Multi-Unit Retailing: The Role of Control as a Determinant of Success

Dr. Judith D. Powell, Marketing, University of Richmond
Dr. Larry N. Bitner, Accounting, University of Richmond

Abstract

To meet the demands of fragmenting markets and to enhance their financial success, small retailers often expand to multi-unit operations. A successful expansion requires careful strategic planning and control. This research indicates that there is a positive relationship between financial success and the degree of centralized control over store identity, buying, and management for certain retailers. Evidence further indicates a synergistic effect among these control variables.

Introduction

Virtually all successful businesses are enticed by the benefits of growth. Small owner-operated retail firms are no exception. Once a single-unit retailer has moved through organizational start-up to success, most begin to explore the option of multiple units. The expansion alternative of a multi-unit operation is currently of particular interest to retailers as markets continue to fragment and as retailers attempt various methods of reaching these segments.

Much has been written to assist the entrepreneur with the initial decision to expand including site selection, financing, and staffing. However, very little information is available to assist in the strategic planning decisions necessary to sustain the success of prior years during the postexpansion period. Strategic marketing decisions become critical to owner-operated retail firms because of the radical changes likely in their marketing plans. The postexpansion owner will likely have to delegate more, reduce client contact, supervise more employees, and depend on more detailed information to control the new organization.

The central issue of this study is whether strategically implemented control will contribute to postexpansion success. Specifically, it is proposed that control of store identity, buying, and management are related to financial success. O'Neill states the problem, "Unfortunately, little empirical research traces the experience of small businesses as they grow. Initial success requires some type of strategic management. Further research may help to identify how the content and process of strategy changes as small firms becomes large." [O'Neill and Duker, 1986, 37] Our study of one component of the process--control--and its relationship with success is an initial step in developing a realistic view of multi-unit strategic planning for small retailers.

Measuring Business Performance

Venkatraman and Ramanujam [1986] present a classificatory scheme to address the issue of measuring business performance. Their model provides a hierarchy of performance measures consisting of three levels. These levels are used to "delineate the domain of the performance concept," and, thus, encourage research which concentrates on "measuring limited domains of the construct." The level at which one chooses to measure performance will depend upon researcher needs and the availability of information. The importance of the latter will likely be inversely related to the size of the business as detailed public information is generally less available for smaller businesses.

At the first level of measurement, Venkatraman and Ramanujam rely solely on financial performance measures such as return on sales, return on assets, or earnings per share. Level two retains the financial measures of level one but adds operational performance measures such as market-share, new product introduc-

tion, product quality, and marketing effectiveness. At the third and broadest level, organizational effectiveness subsumes business performance. they note that appropriate measures for this level are presently a much debated issue; thus, most strategic planning studies have avoided this level.

In this analysis, performance will be measured using level one performance measures. Although summarized, financial statement data for small retail businesses are available. At Venkatraman and Ramanujam's second level, however, even market-share data would be difficult to obtain and often misleading. Small businesses compete locally, therefore; defining their relevant market is difficult, and accurate statistics often are not available.

Using financial ratios alone is not without precedent in measuring business performance. Beaver [1967] in his landmark study demonstrated the effectiveness of using ratio analysis to predict business failure. Later studies by Altman [1968] and Blum [1969] supported Beaver's findings. While these studies relied on empirical data from large firms, Edmister [1972], determined that ratios were likewise able to predict small business failure.

It may be noted that there is a difference between the studies cited above and the current study. Previous studies have concentrated on predicting failure (no success) whereas here the focus is on the degree of success achieved by firms which have not failed. Since the firms in this study have not only established themselves as successful firms but have demonstrated an interest in growth by expanding beyond their initial store, it is assumed that profit is a significant motivator for the entrepreneur. It follows then that performance expressed as success may appropriately be measured by profitability ratios.

Using profitability as a measure of success is consistent with value based planning theory which assumes that a fundamental goal is to maximize the wealth of the owners. Levy and Breda [1988] utilize the well developed concept of residual income (RI) as a performance measure to motivate investment center managers to achieve such a goal. For the larger firm, they argue that using RI as a performance measure can be an effective part of implementing a value based planning strategy. Although RI may be useful for measuring individual store performance, at the aggregate level imputed interest charges would not be relevant. At this highest level of responsibility, bottom line profits become the appropriate measure for performance.

Levy and Breda demonstrate the relationship of the RI model to the ROI (Return on Investment) model which is another commonly used financial performance measure. In its most general form, ROI is computed as the ratio of income divided by investment. Specifying precise definitions of income and investment can create many versions of ROI. These vary from return on owners equity, to return on assets employed by operating segments within a firm, to return on total assets of the business. The focus of this research is to measure and compare overall profitability among a sample of retailers. In order to control for the effects of leverage or any special financing arrangements, return on total assets was deemed the most appropriate for the small retailers included in this research.

