairings (Table 2). The

survey data in these eight tables sustains hypothesis 6 and the

hypothesis is accepted.

Other Conclusions of the Study

Control Factors and Executive Behavior

The survey data supports the proposition that the use of

particular merchandising control factors by department stores

directly influences the behavior of merchandise executives. This

relationship was shown particularly well by the activities of the

buyers in response to the emphasis on markon and gross margin

percentages. So much interest in markon percentages was gen-

erated that the amount of markon available determined which items

were bought, promoted, or eliminated (Table 16). The drive for

markon prompted fifty-five buyers to use higher markon percent-

ages on confined, imported, or private label merchandise where

customers lacked pricing knowledge. The effects of stressing markon were also reflected by the buyers who had items redesigned to allow higher markon percentages and other buyers who asked manufacturers to raise suggested list prices so that higher markon percentages would be obtained. The survey data left no doubt that control criteria influenced the every day operations of merchandising executives.

Importance of Stock Turnover

This study has shown that the stock turnover factor was only of secondary importance to merchandising executives in the department stores included in this study. This conclusion is substantiated by the low ranking of stock turnover among the answers given to all of the survey questions. When stock turnover was matched directly with other control factors in question 7, stock turnover was not preferred on a total basis in any of the pairings. The subordinate status of stock turnover was also shown by the fact that when department stores were confronted by higher expenses the great majority of executives emphasized higher markon percentages rather than increased stock turnover. The typical attitude was shown by the remarks of one buyer who said he found stock turnover too difficult to use in making merchandising decisions. He felt that the markon percentage was more dependable than stock turnover in controlling merchandising operations.

Executives are Satisfied with the Present System

Merchandising executives appear to be well satisfied with the present system of merchandising control. When they were

asked to suggest changes to improve the system almost all of the answers called for improved stock control methods and for better physical handling of the merchandise. None of the executives suggested a change to merchandising management accounting or to the use of the ratio of contribution profits to inventory investment. Despite the widespread discussion of MMA for the past seven years there was no evidence that any of the ideas from MMA have been accepted by merchandising executives in department stores. It would also appear that the retail system of merchandise accounting is firmly embedded in the thinking of department store executives and that any basic changes in the system are likely to be accepted slowly.

Using Quantitative Control Factors

Quantitative methods of measuring merchandising performance do not accurately measure all the duties and responsibilities of merchandising executives. Subjective evaluation is still needed to evaluate an executive's performance in the selection and training of help, in the development of the store image, in the maintenance of supplier relations, and in the many other duties merchandising personnel are called on to perform. Quantitative control factors are a useful set of tools and gauges that can be used to guide and evaluate merchandising operations. They are not ends in themselves, but they do provide a measure of how well an executive is achieving the financial goals of the firm.

Recommendations for Further Research

Stock Turnover and Profits

The fact that stock turnover was of secondary importance to merchandising executives suggests that additional research is needed to determine exactly how this factor influences the profits of department stores. Department store executives' preoccupation with the markon percentage may be entirely justified, but increased emphasis on stock turnover might increase the rate of return on capital for the firm. If additional data were available that showed how stock turnover influenced profits, it is possible that stock turnover might become more important as a merchandising factor. It is entirely possible that stock turnover is not important to the successful operation of department stores, but the validity of this statement should be established by research rather than by the accidental design of the retail system of merchandise accounting.

Organizational Problems

The trend towards the division of buying from selling activities in department stores suggests that there is a need for research into the role and duties of buyer supervisors. The statements of some buyers that they received too much supervision indicates that more attention should be centered on the type of controls that are needed. The fact that seven of the firms in this study were able to operate with only one level of merchandising supervision above the buyer shows that this change in organization is feasible.

Physical Handling of the Merchandise

The executives interviewed expressed an almost universal concern for improved methods of handling merchandise. The executives did not like present inventory control procedures, warehousing methods, or the poor communications between the receiving room and the selling floor. The wide variety of bitter remarks made about the physical handling of merchandise indicates that department stores could gain substantial benefits from additional research on these problems.

Summary

This research project was designed to study the utilization of quantitative merchandising control factors in department stores. It was expected that the investigation would show that different performance measures were being used by different firms and that executives at different job levels emphasize separate factors. It was found, however, that the department stores in this study all used the same control factors and the factors were employed at all three levels of management studied. Differences in the type of merchandise and the sex of the buyers had little influence on the use of merchandising control factors.

It was anticipated that the factors emphasized by the salary system would influence executive behavior and the research data supported this hypothesis. It was also expected that the newer control factors described earlier would not be widely used by merchandising executives. The study showed the new measures were not used at all and that traditional control factors dominated the

thinking of merchandising executives. The data revealed an almost universal reliance on the markon percentage as the most discriminating guide to executive action. Even though the executives said that profits and sales volume were important, the markon percent- was clearly one of the most frequently used factors in making merchandising decisions. The size of the markon percentage determined what items were bought, what items were promoted, and what items were dropped. The markon percentage also influenced the proportions of private-label and imported merchandise that was included in the merchandise mix. Stock turnover, in comparison, was almost completely ignored in making merchandising decisions. The possibility that sales volume was related to price was typically not considered.

