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# *Staff Paper*

**“Strategic Planning and Firm Performance:  
A Proposed Theoretical Model for Small Agribusiness Firms**

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Strategic Planning and Firm Performance:  
A Proposed Theoretical Model for Small Agribusiness Firms”

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***Abstract***

*The link between strategic planning and firm performance has been studied for over two decades. This paper examines this link, with emphasis on small agribusiness firms. A model of strategic planning and performance is developed and applied to small agribusiness firms. Implications for research and limitations are discussed.*

15 pages

## **I. Introduction**

The goal of this paper is to extend agribusiness management theory. In particular, it will contain an examination of the link between strategic planning and firm performance. Pearce, Freeman, and Robinson (1987, 658) define strategic planning as "...the systematic process of determining the firm's goals and objectives for at least three years into the future and developing the strategies that will govern the acquisition and use of resources to achieve these objectives." Formal Strategic Planning (FSP) involves a preordained flow and processing of information, obtains input and commitment from principal stakeholders affected by the plan, and results in written documents.

The paper will be organized in the following manner. First will be a review of the literature related to the link between strategic planning and performance. The next part will be a justification of why FSP can benefit firms, and a description of categories of benefits. A new model, specific to small agribusiness firms, will be introduced. The model will be presented both as a generalized functional expression and using a systems approach of illustrating how the constructs of the model affect firm performance. Finally, the implications and limitations will be discussed.

## **II. Review of Related Literature**

Researchers have posited that strategic planning activities improve firm performance (Ansoff, 1991; Armstrong, 1982; and Byrne, 1996). Empirical studies have been conducted to examine the link between strategic planning and profitability, an important measure of firm performance. The large number of these studies has motivated researchers to publish reviews of this literature. Following is a discussion of some of these reviews, organized chronologically.

Rhyne (1986) reviewed fourteen studies related to the existence of a connection between planning and performance. He reported that eight studies found varying degrees of support for the hypothesis that Formal Strategic Planning (FSP) improves performance, five found no support for the hypothesis, and

one study found a negative relationship. A review of eighteen empirical studies related to the link between strategic planning and performance is given in Pearce, Freeman and Robinson (1987). The conclusion of the authors is that there is a tenuous connection between strategic planning and performance.

More recently, Schwenk and Shrader (1993) used the technique of meta-analysis to study the effects of FSP on small firms. They drew upon twenty-six studies which examine the strategic planning/performance relationship in small firms. The conclusion of this article is that strategic planning has a significant, positive association with performance. Further, they state that other variables moderate the effects of planning on performance of small firms. Such variables may include types and structures of industries, environmental uncertainty, competitive strategy, diversification strategy, and the size and development stage of firms.

Another investigation of the link between strategic planning and performance using meta-analysis of previous studies was performed by Miller and Cardinal (1994). Growth and profitability were used to measure performance, and three contingency variables (firm size, capital intensity, and turbulence) were tested. They found strategic planning to positively affect firm performance.

Due to the large number of individual studies of the link between strategic planning and firm performance, only a few will be considered here. The studies referred to below were selected because of their relevance to the subject matter of this paper, i.e., small agribusiness firms. A more complete list of planning/performance studies is provided in the references section.

Robinson and Littlejohn (1981) surveyed small firms that received systematic planning implementation consulting assistance from University of Georgia's Small Business Development Center. Sales, employment, and profitability exhibited a statistically significant increase after implementing systematic planning. Robinson, Logan, and Salem (1986) examined the relationship between different

types of planning and performance among small, independent grocery firms in South Carolina. They found that firms that engaged in strategic planning alone had higher perceived performance than other firms, but no direct link was found to other measures. A problem in the study was that among the sample of 81 firms, only 15% reported engaging in strategic planning. Firms with a commitment to both strategic and operational planning significantly outperformed other firms on all measures. A reason that was proposed for these findings was based on the concept of “strategic windows.” Only occasionally are firms faced with an opportunity that can be seized if strategic planning is accomplished effectively. For firms between these strategic windows, FSP will not contribute to better performance.

While the literature tends to support a link between formal strategic planning and improved performance, exceptions have been reported. Shrader, Mulford, and Blackburn (1989), for example, found that strategic planning had a negative effect on net income. The firms in the study, however, came from three different industries (retail, service, and manufacturing). Such heterogeneity in the data may have confounded the results. A negative relationship between planning and performance was observed in the motor freight industry (Kallman and Shapiro, 1978) and in banking (Robinson and Pearce, 1983). At the time of these studies, both of these industries were regulated. Regulation reduces the uncertainty faced by firms in an industry. Regulation limits the number of strategic alternatives available to firms, which makes planning less necessary.

