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FINANCIAL PERFORMANCE AND MARKETING STRATEGY
OF SELECTED SMALL APPAREL STORES

Thesis Approved:


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## CHAPTER I

## INTRODUCTION

Small businesses play a major role in the economic health and stability of our country. Producing almost 40 percent of the Gross National Product and employing 48 percent of the work force, small businesses continue as the largest classification of business firms in the United States (Small Business Administration, 1984). In recent years, policy makers have taken steps to encourage business start-ups since they have come to recognize that small enterprises are the likeliest sources of new jobs and industrial innovation (Gumpert, 1982).

However, the loss of human and material resources each year due to a persistently high failure rate was estimated to be over four billion dollars in 1980. Dun and Bradstreet reported in the Apparel Outlook (1981) that 85 percent of all firms that failed were involved in a retail business.

Over half of the retail apparel failures have been attributed to underlying causes such as lack of managerial experience, lack of experience in the line, and experience not well rounded in sales, finance, and purchasing. Inadequate sales, heavy operating expenses
inventory difficulties and competitive weakness were cited as major apparent causes for apparel failures. ${ }^{1}$

Analytical techniques need to be developed to provide the small business owner with some indication of where their business has been, where it is, and where it is going (Patrone and duBois, 1981). Financial ratio analysis, though frequently misunderstood by the small business owner, can provide information to help retailers measure their financial performance.

Measuring performance is not enough, however. In addition, the causes of performance must be understood. Identification of marketing and management variables and anlaysis of the relationships between financial performance and marketing strategies can aid the retailer to operate more efficiently and profitably and should give the firm greater control over its destiny. "The success of modern retail enterprise is the product of a sound marketing strategy matched to a sound financial strategy" (Davidson, Doody and Sweeney, 1975, p. 155). Small business owners need to be aware of the effects of these variables on survival in today's competitive market place.

Small firms have different financial objectives and goals than large firms. Financial management in the small firm is characterized in many cases by the need to confront a somewhat different set of problems and opportunities than that confronted by a large corporation (Small Business Administration, 1976). "Universal truths" may not apply equally well to small and large businesses, and therefore the

[^0]strategies recommended for industry leaders may be distinctively different (Lubatkin and Pitts, 1983).

A major goal of the small store owner is to achieve success within the limitations of available capital and personal attributes (Packard and Carron, 1982). Small retail firms are actively seeking assistance to help improve efficiency in merchandise buying and inventory control. A systematic method of calculating financial performance indicators and an understanding of the effects of marketing and management variables are needed in order for the small business owner to make efficient management decisions. Analytical devices can enable the small business to compare financial statements between firms and over time periods. Comparative facts and figures and empirical research on marketing strategies for the small retail store with annual sales volume of less than one million dollars are virtually non-existent today.

The Center for Ápparel Marketing and Merchandising (CAMM) was established at Oklahoma State University to serve apparel retailers who have voiced a need for assistance in store operation and management. In 1980, research on financial performance analysis was initiated at the Center in order to meet the continuing needs of retailers in apparel stores. Continued research will enable CAMM to maintain a data bank for owners of small stores; and thus, apparel retailers will have access to comparative information related to their financial performance and that of other retailers of similar size.

## Purposes

The purposes of the study were to investigate financial performance and marketing strategy of a selected group of retail apparel stores and to analyze the relationships between financial indicators and marketing factors. Three objectives of the study were the following:

1. To construct a theoretically-based conceptual model to guide in the assessment of financial performance and marketing strategy of small apparel stores.
2. To measure financial performance and identify the marketing strategy of selected apparel stores.
3. To analyze the relationships between financial indicators and marketing factors and examine the interrelationships of the length of time in business and store size.

## Hypotheses

Three hypotheses and related sub-hypotheses were developed in relation to the purposes and objectives of the study. The first set of hypotheses explored the relationship of three financial performance indicators and seven marketing strategy factors. These were:
la. Net Sales is related to marketing strategy.
1b. Return on Investment is related to marketing strategy.
1c. Financial Ratios are related to marketing strategy.
The second set of hypotheses explored the variability of
financial performance and marketing strategy by store age and size.
2a. Marketing strategy varies by store age and size.
2b. Financial performance varies by store age and size.

The third set of hypotheses explored the effects of store age and size on the interrelationships among the three financial performance indicators and seven marketing strategy factors. These were:

3a. The relationship between Net Sales and marketing strategy is affected by store age and size.

3b. The relationship between Return on Investment and marketing strategy is affected by store age and size.

3c. The relationship between Financial Ratios and marketing strategy is affected by store age and size.

Assumptions

The need for analyzing the relationships between financial performance and marketing strategy for retail apparel firms was based on the acceptance of the following assumptions:

1. The failure rate of small business is related to poor financial performance and lack of managerial experience.
2. Small business owners can utilize financial performance measures as a basis for improving marketing and management strategies.

## Limitations

Certain factors limited the scope of the research. In particular, the sample for this research was drawn from the population of apparel retailers who have sought assistance by attending one or more of the one-day workshops offered by the Center for Apparel Marketing and Merchandising (CAMM). Therefore
the generality of the findings was limited to retailers with similar characteristics.

Definition of Terms

Throughout the study the following definitions were used:

1. Aggregate Totals: An average or mean computed for individual financial items from all stores, percentages are then calculated for the sample as whole, using two specified mean totals.
2. Financial Components: Are obtained from year-end financial statements and were combined with financial elements to calculate financial ratios. For the purposes of the study seven financial components were collected, they were: current assets, total assets, current liabilities, total liabilities, owner's equity, cost of goods sold and annual net sales.
3. Financial Elements: Are obtained from year-end financial statements and were combined with financial components to calculate financial ratios. For the purposes of the study eight financial elements were collected, they were: cash on hand, accounts receivable, beginning inventory, ending inventory, total operating expenses, advertising expense, salaries and rent.
4. Financial Indicators: Key variables or factors that measure the firm's ability to meet its financial obligations, and realize a profit. For the purposes
of the study, they were: return on investment, net sales and financial ratios.
5. Financial Ratios: A percentage representing the comparison of one dollar amount with another dollar amount obtained from a company's financial statements, i.e. balance sheet, income statement. Financial ratios were calculated in the study by combining the financial elements and components obtained from year-end financial statements.
6. Marketing/Management Variables: The tools of retail management, which consist of products and services sold; the ability of the firm to communicate with the customer and the location of the store (Rachman, 1975).
7. Marketing Strategy: The combination of marketing and management characteristics, management program profile variables and retailer perceived market position variables collected for this study.
8. Small Business: A single unit firm, independently owned and managed having an annual sales volume under one million dollars.

CHAPTER II

## REVIEW OF LITERATURE

The present environment for retailing is characterized by more competition in a slow growing, cost escalating consumeristic era (Jenkins and Forsythe, 1979). When money was cheap and trade credit loose, retailers could maintain excessive assortments, often competing on the basis of quantity and diversity of merchandise selection. Competition has become increasingly intense during recent recessions and smaller companies find it more difficult to maintain profits and survive as a growing number of firms divide up a smaller consumer spending pie (Gumpert, 1982). Evaluating present performance and managing operations to enhance performance are critical resonsibilities for the small business manager. The literature related to the study was organized into the following sections: small businesses, financial performance and strategic planning.

Small Businesses

The small firm must concentrate its limited resources on a marketing program designed to serve a limited and well-defined group of consumers (Howell, Frazier and Stephenson, 1982). For if they do not recognize the changing environment and take steps to manage and control their operations, the failure rate among small businesses will continue to rise. Tyebjee, Bruno and McIntyre contend:

The theory of evolution suggests that an organism can flourish only if it adapts to environmental changes. No doubt, a business can expect to succeed only if it changes in response to altered external circumstances (1983, p. 62).

Small Business Failures

Survival is not a new struggle for the small business owner. In 1946, Comish urged small store retailers to organize their store by bringing the different aspects of retailing (merchandising, accounting, operations, and promotions) into a systematic relationship with each other, so that the whole store would function harmoniously, efficiently, and profitably. Long range planning and financial performance analysis are probably the most difficult tasks for the entrepreneur and are therefore not often perceived as priorities by the small business owner. McGregor reinterated this concern when he wrote:

It is unfortunate that the stores which make up the largest number of retail establishments in the nation and whose operation characterized much of the industry maintain only those financial and operating records necessary to meet the minimum standards for governmental reports (1957, p. 196).

In 1980, approximately 11,000 small businesses failed, leaving behind \$4.64 billion in liabilities (Van Kirk and Noonan, 1982). On close inspection of failure rates, it was found that there is an interesting distribution of failures in relation to the age of the firm. Altman (1983) stated that it takes some time for a firm to actually fail. Failures in the first year were relatively low, while in the second, a marked increase in failure rates occurred. From the third to the sixth year, the frequency of failures is high, but rather flat, and then during the seventh year the frequency
decreases (Altman, 1983). As one would expect, Altman explained "at some point the older the firm the less likely it is to fail, since it has an established position" (1983, p. 18).

Interestingly, most of the reasons for failure found in the literature were described as what it takes to be successful. Poor management, lack of effective planning, inability to pay debts, failure to monitor results against well-defined performance standards, inadequate understanding and lack of control over cash flow have all been listed as primary causes of business failure and factors of success (Gumpert, 1981; Van Kirk and Noonan, 1982; Small Business Administration, 1976; Dun and Bradstreet, 1981). A good financial plan is not enough in itself to save a firm, but has been found to increase the chances of survival. The support for small business planning and evaluation was found throughout the literature because it has enhanced the firm's success through identifying threats and opportunities that cause businesses to fail.

## Small Versus Large Firms

Small firms are not infantile versions of large ones (Cohn and Lindberg, 1974). The goals, characteristics and experiences of the small firm are unique and distinguish them from large firms. The goals of the small firm are likely to be oriented toward the aspirations of an individual entrepreneur, rather than towards investors as is typical of large firms. The small firm, in contrast to the large firm, is usually characterized by: 1) having great difficulty in attracting and managing funds; 2) reacting to situations instead of planning for them; and 3) more subjective decision-making (Cohn
and Lindberg, 1974). In general, the larger firm is better able to confront and withstand financial difficulties. Evidence shows that larger firms tend to be more profitable and have better sales growth rates (Boardmann, Bartley and Ratliff, 1981). Boardmann et al., also noted that size improves the firm's ability to defend itself against uninvited take-over attempts, and that once a firm overcomes "its smallness through rapid growth, [it] greatly improves its probability of long run success" (1981, p. 34). The typical small firm owner lacks management experience and ability as evidenced in the high failure rate attributed to this factor (Wichmann, 1983). Abell and Hammond (1979) stated that differences in the scale of experience lead to significant cost advantages for the experienced firm through increased market share.

Advantages of the Small Firm

Although the large firm may have a market share advantage with experience and financial expertise, the small firm has certain inherent advantages. Van Kirk and Noonan (1982) described some of these advantages as: 1) flexibility; 2) profitable small opportunities; 3) lower relative overhead; 4) management having direct profit impact; and 5) ability to select target segments. Sanzo (1977) stated that the small business must use the intrinsic qualities of the entrepreneur to its advantage; listing these as service-minded, hard working, and motivated. These and other characteristics, goals, and experiences typical of the small firm indicate that the small business owner is confronted by a dissimilar set of problems and opportunities than those of a large firm. The successful small
firm therefore must have a different outlook and apply different principles than those ordinarily used by larger firms.

## Problems and Limitations

Success for the small firm, with its unique characteristics, is not easily attainable. Not only must proprietors offer a good product or service and know the basics of general management, they must also possess an understanding of the appropriate financial policies to pursue (Boardman, Bartley and Ratliff, 1981). Some of the concerns, problems and limitations faced by the small business and described in the literature were: 1) resource poverty;
2) internal cash flow imbalance; 3) limited product and service lines; 4) limited people resources; 5) scarcity of good market information; 6) excessive cost of maintaining inventories; 7) lack of long-range planning skills; 8) lack of working capital; and 9) lack of accounting and financial analysis skills (Van Kirk and Noonan, 1982; McKeever, 1960; Boardman, Bartley and Ratliff, 1981; Wichmann, 1983; We1sh and White, 1981). The very size of the small firm creates a special condition that often distinguishes it from their larger counterparts and requires some very different management approaches (Welsh and White, 1981). Khan and Rocha (1982) found that of the firms they studied, the most vulnerable to operational deficiences were, not surprisingly, retailing sole proprietorships under five years of age.

## Financial Performance

The decline of profitability of retail stores leads retailers to search for more effective approaches to planning and controlling the financial aspects of their firm. The selection of an approach for evaluating the financial performance of a firm depends on many interrelated aspects of the economy, the industry and the firm itself. Due to the competitive nature of retailing, the search for improved evaluation techniques continues. Following is a review of financial ratio analysis as well as other evaluation techniques used by large and small firms.

## History of Financial Ratios

Ratio analysis has been defined as the combination of financial components on $a$ firm's income statement and balance sheet to obtain certain measures of performance and financial conditions (Mayo and Rosenbloom, 1975). "Since the late 1800's, ratio analysis has been the major tool used in the interpretation and evaluation of financial statements for investment decision making" (Lev, 1974, p. 11). Financial ratios developed in the United States during the late nineteenth century were used primarily as analytical devices for short-term credit. A variety of ratios continued to be developed through the early decades of this century; and by the end of the 1920s ratio data began to flow from individual analysts and institutions. Horrigan (1965) stated that the next phase should have been the development of empirical generalizations which would have been used to formulate hypotheses for developing a theory of financial
ratio analysis. However "a system of empirical generalizations never materialized, much less a theory" (Horrigan, 1965, p. 558).

The literature has shown that facts to support financial ratios analysis and financial management are not lacking. And yet, studies of business mortality have shown repeatedly that retail establishments fail or are forced to discontinue operations because their managements did not give adequate attention to the financial aspects of the retail store operations (Van Kirk and Noonan, 1982; Altman, 1983; Horrigan, 1965; McGregor, 1957).

## Uses of Financial Ratio Analysis

A need does exist for analytical devices which will enable the business owner to compare financial statements between firms and over time periods. The ratio seems to fill that need as a simple quick method of comparison (Horrigan, 1968). Because the small firm has a smaller margin for error they are particularly advised to look at trends through the use of their financial statements and to calculate financial ratios which can be compared with industry standards (Weston and Brigham, 1975). The small business has been cautioned, however, not to use financial statements alone to predict business success or failure, since they merely represent a record of past financial performance.

Laurent (1979) and others justified the use of financial ratio analysis in that there exist certain normative relationships among various key financial components of a company as found in the balance sheet and income statements. These relationships are used to provide management with a basis for control for the activities that the
company is engaged in and to give the company the ability to operate more efficiently and profitably (Small Business Administration, 1976, Mayo and Rosenbloom, 1975).

Ratio analysis has evolved and been developed to such an extent that it can provide the business owner or manager with some indication of where the business has been, where it is now, and where it is going (Patrone and duBois, 1981). Mayo and Rosenbloom (1975) viewed ratio analysis as developing into a tool that can be used as an aid in planning and a means of prediction, as well as a tool of education. Still other researchers emphasized that a knowledge of the significance of important key ratios will point out weaknesses in the financial condition of the business and indicate whether conditions are wholly or partly good, questionable or poor (Foulke, 1968; Schermerhorn and Page, 1977).

Ratios, then, are symptoms of financial conditions which management can recognize and act on. Those who lack the ability or knowledge to recognize the symptoms possibly face financial problems. Edmister (1970) viewed financial ratio analysis as a preliminary step in financial or credit analysis; to review quickly the firm's financial history for irregularities on which to concentrate attention. From an analytical viewpoint the statistical nature of financial ratios appeared to be that they are: 1) approximately normally distributed; 2) highly correlated with each other;
3) highly correlated over time; and 4) subject to wide dispersion, which can be reduced, somewhat, by industry stratification (Horrigan, 1965). Irregardless of the fact that ratios are used extensively for a variety of reasons and purposes,

- . a meaningful and accurate listing of ratios that show which are the best in different situations, or gives an indication of their importance has yet to be agreed upon" (Patrone and duBois, 1981, p. 40).


## Limitations and Cautions

Along with the advantages and uses of financial ratio analysis for the small business, researchers have stressed that caution must be exercised as to their interpretation and dependence on ratios. Edminster (1970) felt that ratios have limited use in predicting a business' financial future because financial statements are based on past performance. Past events are guides and clues to the future but should not be considered sufficient in themselves for most decision situations.

Patrone and duBois (1981) described ratios as being analogous to the tip of an iceberg. They argued that ratios have little meaning by themselves, and only become meaningful when compared to past ratios, ratios of competitors, or published industry averages. Schermerhorn and Page (1977) agreed, in that there must be some standard against which to compare firms, but went on to specify that comparisons should be made within the same industry, with set standards against which to compare firms with each other. If companies do not use standard industry averages for comparisons, the ratios may appear to improve year after year, but in relation to other firms in the same industry, may indicate an abnormally poor financial condition (Schermerhorn and Page, 1977). Howell, Frazier and Stephenson (1982) agreed, and emphasized that intrafirm comparisons offer no basis for evaluating the quality of its
performance with regard to specific variables. Howell et al., went on to state that where significant variations in marketing strategy exist within an industry, even aggregate industry data could be misleading to managers. They cautioned that each industry should be defined in terms of markets and competitive structure before gathering and disseminating industry data.

Two other limitations were noted in the literature in reference to the use of financial ratio analysis. McKeever (1960) pointed out that ratio comparison (inter or intrafirm) is not meaningful unless the interested person has some knowledge and understanding of how the ratio was computed, its limitations, and the means by which it can be improved. Schermerhorn and Page cautioned users of ratio analysis that "standard ratios for a soundly managed, we11 established firm will not necessarily be adequate for measuring a comparatively new or rapidly growing enterprise in the same industry" (1977, p. 12).

Despite the limitations and cautions related to financial ratio use, the literature reviewed spans nearly three decades and illustrated the important role that ratios have played in the history of financial performance evaluation. The philosophies and ideas have withstood the test of time and continue to be used and evaluated. Other Financial Performance Indicators

Several different approaches to the analysis of financial performance for large and small firms were found throughout the literature. Probably one of the most popular approaches in recent years, in terms of quantity of literature devoted to it, and yet
the most elusive in terms of factual procedures, was the Profit Impact of Market Strategies (PIMS) research program. The PIMS program identified 37 factors as significantly related to profit performance. Factors that often were discussed in relation to profitability influences were market share percentage, return on investment, and company factors (Schoeffler, Buzzell and Heany, 1974; Lubatkin and Pitts, 1983; Abell and Hammond, 1979).

Return on investment (ROI) is the financial performance indicator used to measure changes in market conditions and strategies. Anderson and Zeitham1 (1984) found in studies that investigated strategy and performance with product life cycle. (PLC) implications, that ROI and market share were often used as the two strategic performance variables. A third reference to ROI as a performance indicator was found in studies that refer to the duPont model. The duPont model was developed to help managers see interactions among important variables, and uses ROI as the overall indicator of financial success (Van Voorhis, 1981).

Robinson (1983) reported that, in several doctoral studies using discriminant analysis to determine the best predictors of successful versus unsuccessful firms it was found that a measure of profitability and a measure of change in sales were the most significant financial components in predictor equations. Return on sales was suggested as a measure of profitability that is prefereed to ROI for small firms. Sales figures were found to provide greater accuracy and standardization than ROI for the small firm. In addition, Dalrymple (1966) found that sales volume explained the greatest variance in profit levels. Khan and Rocha (1982) found that the
variables most significant in the measurement of performance were annual sales, value of assets, type of ownership, and company age. These key performance variables were found to be instrumental in the identification of critical problem areas.

Research on several different financial performance indicators was reviewed, but research that supports the use of these indicators for small firms is sparse and inconclusive.

## Strategic Planning

For a firm to operate successfully in today's environment, the marketing segment of that enterprise must be examined as to the role it plays in overall profitability (Hise, 1965). Until recently, very little attention has been paid to the interrelationships between financial performance indicators (in particular financial ratios) and marketing strategies. Most researchers tended to agree that interrelationships between performance and marketing characteristics exist (Peles and Schoeller, 1982; Davidson, Doody and Sweeny, 1975; Van Kirk and Noonan, 1982; Abell and Hammond, 1979). The current research issues appear to concentrate on identifying, clarifying, and trying to explain these interrelationships. Large-scale studies have been and are being conducted on factors that affect performance and interrelationships of variables, but these studies deal primarily with non-retailing industries.

In order to begin to understand and control the factors that contribute to the profitability of the firm, a plan should be developed that would identify threats that might lead to failure and opportunities that enhance success. Strategic planning is a
critical factor influencing the organizational effectiveness of most business firms (Robinson, 1983; Dickinson, 1981; Van Kirk and Noonan, 1982; Moyer, 1982). Approaches to strategic planning rest on the premise that there are general principles in business strategy. Buzzell and Dew (1980) agreed, stating that there are some principles viewed as universal relationships among the characteristics of the market served by the firm, its competitive position, the strategy it employs, and its financial results.