The widespread use of traditional merchandising control factors in department stores may indicate that these factors are the most important considerations in the achievement of retail profit goals. This study would suggest that conformity in the use of these factors may be related to the organization of the retail system of merchandise accounting. There is not enough information available, however, to draw a firm conclusion on this issue. It should, therefore, be the objective of future research to identify precisely the role and importance of all merchandising performance factors. Only when the merchandising executive knows the relationship between the control factors and his company's profit objectives, will he be able to produce an optimum solution to the problem of how to effectively utilize quantitative decision criteria.

APPENDIX A

SURVEY QUESTIONNAIRE
METHODS OF MEASURING MERCHANDISING PERFORMANCE
A STUDY SPONSORED BY NRMA

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CONFIDENTIAL EXECUTIVE INTERVIEW SCHEDULE

Name of person
interviewed _____ Position _____

Company _____ Location _____

1. WHAT WOULD YOU SAY ARE THE MOST IMPORTANT DUTIES
   AND RESPONSIBILITIES OF YOUR JOB?

a. _____ e. _____

b. _____ f. _____

c. _____ g. _____

d. _____ h. _____

2. ABOUT HOW MANY HOURS DO YOU PUT IN ON YOUR JOB
   EACH WEEK? _____

   How is this time divided between your different responsibilities?

a. ____ Direct supervision of activities in the stores

b. ____ Office calls by salesmen

c. ____ Buying trips

d. ____ Working on newspaper advertising

e. ____ Meetings with superiors

f. ____ Meetings with subordinates

g. ____ Office work concerned with budgets, pricing, and reviewing
   item performance

h. ____ Telephone conversations with suppliers

i. ____ Travel between stores and offices

j. ____ Other _____

k. _____

l. _____

SURVEY QUESTIONNAIRE - PAGE 2

3. WHEN YOU TALK WITH YOUR BOSS, WHAT THINGS DOES HE REPEATEDLY STRESS AS BEING IMPORTANT TO SUCCESS IN YOUR JOB?

a. _____ e. _____

b. _____ f. _____

c. _____ g. _____

d. _____ h. _____

4. HAVE PERFORMANCE MEASURES BEEN STRESSED IN THE PAST BY YOUR COMPANY THAT ARE DIFFERENT FROM THOSE BEING EMPHASIZED TODAY?

No _____ Yes _____ Which? _____

_____

_____

5. WHAT DO YOU FEEL ARE THE THREE OR FOUR MOST IMPORTANT OVERALL OBJECTIVES OF YOUR COMPANY?

a. _____ d. _____

b. _____ e. _____

c. _____ f. _____

6. WHEN YOU TALK TO THE PEOPLE WHO WORK UNDER YOUR SUPERVISION, WHAT PERFORMANCE FACTORS DO YOU EMPHASIZE?

a. _____ e. _____

b. _____ f. _____

c. _____ g. _____

d. _____ h. _____

SURVEY QUESTIONNAIRE - PAGE 3

7. ASSUME THAT YOU HAVE THE JOB OF EVALUATING THE
PERFORMANCE OF ONE OF YOUR COMPETITORS. WHICH
RATIO IN EACH OF THE FOLLOWING PAIRS OF PERFORMANCE
MEASURES WOULD BE THE MOST VALUABLE FOR THIS
EVALUATION?

a. ____ Realized gross margin   Net profits as a percent of sales
         percentage

b. ____ Net profits per square   Net profits per dollar of inventory
         foot of selling area

c. ____ Sales as a percent of   Stock turnover
         previous year

d. ____ Net profits as a percent   Net profits as a percent of invested
         of sales   capital

e. ____ Realized gross margin   Stock turnover
         percentage

f. ____ Net profits per dollar   Controllable profits per dollar
         of inventory   of inventory

g. ____ Stock turnover   Net profits as a percent of sales

h. ____ Net profits as a percent   Net profits as a percent of total
         of invested capital   capital

8. WHAT DO YOU TRY TO ACCOMPLISH WITH THE PRICES THAT
YOU PLACE ON MERCHANDISE?

a. _____

b. _____

c. _____

9. HOW DO YOU ARRIVE AT THE PRICES FOR YOUR REGULAR
MERCHANDISE?

a. _____

b. _____

c. _____

d. _____

e. _____

   HOW DO YOU ARRIVE AT THE PRICES FOR "SALE"
   MERCHANDISE?

a. _____

b. _____

c. _____

SURVEY QUESTIONNAIRE - PAGE 4

10. DO YOU EXPERIMENT WITH YOUR PRICES TO SEE WHAT
    EFFECT INCREASES OR DECREASES WILL HAVE ON SALES
    OR PROFITS?

    No _____ Yes _____ If so, how is this done? _____

    _____

    _____

11. WHEN YOU ARE SETTING PRICES DO YOU CONSIDER WHAT
    IT COSTS TO BUY, ADVERTISE, SELL, AND DELIVER A
    PARTICULAR ITEM?

    No _____ Yes _____ If so, how are these costs determined?

