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### An Investigation of the Types of Problems Faced by Small Firms and How They Affect the Funding Choices Made by Three Distinct Market Segments

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#### and

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This article looks at the relationship between the problems faced by small business owners and the funding sources used to solve those problems. Three problem types are identified: organizational systems, external, and sales and marketing problems. Based on these three problem types and the funding sources used by owners, the market is segmented into three groups using cluster analysis. Segment 1 is made up of firms with few problems. This segment uses the widest array of financial sources. Segment 2 has more problems than segment 3, but both need help with organizational systems resulting in the use of fewer sources.

The financial literature has long stated that small firms operate in different financial environments than large companies, thus indicating that different rules apply when making financial decisions (Ang, 1991). Small firms seeking capital for start-up, operation, or growth of their businesses continually face funding decisions concerning how, when, and from whom to obtain needed financial support. Funding solutions may vary depending on the situation or type of problem faced by the firm. For example, developing a new product or technology application

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may require a different funding source than penetrating a new geographic territory. Financial options vary depending on the type of problems the owner faces, his knowledge of the market, and his experience with different funding sources. One firm may face internal organizational problems and therefore lack the ability to get a bank loan for additional equipment or growth. Other firms may struggle with issues associated with sales and marketing. It is the founder who must analyze the current situation and make decisions about the best mixture of financial resources.

This research looks at the relationship between the most common situations or types of problems experienced by small business owners and the funding sources they use to solve these problems. The first challenge was to develop a comprehensive list of common problems faced by small firms. Understanding how problems are classified provides a basis for linking a specific type of problem to a specific problem-solving activity. In this research we look at the funding sources that were used by small firm owners to solve specific types of business problems. Dutton and Jackson (1987, pg. 85) indicate that "The simple labeling of issues not only determines decision makers' affective responses to issues, but also it sets into place predictable, cognitive, and motivational processes that move decisions and organizations in predictable directions." This study asks: Will small firms with similar problem types have similar financial responses?

To answer this question we look at contingency theory. Contingency theory claims that there is no one best way to make decisions. The theory asserts that managerial decision-making depends on the elements of the situation. As applied in this study, there is no one best source of funding for small firms. A funding source that is highly effective in solving one type of problem such as attaining market share may not be useful in dealing with the development of financial systems and internal controls. The optimal funding source is contingent upon the type of problem faced by the business owner. The contingency approach suggests that there are patterns that can be seen in common situations (types of problems) that will cause individuals and groups (business owners) to interpret and react with specific behavioral responses (funding decisions).

As early as 1958, March and Simon discussed problem classification much like a stereotyping process, where placement of a problem into a group creates a series of likely reactions. The label, and the body of knowledge that accompanies it, stimulates specific strategic decisions (Walsh, 1988). It is through the owners continued confrontation with the problematic stimuli that a response to specific problems is developed; eventually resulting in the formulation of a taxonomy of problem types (Ramaprasad & Mitroff, 1984). The categorization of problem types consolidates daily situations into groups of activities that help to simplify the process of decision making (Schwenk & Thomas, 1983). Draf's (1988, pg. 56) claims that when logical patterns occur in organizations, it is possible for managers, in this case business owners, to "... apply similar responses to common types of problems." In this study the researchers investigate the link between common problem types and decisions made on the type of funding that is used to solve those problems. In other words it is hypothesized that the type of financing sought by a small business owner is contingent upon the type of problems the company faces.

#### I. Problem Type Classifications

Problem type formulation is based on the belief that business owners characterize the many situations in which they find themselves every day as problems. Once identified, these problems can be classified in a way that makes the owner's life less complicated and simplifies his interpretation process. Using contingency theory Cowan (1988) suggests there are common types of problems that business owners can identify and react to consistently. As owners

experience problems they experiment with a variety of solutions. This experimentation creates a base of knowledge that affects the way the problem is resolved in the future. As a particular solution is connected with a particular type of problem, a link is created that will surface again when the business owner faces the same type of problem (Daft & Weick, 1984; Dutton & Duncan, 1987; Dutton & Jackson, 1987; Walsh, 1988). Repeated experience with the same type of problem allows business owner to become more proficient at classifying problems and identifying solutions. Behaviors are learned and used again and again, resulting in similar response patterns when business owners face similar types of problems (Daft, 1988). This learned behavior helps to guide subsequent decision making activities (Schwenk & Thomas, 1983).