The Return on Assets (ROA) ratio can be decomposed into the product of Return on Sales (ROS) and Asset Turnover (ATO). Although the ratios ROA and ROS are related by ATO, these are not dependent variables. As independent profitability ratios, both ROA and ROS were utilized in this study. Two ratios were selected since no single ratio is uniformly cited as an optimal measure and perhaps, more important, multiple measures may be more reflective of varying performance goals among small business owners.

These ratios allow for two different views of the bottom line and thus may be the focus of different entrepreneurial objectives or goals. ROS, a narrow measure of profitability, measures the portion of every sales dollar that contributes to profit. ROA, on the other hand, tempers this narrow view by incorporating the amount of investment (assets) required to generate that level of sales and profit. In order to allow interindustry comparisons, the computed ratios were normalized by dividing each by the firm's respective industry average. Industry groupings were determined by SIC codes and industry average data was gathered from Dun and Bradstreet's 1987 *Industry Norms and Key Business Ratios.*

In spite of how one decides to measure performance, selection of prediction variables responsible for success is an additional complex issue. In the small business literature Hand, Sineath and Howle [1987] cite six categories of variables as relevant to a firm's performance. Three of these are individual specific: the personal, planning, and financial characteristics of the entrepreneur. Additionally included are customer relations, location of the firm, and control. It is this issue of control which has seen little exploration in past research. Control is of course not the only predictor of retail success, but for small multi-unit retailers it may be

a major influence. This study is limited to small retailers, a single state (Virginia), and eight three digit SIC codes to reduce confounding variables such as the geographic dispersion of units and wide variations in customer characteristics. In addition, 75 percent of the retailers in this study expanded from a single unit within the last ten years. Over 92 percent of the multi-unit retailers have thus far limited their expansion to no more than three units. This homogeneity of experience and size further limits outside variables affecting control or financial performance.

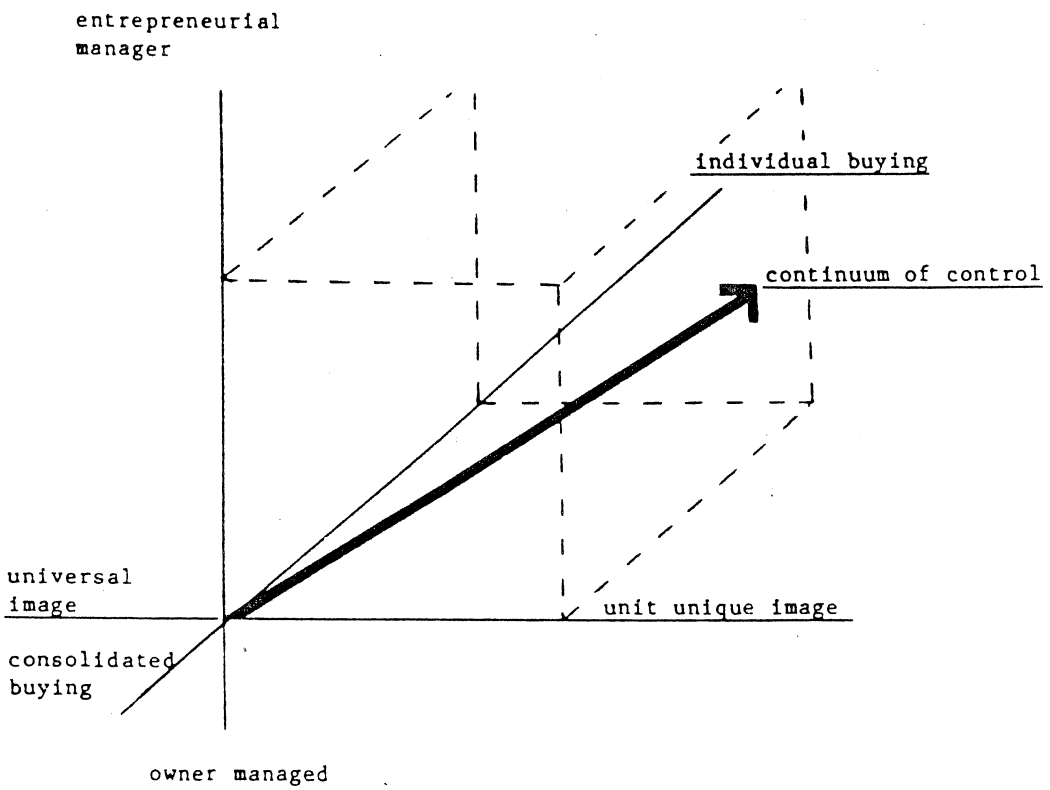
Bitner and Powell [1987] provide a model identifying control as measured within a three dimensional continuum. This model allows one to move beyond the limitation of viewing the amount of autonomy given each unit as a single decision. The choice is approached as no longer simply locating a point between total centralization and total autonomy. Rather, the choice involves different levels of autonomy over separate components of each unit's activities. Thus, their model as shown in Exhibit 1 describes a diversity of control variables and their interaction.

