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Theoretical Background

The strategic choice perspective (Child, 1972) suggests that the top managers of an organization determine its future direction by making important choices about products, markets and technologies. Over time, strategies, or streams or patterns of major and minor decisions (Miles and Snow, 1978; Mintzberg, 1978) contribute to the development of internally consistent configurations of systems and processes that guide an organization's interaction with, and response to the external environment. Since corporate social performance (CSP), has been defined as the identification of the domains of an organization's social responsibility, the development of processes to evaluate environmental and stakeholder demands and the implementation of programs to manage social issues (Carroll, 1979; Wartick and Cochran, 1985; Wood, 1991a; Wood, 1991b), it would seem logical to infer that the strategic orientation of an organization influences its social policies and therefore its CSP.

Typologies of Strategy: The Miles and Snow Framework

Typologies provide a means of classifying organizations in a comprehensive yet parsimonious framework for theory development (Pinder and Moore, 1979) because they reduce the myriad variables that characterize the organization to a manageable set of internally consistent ones. Thus the primary benefit of the typological approach is that the evidence of a few significant characteristics in an organization's profile facilitates the prediction of others. The strategic management literature has developed a variety of strategic typologies that describe an organization's competitive posture in an industry. These typologies of strategy suggest that over time organizations develop configurations of systems and processes which contribute to the development of a distinctive competence and consequently competitive advantage (Miles and Snow, 1978; Porter, 1980). Prominent among these is the Miles and Snow (1978) typology of strategy which describes bundles of organizational characteristics that have been found to lead to successful performance. This typology has been the subject of extensive testing in the strategic management literature and has been judged to be reasonably valid (Doty, Glick and Huber, 1993; Zahra and Pearce, 1990).

Miles and Snow identify three viable strategies, Prospectors, Analyzers and Defenders. While Prospectors and Defenders are maximally different forms, Analyzers are

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hybrid strategies that exhibit some of the key features of both. Prospectors are externally oriented organizations that compete by pioneering new products and developing innovative marketing techniques. Since they are constantly involved in monitoring the external environment and developing alternative responses to emerging trends, they are the creators of change in an industry. In contrast Defenders are internally oriented and focus on penetrating existing markets by improving operational efficiency. The main thrust of the Defender strategy involves "the creation of a narrow, stable domain ... through a limited mix of products and customers and aggressive efforts to "protect" the domain from competitors" (McDaniel and Kolari, 1987:39).

We suggest that the manner in which Prospectors, Analyzers and Defenders perceive and react to the needs of their manifold constituencies will be as distinct as their market approaches. Since Prospectors are externally oriented, they develop and value competencies that facilitate the scanning of the external environment and the early identification of trends. Thus it is expected that Prospectors are more adept at managing the needs of their stakeholders and are likely to achieve superior CSP. In contrast, Defenders operate in narrow and stable domains, are internally focussed and value efficiency above all else. The backgrounds and skills of top managers reflect this orientation and tend to focus on activities that enhance productivity. Consequently, Defenders are less likely to assign much importance to factors outside the organization which in turn translates to less proactive social programs and policies and lower CSP. Based on this logic we propose the following hypothesis:

H1: Prospectors are more likely to achieve higher levels of CSP than Defenders¹.

Method

Setting and Sample

The sample for this study was drawn from the 305 firms that comprise *Fortune* magazine's list of Most Admired Corporations. This list encompasses firms in the 32 industries included in the *Fortune 500* and *Fortune Service 500^2*. The initial sample comprised only manufacturing firms. To maintain a basic level of homogeneity in the sample, service firms were deliberately excluded as it is commonly recognized that they differ in their strategic approaches and competitive maneuvers (Fombrun and Shanley, 1990). Industries with fewer than eight firms on the list were also eliminated. This step was necessary to ensure a minimum level of variance in the dependent measure, CSP, which was described as reflecting a firm's performance relative to the mean of its industry.