A review of the literature indicates that there are a number of frameworks categorizing the type of problems commonly faced by small firms. In 1993, Terpstra and Olson reviewed the predominant classification frameworks for categorizing organizational problem types. These frameworks look at functional problem type classifications (Dearborn & Simon, 1958; Walsh, 1988; Cowan 1990), classifications based on business failure (Bruno, Leidecker & Harder, 1987), classification associated with growth (Anderson & Dunkleberg, 1987), and classifications based on lifecycle information (Kazanjian, 1988; Kuratko & Hodgetts, 1989; Churchill & Lewis, 1983). Although each of these studies identified different numbers and groupings of problem types, there were similarities in the problem categories.

The Terpstra and Olson study (1993) examined 115 rapidly growing firms and identified nine problem classifications for start-up firms and 10 for later growth firms. The problem types were obtaining external financing, internal financial management, sales/marketing, product development, production/operation management, general management, human resource management, economic environment, and regulatory environment. Organizational structure/design was added to the list for later growth firms. Sales/marketing, obtaining external financing, and internal financial management problems were the dominant start-up problems, whereas during the later grow stage sales/marketing, internal financial problems, human resource management, and general management problems were dominant.

Kazanjian's (1988) study identified the most comprehensive list of 18 problem types based on a review of two case studies. Using factor analysis these problem types were condensed into six factors: organizational systems, sales/marketing problems, people problems, production problems, strategic positioning, and external relations. His results indicated that external relations problems were more dominant in the start-up stage and sales/marketing and organizational systems problems were more dominant in the later growth stage. However, some problems such as sales/marketing and strategic positioning were found to dominate across all lifecycle stages. Kazanjian's 18 types of problems compared favorably to the nine problem types identified by Terpstra and Olson (1993). Therefore, Kazanjian's original 18 dominant types of problems were used in this study.

This section summarized the literature on problem type formulation and identifies the instrument used to measure problem types in this research. The next step is to look at financial decision making in small firms.

#### II. Financial Decision Making within Small Firms

Traditional finance theory is based on the assumption of perfect capital markets and the behaviors of large corporations (Modigliani & Miller, 1958). Frank and Goyal (2006) provide a recent review of the literature on capital structure decisions. However, much research has

documented that applications of basic financial theory has less relevance when discussing the financial behavior of smaller firms (Ang, 1992; McMahon & Stanger, 1995; Walker & Petty, 1987). According to Ang (1991), small businesses have unique issues associated with the challenges of asymmetric information, undiversified portfolios, unlimited liability, high risk tolerance, incomplete management teams, high failure and transaction costs, and the integration of personal and business factors. The presence of these intervening variables creates a more complex picture when looking at how small business owners evaluate and use financial resources.

McMahon and Stanger (1995) outline a framework, the financial objective function for small enterprises, that takes into account return and wealth maximization covered in the traditional financial theory for large companies but also covers the issues of risk from the small firm perspective. Consistent with traditional financial theory, the major goal of larger firms is the amount of return or maximizing wealth and profit (Brealey, Myers, & Allen 2006). This may also be the goal for more aggressive entrepreneurial or growth-oriented small firms (Ray & Hutchinson, 1985). However, for smaller family and lifestyle-oriented firms, wealth maximization might represent only one of a group of complex interrelated goals held by their owners. Boyer & Roth suggest (1978) that too many small firms non-pecuniary rewards such as self-actualization, community status, job security, a stable income, and pride are more important than the pecuniary rewards. Because of these beliefs, pecuniary returns are traded off for non-pecuniary returns. These non-pecuniary goals become a significant part of the financial decision process for small firms (Timmons & Spinelli, 2004, 1978; Pandey & Tewary, 1979).

The second dimension that McMahon and Stanger (1995) looked at in their financial objective function for small firms is risk--both systematic risk, which is associated with large company financial theory, and unsystematic risk, which takes into account the dimensions associated with financial small firms: liquidity, flexibility, control, accountability, diversification, and transferability.

The first dimension, liquidity, is an especially difficult issue for small business owners. Because of the small firm's lack of access to financial markets, cash and working capital often become scarce resources and require a great deal of the owner's time and energy (Ang, 1991). In many cases, the amount of profit becomes a secondary issue to cash flow. Small firms can survive with lower profit levels and even losses for long periods. The critical issue for the small firm is cash flow and making the necessary immediate payments to stay in business (Welsh & White, 1981, pg. 29).

The second dimension relates to the small firm's need to be flexible. However, in reality resources are often encumbered. It is important to be able to respond to changes in technology or economic conditions when necessary. Ace, Carlsson, and Karlsson (1999, pg. 34) suggest that management competence is more important than availability of financing. Knowing how, when, and from whom to obtain capital is essential for growth and survival; therefore, it is "... important to have multiple and diverse sources of finance, with different capabilities, viewpoints, risk assessment and willingness to absorb risk working closely with SMEs" (Small and Medium Enterprises).