## Success Factors

Most of the strategic planning literature reviwed focused on the large, multi-product, multi-divisional firms, with increased attention being paid to examining factors underlying corporate success. This examination has led researchers in a number of different directions. Craig and Douglas (1982) examined two categories of factors which they say affect levels of performance; the first was the impact of alternative marketing-mix strategies, and the second, the relationship between performance and industry structure. Other researchers have sought one construct or contingency variable which might have broad explanatory power, for maximization of profitability. These have included environmental uncertainty, market share and stage of product life cycle (Anderson and Zeithaml, 1984). However, it appears throughout the literature that a more comprehensive approach to strategy formulation is favored to a more narrowed approach.

The Profit Impact of Market Strategies (PIMS), which was briefly discussed earlier in this chapter, is an excellent example of a comprehensive approach to strategy formulation. The PIMS project has
also demonstrated the feasibility and benefits derived when companies pool their experiences. Schoeffler, Buzzell and Heany (1974) explained that this pooled information is collected on strategic actions, market and industry variables and situations. The results achieved from this pooling of information are organized into a multipurpose data base which is made available to all participants.

## Small Firm Planning

Firm size is an important contingency variable to consider in the design of effective strategic planning (Robinson and Pearce, 1983). However, researchers have done little to identify the most suitable strategies and planning approaches for small businesses. Much consideration has been given to financial management, business policy, marketing, production and organizational behavior in large corporations. However, scant attention has been given to these disciplines as they apply to small enterprises (Gumpert, 1982). Just two decades ago, small business managers were able to run their businesses based upon their feelings and intution about their environment, industry and business entity. However, in recent years, the lack of effective planning or systematic consideration of present and future circumstances that surround decision making has been one of the major causes of small business failure (Robinson, 1979; Dun and Bradstreet, 1981; Small Business Administration, 1976). Sexton and Van Auken (1982) described small business planning as unstructured, irregular and uncomprehensive. One important contingency in small business planning is the need for simplicity and less formality then is commonly associated with large firm strategic planning
(Robinson and Pearce, 1983). Recently, in a study focusing exclusively upon small banks, Robinson and Pearce (1983) found that formal planners did not out perform non-formal planners over a three year time period. However, this finding does not necessarily mean that less planning will lead to success.

Moyer (1982) and Anderson (1982) both felt that small scale planning should establish specific financial and functional performance goals and objectives to guide its day-to-day activities. Collecting data on the firm's operation over several years and collecting similar data for its leading competitors, the firm would be able to check the plausibility of projected performance goals (Moyer, 1982).

Faced with a variety of strategic planning options, in an uncertain and changing environment, planners have been turning to mathematical models for help. Lubatkin and Pitts (1983) have found however, that to date, there has been no systematic evaluation of the usefulness of any of these planning models. This and other research reviewed seems to leave the small business firm with very little direction as to how to proceed with strategic planning. In fact, Gumpert (1982) indicated that most academics and consultants who work with small firms merely simplify the same theories and practices that are used with the larger companies.

Summary

Small businesses are not scaled-down versions of large businesses. They have distinct characteristics, goals, and objectives. The small business owner confronts a different set of
problems and opportunities than those of larger firms. Yet, in order to compete in today's retailing environment, characterized by more competition in a slow growing, cost escalating, consumeristic era, the small business owner must develop skills in long range planning and financial performance evaluation. The age and size of the firm must be considered in planning, since it has been shown that both of these variables affect the performance, success and failure of the business firm (Welsh and White, 1981; Robinson and Pearce, 1983; Altman, 1983; Khan and Rocha, 1982).

Financial ratio analysis has been used in the interpretation and evaluation of financial statements by businesses for many decades. Horrigan (1968) pointed out that ratio analysis seemed to fill the need, as a simple quick method of comparison for the small business owner. Mayo and Rosenbloom (1975) described ratios as useful in planning, as a means of predicting business failures, as well as a tool of education. Other researchers emphasized that ratios could point out weaknesses in the business and indicate whether conditions were good, questionable or poor (Foulke, 1968;

Schermerhorn and Page, 1977).
Ratio analysis however, must be used with caution. Financial statements, and thus the ratios calculated from those statements, are based on past performance and should not be considered sufficient in themselves for most decision situations. Most ratios become meaningful only when compared to industry standards. And then markets and the competitive structure within the industry should be similar for valid comparisons to be made.

Return on investment (ROI), market share, and return on sales were also found throughout the literature as financial performance indicators. ROI and market share appeared to be used most often with larger firms whereas return on sales was suggested for use with smaller firms. Further empirical research is needed in aiding the small firm in its financial performance evaluation.

In order to more fully understand and begin to control the factors that contribute to the profitability of a firm, a plan should be developed that would identify threats and opportunities. Strategic planning refers to the relationship between the firm and its environment (Davidson, Doody and Sweeny, 1975). The small firm should establish specific financial and functional performance goals and objectives to guide its day-to-day activities. But the literature has shown that ineffective planning and unsystematic evaluation for decision-making have been major causes of small business failure. The variety of strategic planning models being proposed leave the small business firm with little direction in planning that is both simple to initiate and easy to interpret. The need for empirical research in the area of strategic planning for the small firm is indeed great.

## CHAPTER III

## METHODS AND PROCEDURES

The purposes of the study were to investigate financial performance and marketing strategy of a selected group of retail apparel stores and to analyze the relationships between financial indicators and marketing factors. The three objectives of the study were to: 1) construct a theoretically-based conceptual model to guide in the assessment of financial performance and marketing strategy; 2) measure financial performance and identify the marketing strategy of selected apparel stores; and 3) analyze the relationship between financial indicators and marketing factors and examine the interrelationships of the length of time in business (store age) and store size.

To achieve these three objectives, the procedures for the study were developed in three stages: Construction of a Model; Measurement of Performance and Strategy; and Analysis of Relationships. The schematic drawing in Figure 1 depicts the three procedural stages and corresponding sequential activities. The following discussion explains the detailed procedures for each of the three stages.

## Development of Instruments

Objective I of the study was the construction of a model based on selected models used to assess financial performance and marketing

STAGE I


STAGE II
STAGE III


Figure 1. Flow Diagram of the Three Stage Procedural Model.
characteristics. In order to achieve this objective, the following procedures were used: 1) literature review; 2) model selection and modification; 3) instrument preparation; 4) sample selection; and 5) pre-test and revision of procedures and instruments. Following is a discussion of the procedures included in Stage I.

## Literature Review

An extensive library search was conducted to obtain information on financial ratios and to investigate their ability to assess the financial performance of small apparel businesses. A financial ratio matrix is presented in Appendix A illustrating the financial ratios used in previous research studies. Current literature was examined pertaining to marketing characteristics, strategies, marketing mix variables, retailing strategies, and strategic management and conceptual models were studied. The literature review also included previous studies on characteristics and problems of small businesses, performance evaluations for small business, and studies that investigated the relationships of performance to marketing strategies.

## Model Selection and Modification

Two models were selected from the review of literature to serve as the conceptual framwork for the study; the Total Retailing Strategy model (Davidson et al., 1975) and the duPont model (Van Voorhis, 1981). The Total Retailing Strategy model in Appendix B illustrates the close and interdependent relationship between the marketing dimension and the financial dimension. The duPont model, also presented in Appendix B, was selected to explain the financial framework
and interactions among important variables, specifically in terms of cause and effect. The two models were selected because they reflected the general orientation of the study and were thought to be valid representations of the interrelationship of marketing and financial variables.

The Total Retailing Strategy model and the duPont model were modified for the purposes of the study. Small business characteristics, accessibility of financial information, and the unique qualities of retail apparel stores were the basis for initial modifications in the models selected from the literature. Further modifications were made from suggestions of a panel of experienced apparel retail leaders (PEARLs), an accounting consultant, members of the dissertation committee, and information obtained from the pre-test of the instruments. The modified model used as the conceptual framework for the study is illustrated in Figure 2.

The financial elements and components collected for the study were chosen from financial statements typical of small apparel retailers. The eight financial elements and seven financial components were the financial items necessary to calculate the 10 financial ratios selected for the study. Other financial elements, not collected for the study, are shown in the modified model to illustrate the flow and development from financial elements and components to financial ratios. The 10 financial ratios were chosen from the duPont model and ratios used in previous research studies (Jackendoff, 1961; McKeever, 1960; Sanzo, 1977) because they were accessible and functional for the small apparel retailer. The seven marketing strategy factors were modified from the Total Retailing


Figure 2. Modified Model Flow of Financial and Marketing Interrelationships

Strategy model, and the marketing/management characteristics and variables collected for the study.

## Instrument Preparation

Two basic instruments were designed for collection of data. The first instrument consisted of questions seeking information pertaining to the financial items usually found on the year-end Financial Statements; a Balance Sheet and Income Statement. The second instrument was designed to obtain marketing characteristics and the retailer's perception of their market position in relation to their major competitor(s).

Preparation and development of these instruments were based on the modified model (Figure 2) used as the conceptual framework for the study. Previous research studies and questionnaires related to performance evaluation for small businesses, strategy analysis, and relationships of performance to marketing strategies were also relied upon for instrument development.

In order to insure the validity/reliability of each instrument, the following steps were taken. A questionnaire sent to PEARLs, as shown in Appendix $C$, was used to verify the accessibility of financial information obtained from small apparel businesses. A copy of the 1982 Balance Sheet and Income Statement was requested from pre-test respondents to validate the financial information needed on the instrument. A variety of calculations was used to test the validity of the financial information when a Balance Sheet and Income Statement were not returned with the questionnaire. Clarification was obtained for questionable responses
through telephone conversations with respondents. Multiple measures of marketing variables were included on the marketing questionnaires in order to verify responses. Correlation analysis verified the relationship between similar marketing variables. The results are presented in Appendix D.

## Sample Selection

The sample population for the study consisted of approximately 206 retail apparel businesses that were randomly selected (every third listing) from a list of approximately 836 apparel store owner/ managers, geographically representing 29 states. These owner/ managers attended one or more of the 13 workshops sponsored by the Center for Apparel Marketing and Merchandising (CAMM) from January, 1982 through May, 1983. Additional criteria for inclusion of apparel stores in the sample specified a maximum annual sales volume of $\$ 750,000$ and a minimum of one year in operation prior to the study. Finally, the sample was restricted to apparel stores which were single units or which kept separate financial statements if part of a multi-unit operation.

## Pre-test and Revisions

The data collection method and the financial and marketing instruments were pre-tested with 10 apparel retailers who agreed to participate, out of a group of 25 randomly selected retail appare1 owner/managers who attended one or more of the CAMM sponsored workshops offered in the Fall of 1982. Each apparel store retailer was sent a cover letter explaining the research,
a list of the financial information requested and the date when the researcher planned to collect the financial information via telephone. A telephone interview was conducted with each respondent to collect the financial data and to request cooperation in completion of the second questionnaire pertaining to marketing information for each s.tore. The second questionnaire was mailed to each of the 10 retailers. The researcher calculated the financial ratios for each store using the information collected from the telephone interviews. Each store was sent a copy of its financial ratios as soon as the marketing questionnaire was received from the respondent. A copy of the summary report sent to participants is in Appendix E.

The financial and marketing instruments were revised based on the results of the pre-test and the suggestions from several members of the dissertation committee. For example, the financial instrument was shortened from 30 financial items requested from the Balance Sheet and Income Statement to 16 items. Only those financial items that were vital for the study were requested. The format of the marketing questionnaire was reorganized so that similar types of questions were grouped together. Several questions were eliminated that were left unanswered or that were confusing to the 10 retailers participating in the pre-test of the instrument. Questions were reworded for clarity and consistency throughout the marketing questionnaire.

The telephone interviews used to collect financial information for the pre-test appeared to increase the response rate by reassuring confidentiality and further explaining the purposes and value
of the study. ${ }^{2}$ However, due to cost and time constraints, mailed questionnaires were used by the researcher for subsequent collection of financial information and marketing information from the entire sample.

The marketing questionnaire was pre-tested a second time due to the initial pre-test results and the amount and type of format changes suggested by a statistics consultant and several dissertation committee members. The researcher conducted personal interviews with six apparel store owners who responded to each marketing question for the second pre-test. Comments and questions were considered and minor changes were made in the wording of the questions that referred to trading area and in the placement of the questions in the questionnaire booklet. Copies of the revised marketing and financial questionnaires sent to the sample are in Appendix $F$.

## Measurement of Performance

and Strategy

The second objective of the study was the measurement of financial performance and identification of marketing strategy. In order to achieve this objective, the following procedures were used: 1) data collection; 2) data restructure; 3) calculation of financial performance; 4) measurement of financial performance;

[^1]5) categorization of marketing/management strategy; and 6) identification of marketing strategy variables.

## Data Collection

The financial analysis questionnaire (FAQ) booklets which included a cover letter and a self-addressed, stamped return page was mailed to 206 retail apparel stores that initially met the sample selection criteria. The first follow-up postcards were mailed two weeks after the FAQ to 181 non-respondents. Approximately 10 days later, three and one half weeks after the FAQ was mailed, a second follow-up postcard was mailed to 175 non-respondents. A total of 32 FAQ's (17\%) were returned after an initial mailing of 206 FAQ's and two follow-up postcards. Financial questionnaires were deleted from the study if they did not meet the specified criteria. Seven pre-test FAQ's were added because they did meet the criteria for inclusion into the study. Upon receipt of the FAQ or receipt of a copy of year-end financial statements from respondents, the marketing questionnaire (MKT1) booklet was sent to the 37 FAQ respondents who met all the criteria specified for the collection of data. The cover letter included in MKT1 informed respondents that they would receive a copy of financial ratios calculated for their store and a bonus of three months membership in CAMM, ${ }^{3}$ when the MKT1 was returned. The MKT1 included a self-addressed, stamped return page. Both questionnaires (FAQ and MKT1) were coded with a store number to insure the

[^2]confidentiality of information. Follow-up telephone calls were made, after two weeks, to the eight non-respondents of the MKT1. Four additional questionnaires were sent upon request. A total of 33 MKT1 questionnaires (89\%) were returned out of the 37 mailed.

A small response rate was anticipated due to the nature of the FAQ (requesting financial information and/or statments from the retail apparel owners/managers). A minor revision was made in MKT1 to obtain the annual sales volume for use in testing the hypotheses of the study. Annual sales volume was originally requested in the FAQ, and not in the MKT1. The MKT1 was revised slightly, designated as MKT2 and sent to the 174 apparel store owner/managers who did not respond to the previously mailed financial questionnaire (FAQ).

The second marketing questionnaire (MKT2) included only the one additional question which asked for annual sales volume. Respondents to the MKT2 were offered a copy of the median financial ratio values obtained from retail apparel stores similar to their own and a bonus of three months membership in CAMM, if they returned the questionnaire.

One hundred thirty-five follow-up postcards were mailed two weeks after the MKT2 to the non-respondents. Approximately 10 days later a second follow-up postcard was sent to 120 non-respondents requesting their assistance with the study and a prompt reply. A total of 60 MKT2 (34\%) were returned. Data on the number and type of questionnaire sent and response rates are reported in table format in Appendix G.

## Data Restructure

In order to assess instrument-induced sample heterogeneity, a difference-of-means test (t-test) was run between the common variables collected from both marketing questionnaires (MKT1 and MKT2). The results of this test are presented in Appendix H. Significant differences were found between only 4 of the 54 variables common to both instruments. Therefore the 33 MKT1 and the 54 MKT2 surveys were combined for a total of 87 marketing questionnaires (MKTT's) and treated as one group in analyses with marketing variables. Thirtyseven financial questionnaires were used in all analyses of financial data and in the analysis of financial-marketing relationships.

## Financial Ratio Calculation

Financial ratios were calculated in the study by combining the financial elements and components obtained from the financial analysis questionnaire (FAQ), and/or financial statements. A simple computer program utilized basic accounting principles to follow the modified model flow in calculating the financial ratios. The modified model (Figure 2) illustrates the financial framework and interactions among the financial variables. Ten specific financial ratios were selected because they provided the small retail apparel owner/manager with information to make efficient management decisions. The 10 financial ratios selected for the study are presented in Table I along with abbreviations and formulas.

## TABLE I

TEN FINANCIAL RATIOS AND ABBREVIATIONS

| Ratio | Abbreviation | Formula |
| :---: | :---: | :---: |
| 1. Net Profit Margin | PM | $\frac{\text { Net Profit }}{\text { Sales }}$ |
| 2. Inventory Turnover: at Retail | INVTNR | $\frac{\text { Net Sales }}{\text { Avg. Inventory }}$ |
| at Cost | INVTNC | $\frac{\text { CGS }}{\text { Avg. Inventory }}$ |
| 3. Current Ratio | CURRAT | Current Assets Current Liabilities |
| 4. Receivables Turnover | RECTNR | Net Sales <br> $\overline{\text { Accounts Receivable }}$ |
| 5. Sales/Square Foot | S/SQFT | Net Sales <br> Sq.Ft.Selling Space |
| 6. Rate of Asset Turnover | ASSTNR | $\frac{\text { Net Sales }}{\text { Total Assets }}$ |
| 7. Rate of Return on Assets | ROA | $\frac{\text { Net Profit }}{\text { Total Assets }}$ |
| 8. Leverage Ratio | FLM | $\frac{\text { Total Assets }}{\text { Net Worth }}$ |
| 9. Rate of Return on Investment | ROI | $\frac{\text { Net Profit }}{\text { Net Worth }}$ |
| 10. Gross Margin Return on Investment | GMROI | $\frac{\text { Gross Margins }}{\text { Avg.Inventory }}$ |

Median, upper and lower quartile financial ratio values were calculated for the entire sample of FAQ respondents, ${ }^{4}$ and were used in comparing the retail apparel stores in the study to nationally collected financial ratios for retail apparel stores. The 37 retail apparel store owner/managers who responded to the FAQ and MKT1 received a report containing the financial ratios for their individual store along with the median values of all 37 stores. In addition, the financial ratio median values were mailed to the 60 MKT2 respondents.

## Financial Performance Measurement

Return on investment (ROI), annual net sales (NSALES) and 10 selected financial ratios were used as the three financial performance indicators for the purposes of the study. The rationale for the selection of these three financial performance indicators incorporated several factors. First, return on investment (ROI) was described as the key measure of management efficiency in the literature (Wortman, 1976). Individuals generally invest in a business to make a return that would be higher than from alternative investments. This was considered along with the duPont model flow and modified model perspective, which show ROI as an overall indicator of financial success. The effects of the length of time in business (store age) and store size (net sales) on the relationship between ROI and marketing strategy were investigated, as they were for the other two performance indicators.
${ }^{4}$ Descriptive and anlytical statistics reported in the study were derived with a conventional statistical package (SAS).

Second, annual net sales (NSALES), an intermediate financial performance indicator was used to investigate its relationship to marketing strategies. While sales per se do not guarantee success in terms of profits, sales are a readily observable determinant of profit. Given fixed costs, sales in excess of costs of goods sold are a plausible indicator of profitability.

Finally, the financial ratios, typically considered as intermediate indicators of the financial performance of a business, were used as the third indicator of financial performance. Financial ratios help to expedite financial analysis of a business by reducing the large number of items on the Balance Sheet and Income Statement to a relatively small set of economically meaningful indicators (Lev, 1974). Ten financial ratios, identified for use in the study were factor analyzed using a varimax rotation factor pattern, in order to reduce the number to an even smaller workable number and thus identify underlying dimensions of groups of financial ratios. The resulting three factor scores were used in addition to the 10 financial ratios as financial performance indicators.

## Marketing/Management Strategy Categorization

Marketing strategy variables collected on the MKT1 and MKT2 were categorized for the study into three groups of variables: 1) marketing/management characteristics; 2) management program profile; and 3) retailer perceived marketing position. Marketing/management characteristic variables generally described the location, size, and structure of retail apparel stores in the study, as well as descriptive characteristics of management, such as job title. The nine
variables categorized as marketing/managment characteristics and their abbreviated descriptive names are presented in Table II.

Management program profile variables were the second category of marketing strategy variables and also described the retail apparel stores in the study, but tended to concentrate more on the service and inventory profile of the retail store. Nine management program profile variables are shown in Table III along with their descriptive abbreviated names.

The third and last category of marketing strategy variables described the retailer's perception of their stores' marketing characteristics in relation to major competitors. Table IV contains the thirteen variables and their abbreviated names.