To justify the use of the Miles and Snow (1978) typology which is recognized as being applicable at the business level (Hambrick, 1983), only firms that received more than 70 percent of their sales from a single industry were included in the sample (Rumelt, 1974). This step is useful in selecting a sample of comparable firms and is consistent with methods employed in prior literature operationalizing the Miles and Snow typology (Thomas, Litschert and Ramaswamy, 1991). Firms that were classified as conglomerates, holding Fall 1994

companies, subsidiaries or those that had the majority of their sales or manufacturing outside the U.S. were excluded. These procedures resulted in the identification of 134 firms.

Data and Measures

<u>Strategy</u>. Ginn and McDaniel (1987) note that an organization's strategy is reflective of all its systems, allowing a limited selection of theoretically relevant variables to capture strategic type. In this study, strategy was viewed as being implied from behavior rather than stated by management. Thus, the variables selected to operationalize the strategies represent a series of resource allocations and competencies necessary for their successful implementation. The underlying assumption was that the value of these variables stems mainly from managers exercising choice (Child, 1972).

Five different measures were used to operationalize the strategy types. Since strategy is recognized as a stable phenomena which becomes established over time and is relatively immutable, four year averages (1985-1988) were used to describe each of the strategy measures. This step also ensures the stability of the data, smoothing the effects of temporary fluctuations in resource allocations due to unusual circumstances in an organization or its external environment. Wherever possible, ratios were used to control for the possibly contaminating effect of firm size.

The data for these measures were obtained primarily from COMPUSTAT tapes, Company Annual reports, and 10-K reports. Each of these measures is briefly discussed below.

<u>Research and Development (R&D) Expenditures:</u> Snow and Hrebiniak (1980) found that of all the distinctive competencies examined, emphasis on research and development most clearly differentiated between the strategic types. Hence a ratio of R&D expenditures to total sales was used as a standardized indicator of a firm's propensity to search for new products. This measure was derived from previous studies investigating the Miles and Snow typology (e.g. Hambrick, 1983; McDaniel and Kolari, 1987). Since Prospectors engage in greater amounts of innovative activity, they are expected to rank highly on this indicator.

<u>Marketing Expenditures</u>: A ratio of marketing expenditures to total sales were used as an indicator of the firm's market focus. Typically marketing expenditures include direct promotion, advertising and other general selling expenses. In keeping with their external orientation, Prospectors were expected to rank highly on this measure.

<u>Net Sales per Employee</u>: This ratio describes an organization's ability to produce and distribute goods efficiently. Since the Defender strategy is geared toward the maximization of efficiency, it is expected that these organizations would have higher scores.

<u>Property Plant and Equipment Expenditures</u>: A ratio of property plant and equipment to total sales was used to describe the capital intensity of the business. Derived from previous literature on the Miles and Snow typology (Hambrick, 1983), this measure attests to an organization's investment in efficient production. Thus, Defenders were expected to rank highly on this measure.

<u>CEO Experience in External and Internal Functions</u>: The functional background of the CEO was coded as a categorical variable to reflect external or internal experience.

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External experience included backgrounds such as marketing and product research and development while internal experience included backgrounds in finance, engineering and manufacturing. The area where the CEO spent the longest amount of time, *prior* to obtaining the position at the helm of the corporation, was used to determine his or her functional background. Previous research (e.g. Chaganti and Sambharya, 1987; Thomas, Litschert and Ramaswamy, 1991) suggests that Prospectors will have a greater proportion of externally oriented executives and that Defenders will have a greater proportion of internally oriented executives. The data for this measure was obtained from Dun and Bradstreet's *Reference Book of Corporate Management* (1988).

<u>Corporate Social Performance</u>. Each year *Fortune* polls over 8000 senior executives, outside directors and financial analysts to evaluate the reputations of firms which comprise its list of largest industrial and service corporations. These experts are asked to rank the corporations in their industry, using a scale from 0 (poor) to 10 (excellent) on eight qualitative perceptual dimensions³. These scores are then combined to derive a composite number which determines a firms rank on the list of "most admired corporations". The raw data reflecting the evaluations of the industry specialists on each of the eight dimensions was obtained from *Fortune* and used in this analysis. This data has similarly been used in a number of previous studies that attest to its validity (e.g. McGuire, Sundgren and Schneeweis, 1988; Wokutch and Spencer, 1987).