    _____

    _____

12. DO YOU FEEL THAT THE METHOD OF CALCULATING YOUR
    SALARY IS BASED ON AN ACCURATE MEASURE OF YOUR
    WORTH TO THE COMPANY?

    Yes _____ No _____

13. WHAT CHANGES WOULD YOU SUGGEST TO IMPROVE THE
    PRESENT SALARY SYSTEM?

    a. _____ c. _____

    b. _____ d. _____

14. WOULD IT BE POSSIBLE FOR A MERCHANDISING EXECUTIVE
    IN YOUR COMPANY TO INCREASE HIS OWN SALARY AT THE
    EXPENSE OF COMPANY PROFITS?

    No _____ Yes _____ Is this likely to occur? No _____ Yes _____

15. DO YOU FEEL ANY CHANGES COULD BE MADE IN YOUR
    COMPANY'S OPERATIONS THAT WOULD INCREASE MER-
    CHANDISING EFFICIENCY?

    No _____ Yes _____ What? a. _____

    b. _____

    c. _____

    d. _____

APPENDIX B

EMPIRICAL SURVEY DATA

This appendix presents the data that was gathered during interviews with 111 merchandising executives in 11 department store organizations. The tables summarize the data obtained from each of the survey questions. The tables are presented in the same order as the questions appeared on the questionnaire.

TABLE I-Q

QUESTION 1, "WHAT WOULD YOU SAY ARE THE MOST IMPORTANT DUTIES AND RESPONSIBILITIES OF YOUR JOB?"

Ranking	Duties and Responsibilities	Number of Mentions
1	Selection of the right merchandise	62
2	Training and supervision of subordinates	53
3	To make a profit	27
4	Sales promotion and advertising	25
5	Stock control	24
6	Achieving sales volume	20
7	Selling merchandise to customers	16
8	Sales planning	15
9	Maintaining and developing store image	15
10	Selection of good help	. 15
11	Merchandise display	14
12	Keeping up on fashions and new developments	13
13	Stock turnover	12
14	Inspiration and stimulation of subordinates	11
15	Finding out customer wants	11
16	Achieving good markon percentage	10

Table 1-Q Continued

Ranking	Duties and Responsibilities	Number of Mentions
17	Plan and control investment of company's money, achieve a fair return on the investment	9
18	Customer service	9
19	Watch competitor's items and prices	9
20	Employee relations	9
21	Keep basics in stock	8
22	Timing of purchases	8
23	Sell sales clerks on items	8
24	Control markdowns	7
25	Coordination of buying and selling	7
26	Keep stocks balanced	6
27	Maintenance of good records	5
28	Presentation of merchandise to customers	5
29	Maintain good relations with suppliers	5
30	Unit inventory control	5
31	Gross margin percentage	5
32	Expense control	5
33	Work with suppliers to develop special items	4
34	Plan balanced lines of merchandise	4
35	Transfer merchandise between stores to increase sales	4
36	Compare sales results with plans	4
37	Know your merchandise	4
38	Follow up on duties and responsibilities	4
39	Trade up	4
40	Provide fashion leadership	3
41	Scheduling of help	3
42	Assure coverage of sales floor	3
43	Evaluate wholesale markets	3

TABLE 1-Q <u>Continued</u>

Ranking	Duties and Responsibilities	Number of Mentions
45	Coordinate with receiving and marking rooms	2
46	Control duplication of items	2
47	Handle complaints	2
48	Give customers value	2
49	Control shrinkage and theft	2
50	Buy merchandise to be sold at a profit	2
51	Know when to stop reordering	1
52	Development of merchandising policy	1
53	"Not the buying"	1
54	Actually sell merchandise to customers	1
55	Concentrate on a few resources	1
56	Service the needs of the branches	1
57	Improve on last year's sales	1
58	Buy to achieve a higher markon percentage	1
59	Expand credit usage among customers	1

TABLE 2-Q

QUESTION 2, "ABOUT HOW MANY HOURS DO YOU PUT IN ON YOUR JOB EACH WEEK?"

"HOW IS THIS TIME DIVIDED BETWEEN YOUR DIFFERENT RESPONSIBILITIES?"

Executive Functions	Average Hours Per Week
Direct supervision of merchandising activities in the stores	14.9
Office work; writing orders, planning and reviewing item performance	10.4
Buying trips	5.9
Meeting salesmen in own office	5.6
Meeting with subordinates	2.6
Telephone time	2.5
Advertising; planning and coordination	2.2
Meetings with superiors	1.8
Checking inventories and receipts	0.6
Other activities	0.5
Total	48.4

TABLE 3-Q

QUESTION 3, "WHEN YOU TALK WITH YOUR BOSS, WHAT
THINGS DOES HE REPEATEDLY STRESS AS
BEING IMPORTANT TO SUCCESS IN YOUR JOB?"