Decisions as to level of autonomy granted to each unit are described as affecting the freedom of unit relationships with its publics: employees, consumers, and vendors. Thus, three components of control are cited. First, owners may offer units varying levels of autonomy over day to day operating decisions such as staffing, markups and markdowns, and store promotion. This first component is referred to as control over store management. Second, control over store identity may vary. Variations in store identity may result in different product lines, product mixes or even store names. The final component of control, buying, determines the degree of autonomy store managers have in selecting and ordering inventory for their stores.

Prior research provides evidence to support the concept that the control decisions as discussed above are multidimensional. Bruce and Scott [1987] describe the small business which moves from survival through growth to expansion as conquering an increasing need for control. This control and the subsequent consistency of offering, is often used to explain successful retail expansion [Bergman, 1986 and McCullough and Paige, 1986]. Increasing levels of control would thus, seem likely to accompany increasing financial success.

EXHIBIT 1

CONTINUUM OF CONTROL



Even with this expectation of increasing levels of control, total consistency across types of retail stores would be unlikely. Packard, Winters and Axelrod [1977, iii] describes the buying and selling of apparel as differing from other merchandising because of: the required stock turnover, the high markdowns, and the strong influence of fashion shown in the factor of obsolescence, the intrinsic value to the consumer, and the greater difficulty in predicting consumer preference. In light of such differences, it is to be expected that apparel retailers would likewise reflect a wider diversity in the control decisions necessary for success than nonapparel retailers.

This diversity would also be reflected in the interaction of the three components of control. The financial success of a business may be contingent upon a unique combination of control levels for the components under consideration. For example, success when diversity of store identity is necessitated by fragmented markets may require decentralized buying. Yet, a fast food chain which requires absolute uniformity of store identity may successfully decentralize buying in order to deal with local vendors.

As retailing markets mature with different wants, needs, and buying power evident, a single way of doing business is unlikely to appeal to all market segments [Sheth, 1983, 6-18]. Yet, the expectation of scale economies and centralized management may have been, at least partially, the impetus for expansion. Thus, the decision as to the extent of autonomy, of necessity, includes conscious, separate decisions over individual control issues. This research will examine the relationship between levels of autonomy offered to retail units and the success of total operation.

Hypotheses

In order to identify the degree of relationship between financial success and the three components of control, management, identity, and buying, the following hypotheses are tested in this research.

H(1): The level of owner control over store management, identity and buying is positively associated with financial success of the business.

H(2): The relationship between the components of control and financial success will vary across types of retail stores.

H(3): The three components of control interact to affect the degree of financial success of the firm.

Procedure

In order for this study to measure the relationship between store autonomy and financial success, information was needed both on control issues as specified in the model of store autonomy and on accurate financial measures of success. Realizing the difficulty in obtaining from small retailers reliable financial data through independently generated survey instruments, financial information was obtained from Dun and Bradstreet reports on individual businesses. The study specific information on autonomy of units was obtained from a mail survey sent to small retailers.

Sample

Through Dun and Bradstreet's listing service a list of retailers with fewer than 15 total employees and more than one unit was requested. Additionally, to apply some control on the variety of retail outlets, the request was limited to a single state, eight three digit SIC codes, and those firms for which Dun and Bradstreet had actual rather than modeled financial data. In this manner a list of 162 firms which were to have met the stated criteria was provided by Dun and Bradstreet.

The questionnaire was sent to those firms in a double wave mailing with cover letters personally addressed to the store owner. The entrepreneurial nature of the sample firms mitigated concerns that have been expressed [Phillips, 1981] over measurement error resulting from single key informants. In fact these firms are prime examples of the use of a knowledgeable "key spokesman" suggested by John and Reve [1982].

In spite of the sophistication of the sample generation, twenty responses (12% of the initial list) were received from single unit retailers. It is easily assumed that not all single unit retailers took the time to respond, therefore the actually intended sample size is somewhat lower than 142. Of these 142 firms, 64 multi-unit retailers responded for a minimum effective response rate of 45.1 percent.

In order to explore the possibility of nonresponse bias the "last respondent" method of examining nonresponse bias was used [Armstrong and Overton, 1977]. This method suggests that the subjects who are slower to respond are more like nonrespondents than those who respond quickly. The first and last quartile of respondents were grouped into an "early" and a "late" group. The two groups were then compared on six descriptive characteristics (square footage, number of stores, SIC designation, computerization, single name, and single

merchandise mix) using an F-test for significant differences. There were no significant differences between the first and last respondents, and thus, by implication no significant difference between respondents and nonrespondents.