The third and fourth dimensions of control and accountability are multifaceted and have far reaching effects on the future of small firms. The owners' personal and business goals must be combined and evaluated to fully understand the issue. Overall, small business owners would prefer to have control over strategic decisions (Shrivastavo & Grant, 1985). Therefore, the fear of losing control may result in many owners refusing to accept an offer for external funding.

And finally, McMahon and Stanger (1995) examine the risk associated with diversification and transferability. Transferability deals with the inability of the business owner to quit or transfer from the enterprise. The lack of transferability is based on the owner's limited ability to sell shares at will in the market, thus preventing the acquisition of capital by the sale of stock. The small firm by nature also lacks diversification in financial and human capital which may affect the value of the business. Since the owner's assets are tied up in the company, there are no other stock options to balance a potential decline in the firm's stock price.

Overall, this framework by McMahon and Stanger (1995) provides insight into the business owner's financial decision-making based on the complex risk factors facing small firms. Looking at how these risk factors intervene in financial decision-making can help explain what may seem to be irrational financial behavior from the perspective of traditional financial theory and perfect capital markets.

Recent results from research by Cole (2008) and funded by the Small Business Administration are important because this study is the first to look at how small privately held company's use of leverage differs from publicly traded firms. Until this study, much of the research on small business owner's financial behaviors was based on small publicly owned firms or theory. Cole's (2008) research concludes that as small privately held firm leverage increases firm size, profitability, liquidity, and credit quality decreases, whereas firm tangibility and limited liability increases. Furthermore as firm leverage increases, the number of business relationships with banks as well as nonbank financial institutions also increases. This research is important because it provides evidence of the relationship between the leverage circumstances of the smallest privately held firms and the financial decision-making of the firm's owner.

#### III. Research Objectives

The primary objective of this research is to look at the relationships between the types of problems faced by small firm and their use of funding sources. In other words, do small firms rely on certain funding sources when facing some problems and other types of funding when the problems are different? Second, the study investigates the number of funding sources used by business owners. More funding sources are thought to be available to businesses with fewer problems. And finally we look at how problem types may affect the use of the more traditional low cost funding sources versus less traditional higher cost funding sources. More traditional, lower cost sources are thought to be used by those firms with fewer problems.

Hypothesis 1: The funding sources used by the small firm owners are related to the type of problems faced by the firm.

Hypothesis 2: The number of funding sources used by a small firm owner is inversely related to the number of problems faced by the firm.

Hypothesis 3: Low cost traditional funding sources such as commercial bank loans are more likely to be used by small firm owners with fewer problems than higher cost, less-traditional funding sources such as credit cards.

#### IV. Methodology

A list of 4,000 small business owners in the retail and service industry in the Southeastern United States was purchased from Dun & Bradstreet. The questionnaire asked respondents to indicate

whether they were users or nonusers of 15 funding sources. Development of the problem types section of the survey was based on previous research on dominant problems facing small businesses by Kazanjian's (1988). Respondents were asked to indicate whether their businesses encountered the problem type and to rate the importance of the problem type on a seven-point Likert scale. Kazanjian's 18 problem types are listed in Appendix A. The questionnaire also contained sections with questions relating to the demographic characteristics of the firm and the current level of satisfaction with the firm's performance. The questionnaire was initially pretested on a group of three marketing instructors and three retailers and revised for clarity. Subsequently, the questionnaires were mailed and reminder notes sent three weeks later. A total of 200 usable questionnaires were returned, providing a response rate of 5.5%.

The response rate for this survey was low. Response rate data indicates average response rate for small businesses is 27% (Bartholomew & Smith, 2006) versus an average response rate for larger firms of 56% (Baruch, 1999). Nevertheless, research on small firms relies heavily on mailed questionnaires for data collection (Bartholomew & Smith, 2006). Several factors make it more difficult to obtain a high response rate from these firms. Bourgeois (1981) indicates that small firms might have less organizational slack than larger firms. Organizational slack is defined as a discretionary resource (Bourgeois, 1981) or more negatively as an unnecessary cost to the company (Cheng & Kesner, 1997). In the small-business environment, time and resources are tight, making it difficult to accommodate nonessential requests such as filling out questionnaires. In addition, small-firm questionnaires are most often sent to CEOs, as was the case in this research, which lowers the response rate (Baruch, 1999). The CEO must complete the survey because in most cases, his or her head are the only depository for most of the information requested (Baruch, 1999; Tomaskovic-Devey, Leiter & Thompson, 1994).

The length of the questionnaire might have deterred some respondents from completing the instrument. The topic of the research, identification of problem types, and funding sources might also have lowered the response rate because of privacy issues and a reluctance to share this type of information. Although lower response rates do occur with small firms, the 5.5% response rate of this study does limit the ability to generalize its results.

