This study utilizes the Miles and Snow typology within the context of firms in Chapter 11 bankruptcy. We specifically examine (1) the impact of constituent influence on management’s choice of strategic archetype (prospector, defender, or reactor) and (2) whether successful emergence from Chapter 11 is more likely when managers propose prospector strategies which focus on marketing and product innovation, defender strategies which focus on cost efficiency, or reactor strategies which have no clearly defined orientation. Results of the study suggest that when firms are in distress, external constituents influence them not to pursue reactor strategies. Further findings indicate that firms with prospector strategies and well-defined marketing plans are most likely to emerge from Chapter 11. Additional research is necessary because there is a dearth of timely, reliable, and relevant information on small business (prospector, defender, or reactor) and (2) whether successful emergence failures in Chapter 11. Clutterbuck (1982) asserts that many of the problems experienced by distressed firms stem from inadequate strategic management plans or a lack of marketing savvy. The academic literature, however, does not focus on marketing strategy as a critical determinant of survival subsequent to filing for Chapter 11. The objective of this study is to examine whether the managers’ emphasis on marketing is related to the firms’ likelihood of emerging from Chapter 11 as an independent entity. We use the Miles and Snow (1978) theoretical framework to analyze whether management’s proposed plan of reorganization places an emphasis on marketing strategy. According to Miles and Snow (1978), defenders typically foster growth by focusing resources on their current markets instead of engaging in new product development, which can be considered the fuel of the United States economy. Fifty-five percent of U.S. businesses have fewer than 100 employees whereas only 13% of the workforce is employed by large corporations with 1000 or more employees (Statistical Abstract of the U.S., 1996). Therefore, it is not surprising that Congress, entrepreneurs, and academics continuously raise concern about the high failure rate among these firms, particularly in Chapter 11 bankruptcy. In 1996, in response to pressure from small business advocates, Congress created a committee to examine whether the Chapter 11 bankruptcy process contributes toward the notoriously high failure rates experienced by small firms (Szabo, 1995). The concern of Congress has been corroborated by several academic studies (see Lawless et al., 1994).

Another objective is to examine whether external constituents, such as bank creditors who provide pre-petition financ-
ing and creditors who offer post-petition financing, influence managers’ strategic choices subsequent to filing for Chapter 11. Miles and Snow (1978) predict that external constituents influence managers’ strategic marketing choices. Gilson (1990) reports that bank creditors influence firms’ investment and financing policies during Chapter 11, but he does not focus on the marketing aspect of the plan of reorganization. To date, there is no empirical evidence that managers’ emphasis on marketing in the strategic management plan is related to the degree of creditor influence. In our study, the likelihood that distressed firms propose cost-efficiency strategies is highest when either bank creditors own large claims relative to total debt or constituents provide superpriority financing even though closely held firms in our sample that emerge from Chapter 11 bankruptcy often have marketing-oriented plans of reorganization.

Strategic Archetype and Performance

Miles and Snow (1978) postulate that different firms can be equivalently viable in the long run even though they use different strategies. They argue that the defender strategy has as much possibility of success as the prospector strategy as long as all constituents’ preferences and concerns are taken into consideration. Also, defender and prospector strategies outperform reactors.

In their review article, Zahra and Pearce (1990) conclude that findings regarding which strategy leads to better performance are mixed. McDaniel and Kolari (1987) and Snow and Hrebiniak (1980) find that prospectors and defenders perform equally as well. Conant, Mokwa, and Varadarajan (1990) found that, within the HMO industry, prospectors and defenders performed equally well in terms of profitability and outperformed reactors.

Throughout the same time frame, other studies have found contradictory evidence. Hambrick (1983) found that within innovative industries prospectors consistently outperformed defenders on market share change, whereas defenders outperformed prospectors on return on investment. McKee, Varadarajan, and Pride (1989) report that in irregularly and strongly growing markets defenders and reactors outperformed prospectors, in moderately growing markets reactors were inferior to the other strategic archetypes, and in shrinking markets the relationship between strategic archetype and financial performance disappeared.

Hypotheses

Miles and Snow (1978) conjecture that the firm’s strategic archetype (prospector, defender, or reactor) is affected by influential external constituents. Studies empirically examining the Miles and Snow typology have not examined whether creditors constrain management’s strategy choice. Within Chapter 11, creditors should have significant influence because they have direct control over all aspects of the firm’s operations. Moreover, equity holders are sensitive to creditor constituents’ preferences when the firm is distressed because all major decisions need approval of all creditor groups, equity holders, and the judge.