## Marketing Strategy Identification

Marketing strategy as defined for the study was the combination of all three categories of marketing strategy variables described previously. However, in order to test the hypotheses for the study, the number of marketing strategy variables were reduced to a workable size. This was accomplished through the examination of correlations and the use of factor analysis with varimax rotation. In essence, factor analysis was used to identify key underlying dimensions which influenced multiple variables, thereby reducing redundancy. Factor scores were calculated from the resulting factor solution, using the complete estimation method (Nie et al., 1975). Factor names were based on the content of the items loading highest on each factor. Some marketing variables were eliminated from the factor analysis because of the measurement of scale used in the questionnaire

## TABLE II <br> NINE MARKETING/MANAGEMENT CHARACTERISTIC <br> VARIABLES AND ABBREVIATIONS

| Variables | Abbreviation |
| :---: | :---: |
| 1. Size of Store | NSALES |
| 2. Length of Time in Business | YEARS |
| 3. Size of City or Town | POP |
| 4. Location of Store | SLOC |
| 5. Type of Organization | ORG |
| 6. Type of Store | STYPE |
| 7. Current Job Title | title |
| 8. Trading Area: |  |
| Miles within which customers live; North and South | MILESNS |
| East and West | MILESEW |
| 9. Competition: |  |
| Number of stores selling similar apparel | SAPP |
| Number of direct competitors | DCOM |

TABLE III

## NINE MANAGEMENT PROGRAM PROFILE VARIABLES AND ABBREVIATIONS

1. Customer Services Offered:

Delivery SERV1
Alterations SERV2
Credit (instore/national) SERV3
Gift Wrap SERV4
Lay-Away SERV5
Wardrobe Consultation and/or - SERV6
Wardrobe Planning
Return Policy SERV7
Pre-Notice of Sales SERV8
Other Services SERV9
2. Merchandise in Inventory:

Women's Apparel/Accessories WAPCT
Men's Apparel/Accessories MAPCT
Children's Apparel/Accessories . CAPCT
Family Apparel/Accessories FAPCT
Other OAPCT
3. Number of Merchandise Classifications and Subclassifications:

Women's Apparel/Accessories WACLAS, WASCLAS
Men's Apparel/Accessories
Children's Apparel/Accessories
Family Apparel/Accessories
Other
MACLAS, MASCLAS
CACLAS, CASCLAS
FACLAS, FASCLAS
OACLAS, OASCLAS
4. Initial Markup IMU
5. Advertising as a \% of Sales

ADVPCT
6. Average Inventory at Retail

AVGINVR
7. Average Inventory at Cost

AVGINVC
8. Square Feet of Selling Space SQFT
9. Number of Salespeople/day

## TABLE IV

THIRTEEN RETAILER MARKET POSITION VARIABLES
PERCEIVED IN RELATION TO COMPETITORS AND ABBREVIATIONS

| Perceived Market Variables | Abbreviation |
| :--- | :--- |
| 1. Convenience of Location | LOC |
| 2. Hours of Operation | OPER |
| 3. Convenience of Layout | LAYOUT |
| 4. Adequacy of Parking | PARK |
| 5. Extent of Customer Services | CSER |
| 6. Adequacy of Store Employees | EMP |
| 7. Visually Appealing | VIS |
| 8. Extent of Promotional Activity | PROMO |
| 9. Price Leve1 of Merchandise | PRICL |
| 10. Quality of Merchandise | QUAL |
| 11. Variety (Breadth) of Merchandise | VARIETY |
| 12. Assortment (Depth) of Merchandise | ASRT |
| 13. Merchandise Image | IMAGE |

(nominal-scaled variables were eliminated) or a low response rate which hindered the effectiveness of factor analysis and ultimately the reliability of analytical findings.

## Analysis of Relationships

The third and last objective for the study was the analysis of relationships between financial performance and marketing strategies and identification of the effects of store age and store size on this relationship. In order to achieve this objective, the following activities were included: 1) analysis of the relationship between financial indicators and marketing factors; 2) identification of the effects of store age and store size on financial indicators and marketing factors; 3) identification of the effects of store age and size on the relationship between financial indicators and marketing factors; 4) formulation of conclusions as to the effects of size and age on financial performance and marketing strategies; and 5) recommendations for the revision of models and instruments for the collection of data and recommendations and suggestions for small apparel retailers.

Financial Performance and Marketing
Strategy Analysis

Relationships between financial indicators and marketing factors were tested following the modified model flow (Figure 2) and the first set of hypotheses developed for the study using correlation and multiple regression analysis. Both of these statistical techniques investigate the relation between variables. Correlation analysis,
which measures the closeness or degree of a linear relationship between two variables, was used in analyzing the relationship between the three financial indicators and the seven marketing factors. Each of the financial indicators (ROI, NSALES and financial ratios) was analyzed separately in relation to marketing factors. Multiple regression, which shows how one variable is related to another when other variables are "held constant" or "controlled," was used to identify the relative importance of the seven marketing factors in explaining the two financial indicators, ROI and NSALES. Regression analysis was attempted between financial ratios and marketing factors. However, due to the small sample size the results of this analysis were not considered reliable. The decision criterion for acceptance or rejection of the proposed hypotheses was based on the strength (statistical significance) of the relationship between financial indicators and marketing factors.

## Store Age and Size Effects

The effects of store age and store size on the relationship between financial indicators and marketing factors, and directly on those two types of variables were studied by first sorting the 87 MKTTs into one of two categories by length of time in business (store age), and one of two categories by size of store (net sales). Stores in business less than five years were sorted into the category labeled YEARCAT1, and stores in business five years or more
were labeled YEARCAT2. The median sales volume ${ }^{5}$ for the respondents in the study was used as the point of division between the two size categories, so that stores having an annual sales volume less than the median were labeled SIZECAT1, and stores having an annual sales volume equal to or more than the median were labeled SIZECAT2.

Two questions were addressed in the analysis: 1) Does marketing strategy or financial performance vary by store size (net sales) or store age (years in business)?; and 2) Does the relationship between marketing strategies and financial performance vary with store size or store age? A t-test was conducted to assess the differences between financial indicators and marketing factors across the two size categories and the two age categories. Correlation analysis was used in measuring the effects of age and size on financial performance and marketing strategies and on the relationship between the three financial indicators and seven marketing factors. Regression analysis was used to identify the relative importance of the marketing factors in explaining the variation in the financial indicator, NSALES, when the sample was sorted into categories by store age and size.

## Conclusions and Recommendations

Conclusions as to the effects of length of time in business and size of store on financial performance and marketing strategy were based on correlation and regression analysis findings.

[^3]Analytical results were discussed in terms of: 1) varying relationships between marketing strategies and financial performance; and 2) emphasis of different marketing strategies for the size and age categories of stores.

Recommendations for revision of the models and the instruments used in the collection of data were based on: 1) retailers response or non-response to a question; 2) clarity of response; and 3) problems encountered with the structuring and analysis of data.

Recommendations and suggestions for small apparel retailers in terms of financial performance evaluation and marketing strategies were based on: 1) the review of literature, which led to the development of procedures and selection of financial ratios for small apparel firms; 2) correlation, regression, and t-test results from the three hypotheses and related sub-hypotheses tests; and 3) the need for information which is both functional and applicable to the small apparel retailer.

# CHAPTER IV 

## FINDINGS AND ANALYSIS

The purposes of the study were to investigate financial performance and marketing strategy of a selected group of retail apparel stores and to analyze the relationships between financial indicators and marketing factors. The three objectives of the study were to: 1) construct a theoretically-based conceptual model to guide in the assessment of financial performance and marketing strategy; 2) measure financial performance and identify marketing strategies; and 3) analyze the relationship between financial indicators and marketing factors and examine the interrelationships of the length of time in business and store size.

Survey results discussed first include the sample description, and a description of the financial performance and marketing strategy. A discussion of the preliminary analysis of data and the results for each hypothesis test follow the survey results.

## Sample Description

The population for the study consisted of approximately 836 apparel store owners and/or managers who attended one or more of the 13 workshops sponsored by CAMM from January, 1982 through May, 1983. Approximately one-third, 206, of the workshop participants were randomly selected and became the target sample for the study.

Apparel stores included in the sample had an annual sales volume of $\$ 750,000$ or less and had been in business less than 50 years.

The response rates to the three questionnaires used to collect data for the study are presented by number and percentage in Appendix G. Only 32 retailers (17\%) responded to the financial analysis questionnaire (FAQ) mailed to the target sample of 206 apparel stores. Two of these questionnaires were deleted due to an annual sales volume of over $\$ 750,000$. A total of 37 questionnaires that met the criteria established for the study included seven pre-test FAQ's.

The first marketing questionnaire (MKT1) was returned by 33 of the 37 retailers who had completed the financial information requested in the financial questionnaire (FAQ), for a response. rate of 89 percent. Fifteen different states were represented by respondents to the two questionnaires (FAQ, MKT1), as shown in Appendix $G$.

Sixty retailers responded to the second marketing questionnaire (MKT2) sent to 174 apparel store owners who did not respond to the financial questionnaire. Six responses did not meet the criteria established for the study. A total of 54 questionnaires were usable, with 21 different states represented by respondents to the second marketing questionnaire (Appendix G).

Descriptive results were organized into two major areas Financial Performance and Marketing Strategy. The following discussion relates to each of these areas.

## Financial Performance

Financial ratios were calculated in the study by combining the financial elements and components obtained from the FAQ and/or financial statements. Figure 2 in Chapter III illustrates the combination of financial elements and financial components in calculating 10 financial ratios. The following tables and discussion of financial elements, financial components and resulting financial ratios were based on 37 FAQs.

## Financial Elements

Eight financial elements compiled from each of the 37 apparel stores are listed in Table $V$ along with the mean values, the percentage of aggregate totals for the financial elements and comparable national percentages as reported by Dun and Bradstreet (1982) and Packard and Carron (1982).

The mean values of the financial elements help describe the financial performance of the businesses in the study. The mean values as a percentage of their respective aggregate totals are useful when comparing the apparel stores in the sample to other small businesses or nationally reported financial data for apparel stores.

The mean value for cash on hand was approximately $\$ 13,370$ and the accounts receivable were about half that amount at $\$ 6,790$. The ending inventory, $\$ 63,100$ was higher than the beginning inventory of \$57,946.

Dun and Bradstreet (1982) and Packard and Carron (1982) both report nationally collected financial elements for women's apparel

TABLE V
SAMPLE MEANS AND AGGREGATE TOTALS FOR EIGHT FINANCIAL ELEMENTS

|  |  |  | \% of Aggregate Totals |  |
| :--- | ---: | :---: | :---: | :---: |

a Percentage of aggregate totals as reported for this study are based on average net sales of nearly $\$ 206,110$.
${ }^{\mathrm{b}}$ Percentage of total assets as reported by Dun and Bradstreet (1982), based on women's accessory, specialty stores with average net sales of nearly $\$ 180,000$.

Cercentage range of annual net sales as reported by Packard and Carron, assuming gross sales of $\$ 250,000$ for retail apparel stores.
stores within the annual sales volume range of this sample. Data from these sources were used for discussion purposes in comparing this sample to other retail apparel stores. Dun and Bradstreet (1982, p. 151) reported financial elements for Women's Ready-toWear stores with an average net sales of nearly $\$ 180,000$. Packard and Carron (1982, p. 83) assumed gross sales of $\$ 250,000$, in reporting aggregate totals for financial elements. ${ }^{6}$

Cash on hand (12.7\%) and accounts receivable at 6.4 percent (as percentages of total assets) were lower for this sample than nationally reported figures by Dun and Bradstreet, even though this sample of stores had reported a higher mean sales volume $(\$ 206,110)$ than Dun and Bradstreet $(\$ 180,000)$. Inventory costs (as a percentage of total assets) were, on the average, nearly 10 percent higher for this sample (54.9\% and 59.8\%) than average inventory reported by Dun and Bradstreet (47.3\%). Total operating expenses (30.2\%), were lower than the range (32.5-41\%) reported by Packard and Carron. Salaries (10.5\%) were considerably lower than the national range (18-20\%). This may be due to the fact that some apparel store owners did not include their salaries on the Income Statement. Advertising expense at 3 percent (as a percentage of net sales) was high compared to the range reported by Packard and Carron (2.5-3\%). Financial components collected and compared to nationally collected aggregate totals are discussed next.

[^4]
## Financial Components

Seven financial components obtained from the first questionnaire (FAQ) are listed in Table VI along, with the mean values, the percentages of aggregate totals for the financial components as well as comparable national percentages as reported by Dun and Bradstreet (1982) and Packard and Carron (1982).

All three of the financial components as percentages of their aggregate totals in the study appeared to be higher than data reported nationally.

Current assets at $\$ 86,7.92$ made up the largest portion of total assets $\$ 105,504$, representing 82 percent compared to 75 percent reported by national figures. Cost of goods sold, $\$ 133,469$, was 64.8 percent of annual net sales, $\$ 206,110$, which was high compared to national figures (57.7\%).

Following is a discussion of the financial ratios calculated for the study.

Financial Ratios

Financial ratios are indicators of a business' financial performance and thus can provide the small apparel store owner with information to make efficient management decisions. Ten financial ratios selected for the study are listed in Table VII along with the median and upper and lower quartile values calculated for the 37 apparel stores and comparable values reported by Dun and Bradstreet (1982), NRMA (1982), and Robert Morris Associates (1982). The median and upper quartile values for all

TABLE VI
SAMPLE MEANS AND AGGREGATE TOTALS FOR SEVEN FINANCIAL COMPONENTS

| Financial Components | N | Sample Mean | \% of Aggregate Totals |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sample Percentages | Nationally <br> Reported <br> Percentages |
| 1. Current Assets | 36 | \$86,792.11 | 82.3 | $75.1{ }^{\text {a }}$ |
| 2. Total Assets | 37 | 105,503.92 |  |  |
| 3. Current Liabilities | 37 | 34,286.03 | 32.6 | $26.1{ }^{\text {b }}$ |
| 4. Total Liabilities | 37 | 54,476.84 |  |  |
| 5. Owners Equity (Net Worth) | 37 | 50,613.68 |  |  |
| 6. Cost of Goods Sold | 37 | 133,468.81 | 64.8 | $57.7^{\text {c }}$ |
| 7. Annual Net Sales | 90 | 206,109.88 |  |  |

$a_{\text {Percentage of }}$ total assets reported by Dun and Bradstreet (1982), based on women's accessory, specialty stores with average net sales of nearly $\$ 180,000$.
${ }^{\mathrm{b}}$ Percentage of total liabilities and net worth reported by Dun and Bradstreet (1982).
${ }^{\text {c Percentage }}$ of annual net sales reported by Packard and Carron (1982), assuming gross sales of $\$ 250,000$ for retail apparel stores.

## TABLE VII

TEN SAMPLE MEDIAN, UPPER AND LOWER QUARTILE FINANCIAL RATIOS COMPARED TO NATIONALLY COLLECTED RATIOS

| Financial Ratio | N | Upper Quartile | Median | Lower Quartile |
| :---: | :---: | :---: | :---: | :---: |
| 1. Net Profit Margin | 37 | $\begin{array}{r} 10 \% \\ {[14.8 \%} \end{array}$ | $\begin{array}{r} 5 \% \\ 7.6 \% \end{array}$ | $\begin{gathered} -2 \% \\ 2 \%]^{a} \end{gathered}$ |
| 2. Inventory Turnover at Cost | 29 | $\begin{gathered} 2.44 \\ {[4.7} \end{gathered}$ | $\begin{aligned} & 1.93 \\ & 3.2 \end{aligned}$ | $\begin{aligned} & 1.42 \\ & 2.3]^{b} \end{aligned}$ |
| at Retail | 29 | $\begin{gathered} 3.48 \\ {[6.1} \end{gathered}$ | $\begin{aligned} & 3.03 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 2.45 \\ & 2.7]^{\mathrm{a}} \end{aligned}$ |
| 3. Current Ratio | 35 | $\begin{gathered} 6.13 \\ {[7.0} \end{gathered}$ | $\begin{aligned} & 2.79 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 1.76 \\ & 1.6]^{\mathrm{a}} \end{aligned}$ |
| 4. Receivables Turnover | 19 | 121.66 | 41.26 | 21.11 |
| 5. Sales/Square Foot | 86 | \$144.44 | $\begin{aligned} & \$ 100.76 \\ & {[147.10]^{c}} \end{aligned}$ | \$73.95 |
| 6. Rate of Asset Turnover | 37 | 2.51 | 2.06 | 1.45 |
| 7. Rate of Return on Assets | 37 | $\begin{array}{r} 19 \% \\ {[25.6 \%} \end{array}$ | $\begin{array}{r} 7 \% \\ 12 \% \end{array}$ | $\begin{gathered} -3 \% \\ 3.7 \%]^{a} \end{gathered}$ |
| 8. Leverage Ratio | 37 | 3.46 | 1.77 | 1.21 |
| 9. Rate of Return on Investment | 37 | $\begin{array}{r} 31 \% \\ {[45.5 \%} \end{array}$ | $\begin{array}{r} 18 \% \\ 19.1 \% \end{array}$ | $\begin{aligned} & -9 \% \\ & 8 \%]^{a} \end{aligned}$ |
| 10. Gross Margin Ŕeturn on Investment | 29 | 1.35 | ${ }_{[3.33]^{\mathrm{c}}}$ | . 76 |

${ }^{\text {a Reported }}$ by Dun and Bradstreet (1982).
$\mathrm{b}_{\text {Reported }}$ by Dun and Bradstreet (1981).
Ceported by the National Retail Merchants Association (1981).

10 ratios were positive, indicating a reasonably favorable financial performance for the 37 stores as a group. However there were three negative lower quartile values, for net profit margin (-2\%), rate of return on assets ( $-3 \%$ ), and rate of return on investment ( $-9 \%$ ).

Seven out of 10 financial ratios used for the study were reported nationally for women's apparel stores. Data were available only for stores over one million dollars annual sales volume, but the ratios were used for discussion purposes and as a point of reference for performance evaluation. All of the median values and upper and lower quartile values with one exception were below nationally reported values. The exception was the lower quartile value for the current ratio (1.76), which was slightly above the value reported by Dun and Bradstreet (1.6). The upper quartile value (6.13) and median (2.76) for the current ratio were slightly below those reported by Dun and Bradstreet. The most obvious differences between the ratios for the study and those reported nationally seemed to be in the upper and lower quartiles. The median values were just below those reported nationally, with the exception of gross margin return on investment (.98) and sales/ square foot ( $\$ 100.76$ ), which were noticeably lower.

In summary, five of the seven financial elements reported were lower than similar nationally reported financial items. Inventory costs on the average, were almost 10 percent higher than nationally reported data. Advertising expense was high in the range of data reported by Packard and Carron. Financial components as aggregate totals were all higher than similar reported national data. Overall,
the financial ratios calculated for the study were below ratios reported nationally.

## Marketing Strategy

Marketing strategy was defined in the study as the combination of marketing/management characteristics, a management program profile and retailer perceived market position. The following tables and discussion were based on data compiled from 87 apparel retailers' responses to the first and second marketing questionnaires (MKTT).

## Market and Management Characteristics

Market and management characteristics are presented in Table VIII. These characteristics described the "typical" apparel store in the study and its general market/management strategy.

The average store in the study had annual sales of approximately $\$ 206,110$, with a range of annual sales from $\$ 62,000$ to $\$ 727,272$. The average number of years the stores had been in business was 6.5 with a range from 1 to 33 years.

The majority of stores (73\%) were in cities or towns with a population of 25,000 or less, with 53 percent being located in a city or town of less than 10,000 . Sixty-one percent of the stores were located in a central business district, and 28 percent were either in a strip center or free standing location. Only 6 percent were located in a major shopping mall.