#### V. Results

The results section begins by reporting on the sample and the type of funding sources used by small business owners. Factor analysis is then used to reduce Kazanjian's 18 variable into three types of problems faced by small firms. Next, two-step cluster analysis looks at the relationship between these problem types and the funding sources used by these firms. Finally, cross tabulations identifies the characteristics of the businesses classified into each of the clusters.

#### A. Sample and Funding Sources Used

The demographic section of the survey outlines the characteristics of the firms involved in the study. Demographic items included years in operation, number of employees, educational level, and industry type. The majority of firms (60%) were in business for more than 10 years, 15% were in business seven to 10 years, and another 15% were in business four to six years. The owners' average number of years of business experience was 18 and ranged from 1 to 51 years of experience. The average number of full-time people employed by the firm including the owner was 10 and ranged from 1 to 120. The majority of owners, 37.9%, were college graduates, with 17.7% completing high school, 14.6% having associate's degrees, and 67.7% graduating from college. Of the respondents, 58.8% were male and 41.2% were female. The average age of

the business owner was 48 and ranged from 26 to 73 years. Of the owners, 87.6% were white, 5.5 % were black, and 2% were Hispanic. Approximately 63% were the founders of the company. The distribution of firms (by industry) in the survey was 44% in the service industry (20 percent professional services and 24 percent nonprofessional services); 27% in retail; 8.5% in financial/insurance/real estate; 7.5% in construction; 5% in wholesale; 4.5% in manufacturing; and 3.5% in transportation, communications, and utilities. The majority of firms were C-Corporations (43.5%) and S-Corporations (33%). Sole proprietorships made up 17% of the sample and partnerships made up 4% of the sample. Limited liability companies were the lowest percentage, making up 2.5% of the sample. Overall, 97% of the firms reported using at least one funding source.

Table I shows the number of respondents that used each funding source. The actual number of respondents is reported rather than a percentage, since many businesses reported using more than one source of funding. The most common source of funding reported was the use of personal savings. The next three items in order of usage were commercial banks, credit cards, and family and friends. This is consistent with the results of the National Federation of Independent Business' Research Foundation Report (Scott, Dunkelberg & Dennis, 2003) indicating that commercial banks continue to be the primary source of funding for small-business owners after personal savings. Credit-card use increased the most from 1995 to 2001 especially with smaller, female owned, younger, and nonprofessional service sector firms. Personal savings or investments from family and friends carry limitations in terms of the amount of funding available and control issues with family. The NFIB Research Foundation Report (Scott, Dunkelberg & Dennis, 2003) indicates that family and friends financing was used less in the later half of the 1990s. It ranked fourth in this study.

#### B. Problem Types & Characteristics of Market Segments

As Table II indicates, three factors were revealed based on Kazanjian's problem variables. Eight of the original 18 variables (Appendix A) were dropped because of low loadings. Principle component analysis with varimax rotation was chosen because it required no underlying assumptions about the data and is widely accepted as an appropriate procedure for identifying how a particular variable contributes to a factor. The factor analysis accounted for 71.4 % of the total variance. The three identified factors are sales and marketing, organizational systems, and, external relations. After the factor analysis, an alpha coefficient was calculated for the 10 remaining items. A coefficient of .741 reinforced the reliability of the construct.

The factor analysis in this study reduces Kazanjian's six factors model (1988) to three factors. The factors identified in this study correspond to three of Kazanjian's six factors: sales and marketing, organizational systems and external relations. The other three factors production, strategic positioning, and people were not found. Variation in the factors may exist because of the differences in the two samples. Kazanjian's sample consisted of large corporations, whereas this study concentrated on small firms in the retail and service sector. Small firms might not think as strategically, have as many people problems as large corporations, or be involved in the production of goods.

The factor analysis was followed by a two-step cluster analysis to segment the market based on the type of funding sources used. Two-step cluster analysis is used when continuous (problem type factors) and categorical variables (user or nonuser of funding sources) are included in the analysis. The cluster analysis found three distinctive types of business owners or segments. The distinctive characteristics of each cluster are outlined based on the cross

tabulation of cluster membership and the firm's characteristics as measured by demographic and attitudinal traits. The characteristics of each cluster are outlined below.

Cluster 1 has 95 members and makes up 50.3% of the businesses. Firms in this cluster face the fewest problems. Most (63.2%) of the original founders are still running the business; however this cluster reports the largest percentage of firms purchased from other owners (21.1%). C-Corporations make up the major portion (43.5%) of the cluster; with S-Corporations making up 30.5% of the cluster. Table IV outlines the satisfaction levels of firm owners in each of the clusters. Owners in this cluster report the highest level of personal fulfillment from the firm, with 88.4% indicating an above-average rating. The same high level of satisfaction is seen in the areas of product and service quality, achievement of goals, and balancing family and work with the majority of owners (88.4%), (71.6%), and (71.6%) respectively indicating above-average ratings. Sixty-seven percent of the owners also reported above average satisfaction rating with social contributions to the community, 66.2% reported satisfaction with profitability, 65.2% reported satisfaction with the growth and expansion of the firm, and 61% reported satisfaction with their return on investment.