Several studies in the financial economics literature have theorized and empirically shown that banks affect managers’ decisions within Chapter 11 (see, for example, Gilson, 1990). These studies generally conclude that banks use covenants to force cost reductions at distressed firms (e.g., the defender strategy) but they do not analyze whether banks allow distressed firms to emerge from Chapter 11 when they propose cost-cutting strategies.

Creditors that provide post-petition financing or debtor-in-possession (DIP) with superpriority status also have substantial influence over the debtor firm’s strategy within Chapter 11 (see John, 1993). When creditors provide DIP financing they inject capital into the business that is critical to its survival. Because DIP financing provides new capital, courts give these creditors substantial influence over the management’s strategic plans. Similarly, owners have substantial influence over strategic decisions when they offer financing with superpriority status. The financial economics literature, however, gives no direction regarding the strategy preferences of creditors or owners who provide post-petition financing.

Strategic archetype will serve as both an independent variable and dependent variable in our analysis. We use emergence as an independent entity from Chapter 11 bankruptcy as our measure of viability. The alternative hypotheses are as follows:

H1: Firms that propose plans of reorganization that can be characterized as defender strategies have high bank debt relative to total debt.

H2: Firms that propose plans of reorganization that can be characterized as defender or prospector strategies are more likely to have plans of reorganization that include superpriority financing than firms with reactor strategies.

H3: Firms that propose plans of reorganization that can be characterized as defender or prospector strategies are more likely to emerge from Chapter 11 as an independent entity than firms which propose reactor strategies.

H4: Firms that propose defender strategies and have high bank debt relative to total debt are more likely to emerge from Chapter 11 than firms that propose reactor strategies and have high bank debt relative to total debt.

Model and Method

The first part of our analysis determines whether the type of reorganization plan as classified according to the Miles and
Snow (1978) typology is related to the degree of influence by external constituents. To make this determination we use logistic regression to test the following:

\[ \text{Strategic Archetype} = f (\text{Bank Debt}, \text{DIP Financing}, \text{Return on Sales}, \text{Size}). \]

The dependent variable is a multi-level binary variable. The dependent variable is dichotomous. The reference group (level 0) is the reactor category. The prospector group (level 1) and the defender group (level 2) will be compared to the reference group. A positive coefficient indicates that the level 2 has the highest probability. The bank debt ratio is expected to have a positive coefficient because the financial economics literature predicts that banks encourage distressed firms to adopt defender strategies.

The second phase of the analysis determines whether emergence from Chapter 11 is related to the strategic archetype as categorized by Miles and Snow (1978). The reference group (level 0) consists of liquidation within Chapter 11 and conversion to Chapter 7 bankruptcy. The comparison group (level 1) is emergence as an independent entity from Chapter 11. The logistic equation is as follows:

\[ \text{Emergence from Chapter 11} = F (\text{Prospector}, \text{Defender}, \text{Bank Debt}, \text{Defender} \times \text{Bank Debt}, \text{Return on Sales}, \text{Size}). \]

Based on Zajac and Shortell (1989) and McKee et al. (1989) we expect that firms with reactor strategies have the lowest likelihood of emerging as an independent entity. Thus, the coefficients associated with the prospector and defender strategy variables are expected to be positive.

**Sample**

The sample used for this study consists of 97 closely held firms located in the southeast that completed the Chapter 11 process at the Northeast Division of the Atlanta Bankruptcy Court in the one-year period between December 31, 1993 and December 31, 1994. Since legislative debate regarding bankruptcy reform for small firms began in 1994, a period was chosen that is representative of the post-1978 period. The initial sample consists of 659 corporate and sole proprietorship bankruptcies that were filed prior to December 31, 1994. A total of 124 real estate limited partnerships were dropped from the sample because they do not have a typical corporate governance mechanism or capital structure. For obvious reasons, 282 ongoing cases were also eliminated. These two screening criteria reduced the sample to 253 bankruptcies. From the reduced list, 121 sole proprietorship bankruptcies which consisted of the owner's personal assets and noncorporate debt such as mortgages, credit cards, and car lease expenses were also eliminated from the sample. The elimination of these sole proprietorships reduced the sample to 132 voluntary bankruptcies.