This section summarized the large amount of research on the relationship between FSP and performance. Much of the research has indicated that this relationship is positive. A few studies have shown either no significant relationship, or a negative relationship. Special characteristics of the industries examined, or methodological flaws in the studies, have led to findings of a negative relationship, as explained above. The primary point is that FSP is associated with improved performance in firms. Reasons why FSP is especially beneficial to firms will be explained below.

### III. Categories of Benefits of Formal Strategic Planning

In addition to studying the relationship between FSP and performance, it would make sense to examine potential reasons why planning benefits firms. Following are five categories of potential benefits of strategic planning and a brief justification for each.<sup>1</sup>

First, there may be economic benefits from FSP. A common output of the strategic planning process is a list of measurable objectives. Stakeholders such as investors and lenders may use these objectives as a benchmark for evaluating the performance of the firm.

Second, benefits may be organizational. If all employees (and suppliers, for that matter) are aware of the desired future outcomes of the organization, they are more likely to take actions that will lead to achievement of the objectives. Furthermore, gaps and overlaps in activities among employees and departments are minimized when group based FSP systems are used (Pearce and Robinson, 1997). This is because participation in strategy making clarifies responsibilities and roles. Thompson and Strickland (1995) state that strategic planning helps to unify the numerous strategy related choices a firm makes.

The third group of potential benefits of FSP is psychological. These benefits are especially relevant to highly participative strategic planning processes. If lower level employees are allowed to express their concerns to attentive top management team members, they may feel more attached to the firm. This, in turn, may motivate them to 'go the extra mile' to contribute to the organization (e.g. in customer problem solving). Williamson (1975) noted that the separation of strategic and operating functions creates a "psychological commitment" on the part of top officers to maximize profits. Pearce and Robinson (1997) observed that when employees are involved in the strategic planning process, they

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<sup>1</sup> Agribusiness firms, especially those that are small, have characteristics that make them unique. These characteristics will be described in the fifth section of this paper. The categories of benefits of strategic planning to be described apply to firms in general, however, including small agribusiness firms.

have a better understanding of the productivity-reward relationship. This understanding increases their motivation.

Other benefits may arise in the marketing area. Two common strategic planning activities are to perform 1) an external analysis to identify opportunities and threats and 2) an internal analysis to identify strengths and weaknesses (Pearce and Robinson, 1997; Thompson and Strickland, 1995). If these are accomplished in a thorough, disciplined manner, it is likely that a better selection of products, customer groups, and technology will be chosen (Byrne, 1996). In addition, if an imperfectly tradable asset such as an FSP system improves the flow of physical product, service, and marketing information through the channels between manufacturers and users, it can be the source of sustained competitive advantage (Markides and Williamson, 1996).

The final category of benefits of FSP is creative. Strategy may arise from an emergent process (Mintzberg, 1978). In certain environments, however, firms would benefit from a more formal strategic planning process. Such environments are characterized by long production cycles and high asset specificity. And according to Pearce and Robinson (1997, 11), a participative FSP process leads to better decisions because “group interaction generates a greater variety of strategies and because forecasts based on the specialized perspectives of group members improve the screening of options.”

#### **IV. Theoretical Model**

The next issue to be considered is the determinants of firm performance (including FSP), and their relationship to each other. Prior research efforts in this area have been largely ad hoc. An adequate model of the link between strategic planning and firm performance (and possible intervening variables) has not been introduced to date. The goal of this section is to introduce such a model.

One possibility is that environmental factors act as moderating variables between the planning process and the performance of firms (Schwenk and Shrader, 1993). Further, the best plan cannot



improve performance if it is not adequately implemented. Strategy implementation's role as a determinant of firm performance was stressed by Hill, Hitt, and Hoskisson (1992). Kargar (1996) studied the characteristics of planning systems and effectiveness in small, mature firms. Two of his conclusions that apply to the topic addressed here are 1) the benefits of FSP are more of a process nature, which may be a necessary but not sufficient condition for improving financial performance, and 2) "external orientation" is the most important contributor to planning effectiveness. Characteristics of firms, e.g., the age and size of firms, are also argued to affect their performance.