The attribute community and environmental responsibility was used as a surrogate for CSP as there are no widely recognized, objective measures to denote this construct. This measure has been used in a variety of previous studies over the past five years (Boyd and Carroll, 1993; Fombrun and Shanley, 1990; Nayyar, 1992; Wartick, 1992). Wokutch and Spencer (1987) suggest that it is particularly appropriate as it reflects the opinion of a wide range of industry experts.

Since the *Fortune* survey has been conducted annually for a period of fourteen years, it can be assumed that the raters account for shifts in corporate social performance over time, and evaluate firms in a dynamic rather than a static fashion. To assess the reliability of the data, correlation analysis was performed on a sub-sample of firms in several industries over a three year period (1987, 1988, 1989). Notwithstanding changes in economic and environmental conditions, the correlations were consistently positive and significant (ranging between 0.7 and 0.9).

There was considerable variance in the CSP measure across industries, with the firms in some industries ranking consistently high while those in others clustered at the bottom of the overall list. Thus CSP was independently defined within each industry context by comparing each firm in an industry to the mean CSP score *for that industry*. Companies that ranked above or below the mean CSP <u>in their industry</u> were classified as high CSP firms and low CSP firms respectively. By classifying each firm within its own industry, the problem of perceptual bias by raters of a specific industry was substantially reduced. Since CSP is understood to be an outcome of a variety of internal variables and resource allocations (Fombrun and Shanley, 1990), it was measured in 1989 following the classification of the strategies of the firms in the sample.

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Data Analysis

<u>Identifying Strategic Types</u>: Miles and Snow (1978) contended that the three viable strategies, Prospectors, Analyzers and Defenders should be found in every industry. This assertion has subsequently been validated by empirical research in multiple industries (Snow and Hrebiniak, 1980). However, there is no definitive evidence that details the numerical distribution for the three strategies in a particular context (Smith and Grimm, 1987; Zahra and Pearce, 1990). Therefore a two-step process was used to identify Prospectors and Defenders.

In keeping with the contentions of Miles and Snow, strategic orientation was operationalized as a continuum with Prospectors and Defenders occupying the two extremes. To construct the continuum, a two variable criterion set (marketing expenditures/sales and research and development expenditures/sales) was used. These variables were specifically chosen for several reasons. According to Miles and Snow (1978), research and marketing define the external thrust of the Prospector strategy. Further previous research has identified these variables as having high predictive validity (Zahra and Pearce, 1990). Finally, a correlation analysis empirically confirmed high convergence between these two measures (r=0.98). Therefore the two measures were summed and the firms arrayed in ascending order.

A median split method was adopted to identify strategic types (see Drazin and Van de Ven, 1985; Romanelli, 1989 for similar approaches). The top 25 percent (firms having the highest summed score) and the bottom 25 percent (firms having the lowest summed score) of the firms were respectively denoted as Prospectors and Defenders. This process resulted in two sets of 34 firms each that were selected for further testing. Nevertheless, it is recognized that such a procedure can result in classification errors at the margin. In other words, firms having the highest summed score in the Defender sample and firms having the lowest summed score in the Prospector sample could in fact be pursuing the hybrid Analyzer strategy.

To establish the reliability of the above strategy typing approach, the use of multiple methods testing for convergence was necessary. Thus the next step in the analysis was one of validation. The remaining three strategy measures comprising the hold out set (sales per employee, property plant and expenses to revenues and functional background of the chief executive) were used for this purpose. As indicated in Tables 1 and 2, directional t-tests and chi-square tests on these measures (as well as the ones used in the criterion set) revealed statistically significant differences between the two strategy groups. Prospector firms were found to have a significantly higher proportion of R&D expenditures and marketing expenditures than Defenders. They also had a significantly greater proportion of executives with externally oriented rather than internally oriented functional backgrounds. On the other hand, Defenders exhibited higher levels of employee productivity and capital intensity. Their CEO's also tended to have a greater proportion of experience in internal functions as compared to external functions. These findings parallel the conclusions of Hambrick (1983) and Thomas et. al. (1991) who reported similar patterns in their investigations of the Miles and Snow typology.