Questionnaire

In order to obtain study specific information on the level of autonomy granted each unit a questionnaire was developed to measure the control by the owner over three components of control. In initial interviews with small recently expanded retailers certain decisions such as those necessary in strategic planning, promotional strategy, and financial sourcing were found to be retained by the owner.

Three control issues did surface as of primary concern. These three issues closely matched those listed by Bitner and Powell [1987]. The freedom a branch manager is allowed in making day to day supervisory decisions for his branch is one. The owner must also decide whether buying is done centrally or by each unit. Additionally, decisions are made as to how much each branch differs from the original unit.

A multi-item Likert scale was developed to measure each of these control components. Control over day to day management was operationalized as "I let each branch manager handle his store." Control over buying was asked in variations of, "Each store buys its own merchandise." The third component, control over store identity, was asked in forms of "All of our stores are basically alike."

In developing any instrument, one of the major concerns is the reliability of the items used to capture the desired construct. Churchill [1979], provides an iterative paradigm by which the reliability of scales developed for this study might be measured. The first step suggested by Churchill is the calculation of coefficient alpha to assess the internal consistency of a set of items. As shown in Exhibit 2, alpha for the three scales ranged from .6828 to .8115, all above the .5 that Nunnally [1978] describes as sufficing for early stages of research.

Then to confirm that three separate dimensions of control existed, the nine questions were factor analyzed. As shown in the second iteration of Exhibit 2, all questions loaded on the appropriate factor at 7.0 or higher. Thus, three distinct components of unit autonomy were verified with an acceptable level of reliability shown.

Results

In order to analyze the relationship between components of control and the dual measures of success, canonical correlation analysis was used. This multivariate approach is necessary in that "univariate analysis of criterion

EXHIBIT 2

Iterative Examination of Reliability

	Step 1 Coefficient Alpha	Step 2 Factor Loadings		
		F_1	F_2	F_3
BUYING	.8815			
B_1		.87		
B_2		.87		
B_3		.90		
IDENTITY	.7149			
I_1			.78	
I_2			.81	
I_3			.81	
MANAGEMENT	.6828			
M_1				.70
M_2				.75
M_3				.74

phenomena leaves something to be desired when the phenomena cannot be adequately expressed or measured by a single variable" [Lambert and Durand, 1975, 468].

The interpretation of canonical analysis requires a three stage approach. First, the statistical significance of the correlation is judged. Then for those correlations judged significant, the strength of the relationship is assessed in light of the magnitude of the canonical root and the redundancy measure of shared variance. Finally, in those functions showing acceptable correlations, the contribution of individual variables is examined.

Hypothesis 1: Relationship of Control and Success

To test Hypothesis 1, the three control variables were entered into a canonical analysis with the dual success measures. As shown in Exhibit 3, Hypothesis 1 was supported at a .004 level of significance. The level of owner control is shown to be positively related to the success of small multi-unit retailers.

The canonical correlation of .53 is above the .19 to .23 minimum suggested by Hair, Anderson, Tatham and Grablowsky [1979] and the squared correlation shows that 28 percent of the variation in the success variate is explained by the control variate. Examining the redundancy figure as a control on the inherent overstatement possible from the canonical root, it is shown that little explanatory power is lost. Nearly 26 percent of the variance in the success variables is explained by the canonical variate of the control variables.

The canonical loadings which demonstrate the strength of the contribution of an individual variable to the canonical variate, describe a strong and nearly equal contribution of the two measures of success: return on sales (.99) and return on assets (.94). Control over management (.86) and, to a slightly less extent, control over buying (.72) are shown to affect the success of the small retailer.

In the acceptance of Hypothesis 1, it has been shown that owner control over the day to day management and a centralized approach to buying are associated with a high level of success.

Hypothesis 2: Variations Across Store Types

In order to test Hypothesis 2, respondents were somewhat arbitrarily divided into two groups. Men's and women's

EXHIBIT 3

Hypothesis 1

	Loadings	L^2	$\%\Sigma L^2$
Dependent Set			
ROS	.99	.98	52%
ROA	.94	.88	48%
		1.85	
Independent Set			
Buying	.72	.52	36%
Identity	.44	.19	13%
Management	.86	.74	51%
		1.45	

Canonical R	.53
Canonical Root	.28
Level of Significance	.004
Redundancy	.256/.262

apparel and shoe stores were grouped into one classification. The less fashion dependent furniture, carpet, sporting goods, and jewelry stores were grouped into a second classification.

As shown in Exhibit 4, these groups demonstrated a distinct difference in the relationship of control to success. The canonical relationship for the apparel oriented stores in group one showed a significance level at .22 and, therefore, a relationship between control and success for these stores was not demonstrated.

On the other hand, for the nonapparel stores in group two, the relationship was significant at .03. In addition, the canonical root of .50 and the redundancy figure of .44 demonstrate a relatively strong relationship between owner control and success for these stores. Owner control of day to day management of the branch stores is shown to be a major (.81) contribution to success. To a lesser extent, centralized buying (.44) and a single store identity (.43) also contribute to the success of these nonapparel stores.