Ranking	Control Factors	Number of Mentions
1	Sales volume	59
2	Stock control	46
3	Promotions	44
4	Markdowns	40
5	Profits	36
6	Markon percentage	35
7	Stock turnover	23
8	Expense control	20
9	Fashion	15
10	Merchandise display	13
11	Gross margin	13
12	Merchandise lines and items	11
13	Sales planning	10
14	Company policies	9
15	Basic in-stock position	8
16	Personnel problems	7
17	Merchandising problems	7
18	Keep up with new developments	6
19	Trade up	6
20	Buy right merchandise	5
21	Watch competitive items and prices	5
22	Train personnel	4
23	Process claims to manufacturers for defective merchandise	4
24	Cover sales floor	4
25	Stimulate and inspire subordinates	4
26	Shrinkage	4
27	Locate sale merchandise	4

TABLE 3-Q <u>Continued</u>

Ranking	Control Factors	Number of Mentions
28	Control age of stock	4
29	Maintain and develop store image	3
30	Customer satisfaction	3
31	Unit inventory control	3
32	Give value	3
33	Have broad assortments	3
34	Obtain unit sales reports on items	3
35	Clean out old stock	3
36	Follow up on duties and responsibilities	3
37	Watch in-bound freight	2
38	Pass on merchandise information to subordinates	2
39	Develop merchandising ideas	2
40	Presentation of the merchandise to the customer	2
41	Stresses merchandising points	2
42	Coordinate with other departments	2
43	Plan competitive assortments	2
44	Buy low - sell high	2
45	Encourage customer change applications	2
46	Discuss direction company wants to go	2
47	Timing	2
48	Don't tie yourself to one supplier	2
49	Control investment of company funds	1
50	Be price competitive	1
51	Establish customer contact	1
52	Employment issues	1
53	Beat last years sales results	1
54	Get exclusive or confined merchandise	1
55	Hire personnel	1

TABLE 3-Q <u>Continued</u>

Ranking	Control Factors	Number of Mentions
56	Supervise subordinates	1
57	Get end of season merchandise in early at regular prices	1
58	Control over stock rooms and service areas	1
59	Trade down	1
60	Show initiative	1
61	Have merchandise to cover ads	1
62	Promote high markon items	1
63	Returns percentage	1
64	Buy wearable fashion	1

TABLE 4-Q

QUESTION 4, "HAVE PERFORMANCE MEASURES BEEN STRESSED
IN THE PAST BY YOUR COMPANY THAT ARE DIF-
FERENT FROM THOSE BEING EMPHASIZED
TODAY?"

NO ___30___ YES ___81___WHICH?

Rank Position	Performance Measures	Number of Mentions
1	Higher markon percentage needed	46
2	Expenses higher as a percentage of sales	34
3	Trade up to better merchandise	15
4	More emphasis on profit	14
5	More fashion	13
6	More emphasis on stock turnover	9
7	Multiple store operation increases work load	7
8	More competitive	5
9	Automatic stock control	5
10	Merchandise has changed	5
11	More concern with expense control	4
12	Want a larger segment of market	4
13	More promotions	4
14	More basic merchandise	3
15	More emphasis on store image	2
16	More mechanization	2
17	More variety and assortment	2
18	Markon percentage is falling	2
19	More emphasis on growth	2

TABLE 4-Q Continued

Rank Position	Performance Measures	Number of Mentions
20	Take markdowns quickly	2
21	More emphasis on profit in relation to investment	1
22	More concerned with labor problems	1
23	More emphasis on controlling markdowns	1
24	Do more wrapping and marking in the department areas	1
25	More self service	1
26	More controls	1
27	More personnel emphasis	1
28	More basic merchandise	1
29	More excitment	1
30	More flexibility	1
31	More emphasis on credit business	1
32	More progressive	1
33	Communications problems	1
34	More emphasis on training	1
35	Control markdowns by manufacturer	1
36	Customer contact more important	1
37	More service	1
38	Be in an open to buy position	1
39	More emphasis on merchandise for youth	1
40	Get as good a markon percentage as competition will allow	1
41	Blend fashion and volume items	1

TABLE 5-Q

QUESTION 5, "WHAT DO YOU FEEL ARE THE THREE OR FOUR
MOST IMPORTANT OVERALL OBJECTIVES OF
YOUR COMPANY?"

Ranking	Stated Company Goals	Number of Mentions
1	Profits	70
2	Sales growth	54
3	Customer service	49
4	Development and maintenance of store image	32
5	Fashion emphasis	22
6	Community service	14
7	Trade up	10
8	Greater share of market	10
9	Integrity and reliability	9
10	Good value	8
11	Broad lines of merchandise	6
12	Responsibility to employees	5
13	Higher markon percentage	5
14	Right merchandise	4
15	Fewer markdowns	4
16	Proper stock turnover	4
17	Broad assortments	4
18	New credit accounts	3
19	Attract and train employees	3
20	Serve a broader segment of the market	3
21	Serve the middle class market	3
22	Match employees and jobs	2
23	Basic in-stock position	2
24	Perpetuity	2
25	Stock different merchandise	2

TABLE 5-Q Continued

Ranking	Stated Company Goals	Number of Mentions
26	Please stockholders	2
27	Control expenses	2
28	Timing	2
29	Be exciting	2
30	Carry name brands	2
31	Return on capital	1
32	Reasonable percentage profit	1
33	Profits in line with industry averages	1
34	Long run profit	1
35	Watch shortages	1
36	Have fresh stock	1
37	Clean display areas	1
38	Achieve operation plan	1
39	Enthusiasm and leadership	1
40	More continunity between stores in own company	1
41	Stay competitive	1
42	Have the right merchandise	1
43	Appeal to younger matron	1
44	Good display	1
45	Meet changing business conditions	1
46	Develop new products	1

TABLE 6-Q

QUESTION 6, "WHEN YOU TALK TO THE PEOPLE WHO WORK
UNDER YOUR SUPERVISION, WHAT PERFOR-
MANCE FACTORS DO YOU EMPHASIZE?"