An interesting management characteristic in the study was that the largest percentage of stores (48\%) were legally organized as

TABLE VIII

SAMPLE MEANS FOR NINE CATEGORIES OF MARKETING/ MANAGEMENT CHARACTERISTICS

| Characteristics | N | \% | Mean | SD | Range |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. SIZE OF STORE |  |  |  |  |  |
| Net Sales | 90 |  | \$206,110 | \$121 ${ }^{\text {a }}$ | \$62-727 ${ }^{\text {a }}$ |
| 2. YEARS OWNED BUSINESS |  |  |  |  |  |
| Years | 86 |  | 6.5 | 5.3 | 1-33 |
| 3. SIZE OF CITY OR TOWN |  |  |  |  |  |
| Less than 10,000 | 44 | 53 |  |  |  |
| 10,000-25,000 | 17 | 20 |  |  |  |
| 25,001-50,000 | 11 | 13 |  |  |  |
| over 50,000 | 11 | 13 |  |  |  |
| 4. LOCATION OF STORE |  |  |  |  |  |
| Central Business District | 51 | 61 |  |  |  |
| Major Shopping Ma11 | 5 | 6 |  |  |  |
| Strip Center | 12 | 14 |  |  |  |
| Free Standing Location | 12 | 14 |  |  |  |
| Other | 3 | 4 |  |  |  |
| 5. TYPE OF ORGANIZATION |  |  |  |  |  |
| Individual Proprietorship | 34 | 39 |  |  |  |
| Partnership | 11 | 13 |  |  |  |
| Corporation | 41 | 48 |  |  |  |
| 6. TYPE OF STORE |  |  |  |  |  |
| Speciality Store | 68 | 81 |  |  |  |
| Department Store | 4 | 5 |  |  |  |
| Family Clothing Store | 5 | 6 |  |  |  |
| Discount Clothing | 2 | 2 |  |  |  |
| Other | 5 | 6 |  |  |  |
| 7. CURRENT JOB TITLE |  |  |  |  |  |
| Store Owner | 28 | 32 |  |  |  |
| Store Manager | 7 | 8 |  |  |  |
| Store Owner/Manager | 48 | 55 |  |  |  |
| Other | 4 | 5 |  |  |  |
| 8. TRADING AREA |  |  |  |  |  |
| Miles within which customers live: |  |  |  |  |  |
| North and South | 83 |  | 63 | 51 | 2-300 |
| East and West | 83 |  | 63 | 49.1 | 2-300 |
| 9. COMPETITION |  |  |  |  |  |
| No. of store selling similar apparel | 86 |  | 7 | 6.7 | 0-40 |
| No. of direct competitors | 85 |  | 4 | 4.3 | 0-25 |

${ }^{\mathrm{a}}$ The standard deviation and range for net sales are reported in thousands (000).
corporations. Individual proprietorships, a common legal form of organization for stores under one million dollars sales volume represented only 39 percent of the total number of stores included in the study.

The majority of stores were classified as specialty stores (81\%) with family clothing stores (6\%) as the next highest percentage. The majority ( $87 \%$ ) of respondents were store owners or store owner/managers. The average store's trading area, described as the area where most of the store's customers lived, was 63 miles north and south and 63 miles east and west. Thus, the radius of the trading area was approximately 31.5 miles.

Competition was described in two dimensions for the study. the number of stores that sold similar apparel within their trading area and the number of those stores that were direct competitors within the trading area. Typically, seven stores sold similar apparel within the trading area of each store in this sample and approximately four of those were considered direct competitors. Next is a discussion of the second aspect of marketing strategy which dealt with management variables.

## Management Program Profile

Management program profile variables are presented in Table IX for the stores in the study. A variety of customer services were available in a majority of stores in this sample. Layaway (97\%), a return policy (90\%), gift wrapping (86\%) and credit (84\%) were offered by over three-fourths of the stores in the sample. Only 24 percent offered delivery service.

TABLE IX

MEANS AND FREQUENCIES FOR EIGHT CATEGORIES OF MANAGEMENT PROGRAM PROFILE VARIABLES


The majority of stores in the study sold women's apparel and accessories (62\%). Men's (17\%) and children's (16\%) apparel and accessory stores were represented by less than one-fifth of the stores. The number of merchandise classifications ${ }^{7}$ and subclassifications ${ }^{\overline{8}}$ a store carries relates to its variety and assortment of merchandise. Those stores carrying men's apparel listed the largest number of classifications (10) with 26 subclassifications. Children's apparel stores listed nine different classifications, and carried the largest number of subclassifications (30). Women's apparel and accessory stores carried a smaller variety and/or assortment of merchandise with only 6 merchandise classifications and 12 subclassifications.

Stores in the study had an initial markup at retail of 49
percent, even though their average inventory at cost (\$72,935) was approximately 65 percent of their average inventory at retail. (\$112,161). This 16 percent discrepancy may be due to markdowns and sale merchandise. ${ }^{9}$

Other profile variables included: advertising (as a percentage of sales), which was 4.1 percent. Selling space was slightly over

[^5]2100 square feet, with a range from 100 sq. ft. to 8230 sq. ft.; and an average of two salespeople per day were working in each store. Retailer perceived market position was the third and last aspect of marketing strategy for the study.

## Retailer Perceived Market Position

Means, standard deviations, and ranges for retailer's perception of the marketing characteristics of their store in relation to their major competitors are presented in Appendix I. A visual presentation of the mean values is depicted in Table X . Retailers in the study appeared to view their market position as nearly the same or better overall than their competitor(s). Visual appearance (1.9), probably the most subjective market position variable, was rated the highest by store retailers. Convenience of store layout (2.3), extent of customer services (2.1), quality of merchandise (2.3), and merchandise image (2.3) were rated by store retailers as their next most outstanding marketing characteristics in relation to major competitors. The number of hours of store operation (3.0), price level of merchandise (3.0), the extent of promotional activity (2.8), and convenience of location (2.8) were rated as more similar to their major competitor(s).

In summary, the retail apparel stores in the study, had been in business 6.5 years, and had an annual sales volume of approximately \$206,110. Seventy-three percent had stores in cities or towns with a population of 25,000 or less, largely locating in the central business district. Over three-fourths of the stores were categorized as specialty stores, having women's apparel and accessories as

TABLE X

## VISUAL PRESENTATION OF MEAN VALUES FOR RETAILERS PERCEPTION OF THEIR MARKET POSITION IN RELATION TO MAJOR COMPETITORS

```
MARKETING
VARIABLE
```



62 percent of their inventory. Nearly half of the stores were corporations. Of the eight customer services listed in the questionnaire, 90 percent or more of the stores indicated offering layaway and had a return policy. Retailers perceived their store in relation to competitors to be more visually appealing and about the same in price level and hours of operation. The following section deals with the reduction of financial and marketing strategy variables in preparation for hypothesis testing.

## Preliminary Analysis of Data

The results of the factor analysis of the financial ratios using a varimax rotation factor pattern, which tends to make the factors more interpretable, are presented in Table XI. The three factors explained approximately 81 percent of the total variance. Final communality estimates are the squared multiple correlations for predicting the variables from the estimated factors, and are . 66 and above for all of the financial ratio variables.

The first factor showed high positive loadings for inventory turnover at cost and retail, asset turnover, the leverage ratio, gross margin return on investment and receivables turnover. This factor was interpreted as being related to "Efficiency." The second factor was labeled "Profitability" with net profit margin, return on assets and return on investment showing high positive loadings and the leverage ratio showing a high negative loading. The third factor was labeled "Liquidity" and had a high positive loading for both sales/square foot and the current ratio. The factor analysis results confirmed the expectation that the

TABLE XI
FACTOR ANALYSIS OF FINANCIAL RATIOS:
ROTATED FACTOR PATTERN ${ }^{\text {a }}$

|  | 1 | 2 | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| FACTOR | Efficiency | Profitability | Liquidity |  |
| EIGENVALUE | 5.0 | 2.2 | 1.7 |  |
| CUM. PCT. VAR. | 45 | 65 | 81 |  |
| Ratio |  |  | - | Final <br> Communality <br> Estimates |
| 1. Inventory Turnover: At Cost | . 88 |  |  | . 79 |
| At Retail | . 95 |  |  | . 94 |
| 2. Asset Turnover | . 85 |  |  | . 85 |
| 3. Net Profit Margin |  | . 81 |  | . 69 |
| 4. Leverage Ratio | . 56 | -. 56 |  | . 72 |
| 5. Return on Assets |  | . 82 |  | . 88 |
| 6. Gross Margin Return on Investment | . 83 |  |  | . 79 |
| 7. Return on Investment |  | . 91 |  | . 90 |
| 8. Sales/Sq.Ft. |  |  | . 90 | . 86 |
| 9. Receivables Turnover | . 68 |  |  | . 66 |
| 10. Current Ratio |  |  | . 89 | . 80 |

[^6]10 financial ratios could be represented by a lesser number of variables. The three underlying dimensions specified by the factor analysis were used in addition to the individual financial ratios in all analyses with financial ratios.

The results of the factor analyses of marketing/management characteristics, and of the management program profile variables are presented in Table XII. Size of city or town, store location, type of organization, store type, job title, and customer services were eliminated from this analysis because they were measured using a nominal scale (and therefore did not meet the criterion of ordinally scaled data for factor analysis). ${ }^{10}$ Variables that identified the number of merchandise classification and subclassifications in inventory presented in Table IX were also eliminated from this analysis due to a small response rate.

The resulting nine marketing variables loaded on three factors, with the exception of advertising percentage which did not load on any factor at the .4 minimum factor loading. ${ }^{11}$ Approximately 65 percent of total variance was explained by three factors. Final communality estimates were at or above .70 with the exception of advertising percentage (.11) and initial markup (.21). Small

10 These variables were converted to a series of dicotomous variables to permit factor analysis however; the resulting factors did not lend themselves to meaningful interpretation.
${ }^{11}$ Correlation analysis with the 33 marketing variables (AppendixD) indicated that advertising percent correlated only with number of years in business (-.22) and indicated a low negative loading (-.28) in the factor analysis with marketing/ management characteristics and management program profile variables.

TABLE XII

FACTOR ANALYSIS OF SELECTED MARKETING VARIABLES: ROTATED FACTOR PATTERN ${ }^{\text {a }}$

| FACTOR | 1 <br> Store Growth | $\begin{gathered} 2 \\ \text { Trading } \\ \text { Area } \end{gathered}$ | Competition |  |
| :---: | :---: | :---: | :---: | :---: |
| EIGENVALUE | 2.6 | 1.9 | 1.4 |  |
| CUM. PCT. VAR. | 29 | 50 | 65 |  |
| Variables |  |  |  | Final <br> Communality Estimates |
| Length of Time in Business | . 79 |  |  | . 70 |
| Miles Customers Live: North and South |  | . 97 |  | . 94 |
| East and West |  | . 97 |  | . 94 |
| Stores Selling Similar Apparel |  |  | . 88 | . 79 |
| Direct Competitors |  |  | . 74 | . 71 |
| Initial Markup |  |  | -. 45 | . 21 |
| Advertising Percent |  |  |  | . 11 |
| Sq.Ft. Selling Space | . 83 |  |  | . 71 |
| No. of Salespeople. | . 87 |  |  | . 78 |

[^7]apparel retailers do not tend to advertise with any consistency nor do they base their advertising percentage on a formula therefore no relationship appeared to exist between advertising and marketing variables.

The first factor was interpreted as being related to "Store Growth" and showed high positive loadings for years in business, square feet of selling space, and number of salespeople. The second factor was labeled "Trading Area" with miles, north, south, east, and west showing high positive loadings. The third factor was labeled "Competition" with the number of stores selling similar apparel and the number of direct competitors showing high positive loadings, and initial markup loading negatively.

The resulting three factors from this analysis (store growth, trading area, and competition) were used to represent marketing/ management characteristics and management program profile variables and will be referred to as "Selected Marketing Variables." These factors were used in later correlation and regression analyses to test the hypotheses for the study.

The results of factor analysis on retailer perceived market position variables are presented in Table XIII. Four factors explained approximately 62 percent of the total variance with all 13 variables loading at the . 49 level or above. Final communality estimates were all at or above . 45 , which was a satisfactory representation of the variables in this analysis. The first factor was labeled "Merchandise Characteristics" and had high positive loadings for the variables quality, variety, and assortment of merchandise. The second factor was interpreted as being related to "Atmosphere"

TABLE XIII

## FACTOR ANALYSIS OF RETAILER PECEIVED <br> MARKET POSITION VARIABLES: <br> ROTATED FACTOR PATTERN ${ }^{\text {a }}$

| FACTOR | ```1 Merchandise Character- istics``` | Atmosphere | 3 <br> Location <br> Factors | 4 <br> Promo- <br> tional <br> Activity |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $4.0$ | $1.5$ | $1.3$ | 1.2 |  |
| Variables |  |  |  |  | Fina1 Communality Estimates |
| Location |  |  | . 70 |  | . 49 |
| Hours of Operation |  |  |  | . 60 | . 67 |
| Layout |  | . 83 |  |  | . 71 |
| Parking |  |  |  | -. 50 | . 45 |
| Customer Services |  | . 52 |  |  | . 49 |
| Employees |  |  | . 64 |  | . 54 |
| Visually |  | . 86 |  |  | . 77 |
| Promotions |  |  |  | . 73 | . 67 |
| Price Level |  |  | . 49 |  | . 46 |
| Quality | . 51 |  |  |  | . 62 |
| Variety | . 88 |  |  |  | . 79 |
| Assortment | . 87 |  |  |  | . 80 |
| Image |  | . 49 |  |  | . 55 |

[^8]with positive loadings for layout, customer services, visual appeal and image. The third factor was labeled "Location Factors" and had positive loadings for location, employees and price level. The fourth factor labeled "Promotional Activity" had positive loadings for hours of operation and promotions and a negative loading for parking. These factors were used in further analyses in place of the individual retailer perceived market position variable in testing hypotheses.

In summary, these preliminary analyses reduced the number of variables and the possibility of multicollinearity while identifying the underlying dimensions within marketing strategy and financial performance variables. Three factors resulted from the factor analysis of financial ratios: Efficiency (EFF) Profitability (PROFIT), and Liquidty (LIQ). These factors will be used in addition to the individual financial ratios in further analyses. Seven factors resulted from the factor analysis of marketing strategy factors, and will be used in place of the 54 individual marketing variables in further analyses. Three factors were identified from the marketing/management characteristics and management program profile variables: Store Growth (STGRO), Trading Area (TA), and Competition (COMPET). Four factors were identified from the retailer perceived market position variables; Merchandise Characteristics (MDSECHAR), Atmósphere (ATMOS), Location Factors (LOCFAC), and Promotional Activity (PROMOACT). With these preliminary analyses in hand, the next section turns to analysis of the hypotheses presented in Chapter I.


#### Abstract

Prior to discussing the results, each hypothesis is restated for convenience.


## Results for Hypotheses

Three hypotheses and related sub-hypotheses presented in Chapter I were tested and results reported in this chapter. Each hypothesis is presented followed by discussion of analytical results and a decision made as to its acceptance or rejection. The first set of hypotheses explored the relationship of three financial indicators and seven marketing factors.

Hypothesis 1a: Net Sales is related to marketing strategy.

Correlation and regression results for net sales and marketing strategy are presented in Table XIV. Store growth (.64) was the only marketing strategy variable that showed a significant correlation to net sales. Store growth, a factor that had high loadings for years in business, square feet of selling space, and number of salespeople, intuitively should indicate a positive linear relationship to net sales.

Multiple regression was used in analyzing the relationships between marketing strategy factors and net sales. Three equations with net sales as the dependent variable are also summarized in Table XIV. Both equations 2 and 3 accounted for nearly half of the variation in net sales, with R-squares of 44 and 45 percent

TABLE XIV
CORRELATION AND REGRESSION RESULTS FOR NET SALES AND MARKETING STRATEGY

| Marketing Factors | Correlations | Regression |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Net Sales | EQ1 | EQ2 | EQ3 |
| Merchandise |  |  |  |  |
| Characteristics | . 04 | 4866.5 |  | 2569.9 |
| Atmosphere | . 13 | 5428.9 |  | 5630.5 |
| Location Factors | . 04 | 5183 |  | 7024.5 |
| Promotional |  |  |  |  |
| Activity | . 04 | 5596.2 |  | -5108.9 |
| Store Growth | .64*** |  | 74387.5*** | 74446. *** |
| Trading Area | . 08 |  | 6120.1 | 9522.6 |
| Competition | -. 18 |  | -16290.1* | -18870.2* |
|  | Intercept | 201377 | 200887 | 200146 |
|  | DF ${ }^{\text {a }}$ | 80 | 70 | 65 |
|  | $\mathrm{R}^{2}$ | . 02 | .44*** | .45*** |

[^9]respectively, and both were significant at the .01 level. ${ }^{12}$ The slight increase in variance "explained" in equation 3 and the results of the analysis in equation 1 strongly suggested retailer perceived market position variables (merchandise characteristics, atmosphere, location factors and promotional activity) were of little value in explaining the dependent variable, net sales. Store growth was highly significant in both equation 2 and 3 as it was in the correlation analysis.

An interesting result of the regression analysis was that competition was significant in both equations 2 and 3 , even though it was not in the correlation analysis, indicating convariance among the predictors. In other words, once the effects of store growth were "controlled," competition was useful in explaining some of the variance in net sales.

Hypothesis 1a was accepted with limited support. Correlation results indicated that only one marketing strategy factor out of seven correlated significantly with net sales. Regression results showed two significant marketing strategy factors in two significant regression models. The next hypothesis in this set dealt with return on investment as the financial indicator.

Hypothesis 1b: Return on Investment is related to marketing strategy.

Correlation and regression results for return on investment (ROI) and marketing strategy are presented in Table XV.

[^10]TABLE XV

## CORRELATION AND REGRESSION RESULTS FOR RETURN ON INVESTMENT AND MARKETING STRATEGY

| Marketing Factors | Correlations | Regression |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\overline{\text { Return on Investment }}$ | EQ1 | EQ2 | EQ3 |
| Merchandise |  |  |  |  |
| Characteristics | . $37 * *$ | 1. $5 * * *$ |  | 2.2*** |
| Atmosphere | -. 18 | -1.0 |  | $-1.2 *$ |
| Location Factors | -. 11 | -. 7 |  | -1.2 |
| Promotional |  |  |  |  |
| Activity | -. 10 | -. 3 |  | -. 4 |
| Store Growth | . 32 * |  | 1.6 | 2.3** |
| Trading Area | . 12 |  | . 21 | . 2 |
| Competition | -. 14 |  | -. 7 | $-1.0$ |
|  | Intercept | -. 27 | -. 1 | . 36 |
|  | DF ${ }^{\text {a }}$ | 28 | 26 | 22 |
|  | $\mathrm{R}^{2}$ | . 21 | . 12 | . $47 \% *$ |

[^11]$a_{\text {Degrees }}$ of freedom vary by equation because of differential rates of response to particular survey questions.

Merchandise characteristics (.37) and store growth (.32) both showed significant relationships to return on investment in the correlation analysis. As noted earlier, "merchandise characteristics" is a marketing strategy factor that involved retailer perceived market position variables with high positive loadings for merchandise quality, variety, and assortment.

Multiple regression was used to test hypothesis 1 lb , analyzing the relationship between ROI and the seven marketing factors. Only equation 3, which included all seven marketing factors, showed overall statistical significance ( p <.05) , explaining almost 50 percent of the variation in return on investment. Merchandise characteristics were significant in the third equation. The relationship tended to indicate that as merchandise, quality, variety, and assortment increase so will the store's return on investment. Atmosphere, which did not correlate independently with ROI, did show a significant relationship in equation 3. Atmosphere, a retailer perceived market position variable, had positive loadings for layout of store, customer services, visual appeal and image. Atmosphere was negatively related to return on investment in equation 3 . This negative relationship between atmosphere and ROI may indicate that stores had decreased their customer services and possibly money which might have been spent to enhance the store's atmosphere because it was not effective in increasing ROI. Both merchandise characteristics and store growth showed significantly stronger relationships in the regression analysis than in the correlation analysis, indicating covariance. Equation 1 and 3 indicated that retailer perceived
market position factors (merchandise characteristics - promotional activity) were as, if not more important than the selected marketing factors (store growth - competition). This contradicted the marketing strategy emphasis suggested in the previous regression analysis using net sales as the financial performance indicator.

Hypothesis 1 b was accepted. Correlation results indicated that two marketing factors correlated significantly with return on investment. Regression results for equation 3, including all seven marketing factors, were significant, with three individual significant factors. The next (and last) hypothesis in this set dealt with financial ratios as the financial indicator.

Hypothesis 1c: Financial Ratios are related to marketing strategy.

The results of correlation analysis between individual financial ratios, the factor scores developed from these ratios, and marketing strategy is presented in Table XVI. Regression analysis was attempted to test hypothesis 1 c , but due to the small number of financial questionnaires returned (and thus very few degrees of freedom in the regression models), reliability of the findings was questionable. Correlation analysis was used to test hypothesis 1c in relation to financial ratios.