Cluster 2 has 41 members and makes up 21.7% of the businesses. Firms in this cluster face the most problems. These owners have the lowest level of education with 39.1% having less than a four year college degree. In addition, 43.9% of the firms are less than 10 years old. Although 39% are C-Corporations and 39% are S-Corporations, this cluster has the highest number of sole proprietors (19.5%). Firms in this cluster also have the fewest employees, with 58.5% having seven or fewer employees. When compared to other clusters, cluster 2 owners reported the highest level of dissatisfaction with their return on investment (35%). Equal levels of dissatisfaction are seen in the areas of profitability, growth and expansion of the firm, and social contributions; with 30% of owners dissatisfied in each of these areas. This lack of satisfaction was also shown with 25% of owners dissatisfied with their balance of family and work life, 25% dissatisfied with the firm's goal achievement, and 15% dissatisfied with their own personal fulfillment within the company (Table IV).

Cluster 3 has 53 members and makes up 28.0% of the businesses. Firms in this cluster face moderate problems. These owners have the highest educational level, with 73.1% of those in this cluster having a bachelor's degree. A majority of these firms (60.4%) are owned by their original founders, but this cluster represents the largest portion of inherited businesses (22.6%), as well as, the highest concentration of home-based businesses (26.4%). C-Corporations make up 47.2% of the firms in the cluster, with S-Corporations being 32.2%. Compared to other clusters, this group shows a mid-level of satisfaction falling in most cases between the more satisfied cluster 1 and the least satisfied cluster 2.

#### C. Hypothesis Testing

This section looks at the relationship between problem types and funding sources used for each cluster. The data supports hypothesis 1, which states that the funding sources used by small firm owners are related to the type of problems faced by the firm. Three clusters of small business owners are identified with different characteristics, problem types, and funding sources. For each of the three clusters described above, the current problems are identified and the funding sources are discussed.

Cluster 1 business owners indicate a below-average focus on two of the three problem areas. External and organizational system problems are both statistically significant and show a negative direction indicating that owners do not feel that these areas create problems for the

business. Although minor, sales/marketing problems are perceived to create some slight difficulties for this cluster. Overall, this cluster is composed of firms that have few problems and their problems are perceived to be relatively inconsequential. The largest number of funding sources is used by this cluster of business owners and includes credit cards, leasing companies, personal savings, commercial banks, and credit unions. Business owners in this cluster use all funding sources in higher quantities than in any other cluster (Table III).

Firm owners in Cluster 2 perceive that they have issues in all three problem areas. The largest problems are with organizational systems followed by external problems and sales/marketing problems. The organizational systems factor is the only statistically significant factor in this cluster and is used to distinguish this cluster from the other two. This cluster uses very little funding. Those used in small amounts to solve the identified problem areas in this cluster are credit unions, leasing companies, SBA loans, and credit cards. Commercial bank loans are not used at all by these owners. The total absence of commercial bank loan usage distinguishes this cluster from other clusters. (Table III)

Cluster 3 shows no statistically significant problem types across any of the three factors. However, organizational systems and external problems show a positive direction indicating that the companies in cluster 3 are currently focusing on these issues. Sales/marketing problems are negative indicating that this area is not perceived to be an issue. Funding sources used to solve the identified problem areas are family and friends, personal savings, credit cards, credit unions and SBA loans. However, of these only credit unions and SBA loans are used by small business owners in this cluster. Family and friends, personal saving, and credit cards are not used as represented in Table III with zero usage. Commercial banks and leasing companies are used to some degree by cluster 3, but were not significant in differentiating cluster 3 from other clusters.

Taking into account the perceived problem areas faced by small business owners in each of the three clusters, the results indicate that each cluster looks at different funding sources to solve their problems. Cluster 1 tends to experience minor problems in the sales/marketing area and have available to them a wide variety of funding sources to solve problems. The largest funding sources are internal including personal savings, credit cards and family and friends. Cluster 2 tends to have issues in all three problem areas: organizational systems, external and sales/marketing. Their largest funding sources are family and friends and leasing companies, followed by credit cards, credit unions, and SBA loans. However, the usage rate of most funding sources in cluster 2 is substantially smaller than either of the other two clusters. Cluster 3 tends to have problems in two of the problem area: organizational systems and external relations. The largest funding sources for this cluster tend to be external with the largest sources being credit unions and SBA loans.