A model of the determinants of firm performance is introduced in Jenster and Overstreet (1990). According to their model, formal planning directly affects performance. In addition, certain factors influence formal planning. These factors include administrative systems, strategy, structure, organizational processes, and the environment. Formal planning affects these factors as well.

Drawing upon the Resource Based View of the firm (RBV), this paper advances the concept that FSP and its underlying processes can constitute a source of sustained competitive advantage. According to the RBV, only resources that are valuable, rare, costly to imitate, and nonsubstitutable enable firms to earn above normal returns (Barney, 1991). Strategic assets give firms an advantage over competitors for a limited time, due to the fact that they are eventually eroded or imitated by rivals. According to Markides and Williamson (1996, 363), "In the long run, therefore, only accumulated competencies that enable a firm to build new strategic assets more quickly and efficiently than competitors can will allow it to sustain supernormal profits."

A particularly effective strategic planning process may be this type of competency. For example, a firm may have an environmental scanning method that is exceptionally perceptive which allows it to regularly identify product market opportunities before its competitors do. This would allow it to enter an emerging market early. The firm would earn economic profits until the price was driven down to the

competitive level through entry. The superior scanning method, however, would enable the firm to identify other opportunities to enter emerging markets. In this way, the stream of above normal profits could be continued indefinitely. Although strategic planning techniques may be learned (e.g., through classroom training), a special synergy among a top management team and the firm's organizational systems may give a firm an advantage over competitors.

In order for FSP to be a source of sustained competitive advantage, a special relationship between employees and the FSP system or set of procedures would have to hold. Specifically, if a group of employees interacts synergistically together in conjunction with an FSP system in a causally ambiguous (Barney, 1986) way, the combination of the FSP system and the employees involved can be a source of sustained competitive advantage. If the valuable strategic planning process were based entirely on one particularly skillful employee, or a small group of employees, a competitor could hire the valuable employee(s) away for a higher wage and the advantage could not be sustained. Alternatively, the advantage could be based entirely upon a particularly effective set of procedures (e.g., that enable the firm to identify emerging markets before other firms). Under such circumstances, it is possible that an employee could learn the procedures, leave the firm, and replicate the strategic planning process at a competitor. However, due to the complexity and richness of actual strategic planning systems, it is unlikely that the superior effectiveness of the process could be completely embodied within one employee (or a small group of employees). It is also unlikely that an exceptional strategic planning system could be entirely the result of a set of procedures. The more common case is for the superior performance of a strategic planning process to arise from the socially complex interaction between skillful employees and a particularly effective set of procedures. Under these conditions, the competitive advantage arising from strategic planning can be sustained.

It would be useful to draw upon the prior strategy research to propose a model that is specific to

small agribusiness firms. There are a number of characteristics of agriculture that make it unique from other sectors of the economy. These special circumstances make FSP vital for effective management of agribusiness firms. Truett and Truett (1987) identify the following conditions that pose problems for agricultural firms. The first is short run price instability. This results from the fact that the supply and the demand for farm products are highly price inelastic in the short run. Shifts in the supply and/or demand curves often occur, e.g., due to weather, disease, or changes in foreign demand. This causes relatively unstable prices. Further, the level of risk faced by agricultural producers far exceeds the level in practically any other industry.

The specialized assets used in producing farm goods, including human capital, give rise to a high penalty for exiting. The relatively long production cycle for agricultural commodities (e.g., citrus crops) also contributes to limited flexibility for producers. The advantage provided by FSP in an environment characterized by long production cycles and specific assets was discussed earlier in the section on the creative benefits of strategic planning. Furthermore, recent federal legislation has reduced government involvement in farming, giving growers more choice over the crops they plant. This deregulation is likely to make FSP more beneficial<sup>2</sup> for farm operations, most of which are small agribusinesses. In such an environment, strategic planning will help firms survive and prosper.

The relationship between the performance of a small agribusiness firm and its determinants can be expressed through the following generalized functional expression (or model):

$$\mathbf{P} = \mathbf{f}(\mathbf{E}, \mathbf{SP}, \mathbf{FC}, \mathbf{PP}, \mathbf{I}) + \epsilon,$$

where P = firm performance, E = unanticipated environmental disturbances, SP = strategic plan, FC = firm characteristics, PP = strategic planning process, I = implementation, and  $\epsilon$  = a random error term.