| | Prospector (n=34) | Defender (n=34) | |
|--------------------------|----------------------|---------------------------|--|
| Criterion Set | | | |
| R&D Expenses/Sales | .0606*** | .0094 | |
| | (.0387) | (.0120) | |
| Marketing Expenses/Sales | .3796*** | .0689 | |
| | (.0814) | (.0814) | |
| Hold-Out Set | | | |
| Sales/Employee | 119.04 | 303.93** | |
| | (56.33) | (380.99) | |
| Prop. Plant and Eqip. | .3087 | .4931*** | |
| Top. Than and Equp. | (.0858) | (.1891) | |

Table 1: Summary of t-test results for strategy variables^a

^a Natural means reported. Standard deviations are in parentheses. *p<0.05, **p<0.01, ***p<0.001

Table 2: Chi-square Tests Comparing Functional Area Distributions^a

| Functional Area | Prospectors (n=34) | Defenders (n=34) | |
|------------------------|-----------------------|----------------------------|--|
| Internal Functions (%) | 26.5 | 67.6 | |
| External Functions (%) | 73.5 | 32.4 | |
| Chi-Square | 7.53** | 4.25* | |
| | | | |

^aTest of H_0 : No significant differences within compared groups. *p<0.05, **p<0.01,

Results

The hypothesis was examined through a chi-square analysis to test for significant differences in the level of CSP between Prospectors and Defenders. The hypothesis was supported: the Prospector group had a significantly higher proportion of firms with "high CSP" than the Defender group (chi square = 5.96; p<0.05). As shown in Table 3, 59 percent of Prospectors were classified as having "high CSP." In comparison, only 29 percent of the Defenders belonged to the "high CSP" group.

| CSP Level | Prospectors (n=34) | Defenders (n=34) |
|--------------|-----------------------|---------------------|
| High CSP (%) | 58.82 | 29.41 |
| Low CSP (%) | 41.18 | 70.59 |
| Chi-Square | 5.96 [*] | |
| Chi-Square | 5.70 | |

 Table 3

 Chi-square Tests Comparing Distributions of Strategy and CSP

^aTest of H₀: High and Low CSP firms will be equally distributed among Prospectors and Defenders.

*p<0.05

This finding, albeit exploratory and preliminary has some extremely interesting implications. It suggests that the strategic profile or competitive posture of an organization is a significant component of its propensity to engage in socially responsive behavior. Firms that compete on the basis of an external market focus seem to achieve superior levels of social performance compared to firms that compete on the basis of an efficiency focus. The former with their emphasis on domain expansion through product introduction and innovative marketing probably have greater experience in boundary spanning and the diagnosis of environmental and market trends. As indicated by the analysis, their chief executives also have greater experience in external functions, thus reinforcing their basic thrust. In comparison, the internally focussed Defenders who strive to increase profitability by cutting costs, focus on domain penetration. They compete in limited segments of the market and place primary emphasis on increasing the efficiencies and cost effectiveness of the production process. As a consequence their chief executives tend to have experience in cost-oriented functions such as finance and production. Thus responding to external constituencies and achieving superior social performance is less important.

Contributions and Limitations

The primary contribution of this study has been the interdisciplinary approach to address a gap in the social performance literature. By drawing on the theory and methodology of strategic management, this study explored the relatively new arena of the internal, organizational determinants of corporate social performance. Although the Miles and Snow (1978) typology was used in this study, it should be noted that the theoretically specified linkage would allow the use of other typologies and conceptualizations of strategy as well. For example, strategic posture could be specified using dimensions such as corporate diversification or international expansion. Regardless of the approach, the findings suggest that the intuitively appealing relationship between strategy and social performance is an intriguing one that deserves further investigation.