Hypothesis 2 states that the number of funding sources used by small firm owners is inversely related to the number of problems faced by the firm. This hypothesis is also supported. The results of the study indicate that business owners in cluster 1 have the fewest issues in all three problem area and use the highest percentage of funding sources. Cluster 3 has problems in organizational systems and external relations, but fewer than normal in sales/marketing. When looking at the number of funding sources used by cluster 3 one sees the use of credit from sources such as credit unions and SBA loans, but no usage of family and friends, personal savings and credit cards. Finally, cluster 2 has problems in all three areas and it business owners use the fewest funding sources. This market segment consists of the smallest firms with less than seven employees which most closely resemble the type of companies studied by Edwards (1992). Edwards (1992) reported that the smallest firms have the least knowledge of and experience with

financial functions. He indicates that these firms often do not understand financial statements enough to use them for decision making, therefore they perceive that the business does not have financial problems. By the time these firms are aware that there is a problem, their solutions are limited and may demand immediate financing rather than longer-term debt that requires planning and often comes with more constraints on future financing (Smith and Smith, 2000).

Hypothesis 3 states that tradition funding sources such as commercial loans are more likely to be used by small firms with fewer problems than nontraditional more expensive sources such as credit cards. This hypothesis is supported. In this research commercial bank loans are used by 73.2% of clusters 1 and 26.8% of cluster 3, but are not used at all by business owners in cluster 2. Cluster1 with fewer perceived problems in the three identified areas tends to use the highest percentage of commercial bank credit. In fact cluster 1 is the only segment of business owners in which the use of commercial banking is significant in distinguishing it from other clusters. This might support the perception that the only time you can get a bank loan is when you don't need it. Cluster 1 business owners have few problems as exhibited by the high satisfaction scores on factors such as profitability and return on investment. They also received the most funding. Cluster 2 owners tend to be the least satisfied with their business and tend overall not to seek funding from commercial banks. Cluster 3 owners tend to have mediocre feelings about their business and only about a quarter of the business owners seek commercial bank loans. (Table IV)

The wider use of financial instruments employed by cluster 1 may be explained by their perception that they have only minor issues with sales/marketing. Having better control of organizational systems and external problems may provide them with the information that they need to better understand commercial bank requirements and thus allows them to get credit when needed. According to Acs (1999) knowing how, when and from whom to obtain capital is essential for growth and survival. Small business owners start off able to control the business using their gut feelings and physical inspection, but then find that they must rely to an increasing extent on management experience and organizational system (Hutchinson and Ray 1986). The fact that many sources of funding are available to cluster 1, but these firms most often use internal funding is consistent with pecking order theory and Cole's (2008) conclusion that more liquid firms use less leverage.

#### VI. Discussion

The study proposes that there are different segments or clusters of small firms that use funding resources differently depending on the type of problems they face in their businesses. Findings suggest that small firms are not homogeneous and should not be treated the same when dealing with them on financial issues. Understanding the types of problems firms face may help practitioners provide more effective guidance to small firms making funding decisions. Financial providers might be better able to focus their resources on a specific segment of small firms that need the type of funding they provide. This is an exploratory study with a relatively small response rate limiting the advisability to generalize beyond the sample. However, the findings are interesting and add to the discussion on how small firms make funding decisions.

Firms with perceived sales/marketing problems as exhibited in Cluster 1 have a propensity to use many funding sources including commercial bank loans, whereas firms with organizational systems issues such as cluster 2 or 3 tend to use fewer sources. An understanding of these differences may be valuable to small firms and providers of capital. For example, cluster 3 owners tend to use credit sources such as SBA loans and credit unions, but few personal

funding sources. This scenario portrays a business in which the owner may be cash poor, but financial pressured to seek outside funding. Most research indicates that this may be a particularly difficult position for small firms, since they are usually much more dependent on the asset of individuals than their larger counterparts (Welch and White, 1981: Levin and Travis, 1987; Petty and Bygraves, 1993). Solving the problems of a business owner in this cluster may mean dealing with issues such as the external and organizational systems problems identified in this research. These issues may cause the business to operate less efficiently thus resulting in the firm's financial difficulties. Recognizing a cluster 3 business owner and helping him solve the real problems such as putting cost controls in place may be more productive in the long run than providing him with a short-term loan.