EXHIBIT 4

Hypothesis 2

SIC Codes 611, 621, 661

	Loadings	L^2	$\%\Sigma L^2$
Dependent Set			
ROS	.91	.83	46%
ROA	.99	.98	54%
		1.81	
Independent Set			
Buying	.96	.92	84%
Identity	.24	.06	5%
Management	.34	.12	11%
		1.10	

Canonical R	.23
Canonical Root	.05
Level of Significance	.22
Redundancy	.21/.22

SIC Codes 712, 713, 947, 941, 944

	Loadings	L^2	$\%\Sigma L^2$
Dependent Set			
ROS	.95	.90	51%
ROA	.93	.87	49%
		1.77	
Independent Set			
Buying	.44	.19	18%
Identity	.43	.19	18%
Management	.81	.66	64%
		1.04	

Canonical R	.71
Canonical Root	.50
Level of Significance	.03
Redundancy	.44/.45

Hypothesis 3: Control Synergy

The third hypothesis was constructed to test for any synergistic effect of the control variables on financial success. Canonical correlation is useful in allowing for the contribution of multiple variables on both sides of the equation to be demonstrated in light of trait interaction rather than a trait by trait approach. Even so, canonical analysis is a linear technique and can "only indirectly suggest the presence of certain possible nonlinear associations" [Sparks and Tucker, 1972]. For this reason, the hypothesized interactive effect was first explored visually through three dimensional graphing. Cross products of the control components were introduced as independent variables in an attempt to capture any interactive effects.

Exhibits 5, 6, and 7 present a representative sample of three dimensional plots of the data collected for this study. Since the sample sizes are small, these plots are intended to indicate possible relationships and not to suggest statistical significance. For all three plots, the vertical axis represents success as measured by ROA and the horizontal axes represent the degree of control for a combination (cross product) of two of the variables: buying, identity, or management (B, I, and M). Using the Likert scale values from the questionnaire, a value of 0.0 represents a low degree of control (decentralization) and a value of 5.0 represents a high degree of control (centralization).

While the interpretation of Exhibits 5, 6, 7 is limited by the sample size, in that a limited number of observations may determine a lattice point, the exhibits do indicate the likelihood of nonlinear associations. For instance, Exhibit 7 indicates that control of buying and management may well interact to determine the success level of the firm. This exhibit suggests that increasing success is achieved with a synchronous centralization of control over management and buying (e.g. the front right corner of the lattice surface rises in tandem along both horizontal axes). It is interesting to note that local optimal may exist which represent quite different positioning than that of the global optimum. Similar interactions are suggested by the other two exhibits. Since the three dimensional graphing indicates nonlinear interaction of the control variables, in order to capture this nonlinearity, cross products of the control variables were entered into the canonical analysis. Exhibit 8 shows that for the apparel stores the canonical correlation remains nonsignificant even with the addition of cross-products.

EXHIBIT 5
Return on Assets (ROA) as functionally related to control of Buying (B) and Identity (I)