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<sup>2</sup> The possibility that FSP is less necessary in regulated industries was raised in the review of Kallman and Shapiro (1978) above.

All five right hand side variables were discussed earlier in this paper. Although a particular functional form is not specified, the general relationship among the elements can be illustrated.

Figure 1 below shows these relationships, along with the direction of causality. Three business strategy components (the strategic planning process, the strategic plan, and implementation) each affect performance directly. The strategic plan is an output of the strategic planning process. Implementation is directly affected by the strategic plan. Firm characteristics (e.g., age and size) affect the strategic planning process, implementation, and performance. Finally, unanticipated environmental disturbances directly affect the strategic planning process, implementation, and performance.

## **V. Discussion**

The theoretical model presented in the previous section has implications for research in agribusiness management, and agricultural economics in general. There are also some potential limitations to future research in this area that should be noted. This section of the paper will discuss implications and limitations of the theoretical model.

Additional research is needed on the strategic planning methods firms use, and the process of strategic analysis (Peterson and Siles, 1996). If the link between strategic planning and performance were proven through empirical research on agribusiness firms, it would enhance the credibility of this research stream within agricultural economics. In addition, extension workers would likely place greater emphasis on educating agribusiness clients in strategic management techniques.

The discussion of the categories of benefits of strategic planning merely scratches the surface. The door has been opened for much additional research. For example, methods from the cognitive sciences could be used to examine the psychological and creative benefits of strategic planning. Organizational theory would also likely provide insights into this topic, especially regarding the organizational benefits of FSP.

There are some limitations to this type of research. First, it will likely be difficult for researchers

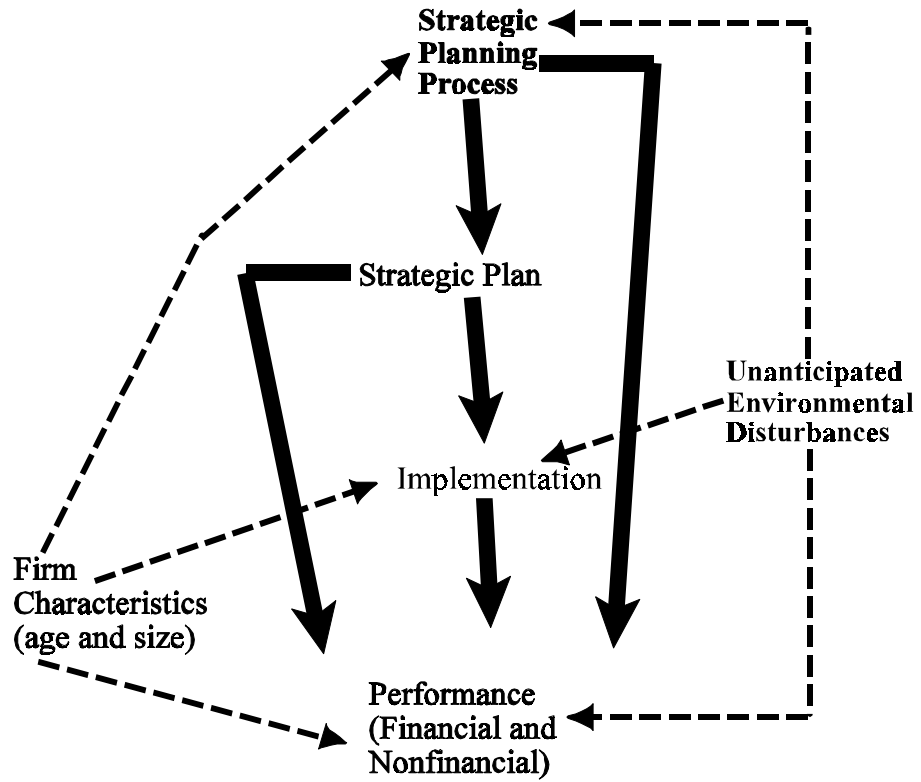
to obtain financial performance data from the owners of small agribusinesses.<sup>3</sup> Second, some of the independent variables of the proposed framework would be difficult to quantify. A somewhat crude method of quantifying the strategic plan (SP) would be for the researcher to classify respondent firms according to some generic strategy lexicon, e.g. Porter's (1985) generic strategies. A zero/one logit variable could be used for each type of strategy. With regard to the planning process, characteristics of the process such as 'Degree of Formality' or 'Degree of Participation' could be used. Measures could be obtained by obtaining mail survey responses from owners of small agribusinesses to Likert scale questions about these characteristics. The independent variable that would be most difficult to quantify is implementation. Perhaps the researcher could rate the quality of implementation on a Likert scale. This method, however, would limit the sample size to the number of firms about which the researcher has somewhat detailed knowledge. Because of this, the degrees of freedom of the study would be vastly curtailed.