On the other hand, cluster 1 business owners may need a totally different solution. The behavior of cluster 1 business owners indicates that they are more skilled in dealing with external problems and have systems in place that help with decision making. In this scenario there are few problems with more focus on improving sales and marketing issues. This cluster may be more like the firms in Myers (1984) study that show growth through experience with financial resources. Myers (1984) indicating that as firms grow, their owners gain experience with the availability of more diverse sources of capital and their appropriateness based on the firm's current situation. As the firms' financial needs increase, additional requirements for more documentation, and due diligence become a part of the systems that they develop in their continued efforts to increase their access to capital. This group of business owners might benefit most by refocusing their funding efforts to attract outside investors rather than relying on internal family resources. Links between these firms and local higher education institutions could increase these firms' ability to connect with the right investors.

Finally, looking at unique combinations of problems and funding such as those in cluster 2, which are characterized as having problems with organizational systems and a tendency to use few funding sources may require a new way of thinking with unique financial approaches. Since these firms do not often reach out for money, quickly identifying this unique combination of traits when they enter the market is important. The lender may need to become the educator. Everyone benefits when these owners become more aware of the systems that need to be in place that will allow them to obtain a higher levels of funding. The right type of education on organizational systems given to the business owner at just at the right time when he is feeling the consequences of not having those systems in place may have the greatest impact on his behavior and the future of the business. Once a business owner is made aware of the increased marketability of the firm and the availability of new avenues of funding with systems in place, the development of organizational systems may be given a much higher priority in the firm.

The results of this study provide valuable information on understanding the funding needs and preferences of the owners of small businesses. Resources could be packaged to meet the needs of the three specific groups or clusters of business owners identified in this study. The marketing department could develop new financial products or packages that would give them an increased return on their promotional investment and at the same time better meet the needs of small business clients. By identifying the type of problem facing the small business, the financial professional could match the funding solution to the owner's needs, thus serving as an ally rather than an adversary.

#### VII. Limitations and Future Research

The study has limitations that provide opportunities for future research. One of the major limitations of this study is the low response rate of 5.5%, which calls into question the ability to generalize the results. However, the paper explores issues of considerable interest concerning funding sources and their relationship to the type of problems faced by relatively small business firms. This population of small firms has little current research in this area; therefore, on an exploratory level this study might provide some directions for future research. Another limitation is the use of cross-sectional data that gives a view of the small business owner's perceptions at only one point. Longitudinal research might be more revealing in terms of recognizing problems and the resources needed to solve them.

A suggestion for future research would be to employ a similar research study with a different population in a wider geographic area. It would also be valuable to look at the decision making behind failed businesses and how it differed from what was done at successful companies. Future research might also explore the extent to which utilizing certain funding sources are or are not good for the health of the organizations. The current study assesses only use and not satisfaction or unsuccessful attempts to use various funding sources. There is no way to assess whether using a particular funding source was an effective means of solving the particular problem. Nor were we able to access business owner's attempts to use funding sources that were denied.

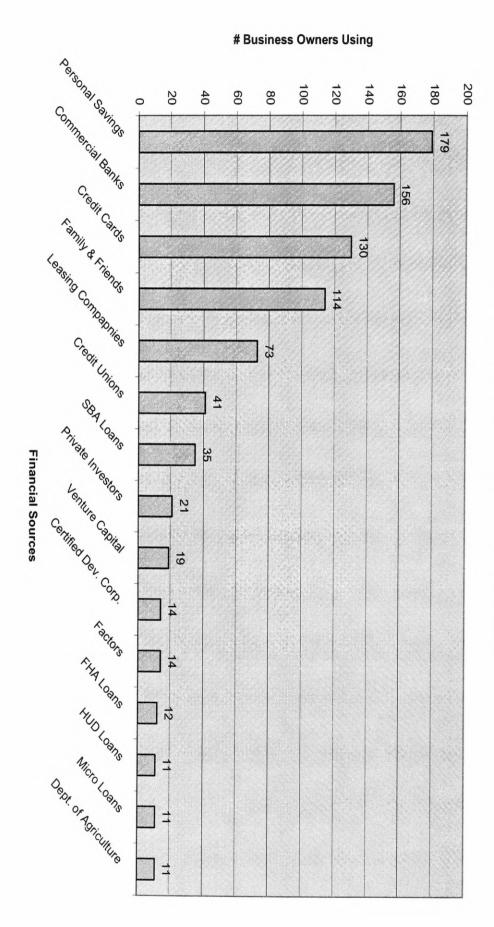
Overall, the results of this study do suggest that funding decisions made by small firm owners are influenced by the type and number of problems they face with each market segment requiring different financial solutions. Whereas one segment of small firms with few problems and a high level of satisfaction has many sources of funding available to them, other segments with more significant problems especially in the area of organizational systems tends show a lower level of satisfaction and use fewer funding sources.