Ranking	Performance Factors Emphasized	Number of Mentions
1	Merchandise information	34
2	Sales volume	18
3	Display	17
4	Courtesy	13
5	Fashion trends	13
6	Customer service	12
7	Customer wants	12
8	In-stock on basics	11
9	Control of stocks	10
10	Promotions and events	9
11	Suggestion selling	8
12	Markon percentage	8
13	Selling techniques	7
14	Increased profits	7
15	Markdowns	7
16	Move out old stock	7
17	Stock turnover	6
18	Stimulate and excite subordinates	6
19	Quality merchandise	6
20	Customer approach	6
21	New merchandising ideas and developments	5
22	Merchandise presentation	5

TABLE 6-Q <u>Continued</u>

Ranking	Performance Factors Emphasized	Number of Mentions
23	Train subordinates	5
24	Trade customers up to higher markon merchandise	4
25	Coordinate colors	4
26	Balanced lines of merchandise	4
27	Get employee's opinions on items	4
28	Achieve plans and programs	4
29	Buy right merchandise for the store	4
30	Personnel relations	3
31	Sell details of garments	3
32	Control expenses	3
33	Cover sales floor	3
34	Handle returns properly	2
35	The buyer has to be a seller	2
36	Customer satisfaction	2
37	Have 20 percent open to buy position	2
38	Credit business	2
39	Gross margin	2
40	Neatness	2
41	Maintain good relations with suppliers	2
42	Improve on last year's performance	2
43	Sell sales people on items	1
44	Know when to stop reordering	1
45	Inventory control	1

TABLE 6-Q Continued

Ranking	Performance Factors Emphasized	Number of Mentions
46	Employee supervision	1
47	Be alert to market opportunities	1
48	Be early in a season	1
49	Multiple sales	1
50	Trade merchandise up	1
51	Give value	1
52	Be aggressive	1
53	Be flexible	1
54	Watch shrinkage	1
55	Timing	1
56	Sales person's productivity	1
57	Show the better merchandise	1
58	Be price competitive	1
59	Obtain greater share of the market	1
60	Achieve desired gross margin percentage	1
61	Sales goals	1
62	Sell advertising space to manufacturers	1
63	Show three price lines	1
64	Work with the branches	1

TABLE 7-Q

QUESTION 7, "ASSUME THAT YOU HAVE THE JOB OF EVALU-
ATING THE PERFORMANCE OF ONE OF YOUR
COMPETITORS. WHICH RATIO IN EACH OF THE
FOLLOWING PAIRS OF PERFORMANCE MEA-
SURES WOULD BE THE MOST VALUABLE FOR
THIS EVALUATION?"

Pair Number	Paired Merchandising Control Factors	Number of Executives Preferring Each Factor (111)
1	Realized Gross Margin Percentage	30
	Net Profits as a Percent of Sales	75
	No Preference	2
	No Answer	4
2	Net Profits per Sq. Foot of Selling Area	30
	Net Profits per Dollar of Inventory	75
	No Preference	2
	No Answer	4
3	Sales as a Percent of Previous Year	58
	Stock Turnover	47
	No Preference	2
	No Answer	4
4	Net Profits as a Percent of Sales	71
	Net Profits as a Percent of Invested Capital	35
	No Preference	—
	No Answer	5
5	Realized Gross Margin Percentage	71
	Stock Turnover	32
	No Preference	4
	No Answer	4
6	Net Profits per Dollar of Inventory	67
	Controllable Profits per Dollar of Inventory	38
	No Preference	2
	No Answer	4
7	Stock Turnover	20
	Net Profits as a Percent of Sales	83
	No Preference	4
	No Answer	4
8	Net Profits as a Percent of Invested Capital	48
	Net Profits as a Percent of Total Capital	33
	No Preference	1
	No Answer	29

TABLE 8-9-Q

QUESTION 8, "WHAT DO YOU TRY TO ACCOMPLISH WITH THE
PRICES THAT YOU PLACE ON MERCHANDISE?

QUESTION 9, "HOW DO YOU ARRIVE AT THE PRICES
FOR YOUR REGULAR MERCHANDISE?