This paper examined the link between strategic planning and firm performance. Particular attention was paid to the relationship between these two concepts in small agribusiness firms. The substantial literature related to planning and performance was reviewed. It was concluded that there is empirical support for a link between strategic planning and the performance of firms. Exploring this phenomenon more deeply, five categories of benefits from strategic planning were discussed. In addition, a model of the determinants of firm performance (including strategic planning) was introduced and explained. As indicated in the discussion of implications and limitations, there is a great deal of opportunity for additional research in this area. The findings of this paper supports additional strategic planning research by agricultural economists. Based on the findings of this paper, strategic planning educational programming for small agribusinesses by extension personnel should be encouraged..

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<sup>3</sup> Since these firms generally are not publicly traded, they are not required to publish information related to financial performance.

**Figure 1: Planning performance relationships for small agribusiness firms.**



## References

- Ackelsberg, R., & P. Arlow, (1985) Small businesses do plan and it pays off. *Long Range Planning*, 18: 5, 61-67.
- Ansoff, I. (1991) Critique of Henry Mintzberg's "The design school: Reconsidering the basic premises of strategic management." *Strategic Management Journal*, 12: 449-461.
- Armstrong, J. S. (1982) The value of formal planning for strategic decisions: Review of empirical research. *Strategic Management Journal*, 3: 197-211.
- Barney, J.(1986) Organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review*, 11: 656-665.
- Barney, J. (1991) Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99-120.
- Bracker, J. S., B. W. Keats, & J. N. Pearson, (1988) Planning and financial performance among small firms in a growth industry. *Strategic Management Journal*, 9 591-603.
- Bracker, J. S., & J. N. Pearson, (1986) Planning and performance of small, mature firms. *Strategic Management Journal*, 7: 503-522.
- Burt, D. N. (1978) Planning and performance in Australian retailing. *Long Range Planning*, 11(3): 62-66.
- Byrne, John A. (1996) After a decade of gritty downsizing, big thinkers are back in corporate vogue. *Business Week*, Aug. 26, 46-52.
- Cragg, P. B., & M. King, (1988) Organizational characteristics and small firms' performance revisited. *Entrepreneurship Theory and Practice*, 13: 2, 49-64.
- Denning, B. W., & M. E. Lehr, (1972) The extent and nature of corporate long-range planning in the United Kingdom-II. *Journal of Management Studies*, 9: 1-18.
- Gable, M., & M. T. Topol, (1987) Planning practices of small-scale retailers. *American Journal of Small Business*, 12: 2 19-32.
- Hill, C., M. Hitt, & R. Hoskisson, (1992) Cooperative versus competitive structures in related and unrelated diversified firms. *Organization Science*, 3: 501-521.
- Jenster , P. V., & G. A. Overstreet, Jr., (1990) Planning for a non-profit service: A study of U.S. credit unions. *Long Range Planning*, 23(2): 103-111.
- Jones, W. D. (1982) The characteristics of planning in small firms. *Journal of Small Business Management*, 20: 3, 15-19.
- Kallman, E. A., & H. J. Shapiro, (1978) The motor freight industry- A case against planning. *Long*

*Range Planning*, 11(1): 81-86.