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Number of Small Business Owners Using Each Financial Source
Financial Sources Used by Small Business Owners

Table II
Results of Rotated Principal Components Factor Analysis

Problems Areas	Factor 1 Sales/ Marketing	Factor 2 Organizational Systems	Factor 3 External Relations
Developing a network of reliable			
vendors or suppliers	0.82	6	
Adequate facilities and/or space	0.70	9	
Produce in volume adequate to meet			
demand	0.68	1	
Product support or customer service	0.61	1	
Management Information Systems		0.766	
Definition of organizational roles,			
responsibilities, & policies		0.763	
Cost Controls		0.715	
Acquiring key outside advisors or			
board members			0.753
Securing financial resources or			
backing			0.746
Penetrating new geographical			
territories			0.679

Extraction Method: Principle Component Analysis Rotation Method: Varimax with Kiser Normalization

Table III
Percentage of Small Business Owners in Clusters Using Each Funding Source

Funding Sources Family and Friends Personal Savings Credit Cards Commercial Banks Credit Unions Leasing Companies	Cluster 1 86.7 %* 100.0 %* 92.1 %* 73.20% 57.6 %* 59.20%	Cluster 2 13.30% 0.00% 7.9 %* 0.0 %* 7.3 %* 13.3 %*	0%* 0%* 0%* 0%* 26.80% 35.1 %* 27.50%
SBA Loans	59.6 %*	6.4 %*	34.0 %*

NOTE: Only funding sources with 35 or more respondents were used in developing clusters. \*Significants at the .05 level.

Table IV
Current Satisfaction Levels by Cluster

	Cluster 1	Cluster 2	Cluster 3
Personal Fulfillment			7.60/
Unsatisfied	3.2%	15.0%	7.6%
Neutral	8.2%	2.5%	21.1%
Satisfied	88.2%	82.5%	71.1%
Balance Family & Work			22.10/
Unsatisfied	13.8%	25.0%	23.1%
Neutral	14.7%	12.5%	19.2%
Satisfied	71.6%	62.5%	57.7%
Social Contribution			(
Unsatisfied	11.7%	30.0%	13.7%
Neutral	21.3%	20.0%	17.6%
Satisfied	67.1%	50.0%	64.9%
Growth & Expansion			/
Unsatisfied	14.8%	30.0%	19.8%
Neutral	20.0%	20.0%	19.3%
Satisfied	65.2%	50.0%	65.2%
Product Service Quality			
Unsatisfied	2.1%	10.0%	4.0%
Neutral	9.5%	5.0%	7.8%
Satisfied	88.4%	85.0%	83.3%
Achievement of Goals			. = =0/
Unsatisfied	7.5%	25.0%	17.7%
Neutral	21.1%	7.5%	13.7%
Satisfied	71.6%	67.5%	68.7%
Profitability			25.00/
Unsatisfied	15.8%	30.0%	25.0%
Neutral	17.9%	25.0%	26.9%
Satisfied	66.2%	45.0%	48.1%
Return on Sales			22.20/
Unsatisfied	16.0%	32.5%	33.3%
Neutral	17.0%	22.5%	21.6%
Satisfied	67.0%	45.0%	45.1%
Return on Investment			22.20/
Unsatisfied	18.0%	35.0%	33.3%
=	21.1%	20.0%	23.5%
Neutral Seriafied	61.0%	45.0%	50.8%
Satisfied	<b></b>		

### Appendix A Kazanjian's 18 Dominant Problem Types

Tell us about the current problems your company faces. Indicate the degree to which the following problems are currently the focus of your company's attention on a scale from 1 to 7 with 1=minor issue to 7=major issue.

- 1. Management information systems
- 2. Cost controls
- 3. Definition of organizational roles, responsibilities & policies
- 4. Developing new product or technology application
- 5. Securing financial resources and backing
- 6. Acquiring key outside advisors or board members
- 7. Product support or customer service
- 8. Attracting capable personnel
- 9. Adequate facilities and/or space
- 10. Developing a network of reliable vendors or suppliers
- 11. Produce in volume adequate to need demand
- 12. Meet sales targets
- 13. Management depth and talent
- 14. Attaining profitability or market share
- 15. Penetrating new geographical territories
- 16. Administrative burden and red tape
- 17. Development of financial systems and internal control
- 18. Establish a firm position in product/market segment

## **Appendix B Funding Sources**

What financial sources have you used in starting and operating your business?

- 1. Family, Friends, and Relatives
- 2. Personal Savings
- 3. Credit Cards
- 4. Commercial Banks
- 5. Credit Unions
- 6. Leasing Companies
- 7. Venture Capital Firms
- 8. Private Investor Networks
- 9. Certified Development Corporations
- 10. SBA Loan Program
- 11. Department of Agriculture Loans
- 12. FHA Loans
- 13. Micro Loans
- 14. HUD Loans
- 15. Factors