There are few significant correlations between the financial ratios and marketing strategy, and only one significant correlation between the financial ratio factors and marketing strategy. ROI had already been discussed and when presented with the other financial ratios in Table XVI appeared to indicate the

TABLE XVI

## CORRELATIONS RESULTS BETWEEN FINANCIAL RATIOS AND MARKETING STRATEGY

| Marketing Factors |  |  |  |  |  |  |  |  |  |  |  | FR FACTORS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { e} \\ & 0 \\ & 0 \\ & \tilde{0} \\ & \text { H } \\ & \text { H } \\ & \text { in } \end{aligned}$ |  |  |
| Merchandise |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Characteristics | －． 09 | －． 11 | －． 24 | ． 26 | －． 06 | ． 09 | －． 15 | ． $37 * *$ | ． 05 | ． 34 | ． 21 | －． 05 | ． 26 | ． 11 |
| Atmosphere | －． 09 | －． 14 | ． 11 | －． 05 | ． 11 | ． 04 | －． 21 | －． 18 | －． 05 | ．45＊ | ． 01 | ． 32 | －． 25 | ． 17 |
| Location Factors | ． 11 | ． 12 | ． 15 | ． 02 | ． 17 | ． 03 | ． 13 | －． 11 | ． 02 | ． 06 | －． 16 | ． 09 | －． 06 | ． 21 |
| Promotional Activity | －． 08 | －． 006 | －． 25 | －． 10 | －． 07 | －． 20 | ． 13 | －． 1 | ． 06 | －． 32 | ． 11 | －． 03 | －． 41 | ． 24 |
| Store Growth | －． 08 | －． 08 | －． 06 | ． 27 | －． 03 | ． 18 | ． 06 | ．32＊ | －．19＊ | －． 02 | －．34＊ | ． 29 | －． 52 | ． 06 |
| Trading Area | －． 13 | －． 11 | ． 002 | －． 01 | －． 14 | ． 004 | －． 05 | ． 12 | ． 01 | －． 20 | －． 05 | －． 06 | ． 006 | －． 14 |
| Competition | －． 04 | －． 002 | －． 13 | －． 05 | －． 26 | －． 13 | ． 06 | －． 14 | ． 19 | ． 44 | －． 02 | ． 13 | ． 21 | ． 72 ＊＊ |

＊Significant at $\mathrm{p} \leq .10$
＊＊Significant at $\mathrm{p} \leq .05$
strongest relationship ${ }^{13}$ to marketing factors with significant correlations between merchandise characteristics (.37) and store growth (.32).

A negative relationship existed between sales/square foot (-.19) and the marketing factor store growth, but this was most likely due to the variable square feet that loaded very highly on this factor. Since square feet of selling space was the denominator in sales/square foot, there is probably less significance than meets the eye in this result.

The current ratio (-.34) also correlated negatively with store growth. The current ratio estimates the ability of a firm to pay its current debts from presently owned assets. The negative relationship between the current ratio and store growth may indicate that as a store becomes larger it borrows more money, possibly becoming less able to pay its current debts. Small apparel retailers typically are not able to raise money from stockholders. If a retailer expands and grows their only source of large amounts of capital are the banks, thus their ability to pay current debts may decrease. The only other significant relationship was the correlation between receivables turnover (.45) and atmosphere. Receivables turnover estimates how fast the business is collecting from its credit customers. Atmosphere is a factor containing the variable customer service, of which credit is usually considered

[^12]an integral part. Therefore, the faster the receivables turn over, the more credit the store can extend to its customers. Also, as the store improves its atmosphere to attract more clientele, there is possibly an increase in the turnover of receivables.

Financial ratio factors explained 81 percent of the variance of all the financial ratios (Table XI) and thus were used in this analysis to point out the convariance among the financial ratios that might exist and have an effect on relationships with marketing strategy. The only significant correlation appeared between the profitability factor ( $\mathrm{r}=.72, \mathrm{p}<.05$ ) and competition. This correlation seemed to indicate that as profit ratios increase (or in other words, as the store become more profitable), competition also increased. An alternate explanation would be that market characteristics make a particular location profitable, inducing many entrants. Thus, these characteristics are causing both profit and competition to increase. The correlation may then be spurious, in a sense.

Hypothesis 1c was not supported. Correlation results indicated that only three financial ratios and one financial ratio factor correlated significantly with three different marketing strategy factors.

Next, the second set of hypotheses explored the variability of financial performance and marketing strategy, by age and size. In order to test Hypotheses 2, 87 MKTT surveys were sorted into one of two categories by age and one of two categories by size. Age was measured by the number of years a store had been in business, and size was measured by annual net sales.

Hypothesis 2a: Marketing Strategy varies by store age and size.

Difference-of-means tests (t-tests) were conducted in order to test hypothesis 2. The first t-test was run between the two age categories of stores (YEARCAT1 and YEARCAT2) on the marketing factors. The results of the t-test with marketing factors are presented in Table XVII. YEARCAT1 represented stores that have been in business less than five years, and YEARCAT2 represented stores in business five years or more. Thirty-seven stores met the criterion for YEARCATI while 49 stores were in YEARCAT2.

The results of the t-test indicated no significant differences between the two groups of stores categorized by number of years a store has been in business on the marketing factors. The significcant difference was probably spurious between newer and older stores for the store growth factor since the number of years in business is a variable which is part of the store growth factor. The correlation analysis between store growth and years ( $\mathrm{r}=.79, \mathrm{p}<.0001$ ) confirmed this interpretation. Correlation results also indicated a significant relationship between competition and years ( $\mathrm{r}=.25, \mathrm{p}<.05$ ), but this was not confirmed in the t-test.

The second t-test results were between the two size categories of stores (SIZECAT1 and SIZECAT2) on the marketing factors and are also presented in Table XVII. SIZECAT1 represented stores with a net sales volume less than $\$ 190,500$ (the median sales volume for this sample) and SIZECAT2 represented those stores with annual net sales of $\$ 190,500$ or more. Forty-six stores met the criterion for SIZECAT1 while 40 stores were in SIZECAT2.

TABLE XVII
MEANS, DIFFERENCE-OF-MEANS AND CORRELATION ANALYSIS FOR MARKETING STRATEGY BY YEAR ${ }^{\text {a }}$ AND SIZE ${ }^{\text {b }}$ CATEGORIES

| MARKETING <br> VARIABLES | MEANS |  |  |  | T-STATISTIC DIFFERENCE-OF-MEANS | CORRELATION WITH YEARS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | YEARCAT1 | N | YEARCAT2 |  |  |
| Merchandise |  |  |  |  |  |  |
| Characteristics | 37 | . 07 | 49 | -. 05 | . 56 | -. 07 |
| Atmosphere | 37 | -. 07 | 49 | . 05 | -. 52 | . 16 |
| Location Factors | 37 | . 07 | 49 | -. 05 | $.61{ }^{\text {c }}$ | . 07 |
| Promotional Activity | 37 | -. 09 | 49 | . 07 | -. 7 | . 04 |
| Store Growth | 29 | -. 54 | 46 | . 34 | $-4.6{ }^{\text {c }}$ *** | .79*** |
| Trading Area | 29 | . 16 | $46^{\circ}$ | -. 10 | $.98{ }^{\text {c }}$ | -. 10 |
| Competition | 29 | -. 1 | 46 | . 06 | -. 67 | . 25 ** |
|  | MEANS |  |  |  | T-STATISTIC | CORRELATION |
|  | N | SIZECATI | N | SIZECAT2 | OF-MEANS | NET SALES |
| Merchandise |  |  |  |  |  |  |
| Atmosphere | 46 | -. 06 | 40 | . 07 | -. 56 | . 13 |
| Location Factors | 46 | -. 04 | 40 | . 04 | -. 37 | . 04 |
| Promotional Activity | 46 | . 0003 | 40 | -. 0004 | . 0031 | . 04 |
| Store Growth | 39 | -. 41 | 36 | . 44 | -4.02*** | .64*** |
| Trading Area | 39 | -. 04 | 36 | . 04 | -. 35 | . 08 |
| Competition | 39 | . 22 | 36 | -. 24 | $2.06{ }^{\text {c }}$ ** | -. 18 |

** Significant at $p \leq .05$
*** Significant at $\mathrm{p} \leq .0001$
${ }^{\text {a }}$ Year categories are defined as: YEARCAT1 $<5$ years in business; YEARCAT2 $\geq 5$ years in business.
${ }^{\mathrm{b}}$ Size categories are defined as: SIZECAT1 < $\$ 190,500$ annual net sales; SIZECAT2 $\geq \$ 190,500$ annual net sales.
$c_{\text {Unequal }}$ variances form of the t-test was used based on an F-test for variance equality at the .05 level. For remaining variables the equal variances form of the t-test was used.

Significant differences were found between the two sizes of stores on two of the marketing factors. Stores with a net sales volume less than $\$ 190,500$ were shown to be significantly different from stores with a sales volume of $\$ 190,500$ or greater for the marketing factors of store growth and competition. Correlation analysis confirmed the highly significant relationship between store growth and net sales $(x=.64, p<.0001)$, but did not indicate a strong relationship between competition and net sales. SIZECAT1 stores had a mean of -.41 for store growth, indicating a value which is lower than the mean for the factor. In other words, years in business, square feet of selling space and number of salespeople "together" were significantly smaller for SIZECAT1 stores than SIZECAT 2 stores, which had a mean of .44. This highly significant difference ( $p<.0001$ ) appeared logical and confirmed the idea that stores in business a longer period of time tended to be larger, in physical size (square feet), in their number of store employees, and in annual sales volume.

The second significant difference was found between the two sizes of stores on the marketing factor, competition. Stores with a sales volume smaller than $\$ 190,500$ had a mean of .22 , while stores with a larger sales volume had a mean for competition of -.24. The results of this analysis tended to indicate that the smaller (SIZECAT1) store owner perceived more competition than the larger (SIZECAT2) store owner.

Hypotheses 2 a was accepted with very limited support. The t-tests indicated no significant differences by store age for the marketing strategy factors (Table XVII). However, there were two
significant differences by store size for marketing strategy. Correlation results indicated two significant relationships between store age and the marketing strategy factors and one between net sales and marketing strategy.

Hypothesis 2b: Financial performance varies by store age and size.

Difference-of-means tests were conducted between financial indicators and the age and size categories to test Hypothesis 2 b . The results of these analyses are presented in Table XVIII. Twenty stores met the criterion for YEARCAT1 while 17 stores were classified as YEARCAT2. The results of the t-test between the two groups of stores categorized by length of time in business on the financial indicators, showed three significant differences. First, inventory turnover at cost was significantly different (p<.1) between stores in business less than five years and those in business five years or more. Correlation results ( $\mathrm{r}=.33$, $\mathrm{p}<.1$ ) reinforced this finding. Second, profit margins were significantly different ( $\mathrm{p}<.1$ ) between year categories, as specified in the t-tests, even though the correlation results did not indicate this relationship. The third and last significant difference in these t-tests were between net sales and the two groups of stores categorized by years. This difference was confirmed by the correlation analysis ( $\mathrm{r}=.40, \mathrm{p}<.05$ ).

The results of these analyses indicated that inventory turnover at cost, profit margins, and net sales were significantly higher for stores in business five years or more. In general, favorable outcomes for firms have been associated with higher levels of sales

## MEANS, DIFFERENCE-OF-MEANS AND CORRELATION RESULTS FOR FINANCIAL PERFORMANCE INDICATORS BY YEAR ${ }^{\text {a }}$ AND SIZE ${ }^{\text {b }}$ CATEGORIES



[^13]and net profits (Khan and Rocha, 1982; Van Kirk and Noonan, 1982). These t-test results appear to add support to previous research studies which found that firms under five years of age are more vulnerable to operational deficiencies (Khan and Rocha, 1982), and tend to have an 80 percent chance of failure (Boardman, Bartley and Ratliff, 1981).

The results of the t-test between the size categories and financial indicators is also presented in Table XVIII. Sixteen stores met the criterion for SIZECATl while 21 stores were classified as SIZECAT2. No significant differences were indicated when this sample was split by size. However, there were three significant correlations between net sales and financial indicators. Inventory turnover at cost (.32), asset turnover (.29) and return on assets (.28) all correlated with net sales at the . 1 level.

Hypothesis 2 b was accepted with limited support. The t-tests conducted for financial indicators by store age showed three significant differences, yet none by store size for financial indicators (Table XVIII). Two significant correlation results were found between both store age and net sales with financial indicators.

In summary, marketing factors varied more when the sample was split by size than when it was split by age. And financial indicators varied more when the sample was split by age than when it was split by size. Neither split indicated consistent dramatic differences across a wide range of variables.

The third and last set of hypotheses explored the effects of age and size on the relationship between the three financial indicators and the seven marketing factors.

Hypothesis 3a: The relationship between Net Sales and marketing strategy is affected by store age and size.

Results of correlation and regression analysis between net sales and marketing strategy as affected by age and size are presented in Table XIX. Significant correlations are shown for both YEARCAT1 ( $\mathrm{r}=-.38, \mathrm{p}<.05$ ) and SIZECAT1 ( $\mathrm{r}=-.31, \mathrm{p}<.1$ ) stores between competition and net sales. These variables did not correlate significantly for stores in business over five years (YEARCAT2) or stores with an annual sales volume greater than $\$ 190,500$ (SIZECAT2). This possibly indicated a more important role being played by competition for newer and/or smaller stores. Store growth continued to be significantly related to net sales across the age ( $\mathrm{r}=.70, \mathrm{p}<.01$; $\mathrm{r}=.60, \mathrm{p}<.01$ ) and size ( $\mathrm{r}=.37, \mathrm{p}<.01$; $\mathrm{r}=.48, \mathrm{p}<.01$ ) categories as it had in the earlier analysis with the total sample (Table XIV).

The results of the regression analysis presented in Table XIX indicated an overall significance at the . 01 level for both YEARCAT models. The model for newer stores appeared to "explain" more of the variance (59\%) in net sales with relation to marketing factors than did the model for older stores (45\%).

Merchandise characteristics were significantly related to net sales for newer stores but not for older stores. Trading area was significantly related for older stores, but not for newer stores.

CORRELATION AND REGRESSION RESULTS BETWEEN NSALES AND MARKETING FACTORS AS AFFECTED BY STORE AGE AND SIZE

| Marketing Factors | CORRELATIONS |  |  |  | Dependent $\begin{aligned} & \text { REGRESSION } \\ & \text { Variable }=\text { Net Sales }\end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | YEARCATI ${ }^{\text {a }}$ | YEARCAT2 | SIZECAT1 ${ }^{\text {b }}$ | SIZECAT2 |  | YEARCAT1 | YEARCAT2 | SIZECAT1 | SIZECAT2 |
|  | NSALES | nSALES | NSALES | NSALES |  |  |  |  |  |
| Merchandise |  |  |  |  |  |  |  |  | 1893.5 |
| Atmosphere | . 04 | . 14 | -. 13 | . 21 |  | 8794.8 | 6750.7 | -2920.0 | 9271.5 |
| Location Factors | . 08 | . 06 | . 09 | . 02 |  | 946.5 | 9042.6 | 5788.4 | 895.1 |
| Promotional Activity | . 06 | . 01 | . 08 | . 06 |  | 3446.1 | -1813.7 | 4404.3 | -14096.5 |
| Store Growth | .70*** | .60*** | . $37 * * *$ | .48*** |  | 66508.9*** | 77296.1*** | 19290.4* | 47872.1** |
| Trading Area | -. 02 | . 21 | . 11 | . 09 |  | -8423.7 | 34971.7* | 1949.9 | 21648.8 |
| Competition | -. 38** | -. 16 | -.31* | . 10 |  | -12278.0 | -25914.7 | -8464.9 | -7181.9 |
|  |  |  |  |  | Intercept | 202674 | 200225 | 133317 | 251458 |
|  |  |  |  |  | DF | 20 | 37 | 30 | 27 |
|  |  |  |  |  | $\mathrm{R}^{2}$ | .59*** | .45*** | . 25 | . 25 |

[^14]Store growth indicated significance at the . 01 level for both year categories, possibly due to the variable, number of years in business, which is part of the store growth factor.

In summary, the two YEARCAT models illustrated that store age had an effect on the relationship between financial performance and marketing strategy. Newer stores showed a significant relationship between merchandise characteristics and net sales, whereas older stores showed trading area (distance customer live from the store) to be significantly related to net sales.

Splitting the sample into smaller and larger sales volume groups for the regression analysis did not prove to be as meaningful as splitting the sample by age categories. Neither model was significant. Store growth indicated individual significance in each of two size groups, but not as strong as previous analysis with the total sample or as in the two age categories. The results for this regression analysis by size categories indicated a very weak relationship between marketing factors and net sales.

Hypothesis 3 a was accepted. The relationship between net sales and marketing factors was affected by store age and size. Correlation results on one hand did not show strong support for this hypothesis, in that a consistently significant relationship was indicated between store growth and net sales for all age and size categories. However, correlation results did vary between competition and net sales for age and size categories.

Regression results indicated that by splitting the sample by years (stores $<5$ years and $\geq 5$ years) the relationships between net sales and marketing factors were significant at the . 01 level.

In contrast, when the sample was split by size, neither size category model was significant.

The next hypothesis in this set explored the effects of age and size on return on investment in relation to marketing strategy.

Hypothesis 3b: The relationship between return on
investment and marketing strategy is
affected by store age and size.
The relationship between return on investment and marketing strategy as affected by age and size was tested using correlation analysis. Regression analysis was attempted and found unreliable due to the reduction of cases when the sample was split into categories.

The results of the correlation analysis between return on investment (ROI) and marketing factors are presented in Table XX. Merchandise characteristics ( $\mathrm{r}=.45, \mathrm{p}<.1$ ) and store growth ( $\mathrm{r}=.59, \mathrm{p}<.05$ ) both showed significant correlations with ROI for SIZECAT1 stores as discussed previously for the total sample (Table XV). Newer (YEARCAT1) and larger (SIZECAT2) stores indicated a significant relationship for return on investment ( $\mathrm{r}=.45, \mathrm{p}<.1$ ) only with merchandise characteristics while older(YEARCAT2) stores showed a total lack of significant relationships between ROI and marketing factors.

Hypothesis 3 b was accepted with limited support. Correlation results indicated that store age and size only slightly affected the relationship between return on investment and marketing strategy.

TABLE XX
CORRELATION RESULTS BETWEEN ROI AND MARKETING FACTORS AS AFFECTED BY STORE AGE AND SIZE

| MARKETING | AGE ${ }^{\text {a }}$ |  | SIZE ${ }^{\text {b }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | YEARCAT1 | YEARCAT2 | SIZECAT1 | SIZECAT2 |
| FACTORS | ROI | ROI | ROI | ROI |
| Merchandise |  |  |  |  |
| Characteristics | .45* | -. 09 | . $45 *$ | . $47 *$ |
| Atmosphere | -. 26 | -. 09 | -. 22 | -. 30 |
| Location Factors | -. 18 | . 22 | -. 30 | . 16 |
| Promotional |  |  |  |  |
| Activity | -. 19 | -. 007 | -. 03 | -. 28 |
| Store Growth | . 42 | -. 02 | . $59 * *$ | -. 44 |
| Trading Area | . 16 | . 18 | . 17 | -. 30 |
| Competition | -. 31 | -. 02 | -. 08 | -. 14 |
| * Significant at $\mathrm{p} \leq .1$ |  |  |  |  |
| ** Significant at $\mathrm{p} \leq .05$ |  |  |  |  |
| ${ }^{\mathrm{a}}$ Age categories are defined as: YEARCAT1< 5 years in business; YEARCAT2 >5 years in business. |  |  |  |  |
| $\mathrm{b}_{\text {Size }}$ categories are defined as: SIZECAT1 < \$190,500 annual net sales; SIZECAT2 $\geq$ \$190,500 annual net sales. |  |  |  |  |

The last hypothesis in this set explored the effects of age and size on financial ratios in relation to marketing strategy.

Hypothesis 3c: The relationship between financial ratios and marketing strategy is affected by store age and size.

The results of the correlation analysis between the 10 financial ratios, their three factors and the seven marketing factors are presented in Appendix $J$ (due to the number of correlations and complexity of the table). A summary of the significant correlations between the financial ratios and the seven marketing factors, organized by age categories is presented in Table XXI.

## Correlation by Store Age

Stores in business less than five years (YEARCAT1) illustrated a varied financial performance-marketing strategy relationship in that all three factor categories of financial ratios (EFF, LIQ and PROFIT) were represented and correlated significantly with marketing factors. Also the full range of marketing factors were reflected with atmosphere and merchandise characteristics (representing retailer perceived market variables) and store growth and competition (factors of selected market variables). The marketing strategy for newer stores (YEARCAT1) was most strongly represented by atmosphere, store growth and competition, since these correlated twice each with financial performance measures.

Inventory turnover at retail (INVTNR) which describes the number of times inventory sells out during the year, only correlated with atmosphere (ATMOS), and only for newer (YEARCAT1) stores.

TABLE XXI

SUMMARY OF SIGNIFICANT CORRELATIONS BETWEEN FINANCIAL RATIOS, THEIR FACTORS AND MARKETING STRATEGY

AS AFFECTED BY STORE AGE ${ }^{\text {a }}$

|  | YEARCAT1 | YEARCAT2 |
| :---: | :---: | :---: |
| MARKETING FACTORS | FINANCIAL RATIOS | FINANCIAL RATIOS |
| Merchandise |  |  |
| Characteristics: | Return on Investment* | - |
| Atmosphere: | Inventory Turnover at Retail*, Efficiency Ratios* | (-) Gross Margin Return on Investment** |
| Location Factors: | - | - |
| Promotional |  |  |
| Activity: | - | (-) Receivable <br> Turnover*, <br> Sales/Sq.ft.* |
| Store Growth: | (-) Sales/Sq.ft.***, <br> (-) Liquidity* | - |
| Trading Area: | - | Efficiency Ratios* |
| Competition: | Receivable Turnover*, Profitability Ratios*** | - |

[^15]Inventory impacts on the store image and visual presentation and often affects customer services and layout. This correlation reinforced the importance of both inventory turnover and atmosphere for stores in business a short period of time.