Of the remaining sample, five of the initial filings are Chapter 7 liquidations and all except one were closely held firms. The Chapter 7 filings and the publicly traded firm were excluded to ensure homogeneity of the sample. Another 29 cases were eliminated because at the time of data collection information from court documents was not available. This reduced the sample to 97 voluntary Chapter 11 bankruptcies. The firms within the sample are from various industries (see Table 1). Based on multiple discriminant analysis, we found that the nature of the business does not impact the type of strategy. The F-statistics from a two-factor ANOVA ranged from 0.38 to 0.92 and none of the Duncan comparison tests are significant.

The data for the sample of firms consist of information taken from court documents. This information includes the income statement from which the net income, sales, total expenses, and general marketing expense variables are taken and the balance sheet from which the total assets, total debt, and bank debt are taken. The initial reorganization plan contains information regarding number of product lines, projected sales growth, projected cost reductions, and statements concerning the firms’ strategic objective. The final report states the outcome of the Chapter 11 process, which includes approval or disapproval of a final plan of reorganization, the sale of the firm, or conversion to Chapter 7 liquidation.

**Measures**

**STRATEGIC ARCHETYPE.** We categorized the 97 firms in our sample as prospector, defender, or reactor based on four variables previously reported by both Snow and Hrebiniak (1980) and McDaniel and Kolari (1987). The first variable, cost efficiency, is measured as the projected total expense minus the historical total expense divided by sales from the income statement at the initial filing date. The second variable, product mix breadth, is measured as the number of product lines or services. The third variable, projected sales growth, is measured as the forecasted sales amount in the initial plan of reorganization minus the historical sales amount in the income statement divided by historical sales. The fourth variable, projected change in marketing expenditures, is measured as the forecasted marketing expense minus historical marketing expense divided by sales from the income statement at the initial filing date. Marketing expenses include advertising, promotion, and marketing research.

Each firm in the sample was ranked from strongest to weakest on each of the four strategy variables (cost efficiency, product mix breadth, projected sales growth, and projected change in marketing expenditures). Each group was then divided into quintiles. Each quintile received a score from 1 to 5, where 5 = strongest and 1 = weakest on the strategy variable. Firms in the top quintile (top 20%) received a score
Table 1. Profile of Firms in Sample

<table>
<thead>
<tr>
<th>Industry</th>
<th>n</th>
<th>Prospector</th>
<th>Defender</th>
<th>Reactor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing (e.g., trucking)</td>
<td>32</td>
<td>15</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Service (e.g., chiropractor)</td>
<td>43</td>
<td>8</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>Wholesale (e.g., paper products)</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Recreation (e.g., golf course)</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Food Service (e.g., restaurant)</td>
<td>14</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

of 5, those in the next quintile received a score of 4, and so forth. Firms in the bottom quintile received a score of one. Those firms that received a mean score of less than 2, for all four strategy variables, were classified as defenders. Firms that received a mean score greater than 4 were classified as prospectors and firms that received mean scores between 2 and 4 were classified as reactors.

An example of one of the firms in our sample is a specialty merchandise store that proposed to change and expand its merchandise to reflect changing consumer tastes. As a result the store’s product lines increased to over 200 items and its projected sales growth increased to 23%. This company received a score of 5 on both product mix and projected sales growth. The plan also requested additional funds for advertising new merchandise, which increased the projected marketing expense by 45%. The firm was also given a score of 5 on this variable. Although the plan required the new management to cut salary and administrative costs by 5%, the overall expenses remained the same. The company was ranked in the fourth quintile on the cost efficiency variable, which gave it a score of 2. Overall, the company received a mean score of 4.25 and was classified as a prospector.

As a result of the classification, the 97 firms in our sample that filed for Chapter 11 include 24 prospectors, 28 defenders, and 45 reactors. It is interesting to note that one of the few studies including reactors in the analysis, James and Hatten (1994), reported that only 9 of 408 managers surveyed categorized their companies as reactors. We suspect that few managers in our sample would have intentionally described their strategy as that of a reactor in a survey administered by the bankruptcy court.

By design, the firms with prospector strategies have the highest sales and marketing expense growth rates of 7%, compared to the defender and reactor firms’ negative projected sales growth rates of 36% and 8%, respectively. The projected marketing expense growth rate for the prospector, defender, and reactor firms were 15%, 0%, and 1%, respectively. The projected total expense growth rates were negative 6% for prospector firms, negative 21% for defender firms, and negative 5% for reactor firms.