Ranking	Executive Comments	Number of Mentions
1	Be competitive	63
2	Use higher markon percentages on confined, owned, or imported merchandise	55
3	Use a markon percentage that is traditional with the type of merchandise	51
4	Follow the manufacturer's suggested list	45
5	Try to obtain a planned average markon percentage	25
6	Price the item according to its worth	16
7	Price according to what the traffic will bear	15
8	If an item doesn't have an average markon percentage or better we do not buy it	14
9	Follow fair traded prices	12
10	Will use lower markon percentage if there is prospect of high turnover	11
11	Price to points and lines	11
12	Price secondary to fashion	10
13	Follow markup chart	10
14	Lead competitors on price	9
15	Give value	8
16	Variable markon percentages are used	7
17	Markon percentage is increasing	7
18	Some items carried at low markon and lose money on them	7
19	Consider transportation to arrive at a landed cost	6
20	Bring item in at high markon percentage and if it sells we take an ad and have a good price comparison at a lower price	5
21	Use fair prices	5

TABLE 8-9-Q - <u>Continued</u>

Ranking	Executive Comments	Number of Mentions
22	Trade up to a higher priced merchandise	4
23	Since we can't raise prices on competitive items, we may ask manufacturer to raise the suggested list to allow more markon. Other firms will follow the manufacturer where they might not follow one store in its quest for a higher markon percentage	4
24	Price to sell	3
25	Price to produce a good net profit	3
26	Use a reasonable margin	2
27	Use moderate price lines	2
28	Price to get volume	2
29	Price to income of community	2
30	Have manufacturer redesign to allow better markon percentage	2
31	Negotiate for better prices	2
32	Do not buy volume items for less than average markon percentage	2
33	Push high markon merchandise	2
34	List prices are meaningless	2
35	Buy end-of-season merchandise and bring it in early at regular markon percentage	2
36	Use higher markon percentage on higher priced merchandise	1
37	Selection of merchandise influences markon percentage achieved	1
38	Do not use 98 cent endings; class versus mass appeal	1
39	Use several price lines	1
40	Volume doesn't make up for low markon percentage	1
41	Do not promote low markon merchandise	1
42	Do not sell items below cost, once we own it costs are sunk	1

TABLE 8-9-Q - <u>Continued</u>

Ranking	Executive Comments	Number of Mentions
43	Inflation makes it difficult to maintain price points and manufacturers have to cut quality to do so	1
44	When pricing, who is to say what the value is?	1
45	We don't know where the top markon percentage is yet	1
46	Balancing markon percentage against volume is too difficult	1
47	The public can and will pay a higher markon percentage	1
48	Buy close outs	1

TABLE 9A-Q

QUESTION 9A, "HOW DO YOU ARRIVE AT THE PRICES FOR 'SALE' MERCHANDISE?"

Ranking	Pricing Policies	Number of Mentions
1	Sale merchandise bought cheaper	67
2	Smaller markon percentage used on sale merchandise	57
3	For clearance use one third off	29
4	For clearance use one half off	19
5	Use regular or higher markon percentage for sales	16
6	Buy from regular suppliers for sales	8
7	What is needed to sell the item	6
8	First markdown is the cheapest	6
9	Try not to sell below cost	4
10	Follow standard dollar markdowns	2
11	Twenty percent or more off for clearance	2
12	Sell at cost	1

TABLE 10-Q

QUESTION 10, "DO YOU EXPERIMENT WITH YOUR PRICES TO SEE WHAT EFFECT INCREASES OR DECREASES WILL HAVE ON SALES OR PROFITS?"

NO __59__ YES __39__ IF SO, HOW IS THIS DONE?

Ranking	Pricing Procedure	Number of Mentions
1	If the item is not selling, lower price	32
2	Use higher markon percentage to see what will happen	20
3	Never raise prices	10
4	Moved to even pricing with success	6
5	Lower prices for competitive reasons	2
6	If item is selling well, may move it up	2
7	Raise prices when market prices increase	2
8	Some price points work better than others	2
9	Maintain prices	1
10	Trade up to higher price points	1
11	Try different price lines to see what sells	1
12	Use multiple and irregular prices	1

TABLE 11-Q

QUESTION 11, "WHEN YOU ARE SETTING PRICES DO YOU CON-
SIDER WHAT IT COSTS TO BUY, ADVERTISE,
SELL, AND DELIVER A PARTICULAR ITEM?"

NO __46__ YES __44__ IF SO, HOW ARE THESE
COSTS DETERMINED?

Ranking	Executive Comments	Number of Mentions
1	Expenses covered by markon percentages	57
2	Consider inbound transportation costs	17
3	Raise prices to cover special advertising	5
4	Cooperative advertising is important	2
5	Trade discount covers these expenses	2
6	Where expenses are large, such as appliance delivery, they are considered	2
7	Expenses are considered on high and low markon items	1
8	We ask whether the price of the item can carry advertising costs	1
9	It is hard to load advertising into prices	1
10	Consider expenses only in special cases	1
11	We watch selling expenses	1
12	If you use expenses to price you will be out of line competitively	1

QUESTION 12, "DO YOU FEEL THAT THE METHOD OF CALCU-
LATING YOUR SALARY IS BASED ON AN
ACCURATE MEASURE OF YOUR WORTH TO THE
COMPANY?"

YES __70__ NO __18__

TABLE 13-Q

QUESTION 13, "WHAT CHANGES WOULD YOU SUGGEST TO
IMPROVE THE PRESENT SYSTEM?"