Receivables turnover (RECTNR), which explains how fast the business is collecting its debt from customers correlated with competition (COMPET) for newer stores (YEARCAT1). This finding indicated that as the rate for receivables turnover increased, so did competition for newer stores. One good indication of a prosperous business is when customers pay their debts. And it appeared to be logical to conclude that a prosperous business would attract other businesses to the area, thereby increasing competition. This correlation may also indicate that as competition increased, newer stores would adopt a more liberal credit policy, possibly a credit policy that would make it easier for customers to pay off their debts (i.e. National bank cards).

Older stores(YEARCAT2) showed significant relationships between the financial ratios that were labeled "Efficiency" ratios and the marketing factors related to atmosphere, promotional activity, and trading area.

Gross margin return on investment (GMROI) correlated significantly only with atmosphere for older (YEARCAT2) stores. Gross margin return on investment deals with merchandise management efficiency. A high GMROI position is achieved by either exceptionally high margins or turnover rates or by an above average margin and turnover performance (Sweeny, 1973). GMROI negatively correlated with atmosphere which may indicate a lack of customer


#### Abstract

services since customer services tend to reduce margins. Another possible explanation for GMROI negatively correlating with atmosphere would be that in order to achieve a high turnover rate the store's appearance and image may suffer from large quantities of merchandise or excessive sale racks of merchandise.


Receivable turnover (RECTNR), another efficiency ratio correlated negatively with promotional activity for older stores (YEARCAT2). The higher this turnover ratio, the faster the store is collecting debt from its customers. One explanation of this correlation may be that, when promotional activity increases, customers may tend to buy more on credit in order to take advantage of sale merchandise, thereby causing the receivables turnover rate to decrease. In the case where the store is not having a large promotion, customers may decrease their purchases and pay off their debts, and thus the receivables turnover would increase.

Sales/square foot (S/SQFT) also correlated with promotional activity for older stores (YEARCAT2). Sales/square foot, reflects marketing productivity performance, and as this increased, promotional activity also appeared to increase. As a store becomes older, and its productivity per square foot increases, it may advertise more or at least have the funds to advertise more.

The financial ratio factor, efficiency (EFF), correlated with trading area. Trading area did not correlate significantly with any of the 10 financial ratios, or their factors in previous correlation analysis. Trading area represents the distance, in miles from the store, to customers' residences. As the trading area of a store increases, or in other words, as more customers
are attracted to a store--traveling farther, perhaps, the stores' efficiency in inventory and asset control (inventory turnover at cost and retail, asset turnover) and merchandise management (GMROI) must develop in order to meet the needs of the increased traffic flow. Increasing the store's trading area is a vital concern for the older store, that has become more efficient over time.

## Correlations by Store Size

A summary of the significant correlations between financial ratios and the seven marketing factors, organized by size categories is presented in Table XXII. There appeared to be a very strong relationship between the marketing strategy factor, store growth, and financial ratios for smaller stores (SIZECAT1). Store growth (STGRO) correlated significantly with financial indicators in five separate instances.

Asset turnover (ASSTNR) represents the dollars of sales volume produced by each dollar invested in the total assets of the business. Asset turnover was positively correlated with location factors (LOCFAC) and negatively correlated with store growth (STGRO). A good location, adequate salespeople and a price level that suits the target customers are some of the elements that would lead to increasing asset turnover. If these location factors are positive it would seem to lead to positive effects on the rate of asset turnover. A negative relationship between store growth and asset turnover could possibly indicate that too many salespeople were hired, or the store was too large (square feet), with too much

TABLE XXII

## SUMMARY OF SIGNIFICANT CORRELATIONS BETWEEN FINANCIAL RATIOS, THEIR FACTORS AND MARKETING STRATEGY AS AFFECTED BY STORE SIZE ${ }^{\text {a }}$

| MARKETING FACTORS | SIZECAT1 FINANCIAL RATIOS | SIZECAT2 FINANCIAL RATIOS |
| :---: | :---: | :---: |
| Merchandise Characteristics: | Return on Investment* | Return on Investment* |
| Atmosphere: | - | - |
| Location Factors: | Asset Turnover* | (-) Efficiency** |
| Promotional Activity: | - | - |
| Store Growth: | (-) Asset Turnover*, <br> (-) Sales/Sq.ft.*, <br> Profit Margin*, <br> Return on Investment**, <br> (-) Liquidity Ratios* | (-) Sales/Sq.Ft.** |
| Trading Area: | - | - |
| Competition: | Sales/Sq.Ft.* | ```Financial leverage ratio**, Liquidity Ratio***, Profitability*``` |

[^16]merchandise, slowing down the rate of asset turnover. The more assets the store has acquired the more difficult the task of turning them over.

Profit margin represents the part of every sales dollar that is profit and correlated positively with store growth for smaller stores (SIZECAT1). Logically, as stores grow older and in size (number of salespeople and square feet) their profit margin will increase due to economies of scale. Therefore growth indicated an increase in profits.

The correlations between the liquidity factor (sales/sq.ft. and the current ratio) and sales/sq.ft. with store growth were probably insignificant due to the variable square feet in the numerator and denominator of this equation. Smaller stores that increased their sales/sq. ft. may also be increasing their competition by attracting other stores to the area. The relationship was indicated by the significant, positive correlation between sales/sq.ft. and competition.

Stores with an annual sales volume of $\$ 190,500$ or more (SIZECAT2) showed a profit oriented financial performance-market strategy relationship. Competition correlated positively with one financial ratio and two financial ratio factors (liquidity and profitability) for larger stores. The financial leverage ratio represents dollars of total assets that are supported for each dollar of owner's investment, and correlated positively with competition. A store owner puts money into the business to increase its assets because it is profitable. Likewise competitors will increase their assets when business is profitable. This
reasoning could also apply to the relationship between the two financial ratio factors, liquidity and profitability, and competition. As the store becomes more profitable, and managed more efficiently, competition may increase because the successful buiness would indicate to other similar businesses that there was a market for this merchandise or service.

The relationship between store growth and sales/sq.ft. would be explained as it was for smaller stores (SIZECAT1), which is possibly a spurious relationship, due to the variable square feet in both the store growth factor and the financial ratio, sales/ square foot. The efficiency factor correlated negatively with the location factor for older stores (SIZECAT2). This relationship indicates that as the location factor increases, efficiency ratios would decrease. Possibly as the store becomes older, it may tend to retain unneeded employees, due to loyalty or the location of the store may not be as desirable as it once was, therefore having a negative effect on the efficiency ratios of the store.

Hypothesis 3c was accepted. The relationship between financial ratios and marketing strategy was affected by both store age and size. The number of significant relationships was not the criterion used to accept or reject this hypothesis, since the number of signifcant relationships found in this analysis could have occurred by mere chance It is, however illustrated that the financial performance/ marketing strategy relationship did vary by age and size.

## Summary

The two major purposes of the study were achieved: 1) the researcher investigated financial performance and marketing characteristics of a selected group of retail apparel stores; and 2) the researcher analyzed the relationships between financial indicators and marketing factors.

Overall, the financial elements collected for the study were lower than similar nationally reported financial items. All three of the financial components as aggregate totals were higher than data reported by Dun and Bradstreet (1982) and Packard and Carron (1982). The financial ratios calculated for the study were slightly below similar ratios reported nationally.

Apparel stores in the study had a mean sales volume of $\$ 206,110$, and had been in business, on the average, 6.5 years. The average store in this sample was located in the central business district, and in a town of less than 10,000 population. The majority of these stores were either individual proprietorships or corporations and were classified as specialty stores.

A number of related issues were investigated in this chapter. To insure that they can be easily reviewed, a summary of the hypotheses tests is given in Table XXIII. Three hypotheses and related sub-hypotheses were tested to analyze the relationship between financial performance and marketing strategy. First it was found that financial indicators (net sales, return on investment) were related to marketing factors, however financial ratios were not. Second, t-test analyses somewhat supported the hypothesis

TABLE XXIII

SUMMARY OF HYPOTHESES AND RESULTS

| Hypothesis | $\frac{\text { Variables }}{\text { Dependent/Independent }}$ | Regression | Correlation | T-test |
| :---: | :---: | :---: | :---: | :---: |
| 1a | NSALES/MKTING STRATEGIES | Supported | Some support | - |
| 1b | ROI/MKTING STRATEGIES | Supported | Supported | - |
| 1c | FR/MKTING STRATEGIES | - | No support | - |
| 2a | MARKETING STRATEGIES: |  |  |  |
|  | Store Age | - | Some support | Some support |
|  | Store Size | - | Some support | Some support |
| 2b | FINANCIAL PERFORMANCE: NET SALES |  |  |  |
|  | Store Age | - | Supported | Supported |
|  | RETURN ON INVESTMENT |  |  |  |
|  | Store Age | - | No support | No support |
|  | Store Size | - | No support | No support |
|  | FINANCIAL RATIOS |  |  |  |
|  | Store Age | - | No support | Some support |
|  | Store Size | - | Some support | No support |
| 3 a | NSALES/MKTING STRATEGIES |  |  |  |
|  | Store Age | Supported | Some support | - |
|  | Store Size | No support | Some support | - |
| 3 b | ROI/MKTING STRATEGIES |  |  |  |
|  | Store Age | - | No support | - |
|  | Store Size | - | Some support | - |
| 3 c | FR/MKTING STRATEGIES |  |  |  |
|  | Store Age | - | Supported | - |
|  | Store Size | - | Supported | - |

that financial performance and marketing strategy do vary by store age and size. And third, the relationship between financial performance and marketing strategy was affected, in most cases by store age and size.

Finally, selected findings related to marketing factors are presented in Table XXIV. The largest number of significant relationships existed between store growth and financial performance. Although, some of these relationships may have been spurious, ${ }^{14}$ store growth nevertheless proved to be highly significant marketing factor. The PIMS study supported this finding, indicating that sales employees were an effective use of investment and helped explain the variance in return on investment (Abell and Hammond, 1979). Small apparel retailers who continued to meet the needs of their target customers through increased sales help, and possibly an increase in square feet of selling space, over time, tended to see an increase in their financial performance, in particular net sales.

The second largest number of significant relationships existed between merchandise characteristics and financial performance, in particular, return on investment. The PIMS study supported this finding, indicating that merchandise quality strengthens a firms competitive position and was a key variable in explaining return on investment (Abell and Hammond, 1979). Small apparel retailers
${ }^{14}$ The findings were possibly spurious in the analyses where store growth was significantly related to financial performance indicators when the sample was split into year categories, or when store growth indicated a significant difference between the two groups of year categories.

| Marketing Factors | Variables | Findings |
| :---: | :---: | :---: |
| Merchandise Characteristics | Quality | - A positive relationship existed between ROI and merchandise characteristics, but did not exist for net sales and financial ratios. |
|  | Variety |  |
|  | Assortment |  |
| 2. Atmosphere | Layout | - A positive relationship existed between the efficiency ratios and atmosphere for newer stores. A negative relationship existed between GMROI and atmosphere for larger stores. |
|  | Customer Services |  |
|  | Visual Appeal |  |
|  | Image |  |
| Location <br> Factors | Location | . A positive relationship existed between location factors and asset turnover for smaller stores. <br> A negative relationship existed between efficiency ratios and the location factors. |
|  | Employees |  |
|  | Price Level |  |
| 4. Promotional | Hours of Operation | . A positive relationship existed between |
| Activity | Parking | sales/sq.ft. and promotional activity |
|  | Promotions | for older stores. <br> A negative relationship existed between receivables turnover and promotional activity. |
| 5. Store Growth | No. of years in business <br> No. of sales people <br> Sq. ft. of selling space | . A positive relationship existed between financial performance and store growth. |
| 6. Trading Area | Miles North, South, East and West | . A positive relationship existed between the efficiency ratios and trading area for older stores. |
| 7. Competition | No. of stores selling similar apparel No. of direct competitors | - A negative relationship existed between net sales and competition. |

who increase their merchandise variety and assortment and upgrade their merchandise quality in relation to their target customers tended to see an increase in their return on investment. Other significant relationships discussed in detail are summarized in Table XXIV.

## CHAPTER V

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The researcher investigated financial performance and marketing strategy of a selected group of retail apparel stores, and analyzed the relationships between financial indicators and marketing factors. The three objectives of the study were to: 1) construct a theoretically-based conceptual model to guide in the assessment of financial performance and marketing strategy; 2) measure financial performance and identify marketing strategies of selected apparel stores; and ${ }^{\text {3 }}$ ) analyze the relationship between financial indicators and marketing factors and examine the interrelationships of the length of time in business (store age) and store size.

Throughout the literature there was support for the study. It is found that the successful small firm must have a different outlook and apply different principles than those ordinarily used by large firms. Even though "typical" small firm owners lack management experience and ability, small businesses do have some inherent advantages that large firms are lacking. Quick and simple analytical devices are needed to enable the small business owner to keep up-to-date on the financial aspects of the firm. Although, financial ratio analysis satisfies a need for the small firm, an accurate and meaningful list of ratios has yet to be developed. Other financial indicators supported throughout the literature
included return on investment, market share, and return on sales. Strategic planning for small firms should be used to establish specific financial and functional performance goals and objectives to guide the day-to-day activities. However, the variety of strategic planning models used by large companies leaves the small business firm with little direction in planning the financial and marketing strategy.

## Summary of Procedures

Approximately 206 retail apparel businesses were randomly selected from 836 owner/managers who attended one or more of the 13 all-day workshops sponsored by the Center for Apparel Marketing and Merchandising (CAMM) from January, 1982 through May, 1983.

Two basic instruments were designed for the collection of data. The first instrument consisted of questions seeking information from year-end Financial Statements, and was sent to the target sample. The second instrument was designed to obtain marketing characteristics and retailer's perceptions of their marketing position in relation to their major competitors. Data were collected using a mailed self-administered survey designed in booklet form. Follow-up activities by mail and phone were conducted.

The response rate for the financial questionnaires sent to 206 retail businesses was 17 percent. The response rate to the marketing questionnaire sent to 37 who responded to the financial questionnaire was 89 percent. The response rate to the 174 additional marketing questionnaires sent to retailers who did not respond to the financial questionnaire was 34 percent. This
yielded 37 useful financial questionnaires, 87 useful marketing questionnaires and 33 matching financial and marketing questionnaires.

Ten financial ratios were calculated for each of the 37 respondents. In addition to financial ratios, return on investment and annual net sales were used as financial performance indicators.

The marketing strategy was identified for each of the 87 stores by combining the three categories of marketing strategy variables. Factor analysis reduced the number of marketing strategy variables to a workable size (7), ${ }^{15}$ and identified underlying dimensions.

Relationships were analyzed between financial indicators and marketing factors and the effects of store age and store size were tested by three major hypotheses and related sub-hypotheses, using regression, correlation, and difference-of-means tests. Hypotheses were supported or not supported on the basis of the strength (statistical significance) of the relationships.

Analytical results were discussed in terms of varying relationships between marketing strategies and financial performance, and the emphasis of different marketing strategies and varying financial performance by store size and store age.

Recommendations for the revision of models and instruments used in the collection of data were based on: 1) retailers response or

[^17]non-response to items on the questionnaire; 2) clarity of response; and 3) problems encountered with structuring and analysis of data.

## Summary of Findings and Conclusions

The first set of hypotheses explored the relationship of three financial indicators and seven marketing factors. Correlation and regression results indicated support for a relationship existing between net sales, return on investment and certain marketing strategy factors. Correlation results indicated some support for a relationship between financial ratios and marketing strategy. As pointed out in the literature review, very little attention has been paid to the interrelationship between financial performance (in particular, financial ratios) and marketing strategies, until recently, and then only for large corporations. However, most researchers do agree with the existence of these relationships (Peles and Schoeller, 1982; Davidson, Doody and Sweeney, 1975; Van Kirk and Noonan, 1982; Abell and Hammond, 1979). The results from the first set of hypotheses were in agreement with the literature and confirmed that relationships exist between financial performance and marketing strategies for the small retail apparel store.

The second set of hypotheses were developed to discover if small stores (under $\$ 750,000$ annual sales volume) vary in their marketing strategies and financial performance by store age and/or
store size. ${ }^{16}$ The literature is clear on the fact that small firms are different from large firms, each having distinct characteristics, goals, objectives, advantages, and disadvantages. The literature was void as to the effects of store age and size on marketing strategies and financial performance. The second set of hypotheses addressed this issue, using a t-test and correlation analysis.

Two marketing strategy factors did vary by store age and size. This finding confirmed that older stores or stores with a larger sales volume, tended to be larger (square feet) and have more employees than newer stores. Competition appeared to increase as the size of the store increased, and decreased as the store became older. Further investigation would be needed to clarify this finding.

The results of the t-test for financial performance indicated a variety of results for the three financial indicators. Net sales varied by store age, as did two financial ratios. Return on investment and the other financial ratios did not. Neither return on investment nor the financial ratios indicated significant variability by size. Overall, financial performance indicators (with

The eighty-seven marketing questionnaires were sorted into one of two categories by length of time in business and one of two categories by size of store (annual sales volume). Stores were labeled YEARCAT1, if they had been in business less than five years, and labeled YEARCAT2, if they had been in business five years or more. Stores were labeled SIZECAT1 if they had an annual sales volume under $\$ 190,5000$, and labeled SIZECAT2 if they had an annual sales volume of $\$ 190,500$ or greater.
the exception of net sales) appeared to remain somewhat consistent as the store size and age varied.

The researcher found that financial performance and marketing strategies were related for stores participating in the study. There was some support for the fact that certain marketing strategies vary by the age and size of the store, while financial performance indicators tended to remain somewhat consistent as store age and size varied.

The third set of hypotheses referred to the effects of store age and size, but concentrated on how age and size affected the relationship between financial performance and marketing strategies. The relationship between net sales and marketing factors varied by store age, but did not indicate strong variability when the sample was split by size. The results of correlation analysis between return on investment and marketing factors indicated the opposite results: its relationship varied somewhat by store size but not by store age. The relationship between financial ratios and marketing stategies varied by store age and store size.

This study was exploratory in nature, due to the lack of research with small firms in the area of financial performance analysis and marketing strategies. The conclusions that can be drawn from these findings are, in some instances, a mere reporting of the results. These findings do however, provide further evidence adding to the existing body of knowledge concerning factors that effect and are associated with financial performance.

Suggestions and Implications

Two suggestions are offered small apparel retailers in terms of financial performance evaluation and marketing strategies made by the researcher. First, that small apparel retailers use financial performance indicators regularly, to evaluate the performance of the firm. The financial ratios selected for the study are recommended on the basis that they are easily accessible and include several aspects of financial evaluation, i.e., profitability of investments and sales, liquidity and efficiency of the company's use and control of its assets. Second, financial ratios did not vary as the store increased in number of years in business. This indicated that the 10 financial ratios used in the study could be used as standards of comparison for small apparel businesses under $\$ 750,000$ annual sales volume.

Implications for small apparel retailers were based on regression and correlation results. The small apparel retailer should be aware that merchandise quality, assortment and variety, positively affected return on investment, but not necessarily net sales. However, as net sales increased, the small apparel retailer considered fewer stores as competitors. Finally, financial indicators tended to increase over time as the small apparel retailer met the needs of the target customer through increased sales help and increased selling space.

Suggestions for the revision of models and instruments used in the collection of data are: 1) minor format revisions on the financial analysis questionnaire, for ease of retailer response;
2) secure information from retailers as to their net earnings after taxes, thus making it possible to calculate the return on sales ratio; and 3) eliminating or revising the questions which sought precise inventory information on the marketing questionnaire.

## Recommendations for Future Study

The experience of conducting the present study indicated that certain changes could be made in future studies with small apparel stores. The following recommendations for future study are proposed by the researcher:

1. Replicate the study, using a larger sample of apparel stores. Following are suggestions for revisions:
a. Consider revisions in the collection of inventory data.
b. Consider using individual marketing variables instead of marketing factors for analyses.
c. Investigate differences in marketing strategies between stores with upper quartile financial ratio performance and those with lower quartile financial ratio performance.
d. Examine in closer detail the relationship between financial performance and marketing strategies so as to aid the small apparel retailer in their strategic planning evaluation.
2. Continue the collection of financial and marketing information from small apparel stores and establish
a data bank in the Center for Apparel Marketing and Merchandising (CAMM).
a. Develop industry norms for financial performance of small apparel stores.
b. Develop marketing strategy guidelines to facilitate the improvement of financial performance of small apparel stores.
3. Investigate the affects of the economic environment on financial performance and marketing strategy of small apparel stores.
a. Compare financial performance of smaller and larger stores within the same trading area, thereby controlling for economic variances.
b. Compare financial performance of small apparel stores in urban versus rural areas.