CONSTITUENT INFLUENCE. According to Miles and Snow (1978), senior management must align the organization’s strategic objectives with its external constituents’ preferences because organizational survival depends upon the fit which management achieves. When a firm is in bankruptcy it is under pressure to present an effective strategic plan as a means for maintaining the support of important external constituents and initiating a turnaround. Numerous studies in the financial economics literature predict that external constituents, particularly creditors, influence management’s strategic choices in bankruptcy (see John, 1993).

When bankruptcy is on the horizon, Hitt, Keats, Harback, and Nixon (1994) state that creditors become myopic in the sense that reorganization plans focus excessively on risk aversion, localization, and the short-term bottom line. Thus, it is expected that managers will present plans that focus on bottom line, cost-cutting strategies when creditors have significant influence. Banks typically place constraints on managers’ operating and financing policies in Chapter 11 (see Gilson, 1990), and banks are active participants in the Chapter 11 process (see Asquith, Gertner, and Scharfstein, 1994). Gilson, John, and Lang (1990) provide evidence that banks are aggressive external constituents and have significant bargaining power when the firm is in financial distress. Following their analysis, we measure the degree of bank creditor influence as the ratio of bank debt (bank liabilities/total liabilities) divided by total debt.

John (1993) states that providers of superpriority financing (DIP) also wield significant power in Chapter 11 filings. DIP financing is measured by the existence of debtor-in-possession credit from banks or suppliers of raw materials. (See John, 1993 for a description of debtor-in-possession financing and owner capital that qualifies under the new value exception rule.) When owners contribute new funds in exchange for preserving their equity stake and superpriority, this action is referred to as a “new value exception” (NVE) to the absolute priority rule (see Miscioscia, 1993). Courts allow new value exceptions when the owner/manager’s participation is deemed to be essential. As a result, owner/managers have substantial influence regarding strategy when they provide superpriority financing.

Table 2 reports statistics concerning the capital structure of the distressed firms in our sample. The average bank creditor owned 28% 13%, and 8% of the debtor firms’ total liabilities at firms that proposed defender, prospector, and reactor strategies, respectively. Table 2 also reports that 15%, 4%, and 5% of the plans of reorganization include superpriority financing (DIP) when management propose defender, prospector, and reactor...
strategies, respectively. Twelve percent of the plans of reorganization include owners/managers capital injections when they are characterized as defender or prospector strategies.

**RETURN ON SALES AND FIRM SIZE.** We measure return on sales as net income divided by sales and firm size as measured by total assets. The return on sales for prospectors, defenders, and reactors in our sample are −1.96%, −2.30%, and −7.83%, respectively. Firm size is similar across strategy types.

**Results**

**External Constituents’ Influence**

In the ordered multinomial logistic model in Table 3, the independent variable, the firm’s strategic archetype, is a multilevel dichotomous variable equal to zero for reactor strategies, one for prospector strategies, and two for defender strategies. In an ordered multinomial logistic model the strategy affiliated with level two, one, and zero have the highest, middle, and lowest probabilities, respectively. A positive coefficient on an independent variable indicates that the defender strategy is most likely. A negative coefficient suggests that the reactor strategy is most likely.

The first and second intercept variables indicate whether prospector and defender strategies, respectively, are proposed more often than reactor strategies. The coefficients of 0.71 and 1.33 are insignificant, which implies that reactor strategies are proposed as often as defender and prospector strategies within Chapter 11 bankruptcy. Neither the firm’s asset size nor level of profitability are related to the firm’s strategy choice. The distressed firm’s strategic outlook, however, is related to the existence of bank creditors and constituents that provide superpriority financing. The coefficient of 1.04 on the bank debt variable is significant at the 0.05 level and provides support for H1. Hence, the existence of bank creditors with substantial influence increases the likelihood that distressed firms’ management propose defender strategies and do not provide funding to managers who develop reactor strategies. The coefficient on the superpriority dichotomous variable of 1.61 is significant (p < 0.05) which provides support for H2. Apparently, constituents are not likely to provide superpriority financing to managers who develop reactor strategies.