The results obtained also offer encouragement for greater cooperation across disciplinary boundaries. Rather than limiting investigations to narrowly defined social performance functions and issues, researchers should attempt to map the complex web of interrelationships between competitive profiles, leadership competencies, resource allocations and multiple dimensions of corporate financial and social performance. In this regard, the use of a configurational approach (Meyer, Tsui and Hinings, 1993) may be especially relevant. Such an approach would allow the investigation of the organization as a holistic entity and permit multidimensional inquiries between various internal organizational characteristics and outcomes.

This study also has implications for practicing managers. It suggests that social performance is tightly woven together with other dimensions of organizational functioning. Therefore superficial attempts to enhance an organizations responsiveness may not be effective. Instead the entire strategic approach to the market must be evaluated and addressed. Changes in social performance will only occur when fundamental internal, organizational adjustments are made.

However, it is not our intention to suggest that Defenders are doomed to chronically low social performance. Rather, we wish to emphasize that internally focussed organizations are less equipped to read and respond to environmental demands and changes in the needs of constituencies. Thus superior social performance for Defenders will require a significant effort to develop, recruit and institutionalize scanning and response mechanisms. In this age of ecological consciousness, such an investment would indeed be worthwhile.

Despite its contributions, this study is not without its limitations. First, the *Fortune* data has been criticized for being unidimensional and representing the firm's posture toward meeting financial rather than social responsibilities (Ruf, Muralidhar and Paul, 1993). This issue is underscored by the results obtained by Fryxell and Wang (1994) who empirically illustrated some of the weaknesses of the *Fortune* data. Future research should attempt to relate organizational posture to multiple objective and subjective measures of social performance to validate the relationship uncovered in this study. The use of a cross-sectional design was also limiting as any conclusions about causality were precluded. Longitudinal analysis and structural equation methodologies are needed to address this issue.

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The range of firms represented in the sample was limited to the 10 largest firms on Fortune 500 list. Although these firms do account for a significant proportion of sales in every industry, whether they are representative of the entire population is yet to be evaluated. It is likely that as the largest competitors in an industry they follow similar investment patterns in order to maintain similar cost structures and realize similar economies of scale. Thus the variance may be limited and the linkage between social performance and strategy in emergent or entrepreneurial firms may be quite different. Similarly, as suggested by previous literature (Wartick, 1992), other factors such as the organizations visibility to consumer and stakeholder groups may explain its propensity to engage in socially responsible behavior. For example, in the disaster involving the space shuttle Challenger, NASA bore the majority of the blame even though the defective part causing the accident was produced by Morton Thiokol. In other words, the implications of socially irresponsible behavior may be diluted for firms that primarily produce components and heightened for high-profile organizations, frequently in public view. Thus future research using single industry samples with firms stratified by size and product are advocated. Over time, such an approach will facilitate the identification and isolation of salient intervening and moderating variables, eventually resulting in the triangulation of findings and the development of robust theories and methodologies.

Conclusions

This study represents a preliminary, broad-brush attempt to explore the logically appealing relationship between business strategy and corporate social performance. Although a number of previous efforts have assumed that organizational policies and values were a reflection of the organization strategy, this contention had not been tested until now. The results suggest that the overall strategy of the organization may be a key indicator of its propensity to engage in socially responsible behavior. Future research on this relationship will facilitate the development of a paradigm that will allow the prediction of CSP. Such advancements could significantly transform the business-society relationship as we know it today.

Endnotes

¹Since this is an exploratory effort, the hypothesis only includes the extreme strategic types. The validation of the relationship between Prospector and Defender profiles and CSP will set the stage for the examination of the intermediate Analyzers.

 2 Companies are classified according to the industry which represents the greatest volume of their sales. The list of industries is based on categories established by the U.S. Office of Management and Budget and issued by the Federal Statistical Policy and Standards Office.

³These dimensions are quality of management, quality of products and services, innovativeness, longterm investment value, financial soundness, ability to attract, develop and keep talented people, community and environmental responsibility, the use of corporate assets.

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