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## APPENDIXES

APPENDIX A

FINANCIAL RATIO MATRIX USED IN

PREVIOUS RESEARCH STUDIES

FINANCIAL RATIO MATRIX


## APPENDIX B

TOTAL RETAILING STRATEGY MODEL

AND THE DUPONT MODEL

Total Retailing Strategy Model


Source: W. R. Davidson, A. F. Doody, D. J. Sweeney,

THE DUPONT MODEL


Source: K. R. Van Voorhis, Journal of Small Business Management, (1981).

## APPENDIX C

LETTER AND QUESTIONNAIRE SENT TO
PANEL OF EXPERIENCED APPAREL
RETAIL LEADERS (PEARLs)

# LETTER SENT TO PANEL OF EXPERTS ALONG WITH FINANCIAL VERIFICATION QUESTIONNAIRE 

December 3, 1982

## Dear

Over the past five years small apparel retailers have voiced a need for assistance to improve the efficiency of their store's operations. Dr. Kathryn Greenwood and her staff at Oklahoma State University began to answer this need by developing and presenting workshops, seminars and consulting on Inventory Control, Dollar Merchandise Planning and Promoting and Selling Apparel.

In order to meet the continuing needs of small apparel retailers, I am designing a research project under the direction of Dr. Greenwood in the area of financial strategy analysis. My research will enable a data bank to be established at the Center for Apparel Marketing and Merchandising (CAMM). In the future small apparel retallers who have attended CAMM workshops will be able to compare their financial performance to other retailers of similar size (as measured by annual sales volume) and number of years in business. Complete confidentiality will be assured for retailers who contribute to the CAMM Data bank.

As one of the RAGs who has assisted in CAMM workshops, you have been specially selected to ald in the development of the Instrument that will be used to collect financial information from small apparel retailers. Your answers and comments to the questions on the enclosed survey will help us in finalizing the instrument to be used for this CAMM Research project.

This is a busy season and you need not return the questionnaire. Just review it, and I will call you prior to December 15 to obtain your reactions and answer questions you may have regarding the Research project.

I will send you a summary of the results of this Research project when it is completed. Thank you for your assistance.

> Sincerely,

Susan S. Fiorito
Graduate Research Associate

Please read each question carefully; circle the number of your answer, and follow the arrow of the number you circled to the next question.

Q-1 Does your business use a balance sheet at the end of the year? (Circle number of your answer)


Q-3 Does your businass use an income atatement at the end of the year? (Circle number of your answer)


Q-4a Which of the following items are calculaced on your income statement? (Please circle)

Q-4b Which of the following financial items are calculated at the end of the year for your business? (Please circle)

Q-5 Who is rempoantble for end of year financial statements in your business? (Circle number of your answer)

1 Owner
2 Partner

3 Manager
4 Accountant
5 Other (Please specify)

Q-6 Which of the folloring financial totals are calculated for your business? (Circle number of your answer)
1 Net Sales
2 Cost of Goods Sold
3 Gross Margin
4 Variable Expenses
5 Fixed Expenses
6 Operating Profit
7 Current Assets
8 Fixad Asseta
9 Net Worth

Q-7 Which of the following financial percencages are colethated for your business? (Cirele muber of your answer)

> 1 Net Profit Margin
> 2 Recurn on agaets
> 3 Return on nat worth

Q-8 Your position in this business. (Circie mumber)
1 Owner
2 Partner
3 Manager
4 Other (Please specify)

> Q-9 Do you think a majority of apparel retailers will have access to the information you have circled on the previous pages (circle number of your answer).
> 1 YES
> 2 NO

COMMENTS: $\qquad$
$\qquad$
———
Q-10 Do you think other retailers will contribute these kinds of financial information (held in complete confidence) to the CAMM Data Bank in order to have access to ratio tables from stores of similar size and length of time in business (circle number of your answer).

1 YES
2 NO
COMMENTS: $\qquad$

Is there anything else you would like to tell us about your needs for financial strategy analysis within your business? Also any comments you wish to make that you think might help us in future efforts to aid small retail owners with financial analysis will be appreciated, either here or in a separate letter.

Your contribution to this effort is very greatly appreciated. We will see that you gt a copy. Please jot your answers down on the questionain and place it rear your telephone so it will be kandy when $D$ call your rest wreck.

APPENDIX D

CORRELATION OF MARKETING STRATEGY VARIABLES
AND DEFINITION AND DESCRIPTION OF
MARKETING VARIABLES

## MARKETING VARIABLE INTERCORRELATIONS

Marketing
Variable
Other Marketing Variable Correlates

ADVPCT
ASRT
AVGINVC
AVGINVR
CSER SERV2, -. 22**; SERV5, -. 26**; SERV7, -. 22**; SAPP, .26**; YEARS, 19*; DCOM, .25**

DCOM VIS, . $24 * *$; QUAL, . $24 * *$; CSER, . $25 * *$, VARIETY, $.22 * *$; YEARS, .45**; IMAGE, . 28**

EMP
SALESP, -. $35 * * * ; ~ S A P P, ~ . ~ 2 \% ~$
IMAGE
IMU
LAYOUT
LOC
MILESEW


MILESNS OPER, .19*; VARIETY, .27**
OPER MILESEW, .32***, MILESNS, .19*; SQFT, .2*
PARK
PRICL
PROMO
QUAL SERV1, -. 2*; SERV2, -.19*; SERV5, -. 21**; SERV8, -. 22**;
SERV9, -. 20*; DCOM, .24**; IMU, -.2*
SALESP
SAPP
SERV1

SERV2

SERV3
SERV4

SERV5
SERV4, -. 19*; SERV5, -. 25**; IMU, -. 46***
SERV5, -.19*, SERV7,-.19*; IMU, -. 22*

YEARS, . $54 * * *$
CSER, . 26**; EMP, .2*; IMAGE, . 24**
QUAL, -.2*; SERV2, .26**; SERV3, .25**; SERV4, .23**;
SERV6, . 29***; SERV9, . 21*
CSER, -. 22**; QUAL, -. 19*; SERV1, . 26**; SERV4, .25**;
SERV6, .19**; SERV9, .19*
ASRT, -. 19*; SERV1, . 25**; SERV4, . 37***; SERV5, . 26**
PRICL, -.19*; SERV1, . 23**; SERV2, . 25**; SERV3, . $37 \% * *$;
SERV5, . 29***
CSER, -. $26 * *$; PRICL, $-.25 * *$; PROMO, $-.19 * ;$ QUAL, -. 21**; IMAGE, -. 26**; ASRT, -. 2*; SERV3, . 26**; SERV4, . 29*** SERV7, . $35 * * *$

## MARKETING VARIABLE INTERCORRELATIONS

Marketing
Variable
Other Marketing Variable Correlates

SERV6 $\begin{aligned} & \text { LAYOUT, }-.22 * * ; \text { ASRT, }-.18 * ; \text { SERV1, } .29 * * * ; ~ S E R V 2, .19 * * ; ~ \\ & \text { SERV9, } 32 * * *\end{aligned}$
SERV7 LOC, -.23**; LAYOUT, -.2*; CSER, -.22**; PROMO, -.19*; SERV5, .35***; SERV9, -.24**

SERV8 QUAL, -.22**; IMAGE, -.27**
SERV9 QUAL, -.2*; SERV1, .21*; SERV2, .19*; SERV6, .32***; SERV7, -.24**

SQFT LOC, -.22**; OPER, .2*; YEARS, .45***
VARIETY
MILESNS, .27**; DCOM, .22**
VIS DCOM, .24**; YEARS, .27**
YEARS DCOM, .45**; ADVPCT, -.22**; SQFT, .45***; SALESP, .54***; AVGINR, .33**; AVGINC, .40***; CSER, .19*; VIS, .27**; SERV8, -. 21*

Only correlations significant at $\mathrm{p} \leq .1$ or better are shown.

BRIEF VARIABLE DEFINITIONS (CODING SCHEME)

| Variable | Description | Level of Measurement | Codes or Values |
| :---: | :---: | :---: | :---: |
| ADVPCT | Advertising | Ratio | Percent of Sales |
| ASRT | Depth of mdse. assortment | Interval Scale | 5 point, $1=$ high |
| AVGINVC | Average inventory at cost | Ratio | Dollars |
| AVGINVR | Average inventory at retail | Ratio | Dollars |
| CSER | Extent of customer services | Interval Scale | 5 point, $1=h i g h$ |
| DCOM | Direct competitors | Ratio | Competitors |
| EMP | Adequacy of employees | Interval Scale | 5 point, 1 = high |
| IMAGE | Level of fashion image | Interval Scale | 5 point, l = high |
| IMU | Initial markup | Ratio | Percent at retail |
| LAYOUT | Convenience of lay-out | Interval Scale | 5 point, l=high |
| LOC | Convenience of location | Interval Scale | 5 point, l=high |
| MILESEW | Trading area East and West | Ratio | Miles |
| MILENS | Trading area North and South | Ratio | Miles |
| OPER | Hours of operation | Interval Scale | 5 point, l=high |
| PARK | Adequency of parking | Interval Scale | 5 point, 1=high |
| PRICL | Merchandise price level | Interval Scale | 5 point, l=high |
| PROMO | Extent of promotions | Interval Scale | 5 point, 1 = high |
| QUAL | Merchandise quality | Interval Scale | 5 point, l=high |
| SALESP | No. of salespeople/day | Ratio | Salespeople |
| SAPP | Stores selling similar apparel | Ratio | Stores |
| SERV1 | Delivery | Categorical | $1=$ offer service <br> $\emptyset=$ does not offer service |
| SERV2 | Alterations | Categorical |  |
| SERV3 | Credit (instore/national) | Categorical | " |
| SERV4 | Gift wrap | Categorical | , |
| SERV5 | Lay-away | Categorical | 1 |
| SERV6 | Wardrobe consultation and/or planning | Categorical | " |
| SERV7 | Return policy | Categorical | , |
| SERV8 | Pre-notice of sales | Categorical |  |
| SERV9 | Other services | Categorical | " |
| SQFT | Square feet of selling space | Ratio | Square feet |
| VARIETY | Merchandise variety | Interval Scale | 5 point, l=high |
| VIS | Visually appealing | Interval Scale | 5 point, 1 = high |
| YEARS | No. of years in business | Ratio | Years |

See Appendix $F$ for actual questions and further details.

APPENDIX E

SUMMARY REPORT SENT TO PARTICIPANTS:

MEDIAN FINANCIAL RATIOS, FORMULAS, DEFINITIONS, COMPONENT PARTS OF RATIOS AND THEIR SOURCES

## COMPONENT PARTS OF FINANCIAL RATIOS AND THEIR SOURCE



SUMMARY OF REPORT OF MEDIAN RATIOS


## APPENDIX F

FINAL QUESTIONNAIRES SENT TO SAMPLE:
FINANCIAL ANALYSIS QUESTIONNAIRE
(FAQ), MARKETING/MANAGEMENT
QUESTIONNAIRE (MKT1)

## III

## Oklahoma Slate University

CENTER FOR APPAREL MARKETING \& MERCHANDISING

## May 25, 1983

Dear Retailer
The Center for Apparel Marketing and Merchandising (CAMM) was
recently established at Oklahoma State University to serve small apparel
retailers what have voiced a need for assistance to improve the efficiency o
Kathryn Greenwood and the CAMM staff have developed and conducted
workshops, seminars and consulting on Inventory Control, Dollar Mr-
chandise Planning, and Promoting and Selling Apparel, for the past five
years.
Research on financial strategy analysis has been initiated at the Center un-
der the direction of Dr. Greenwood. This research will enable CAMM to
maintain a data bank for owners of small stores. Apparel retaliers like your-
self who have attended CAMM workshops will have access to comparative
$\begin{aligned} & \text { information related to their financial performance and that of other retailers } \\ & \text { of similar size. Complete confidentiality will be assured for retailers who }\end{aligned}$
contribute to the CAMM Data Bank.
You will receive a confidential financial analysis for your store com-
$\begin{aligned} & \text { alimentary of our CAMM Research staff if you will assist us with this vital } \\ & \text { study. Your responses to the enclosed questionnaire will contribute to the }\end{aligned}$
establishment of the CAMM Data Bank, and the future availability of com-
parative financial information characteristic of small apparel stores. You
may be assured that the information you provide will not be ideniffled in any
way with your store.
Please collect the information needed from your year end balance sheet and
income statement (P\&L) for 1982 and complete the information on the op-
posit page. If you prefer, you may enclose a copy of your 1982 financial
statements. We greatly appreciate your time and effort in assisting us with
If you have any questions, please contact me or Dr. Greenwood at (405) 624-
7469 or by mail.
Susan S. Fiorito
Graduate Research Associate
Dr. Kathryn M. Greenwood

SURVEY OF FINANCIAL. PERFORMANCE.
Connpiete confidentiality is assured. A code number at the bottom of the page is for identification. All the information requested below wit our year -end balance sheet and Income Statement (D) 1 I for 1982.
would be helpful for the pu pose of analysis if you would enclose a copy of your financial statements, however, this is not necessary.
Thank your, in advance, for your cooperation.



Thank you very much for your help and cooperation. You will be receiving
-Please enclose a copy of your 1982 financial statements.
-Fold the booklet so that our return address is on the outside.

## -Please secure.

THANK YOUFOR YOUR HELP!

FOLDHERE ANDSTAPLE ATTHE BOTTOM TORETURN

ER FOR APPAREL MARKETING
CENTER FOR APPAREL MARK
Oklahoma State University Extension
306 Home Econmics West
Stllwater, Oklahomin 7407


RETURN POSTAGE GUARANTEED EENTERFORAFPKRELMARKETING ND MERCHANDISING OSU EXTENSION
306 Home Economics Wes


## RETURN POSTAGE GUARANTEED

## CENTER FOR APPAREL MARKETING

AND MERCHANDISING
OSU EXTENSION
306 Home Economics West Stillwater, Okiahoma 74078


## Oklahoma State University <br> CENTER FOR APPAREL MARKETING \& MERCHANDISING <br> 

July 19, 1983

Dear Retailer,

Thank you very much for participating in the research project being conducted by the Center for Apparel Marketing and Merchandising on financial strategy analysis. Your help is greatly appreciated.

The enclosed questionnaire is the final stage of the study, and is concerned with marketing and management factors. We will be analyzing financial performance in relation to market strategies. There are no right or wrong answers. Please check each question as it pertains to your store. Each questionnaire is coded and will in no way be associated with you or your store. Please take a few minutes now to answer the questions, and mail promptly to us.

The financial information you provided in Part I of the research project is being processed. We will mail the key financial ratios for your store as soon as you return the enclosed questionnaire. A final summary of the overall results will be available to you following the completion of this project.

I will be happy to answer any questions you may have. Please call me if necessary at (405) 624-7469. Thank you for your continued assistance.

Sincerely,


Susan Fiorito Graduate Research Assistant


Kathryn M. Greenwood Director

SURVEY OF FINANCIAL STRATEGY ANALYSIS
PART II: MARKETING/MANAGEMENT QUESTIONNAIRE

To insure complete confidentiality, please do not put your name or the name of your store on this questionnaire. A code number at the bottom of each page is for identification. Thank you in advance for your time and effort with this final part of our study.

Q-1 How many years have you owned your store?
years
Q-2 What is the size of city or town where your store is located? (Circle number)
Less than 10,000
10,000 to 25,000 25,001 to 50,000 50,001 to 75,000
75,001 to 100,000
6 Over 100,000
Q-3 How would you describe the location of your store? (Circle number)

```
Central Business District
Major Shopping Mall
Regional Shopping Center
Strip Center
Free Standing Location
Other (Please specify)
```

Q-4 Under which type of legal form or organization does your store belong? (Circle number)
1 Individual Proprietorship
2 Partnership
3 Corporation
Q-5 What type of store do you own? (Circle number)
1 Department Store
2 Specialty Store
3 Family Clothing Store
4 Discount Store
5 Other (Please specify)
Q-6 What is your current job title/position? (Circle number)

```
Store Owner
Store Manager
Store Owner/Manager
Other (Please specify)
```

$\qquad$
Q-7 Which of the following services do you offer your customers? (Circle number(s))

```
1 Delivery
2 Alterations
3 Credit (in store or national)
4 Gift Wrap
5 Lay-Away
6 Wardrobe Consultation and/or Planning
7 Return Policy
8 Pre-notice of Sales
9 Others (please specify)
```

Q-8 Within how many miles of your store do most of your customers live? (Also referred to as your Irading Area)
$\qquad$ Miles Morth $\qquad$ Miles East
$\qquad$ Miles South $\square$ Miles West

Q-9 Approximately how many stores sell apparel similar to you, in your trading area?
$\qquad$ NUMBER OF SIORES WITH SIMILAR APPAREL

Q-10 Approximately how many of these stores selling similar apparel do you believe are in direct competition with your store?
$\qquad$ NUMBER OF DIRECI COMPETITORS IN TRADING AREA
Q-11 Estimate the average percentage of your initial markup on merchandise in 1982 at retail. \% averace intital markur at retail

Q-12 Estimate the percentage of annual sales that you spent on advertising in 1982. \% AnNUAL SALES SPENT ON ADVERTISING

Q-13 Estimate the square footage of selling space in your store.
$\qquad$ SQUARE FEET OF SETIING SPACE
Q-14 Estimate the aveage number of salespeople on the selling floor each day.
$\qquad$ nuniber of salespeople bach day
Q-15 Estimate the average inventory you kept in your store in 1982.
——
average inventory - at retail
OR
AVERAGE INVENTORT - AT COST
Q-16 Approximately what percentage of each type of merchandise do you carry in inventory?
TYPE
WOMEN'S APPAREI/ACCESSORIES
MEN'S APPAREL/ACCESSORIES \%
CAILDREN'S APPAREL/ACCESSORIES \%
FAMILY APPAREL/ACCESSORIES \%
OTHER (Please specify)
total
1002
Q-i7 Approximately how many merchandise classifications and subclassifications (categories) do you have in your store? EXAMPLE: CLASSIFICATION-Sporrswear; SUBCLASSIFICATION-Blouses.

TYPE CLASSIFICATION ( $\#$ ) SUBCLASSIFICATION ( $\#$ )
WO:IEN'S APPAREL/ACCESSSORIES
MEN'S APPAREL/ACCESSORIES CHILDREN'S APPAREL/ACCESSORIES
FAMILY APPAREL/ACCESSORIES
OTHER (Please specify) $\qquad$ $\square$



Is there anything else you would like to tell us about your needs for financial strategy analysis within your business? Also any comments you wish to make that you think might help us in future efforts to aid small retail owners with financial analysis will be appreciated, either here or in a separate letter.

[^18]
# To get your FREE 6-Month CAMM Membership, <br> please mail this TODAY. <br> <br> Thank you for your help! 

 <br> <br> Thank you for your help!}

FOLD HERE AND STAPLE AT THE BOTTOM TO RETURN

Dr. Kathryn M. Greenwood
Center for Apparel Marketing \& Merchandising 306 HEW
Oklahoma State University
Stillwater, OK 74078

## APPENDIX G

NUMBER AND PERCENTAGES OF RESPONSES TO THE THREE QUESTIONNAIRES AND LOCATION OF

RESPONDENTS BY STATE

TABLE XXV

NUMBER AND PERCENTAGE OF RESPONSES
TO THE THREE QUESTIONNAIRES

| Questionnaire | Mailed | Returned |  | Deleted N | Added ${ }^{a}$ N | Total <br> Useful |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | N | \% |  |  |  |
| Financial (FAQ) | 206 | 32 | 17 | 2 | 7 | 37 |
| Marketing (MKT1) ${ }^{\text {b }}$ | 37 | 33 | 89 | - | - | 33 |
| Marketing (MKT2) ${ }^{\text {c }}$ | 174 | 60 | 34 | 6 | - | 54 |
| Total Responses to Matching Questionnaire (FAQ, MKT1) |  |  |  |  |  | 33 |
| Total Responses to Both Marketing Questionnaires (MKT1, MKT2) |  |  |  |  |  | 87 |

apre-test participants.
${ }^{\mathrm{b}}$ Questionnaire sent only to retailers responding to the $F A Q$.
${ }^{C}$ Questionnaire sent to retailers who did not respond to the FAQ. This questionnaire is the same as MKTl with only one additional question requesting annual net sales.