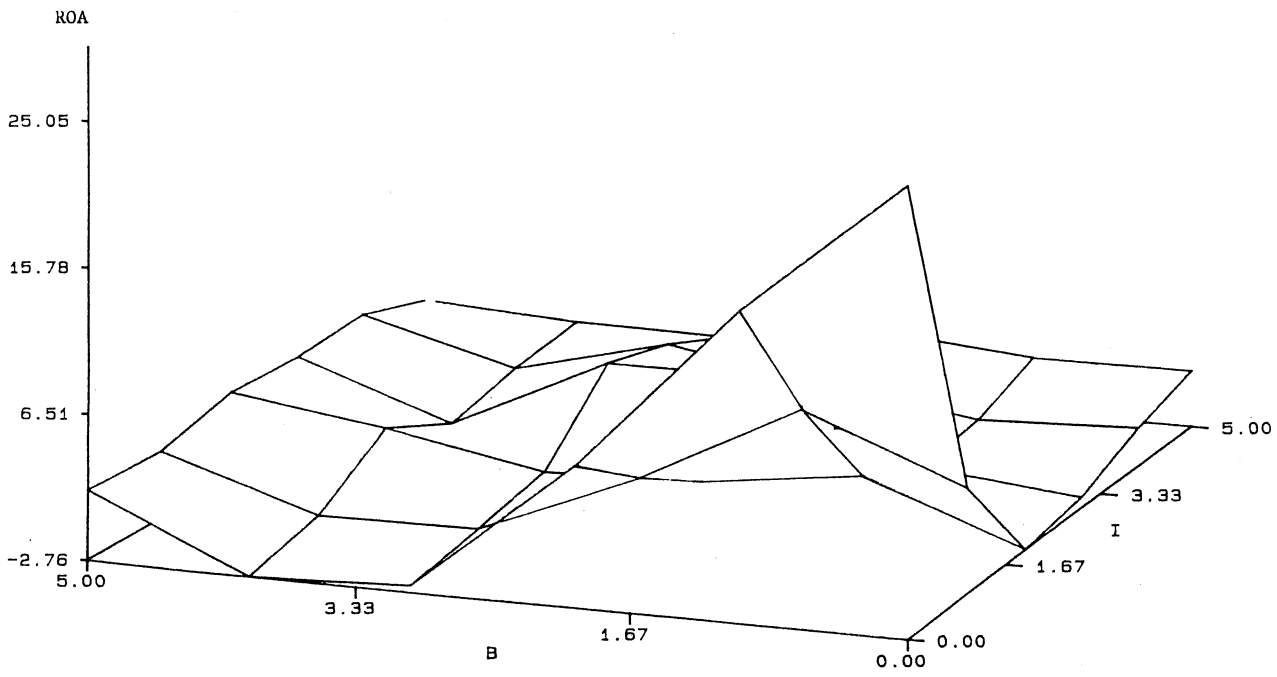


EXHIBIT 6
Return on Assets (ROA) as functionally related to control of Management (M) and Identity (I)

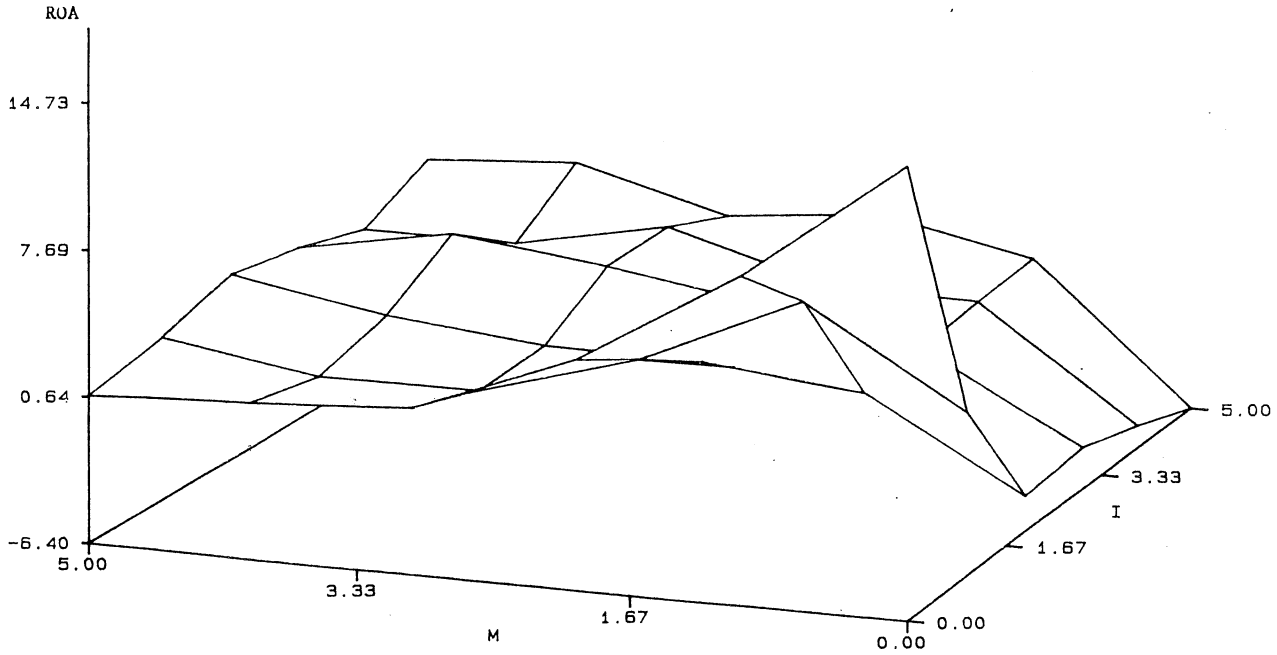
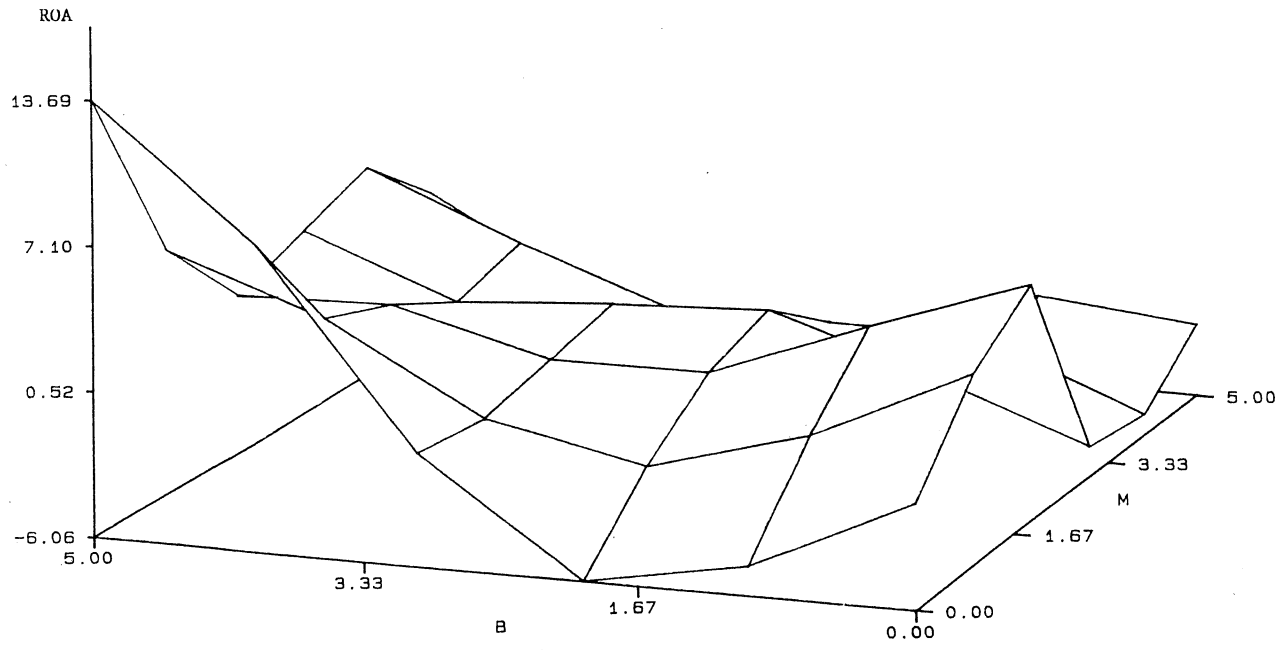