Ranking	Suggested Changes	Number of Mentions
1	Feels underpaid	17
2	More information on how bonus is determined	9
3	They pay only what they can get you for	5
4	Would like percent of the profit in addition to percent of volume	3
5	System should include qualitative evaluation	3
6	Tie bonus to increase in sales or profits	2
7	Base salary should be tied to the cost of living	1
8	Need base salary since percentages do not cover all the work	1
9	Base pay not an accurate measure of the work done	1
10	Bonus plan is accurate	1
11	Present system rewards seniority, may be overpaid	1
12	More salary less bonus	1
13	Method of determining base salary penalizes best buyers	1
14	Women paid less than men	1
15	With branches net profit system loses accuracy when others control expenses	1
16	We are charged for inventory controlled by others	1
17	Volume subject to outside influences not under the control of the buyer	1
18	Should pay bonus for lower markdowns or higher markon percentage	1
19	Put sales people on commission	1

QUESTION 14, "WOULD IT BE POSSIBLE FOR A MERCHANDISING
EXECUTIVE IN YOUR COMPANY TO INCREASE
HIS OWN SALARY AT THE EXPENSE OF COMPANY
PROFITS?"

NO _60_ YES _27_ IS THIS LIKELY TO OCCUR?   NO _26_ YES _2_

TABLE 15-Q

QUESTION 15, "DO YOU FEEL ANY CHANGES COULD BE MADE
IN YOUR COMPANY'S OPERATIONS THAT WOULD
INCREASE MERCHANDISING EFFICIENCY?"

NO ___22___ YES ___86___ WHAT?

Ranking	Suggested Changes	Number of Mentions
1	Faster and more detailed merchandising reports	19
2	Electronic inventory control	17
3	Make receiving and marking more efficient	13
4	Simplify paper work and accounting procedures	10
5	More help to keep records	8
6	Better warehousing	7
7	More space for merchandise display	6
8	Separation of buying from selling activities	6
9	More efficient stock control	5
10	Improved advertising	5
11	Improved communications between branches and buyers	5
12	Department package wrapping	4
13	More automation	4
14	More research	3

TABLE 15-Q Continued

Ranking	Suggested Changes	Number of Mentions
15	More turnover	3
16	Better physical handling of merchandise	3
17	Fewer bosses	3
18	Better communications between buyers, warehouse and receiving room	3
19	Get merchandise on floor faster	2
20	Simplified transfer of merchandise between stores	2
21	Pay sales help higher wages	2
22	Better display and presentation of merchandise	2
23	More open to buy flexibility	2
24	Simplify purchase form	2
25	Increased stock room space and help	2
26	Need traffic manager to route inbound freight	1
27	Decentralized buying yields higher prices for merchandise	1
28	Need standardized boxes for merchandise to simplify handling and storage	1
29	Need standardized manufacturer's invoices	1
30	Prefer department rent on a square foot basis rather than on sales	1
31	Questions value of sales person wrapping	1
32	More clearly defined buyer responsibilities	1
33	Buy basic items centrally	1

TABLE 15-Q <u>Continued</u>

Ranking	Suggested Changes	Number of Mentions
34	Broader lines of merchandise	1
35	More centralization of management	1
36	Divisional merchandising managers may not be needed	1
37	Better packaging and preticketing	1
38	Classify credit customer and appeal by direct mail	1
39	Buying group accounting system makes it hard to sell low markon items	1
40	Growth has brought bureaucracy and rigidities	1
41	Improved marking procedures	1
42	More flexibility in moving sales help around store	1
43	More enthusiastic buyers	1
44	Increased emphasis on fashion image	1
45	Remodel the store	1
46	Improve hours and working conditions for employees	1
47	Buy fewer foreign goods	1
48	Eliminate overlap between accounting and merchandising divisions	1
49	More premarking of merchandise	1
50	Too much control from the top	1
51	More exchange of merchandising information between stores	1
52	Simplify sales transaction	1
53	Allocate transport costs on sales rather than on use	1

APPENDIX C

COMPUTATION OF CHI SQUARE VALUES

Two separate tests of significance were completed using the executives' preferences for control factors recorded in question 7. The first test evaluated the null hypothesis that buyers and merchandise managers showed no real preferences between the paired control factors. This would mean that each of the paired performance measures would have been selected about 50 percent of the time. The chi square test was used to evaluate the differences between the actual and the expected preferences for the control factors (Table 1-C).

The second test evaluated the null hypothesis that there were no differences between buyers' and merchandise managers' preferences for the paired control factors. A slightly different form of the chi square analysis was used in this test. The data was tabulated in a 2 by 2 table and analyzed using the following formula:

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)}$$

where the values of a, b, c, d, and N are taken from the following table:

	Executives' Preference for Control Factors		Total
	Buyers	Merchandise Managers	Total
First Control Factor	a	b	a + b
Second Control Factor	c	d	c + d
Total	a + c	b + d	a + b + c + d = N