TABLE XXVI
LOCATION OF. RESPONDENTS BY STATE

| State | FAQ\&MKT1 | PRE-TEST PARTICIPANTS | MKT2 |
| :---: | :---: | :---: | :---: |
| AR | 2 | 1 | 1 |
| CA |  |  | 1 |
| CO | 2 |  | 4 |
| IA | 1 | 1 | 3 |
| ID | 1 |  |  |
| KS | 1 |  | 6 |
| LA |  |  | 4 |
| MD |  | 1 |  |
| MN | 5 | 3 | 12 |
| мо |  |  | 2 |
| MS | 1 |  |  |
| NC | 3 |  | 3 |
| ND | 1 |  | 4 |
| NE | 4 | 1 | 1 |
| OK |  |  | 3 |
| OR | 1 |  | 1 |
| PA |  |  | 2 |
| SC |  |  | 1 |
| SD | 2 |  | 1 |
| TX | 6 |  | 3 |
| VA |  |  | 1 |
| WI | 2 |  | 2 |
| WV |  |  | 1 |
| WY | 1 |  | 4 |
| TOTAL | 33 | 7 | 60 |

## APPENDIX H

T-TESTS FOR THE TWO MARKETING QUESTIONNAIRE RESPONSES (MKT1 AND MKT2)

## TABLE XXVII

MEANS AND DIFFERENCE OF MEANS FOR MKT1 AND MKT2 QUESTIONNAIRE RESPONSE

| Variable | Means |  | T-Statistic <br> Difference of Means |
| :---: | :---: | :---: | :---: |
|  | MKT1 | MKT2 |  |
| NSALES | 192419.09 | 229036.12 | $1.34{ }^{\text {a }}$ |
| YEARS | 5.63 | 7.08 | $1.37{ }^{\text {a }}$ |
| POP | 2.12 | 1.99 | -. 38 |
| SLOC | 1.97 | 2.57 | 1.52 |
| ORG | 2.21 | 2.00 | -1.03 |
| STYPE | 2.24 | 2.31 | . 37 |
| TITLE | 2.33 | 2.31 | -. 08 |
| SERV1 | . 30 | . 20 | -1.05 |
| SERV2 | . 61 | . 65 | . 39 |
| SERV3 | . 79 | . 87 | 1.01 |
| SERV4 | . 79 | . 91 | $1.45{ }^{\text {a }}$ |
| SERV5 | . 97 | . 96 | -. 17 |
| SERV6 | . 39 | . 35 | -. 39 |
| SERV7 | . 85 | . 93 | $1.06{ }^{\text {a }}$ |
| SERV8 | . 45 | . 61 | 1.43 |
| SERV9 | . 15 | . 00 | $-2.39^{\text {a }}$ ** |
| MILES NS | 60.30 | 64.08 | . 33 |
| MILES EW | 63.24 | 62.48 | -. 07 |
| SAPP | 6.29 | 6.92 | $.46{ }^{\text {a }}$ |
| DCOM | 2.79 | 4.34 | $1.84{ }^{\text {a }}$ * |
| IMU | 49.33 | 48.74 | $-.36^{\text {a }}$ |
| ADVPCT | 4.64 | 3.73 | $-1.42{ }^{\text {a }}$ |
| SQFT | 1896.67 | 2256.39 | $1.31{ }^{\text {a }}$ |
| SALESP | 2.13 | 2.41 | $1.24{ }^{\text {a }}$ |
| AVGINVR | 121120.00 | 106053.27 | -. 60 |
| AVGINVC | 69729.17 | 75198.38 | . 43 |
| WAPCT | 66.45 | 58.62 | -. 84 |
| MAPCT | 12.52 | 19.35 | 1.02 |
| CAPCT | 16.45 | 16.31 | -. 02 |

TABLE XXVII (Continued)

| Variable | MKT1 | MKT2 | T-Statistic <br> Difference of Means |
| :---: | :---: | :---: | :---: |
| FAPCT | . 30 | 1.89 | $1.71{ }^{\text {a }}$ * |
| OAPCT | 4.30 | 3.80 | -. 20 |
| WACLAS | 6.71 | 5.59 | -. 83 |
| WASCLAS | 11.19 | 12.00 | . 21 |
| MACLAS | 18.71 | 5.82 | $-.94^{\text {a }}$ |
| MASCLAS | 56.80 | 8.67 | $-.88^{\text {a }}$ |
| CACLAS | 11.73 | 6.23 | $-.88^{\text {a }}$ |
| CASCLAS | 25.67 | 34.71 | . 34 |
| FACLAS | 1.00 | 1.80 | . 72 |
| FASCLAS | 2.75 | 4.33 | . 39 |
| OACLAS | 2.33 | 3.43 | . 72 |
| OASCLAS | 1.33 | 7.80 | $1.76{ }^{\text {a }}$ |
| LOC | 2.91 | 2.81 | -. 44 |
| OPER | 2.94 | 3.00 | . 40 |
| LAYOUT | 2.24 | 2.35 | . 50 |
| PARK | 2.36 | 2.70 | 1.43 |
| CSER | 1.88 | 2.20 | 1.64 |
| EMP | 2.70 | 2.70 | . 04 |
| VIS | 1.79 | 1.98 | . 90 |
| PROMO | 2.70 | 2.81 | . 42 |
| PRICL | 2.95 | 2.96 | . 05 |
| QUAL | 2.17 | 2.41 | 1.45 |
| VARIETY | 2.20 | 2.64 | 1.90* |
| ASRT | 2.48 | 2.57 | . 37 |
| IMAGE | 2.12 | 2.40 | 1.26 |

$a_{\text {Unequal }}$ variances form of the $t$-test was used based on an F-test for variance equality at the . 05 level. For remaining variables the equal variances form of the t-test was used.

* Significant at $\mathrm{p} \leq .1$
** Significant at $\mathrm{p} \leq .05$
*** Significant at $\mathrm{p} \leq .01$


## APPENDIX I

MEAN VALUES FOR RETAILERS PERCEPTION
OF MARKET POSITION IN RELATION
TO MAJOR COMPETITORS

TABLE XXVIII
MEAN VALUES FOR RETAILERS PERCEPTION OF THEIR MARKET POSITION IN RELATION TO MAJOR COMPETITORS

| VARIABLE | N | MEAN | SD | RANGE |
| :--- | :---: | :---: | :---: | :---: |
| LOCATION | 87 | 2.8 | 1.1 | $1-5$ |
| HOURS OF OPERATION | 87 | 3.0 | .7 | $1-5$ |
| LAY-OUT | 87 | 2.3 | 1.0 | $1-4$ |
| PARKING | 87 | 2.6 | 1.1 | $1-5$ |
| CUSTOMER SERVICES | 87 | 2.1 | .9 | $1-5$ |
| STORE EMPLOYEES | 87 | 2.7 | .7 | $1-4$ |
| VISUALLY | 87 | 1.9 | 1.0 | $1-5$ |
| PROMOTIONS | 86 | 2.8 | 1.2 | $1-5$ |
| PRICE LEVEL | 87 | 3.0 | .8 | $1-5$ |
| QUALITY | 87 | 2.3 | .8 | $1-3.5$ |
| VARIETY | 87 | 2.5 | 1.1 | $1-5$ |
| ASSORTMENT | 87 | 2.5 | 1.1 | $1-5$ |
| IMAGE | 87 | 2.3 | 1.0 | $1-5$ |

APPENDIX J

CORRELATION RESULTS BETWEEN FINANCIAL RATIOS AND MARKETING STRATEGY WITH THE SAMPLE SPLIT INTO STORE AGE AND SIZE

CATEGORIES

CORRELATION RESULTS BETWEEN FINANCIAL RATIOS AND MARKETING STRATEGY WITH THE SAMPLE SPLI... TNTO STORE AGE AND SIZE CATEGORIES

|  | Inventory Turnover at Cost |  |  |  | Inventory Turnover at Retail |  |  |  | Asset Turnover |  |  |  | Profit Margin |  |  |  | Financial Leverage |  |  |  | Return on Assets |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marketing Variables | YR1 | YR2 | SCl | SC2 | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 |
| Merchandise Characteristics | . 15 | -. 47 | -. 03 | -. 13 | . 01 | -. 44 | -. 06 | -. 17 | -. 15 | -. 38 | -. 36 | -. 16 | . 29 | . 20 | . 32 | . 26 | -. 05 | -. 17 | . 07 | -. 14 | . 17 | -. 15 | . 14 | . 02 |
| Atmosphere | . 45 | -. 32 | -. 28 | . 05 | .47* | -. 42 | -. 31 | . 05 | . 29 | -. 03 | . 26 | . 02 | -. 06 | -. 06 | -. 06 | -. 04 | . 20 | -. 23 | . 37 | -. 04 | . 06 | -. 01 | . 05 | . 02 |
| Location Factors | . 23 | . 09 | . 30 | -. 20 | . 20 | . 11 | . 30 | -. 18 | . 25 | . 07 | .43* | -. 06 | . 001 | . 19 | -. 08 | .13 | . 29 | -. 22 | . 17 | . 14 | -. 02 | . 14 | -. 01 | . 02 |
| Promotional Activity | -. 44 | -. 10 | -. 06 | -. 07 | -. 21 | -. 05 | . 03 | -. 04 | -. 40 | -. 11 | -. 42 | -. 02 | -. 31 | . 13 | -. 03 | -. 22 | -. 07 | . 18 | . 21 | -. 29 | -. 36 | -. 04 | -. 18 | -. 15 |
| Store Growth | -. 27 | -. 07 | . 08 | -. 15 | -. 12 | -. 09 | . 10 | -. 11 | -. 23 | . 16 | -.47* | -. 08 | . 34 | -. 13 | .46* | -. 04 | . 25 | -. 16 | -. 27 | -. 16 | . 24 | . 01 | . 31 | -. 08 |
| Trading <br> Area | -. 31 | . 12 | -. 25 | . 32 | -. 16 | . 03 | -. 19 | . 30 | -. 19 | . 30 | -. 03 | . 03 | . 05 | $-.12$ | . 04 | -. 28 | -. 22 | . 25 | -. 15 | -. 21 | -. 002 | . 13 | . 06 | -. 18 |
| Competition | . 13 | -. 21 | . 01 | -. 04 | . 20 | -. 17 | . 003 | . 05 | . 05 | -. 21 | -. 25 | . 13 | -. 30 | . 18 | -. 06 | . 18 | -. 34 | -. 11 | . 06 | .60** | -. 25 | -. 07 | -. 18 | . 14 |

[^19]
## (CONTINUED)

|  | Gross Margin Return on Investment |  |  |  | Return on Investment |  |  |  | Sales/sq.ft. |  |  |  | Receivable Turnover |  |  |  | Current Ratio |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marketing Variables | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 |
| Merchandise Characteristics | -. 17 | -. 33 | -. 11 | -. 25 | .45* | -. 09 | .45* | .47* | . 16 | -. 10 | . 13 | -. 11 | -. 14 | . 57 | . 14 | . 46 | . 29 | . 006 | . 14 | . 37 |
| Atmosphere | . 39 | -. 56 ** | -. 34 | . 03 | -. 26 | -. 09 | -. 22 | -. 30 | -. 25 | . 14 | -. 12 | . 11 | . 38 | . 61 | -. 09 | . 53 | -. 10 | . 31 | -. 03 | .10 |
| Location Factors | . 11 | . 15 | . 29 | -. 12 | -. 18 | . 22 | -. 30 | . 16 | -. 07 | . 09 | . 01 | . 05 | -. 11 | $-.003$ | . 46 | . 15 | -. 28 | -. 18 | -. 2 | -. 09 |
| $\begin{aligned} & \text { Promotional } \\ & \text { Activity } \end{aligned}$ | . 16 | . 05 | . 17 | . 02 | -. 19 | -. 007 | $-.03$ | -. 28 | -. 08 | .24* | . 08 | . 009 | $-.12$ | -.70* | -. 56 | -. 45 | -. 03 | -. 1 | -. 12 | . 18 |
| Store Growth |  | -. 11 | . 14 | -. 008 | . 42 | $-.02$ | .59** | -. 44 | -.67*** | -. 17 | -.28* | -.34** | . 23 | -. 17 | -. 64 | . 12 | -. 39 | -. 17 | -. 39 | -. 37 |
| Trading <br> Area |  | -. 12 | $-.10$ | . 23 | . 16 | . 18 | . 17 | -. 30 | -. 17 | . 13 | -. 008 | . 03 | -. 54 | . 26 | -. 36 | -. 20 | -. 08 | -. 22 | -. 06 | $-.02$ |
| Competition | . 27 | -. 08 | -. 009 | . 26 | -. 31 | -. 02 | $-.08$ | -. 14 | . 25 | . 17 | .27* | . 11 | .77* | . 20 | . 11 | . 55 | . 07 | . 03 | -. 09 | . 04 |

(CONTINUED)

|  | FINANCIAL RATIO FACTORS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Efficiency |  |  |  | Liquidity |  |  |  | Profitability |  |  |  |
| Marketing Variables | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 | YR1 | YR2 | SC1 | SC2 |
| Merchandise Characteristics | . 12 | -. 62 | . 27 | -. 37 | . 54 | $-.40$ | . 12 | . 62 | -. 04 | . 58 | -. 27 | . 59 |
| Atmosphere | .75* | -. 55 | . 27 | . 13 | -. 31 | -. 03 | -. 49 | . 70 | . 15 | . 20 | -. 06 | . 30 |
| Location Factors | . 07 | . 15 | -. 09 | -.84** | . 002 | . 10 | . 37 | -. 14 | . 08 | . 39 | . 71 | -. 28 |
| Promotional Activity | . 03 | -. 15 | . 08 | -. 14 | -. 32 | -. 48 | -. 66 | . 05 | . 23 | -. 03 | -. 18 | . 64 |
| Store Growth | . 5 | . 32 | . 05 | -. 29 | -.84* | . 63 | -.84* | . 24 | -. 07 | . 006 | -. 46 | . 24 |
| Trading Area | -. 27 | .86* | . 24 | . 08 | -. 22 | . 34 | -. 13 | -. 34 | -. 13 | . 31 | -. 29 | . 01 |
| Competition | . 17 | . 02 | -. 49 | . 63 | . 24 | . 47 | . 15 | . $99 * * *$ | . 90 ** | -. 08 | -. 3 | .84* |

# VITA <br> Susan Syron Fiorito <br> Canadidate for the Degree of <br> Doctor of Philosophy 

Thesis: FINANCIAL PERFORMANCE AND MARKETING STRATEGY OF SELECTED SMALL APPAREL STORES

Major Field: Home Economics--Clothing, Textiles and Merchandising
Biographical:
Personal Data: Born in Youngstown, Ohio, October 21, 1951, one of seven children of William C. and Mary Elaine Syron. Married to Jack Fiorito on May 14, 1982.

Education: Graduated from North Miami Senior High School, North Miami, Florida in June, 1969; received Associate of Arts degree in Home Economics from Miami Dade Community College in June, 1971; received Bachelor of Science Degree in Home Economics Education from Florida State University in June, 1973; received Master of Science degree in Administration/Supervision from Barry College in June, 1976; completed requirements for the Doctor of Philosophy degree at Oklahoma State University in July, 1984.

Professional Experience: Sales Associate, J. C. Penney Department Store, Miami and Tallahassee, Florida, 1969 to 1973; Instructor, High School Home Economics, Hialeah-Miami Lakes Senior High, 1973-1976; Manager and part owner of small apparel stores, Atlanta, Georgia, 1976 to 1979; Instructor, High School Home Economics, George Walton Senior High, 1976 to 1978; Instructor and Department Director for Fashion Merchandising, Fashion Institute of Atlanta, 1978-1980; Assistant Professor of Apparel Merchandising, Florida International University, 1980 to 1981; Research Assistant, Department of Clothing, Textiles and Merchandising, The Center for Apparel Marketing and Merchandising, Oklahoma State University, 1981 to 1983; Instructor and Assistant Professor, Department of Home Economics, The University of Iowa, August, 1983 to present.


[^0]:    $1_{\text {Causes }}$ of retail apparel failures in the United States as reported by Dun and Bradstreet (1981) are based on opinions of informed creditors and information in D \& B's credit reports.

[^1]:    ${ }^{2}$ Forty percent ( 10 out of 25 ) of the retail store owners agreed to participate in the pre-test when the method for collecting financial information was telephone interviews. Seventeen percent ( 32 out of 206) of the retail store owner/managers responded to the mailed questionnaires.

[^2]:    ${ }^{3}$ Annual membership in the Center for Apparel Marketing and Merchandising (CAMM) includes four newsletters, two research reports and one store financial analysis summary report.

[^3]:    ${ }^{5}$ The median was chosen since the arithmetic average would be biased by the outliers in the sample.

[^4]:    ${ }^{6}$ Figures are based on data prepared by the National Retail Merchants Association, Dun and Bradstreet, Inc., NCA, and Robert Morris Associates.

[^5]:    $7_{\text {Packard }}$ and Carron (1982), define merchandise classifications as a group of merchandise reasonably interchangable from a customer's point of view.
    $8^{\text {Packard }}$ and Carron (1982), define subclassifications as narrowed segments of expected consumer wants.
    $9^{9}$ The National Retail Merchants Association (NRMA) reported in their Merchandising and Operating Results (MOR) for 1981 that women's apparel stores with annual sales over one million dollars, averaged 20.9 percent markdowns on sales.

[^6]:    ${ }^{\mathrm{a}}$ Only loadings with an absolute value of .5 or greater are shown.

[^7]:    ${ }^{\text {a }}$ Only loadings with an absolute value of .4 or greater are shown.

[^8]:    ${ }^{a}$ On1y loadings with an absolute value of .49 or greater are shown.

[^9]:    * Significant at $p \leq .1$
    *** Significant at $\mathrm{p} \leq .01$
    ${ }^{a}$ Degrees of freedom vary by equation because of differential rates of response to particular survey questions.

[^10]:    ${ }^{12}$ R-square, the coefficient of determination, is a measure of the proportion of variation in the dependent variable "explained" by variables included in the regression equation.

[^11]:    * Significant at $\mathrm{p}<.1$
    ** Significant at $\mathrm{p}<.05$
    *** Significant at $\mathrm{p}<.01$

[^12]:    ${ }^{13}$ In other words, there were more statistically significant correlations with return on investment and marketing strategy factors than any other single ratio in its relations to marketing strategy.

[^13]:    * Significant at p<.1
    ** Significant at $\mathrm{p} \leq .05$
    *** Significant at $\mathrm{p} \leq .001$
    ${ }^{\text {a Year }}$ categories are defined as: YEARCAT1 < 5 years in business; YEARCAT2
    $\geq 5$ years in business.
    ${ }^{\text {b Size categories are defined as: SIZECAT1 < } \$ 190,500 \text { annual net sales; SIZECAT2 }}$ $\geq \$ 190,500$ annual net sales.
    $c_{\text {Unequal }}$ variances form of the $t$-test was used based on an F-test for variance equality at the .05 level. For remaining variables the equal variances form of the t-test was used.
    $\mathrm{d}_{\text {Sales }} / \mathrm{sq} . \mathrm{ft}$. and net sales were calculated from data obtained from the marketing questionnaire and therefore had a total sample size of 86 and 90 , respectively.

[^14]:    * Significant at p <. 1
    ** Significant at $\mathrm{p}<.05$
    *** Significant at $\mathrm{p} \leq .01$
    a YEARCAT1 < 5 years in busines; YEARCAT2 $\geq 5$ years in business.
    b SIZECAT1 < $\$ 190,000$ annual sales volume; SIZECAT2 $\geq \$ 190,500$ annual sales volume.

[^15]:    * Significant at $\mathrm{p}<.1$
    ** Significant at $\mathrm{p} \leq .05$
    *** Significant at $\mathrm{p} \leq .01$
    a Age categories are defined as: YEARCAT1 < 5 years in business; YEARCAT2 $\geq 5$ years in business.

[^16]:    * Significant at $\mathrm{p} \leq .1$
    ** Significant at $\mathrm{p}<.05$
    *** Significant at $\mathrm{p} \leq .01$
    $a_{\text {Size }}$ categories are defined as: SIZECAT1 < \$190,500 annual net sales; SIZECAT2 $\geq$ \$190,500 annual net sales.

[^17]:    15 The seven marketing strategy variables consisted of four retailer perceived marketing position variables (merchandise characteristics, atmosphere, location factors, and promotional activity) and three selected marketing variables (store growth, trading area, and competition).

[^18]:    Your contribution to this research is greatly appreciated. We will send you a copy of your store's financial ratios as soon as we receive this questionnaire.

    If we, at the Center for Apparel Marketing and Merchandising can be of any further help, please let us know.

[^19]:    *Significant at $p \leq .1$
    **Significant at $p \leq .05$
    ***Significant at $p \leq .01$
    ${ }^{\text {a }}$ Age categories are defined as: YEARCAT1 < 5 years in business; YEARCAT2 $\geq 5$ years in business.
    $b_{\text {Size categories are defined as: }}$ SI2ECAT1 < $\$ 190,500$ net sales; SIZECAT2 $\geq \mathbf{\$ 1 9 0 , 5 0 0}$ net ales.