**Emergence from Chapter 11**

Table 4 provides the results from a logistic model that regresses the incidence of reorganization as characterized by emergence from Chapter 11 bankruptcy against dichotomous variables which indicate defender or prospector strategies and bank creditor influence. The independent variable equals one when

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (Standard Error)</th>
<th>Wald Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.71</td>
<td>1.08</td>
</tr>
<tr>
<td>Bank Debt/Total Debt</td>
<td>1.72</td>
<td>1.28</td>
</tr>
<tr>
<td>Return on Sales</td>
<td>0.03</td>
<td>0.59</td>
</tr>
<tr>
<td>−2 Log L</td>
<td>10.85*</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at p < 0.05.
the firm emerges from Chapter 11 and zero otherwise. In our sample, 25 of the 97 firms emerged from Chapter 11. The firm’s asset size and level of profitability are unrelated to the likelihood of emerging from Chapter 11 bankruptcy. The coefficients of 0.09 and 0.01 on asset size and return on sales, respectively, are not significant.

The strategy choice is an important determinant of survival for firms that propose prospector strategies. The 2.16 coefficient on the prospector dichotomous variable is significant at the 0.05 level. Hence, the likelihood of emerging from Chapter 11 bankruptcy is higher when distressed firms’ management propose prospector strategies instead of reactor strategies. On the other hand, the likelihood of emerging from Chapter 11 bankruptcy is similar when management propose defender and reactor strategies. The coefficient on the defender dichotomous variable is not significant. Thus, H3 is partially supported.

The coefficient of −1.72 on the bank debt variable in Table 4 is not significant. Thus, bank creditors do not marginally effect the bargaining process. Apparently, banks neither disproportionately force closely held distressed firms into liquidation nor do they facilitate reorganization. The absence of bank creditor influence on the outcome persists even when distressed firms’ management propose defender strategies does not support H4. The 1.26 coefficient on the interaction term is not significant.

Discussion of Findings

This study examines the strategies, as characterized by Miles and Snow (1978), of a sample of closely held firms going through Chapter 11 bankruptcy proceedings. In Chapter 11, the discovery process requires distressed firms’ management to describe their strategic plan in detail in the final plan of reorganization. Consequently, we are able to test an established typology with a unique sample (closely held firms) in a novel setting (bankruptcy).

The Miles and Snow (1978) typology makes several predictions. The first prediction is that cost-oriented (defender) and marketing-oriented (prospector) strategies are equally viable with regard to performance and both are superior to an unfocused strategy (reactor). The second prediction is that managers have to consider firms’ constituents when designing strategic policy. Specifically, the study analyzes whether the management’s choice of strategy and the firm’s ability to emerge from Chapter 11 are related to the degree of influence by constituents.

Findings are inconsistent with the first prediction. Closely held firms emerge from Chapter 11 bankruptcy most often when managers propose marketing-oriented strategies. We, however, cannot make a normative statement concerning optimal strategic policy within Chapter 11 because firms choosing a prospector strategy may have better investment opportunities than firms choosing a cost-oriented strategy. The most that can be said is that, in our sample, cost-oriented strategies are equally as successful or unsuccessful as unfocused strategies.

The results are consistent with the second prediction. Bank creditors and constituents that provide superpriority financing tend not to provide funding to firms that have unfocused strategies. These constituents are more likely to provide funding to firms with cost-oriented or marketing-oriented strategies. Almost all of the firms in the sample that received superpriority financing emerged from Chapter 11. Bank creditors with substantial influence, however, do not marginally effect the bargaining process. Banks neither force distressed firms into liquidation nor facilitate reorganization. The major implication of this study is that managers of small firms facing Chapter 11 should consider an emphasis on marketing as a viable option. The study also sheds light on the relationship between firms and their constituents. While it is often the case that banks and other constituents are pressure firms in bankruptcy to cut costs, this study should suggest that such constituents that in increasing marketing expenditures will not necessarily result in a negative outcome for the firm.

Although the results of our study make a contribution to both the financial economics, marketing, and management literatures, the generality of our conclusions is limited to small, privately held southeastern firms. As recently as 1994, however, legislators have commented on the disparate treatment between small closely held firms and large publicly traded corporations. In most cases, Chapter 11 bankruptcy is a precursor to Chapter 7 liquidation for closely held firms which evokes harsh criticism of the bankruptcy process. In response to small business advocates, Congress established a panel to discuss issues regarding the Chapter 11 bankruptcy process and small businesses. Yet, the academic literature provides few comprehensive empirical tests on small firms. Our study is one step toward filling this gap in the literature. Future research will analyze how medium and large businesses formulate recovery strategies after encountering financial distress both within and outside of Chapter 11.

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