- Karger, D. W., & Malik, Z. A. (1975) Long range planning and organizational performance. *Long Range Planning*, 8(6): 60-64.
- Kargar, Javad. (1996) Strategic planning system characteristics and planning effectiveness in small mature firms. *The Mid-Atlantic Journal of Business*, 32 (1): 19-34.
- Kukalis, S. (1989) The relationship among firm characteristics and design of strategic planning systems in large organizations. *Journal of Management*, 15: 565-579.
- Markides, C., & P., Williamson (1996) Corporate diversification and organizational structure: a resource-based view. *Academy of Management Journal*, 39: 340-367.
- Miller, C., & L. Cardinal (1994) Strategic planning and firm performance: A synthesis of more than two decades of research. *Academy of Management Journal*, 37 (6): 1649-1665.
- Miller, D., & J. M. Toulouse (1986) Strategy, structure, CEO personality and performance in small firms. *American Journal of Small Business*, 10: 3, 47-62.
- Mintzberg, H.D. (1973) Strategy making in three modes. *California Management Review* 16: 44-53.
- Mintzberg, H. D. (1978) Patterns in strategy formation, *Management Science*, 24: 934-948.
- Odom, R. Y., & W. R. Boxx (1988) Environment, planning processes, and organizational performance of churches. *Strategic Management Journal*, 9: 197-205.
- Orpen, C. (1985) The effects of long-range planning on small business performance: a further examination. *Journal of Small Business Management*, 23: 1, 16-23.
- Pearce, John A., II, Elizabeth B. Freeman, & Richard B. Robinson (1987) The tenuous link between formal strategic planning and financial performance. *Academy of Management Review*, 12 (4): 658-75.
- Pearce, John A., II, D.K. Robbins, & Richard B. Robinson (1987) The impact of grand strategy and planning formality on financial performance. *Strategic Management Journal*, 8: 125-134.
- Pearce, John A., II, & Richard B. Robinson (1997) *Strategic Management: Formulation, Implementation, and Control*. Sixth Edition, Chicago, Irwin.
- Peterson, H. Christopher. (1997) The epistemology of agribusiness: methods of agribusiness scholarship. Department of Agricultural Economics Staff Paper No. 97-25, Michigan State University.
- Peterson, H. Christopher, & Marcelo Siles (1996) The impact of planning activities on the performance and expectations of Michigan input supply and grain handling firms. Department of Agricultural Economics Staff Paper No. 96-34, Michigan State University.
- Porter, Michael E. (1985) *Competitive Advantage: Creating and Sustaining Superior Performance*, New



York: The Free Press.

- Rhyne, Lawrence C. (1986) The relationship of strategic planning to financial performance. *Strategic Management Journal*, 7: 9, 423-436.
- Robinson, R. B. (1982) The importance of “outsiders” in small firm strategic planning. *Academy of Management Journal*, 25: 1, 80-93.
- Robinson, R. B., & W. F. Littlejohn (1981) Important contingencies in small firm planning. *Journal of Small Business Management*, 19(3): 45-48.
- Robinson, R. B., J. E. Logan, & M. Y. Salem, (1986) Strategic versus operational planning in small retail firms. *American Journal of Small Business*, 10(3): 7-16.
- Robinson, R. B., & J. A. Pearce II. (1983) The impact of formalized strategic planning on financial performance in small organizations. *Strategic Management Journal*, 4: 3, 197-207.
- Robinson, R. B., J. A. Pearce II., G. Vozikis, & T. Mescon, (1984) The relationship between stage on development and small firm planning and performance. *Journal of Small Business Management*, 22: 2, 45-52.
- Schwenk, Charles R., & Charles B. Shrader (1993) Effects of formal strategic planning on financial performance in small firms: A meta-analysis. *Entrepreneurship Theory and Practice*, 17: 53-64.
- Shrader, Charles B., C. L. Mulford, & V. L. Blackburn (1989) Strategic and operational planning, uncertainty, and performance in small firms. *Journal of Small Business Management*, 27: 4, 45-60.
- Thompson, A. A. Jr. & A. J. Strickland, III (1995) *Crafting and Implementing Strategy*. Sixth Edition, Irwin, Chicago.
- Truett, D. & L. Truett, (1987) *Microeconomics*. Times Mirror/ Mosby College Publishing, St. Louis, 467-8.
- Walsch, J. & J. Seward, (1990) On the efficiency of internal and external corporate control mechanisms, *Academy of Management Review*, 15: 421-458.
- Watts, L. R., & J. C. Ormsby, (1990) The contribution of operational and strategic planning to small firm performance. Paper presented at the 19<sup>th</sup> annual meeting of the Western Decision Sciences Meeting.
- Williamson, O.E. (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York.
- Woiceshyn, J., & D. Hartel, (1996) Strategies and performance of Canadian biotechnology firms: an empirical investigation. *Technovation*, 16(5): 231-243.
- Wood, D. R., & R. L. LaForge (1979) The impact of comprehensive planning on financial performance.

*Academy of Management Journal*, 22: 516-526.

Woodburn, T. L. (1984) Corporate planning in south African companies. *Long Range Planning*, 17(1): 84-99.