EXHIBIT 7
Return on Assets (ROA) as functionally related to control of Buying (B) and Management (M)



On the other hand, for nonapparel stores, the correlation is significant at the .05 level with a canonical correlation of .82. The addition of the cross-products increases the variation in the success variate explained by the control variate to 67 percent (from the 50 percent shown without cross-products in Exhibit 4). Even the less inflated redundancy figure shows 58 percent of the variance in the success variables explained by the canonical variate of the control variables. Owner control of day to day management of the branch stores continues to be a major (.66) contribution to success. But, owner control of management becomes even more important as it interacts with the control of the stores' identity (.81).

This importance of the nonlinear relationships between control variables is again demonstrated by the contribution that the cross-products make to the total variance of the control variate. Thirty-one percent of the shared variance is explained by the interaction of store identity and management. The linear contribution of control over management is only slightly higher than the interactive effects of buying and management, and buying and store identity. Thus, for the less fashion oriented retailers, control by the owner over the day to day management of the branch operations appears to be an important contribution to success. This contribution is tempered in certain situations by the interaction of other components of control.

Conclusions

With an objective of optimizing financial success, the general conclusion of this study is that, ceteres paribus, more control is better than less. However, there are qualifications and exceptions to this generalization. The analyses demonstrate that owner control over management, store identity, and buying of separate retail units is positively related with the level of success achieved by those units. The importance of this owner control is most clearly demonstrated for furniture, carpet, sporting goods, and jewelry retailers. This relationship appears to be nonlinear, demonstrating unique points of success possible outside of the general model.

For the small retailer selling other than apparel, the research clearly suggests that owner control over the day to day operations of the branches is important to the financial success of the firm. Successful firms seem to function with more diversity in the level of centralized buying and the variety of store identities.

Implications for retailers are that success is dependent upon an interaction among the three components of control and that this interaction is not stable across all store types. Selecting the right position on the control continuum thus becomes a complex task. One suggestion for the aspiring multi-unit retailer would be to first select a position for the variable most subject to control by external factors. For example, if market analysis prescribes decentralized control over store identity then control of management and buying should be decentralized. On the other hand, when the correct marketing strategy appears to be one of like stores, centralizing control over buying and management would be more likely to produce optimal success.

Very little has been written to assist the small retailer in making policy decisions concerning expansion. This research provides a beginning. It has introduced the issue of control as an important factor contributed to success.

The retailer considering expansion has been alerted to the need to make conscious control decisions. These decisions include not only the general issue of branch management, but the interrelationship of control decisions over identity, buying, and management. By examining the success and control of eight different types of retail stores, applicability should exist across a fairly wide cross-section of small retailers.

In light of the dearth of previous research on success determinants for recently expanded small retailers, this research is by nature exploratory. In spite of a good response rate and an instrument which tests positively as to reliability, the limitation of the sample frame to a single state did limit the number of responses and, therefore, the ability to analyze the data by single SIC codes. For that reason, little knowledge was gained on success determinants for apparel retailers.