TABLE 1-C
CALCULATION OF CHI SQUARE VALUES TO TEST EXECUTIVE PREFERENCES FOR MERCHANDISING CONTROL FACTORS

Pair	Paired Merchandising Control Factors	Executive Preferences	Ex-pected	Diff	Diff²	Diff²/Exp	Chi Square [a]
1	Realized GM percentage Net Profits as % of sales	30 62	46.0 46.0	16.0 16.0	256.00 256.00	5.56 5.56	11.1
2	Net profits/ft² of selling area Net profits/$ of inventory	27 65	46.0 46.0	19.0 19.0	361.00 361.00	7.84 7.84	15.7
3	Sales as a % of previous year Stock turnover	50 43	46.5 46.5	3.5 3.5	12.25 12.25	.26 .26	0.5
4	Net profits as a % of sales Net profits % of invested capital	60 33	46.5 46.5	13.5 13.5	182.25 182.25	3.92 3.92	7.8
5	Realized gross margin % Stock turnover	63 27	45.0 45.0	18.0 18.0	324.00 324.00	7.20 7.20	14.4
6	Net profits/$ of inventory Controllable profits/$ inventory	62 31	46.5 46.5	15.5 15.5	240.25 240.25	5.17 5.17	10.3
7	Stock turnover Net profits as a % of sales	20 70	45.0 45.0	25.0 25.0	625.00 625.00	13.89 13.89	27.8
8	Net profits as a % invested capital Net profits as a % total capital	48 33	40.5 40.5	7.5 7.5	56.25 56.25	1.39 1.39	2.8

[a] With one degree of freedom the probability of exceeding a chi square value of 10.83 is one in a thousand. The probability of exceeding a chi square value of 6.64 is one in a hundred.

Calculations of Chi Square Values to Test for Differences Between
Buyers' and Merchandise Managers' Preferences
for Control Factors

Pair Number 1	Executives' Preferences for Control Factors		Total
	Buyers	Merchandise Managers	
Realized gross margin %	22	8	30
Net profits % of sales	44	18	62
Total	66	26	92

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)} \qquad \chi^2 = \frac{178,112}{3,191,760}$$

$$\chi^2 = \frac{92(396 - 352)^2}{(30)(62)(66)(26)} \qquad \chi^2 = 0.0558$$

Pair Number 2	Executives' Preferences for Control Factors		Total
	Buyers	Merchandise Managers	
Net profits/ft^2 selling area	19	8	27
Net profits % of sales	47	18	65
Total	66	26	92

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)} \qquad \chi^2 = \frac{106,352}{3,011,580}$$

$$\chi^2 = \frac{92(342 - 376)^2}{(27)(65)(66)(26)} \qquad \chi^2 = 0.0353$$

Pair Number 3	Executives' Preferences for Control Factors		Total
	Buyers	Merchandise Managers	
Sales % of previous year	31	19	50
Stock turnover	35	8	43
Total	65	27	93

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)}$$

$$\chi^2 = \frac{16,171,677}{3,831,300}$$

$$\chi^2 = \frac{93(245 - 665)^2}{(50)(43)(66)(27)}$$

$$\chi^2 = 4.2209\,[a]$$

Pair Number 4	Executives' Preferences for Control Factors		Total
	Buyers	Merchandise Managers	
Net profits as a % of sales	37	23	60
Net profits as a % of invested capital	29	4	33
Total	66	27	93

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)}$$

$$\chi^2 = \frac{25,050,573}{3,528,360}$$

$$\chi^2 = \frac{93(148 - 667)^2}{(60)(33)(66)(27)}$$

$$\chi^2 = 7.0998\,[a]$$

---

[a] With one degree of freedom the probability of exceeding a chi square value of 3.84 is one in twenty.

Pair Number 5	Executives' Preferences for Control Factors		Total
	Buyers	Merchandise Managers	
Realized gross margin percentage	44	19	63
Stock turnover	21	6	27
Total	65	25	90

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)}$$

$$\chi^2 = \frac{1,640,250}{2,764,125}$$

$$\chi^2 = \frac{90(264 - 399)^2}{(63)(27)(65)(25)}$$

$$\chi^2 = 0.5934$$

Pair Number 6	Executives' Preferences for Control Factors		Total
	Buyers	Merchandise Managers	
Net profits /$ of inventory	44	18	62
Controllable profits /$ of inventory	23	8	31
Total	67	26	93

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)}$$

$$\chi^2 = \frac{357,492}{3,348,124}$$

$$\chi^2 = \frac{92(352 - 414)^2}{(62)(31)(67)(26)}$$

$$\chi^2 = 0.1068$$

Pair Number 7	Executives' Preference for Control Factors		Total
	Buyers	Merchandise Managers	
Stock turnover	15	5	20
Net profits as a % of sales	50	20	70
Total	65	25	90

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)} \qquad \chi^2 = \frac{225,000}{2,275,000}$$

$$\chi^2 = \frac{90(300 - 250)^2}{(20)(70)(65)(25)} \qquad \chi^2 = 0.0989$$

Pair Number 8	Executives' Preferences for Control Factors		Total
	Buyers	Merchandise Managers	
Net profit as a % of invested capital	34	14	48
Net profit % of total capital	22	11	33
Total	56	25	81

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)} \qquad \chi^2 = \frac{352,836}{2,217,600}$$

$$\chi^2 = \frac{81(374 - 308)^2}{(48)(33)(56)(25)} \qquad \chi^2 = 0.1591$$

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