Likewise, while the existence of nonlinear relationships between the components of control was identified, only an exploratory beginning was made on actually defining the nature of this relationship. Further research is needed to expand the sample size in order to examine smaller subgroups as to the level of control related to success and to define the nature of the interaction of the components of control.

Further examination of these interactions would also need to control for or identify other factors affecting success. If success and control over store identity, buying, and management are interrelated, can we be sure that another element of the organization, for instance, organizational goals, has not influenced the relationship?

Financial success is only one component of the measurement of overall organizational effectiveness. As

research advances to examine higher level performance measures, the influence of operational performance and organizational effectiveness will have to be examined.

While in this study some control over higher level performance variables was achieved through limiting size, geographical area, and store type, future research will need to control for or actually include measurements of higher level performance. For example, product quality and market share may be measured as components of operational performance. At an even higher level, organizational goals and constituent influence as components of organizational effectiveness would become important performance measures.

As small retailers are enticed by the benefits of expansion to multi-unit-operations, decisions as to control of these units are crucial to the financial success of the firm. Day to day owner control of management was shown to be an important contributor to success. However, overall strategic decisions as to autonomy of identity, buying, and management are complex and interactive. Definition of this complexity will require additional study of differences across store types and of forces contributing to variation in the interactions.

The authors acknowledge the financial assistance of Shell Companies Foundation, Inc. and the University of Richmond Faculty Research Fund.

References

1. Altman, E. I. (1968), "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy," *The Journal of Finance*, XXIII (September), 589-609.
2. Armstrong, J. S. and T. S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research*, (August), 396-402.
3. Beaver, W. H. (1967), "Financial Ratios as Predictors of Failure," *Empirical Research in Accounting: Selected Studies*, University of Chicago, 71-111.
4. Bergman, J. (1986), "Controlled Expansion, Better Planned, More Manageable Growth," *Stores*, (August), 14.
5. Bitner, Larry N. and Judith D. Powell (1987), "Expansion Planning for Small Retail Firms," *Journal of Small Business Management*, 25 (April), 47-54.
6. Blum, M. P. (1969), "The Failing Company Doctrine," Ph.D. dissertation, Columbia University.
7. Bruce, R. and M. Scott (1987), "Five Stages of Growth in Small Business," *Long Range Planning*, (June), 45-52.
8. Churchill, G.A., Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (February), 64-73.
9. Edmister, R. O. (1972), "An Empirical Test of Financial Analysis for Small Business Failure Prediction," *Journal of Financial and Quantitative Analysis*, (March), 1477-1493.
10. Hand, H., W. P. Sineath, III, and W. E. Howle (1987), "Small Business Concepts and Their Relationship to Performance," *Journal of Small Business Management*, 25 (April), 55-63.
11. Hair, J. F., Jr., R. E. Anderson, R. L. Tatham, and B. J. Grablowsky, (1979), *Multivariate Data Analysis*, Tulsa: Petroleum Publishing Company.
12. John, G. and T. Reve (1982), "Reliability and Validity of Key Informant Data from Dyadic Relationships in Marketing Channels," *Journal of Marketing Research*, 19 (November), 517-24.
13. Lambert, Z. and R. Durand (1975), "Some Precautions in Using Canonical Analysis," *Journal of Marketing Research*, 12 (November), 468.
14. Levy, M. and M. F. Van Breda (1988), "The Decomposition of Firm Value in a Hierarchical Retailing Organization," *Journal of Retailing*, 64 (Summer), 215-225.
15. McCullough, J. and E. Paige (1986), "Eugster Explains Keys to Successful Expansion," *Billboards*, (May 24), 48.
16. Nunnally, J.C. (1978), *Psychometric Theory*, New York: McGraw-Hill.
17. O'Neill, H. M. and J. Duker (1986), "Survival and Failure in Small Business," *Journal of Small Business Management*, 24 (January), 30-37.
18. Packard, S., A. Winters, and N. Axelrod (1977), *Fashion Buying and Merchandising*, Fairchild Publications, Inc.: New York.
19. Phillips, L. W. (1981), "Assessing Measurement Error in Key Informant Reports: A Methodological Note on Organizational Analysis in Marketing," *Journal of Marketing Research*, 18 (November), 395-415.
20. Sheth, J. (1983), "Emerging Trends for the Retailing Industry," *Journal of Retailing*, 59 (Fall), 6-18.
21. Sparks, D. L. and W. T. Tucker (1972), "A Multivariate Analysis of Personality and Product Use," *Journal of Marketing*, 9 (May), 187-192.
22. Venkatraman, N. and V. Ramanujam (1986), "Measurement of Business Performance in Strategy Research: A Comparison of Approaches" *Academy of Management Review*, 2, 801-814.