

December 2007

## Capital Acquisition Attitudes: Gender and Experience

Richard B. Carter  
*Iowa State University*

Howard Van Auken  
*Iowa State University*

Follow this and additional works at: <http://digitalcommons.pepperdine.edu/jef>

---

### Recommended Citation

Carter, Richard B. and Auken, Howard Van (2007) "Capital Acquisition Attitudes: Gender and Experience," *Journal of Entrepreneurial Finance and Business Ventures*: Vol. 12: Iss. 2, pp. 55-74.  
Available at: <http://digitalcommons.pepperdine.edu/jef/vol12/iss2/4>

This Article is brought to you for free and open access by the Graziadio School of Business and Management at Pepperdine Digital Commons. It has been accepted for inclusion in The Journal of Entrepreneurial Finance by an authorized administrator of Pepperdine Digital Commons. For more information, please contact [paul.stenis@pepperdine.edu](mailto:paul.stenis@pepperdine.edu).

# **Capital Acquisition Attitudes: Gender and Experience**

**Richard B. Carter<sup>\*</sup>**  
**Iowa State University**

**and**

**Howard Van Auken<sup>\*\*</sup>**  
**Iowa State University**

In this research we provide evidence on small firm owners' attitudes and approaches to capital acquisition. The most surprising finding is their general dissatisfaction with the capital acquisition process. Yet we found no evidence that this dissatisfaction translates into poor performance. Our analysis indicates that male-owned businesses were older, more likely to be technology-based, and bigger in terms of sales and assets. Male respondents were also better educated. We found no significant results for the firms owned by more experienced respondents. However, more experienced owners and male respondents were more likely to look to outside resources, like governments, to provide guidance and assistance in the capital acquisition process. Implications from the results can be used by owners to better understand capital acquisition decisions and to develop better capital acquisition, by government agencies that develop public policy on small firms, and consultants that assist small firms with capital acquisition.

## **Introduction**

Capital acquisition decisions are some of the most important and challenging issues facing small firms (Ang, 1992). Without sufficient capital, small firms are unable to

---

<sup>\*</sup> Professor Carter received a Ph.D. in finance from the University of Utah. He has taught classes in investments, corporate finance, real estate finance and security analysis. His research interests include capital acquisition and investment banking.

<sup>\*\*</sup> Professor Van Auken received a Ph. D. in Business Administration from the University of Oklahoma. He has taught such classes as Entrepreneurship and New Venture Management, Technology Transfer and Feasibility Analysis and International Entrepreneurship. His research interests include international financial management and capital acquisition.

successfully compete and often face difficulties obtaining financing, especially during periods of high capital demand and yet it is capital that provides firms the slack to experiment with new strategies and innovative projects (Coleman, 2000; Wiklund and Shepherd, 2005). In fact, several studies confirm that poor capitalization is a leading cause for small firm failure (see for example, Coleman, 2000 and Carter and Van Auken, 2006).

Research suggests that the reasons for under-capitalization for small firms are varied and complex. Haber and Reichel (2007) argue that managerial skills are the strongest contributor to small venture performance. Among these skills are those necessary to adequately understand the capital acquisition process. Poor financial decisions may be a primary cause for the high failure rate among small firms (van Praag, 2003; Gaskill, Manning, and Van Auken, 1993).

Gibson (1992) believes that owners' search for capital is often inefficient, unorganized, and unsuccessful as a result of their lack of information about the alternative sources of funding. Moreover, Busenitz et al (2003) suggest that the availability of information often determines decisions. This includes information about alternative sources of capital as well as the process through which capital is acquired (Berger and Udell, 1998; Gibson, 1992). Holmes and Kent (1991) refer to the limited awareness of capital alternatives in the context of a financing gap or "knowledge gap".

But there are other possible causes for the failure to establish sufficient financing. For example, higher risk firms have greater difficulty in obtaining capital than lower risk firms and must seek "niche" sources (Cassar, 2004). Chaganit, DeCarlis, and Deeds (1995) emphasize that capital that is easier to acquire is used more often while capital that is more difficult acquisition commonly leads to lesser usage. This may mean that owner/managers do not establish the experience and potential capital resource networks for when severe cash shortages arise. Kuratko, Hornsby, and Naffziger (1997) and McMahan and Stanger (1995) argue that owner's decisions are often linked to personal issues as well as business needs.

In this paper we present our findings concerning two characteristics of small business owner/managers that may influence their search for capital: gender and experience. In focus groups with CEOs of small firms we found marked differences in their attitudes and approaches to capital acquisition. It appeared from these discussions that attitudes may be a function of owner/manager characteristics. Yet in an examination of the literature, we found very little work specifically addressing these issues. Hence, our objective in this research is to survey a sample of small business owner/managers and to establish differences in their attitudes toward financing alternatives and capital acquisition strategies as a function of gender and experience.

In the following we first discuss extant research concerning gender and experience. This culminates in research questions which are followed by our Methodology, Results, a Discussion section and finally a Summary and Conclusions.

## **I. Related Research: Gender and Experience**

### **A. Gender**

Women small business owners have become an increasingly important part of the US economy. Almost half (48%) of all privately-held US firms are at least 50% owned by women. These firms employ about 9.8 million workers and generate about \$1.19 trillion in sales. The number of women-owned firms is estimated to be about 15.6 million as of 2002 and has been expanding at three times the rate of all firms. Between 1997 and 2004, almost 775,000 new women-owned businesses have been started each year, an increase of about 45%. Women-owned firms now account for 55% of new firm start-ups in the US (NFWBO, 2006).

The importance of women-owned business will likely continue since about 64% of women aged 18-34 and 46% of women aged 35-55 are interested in owning a business. The

economic impact of this growth is evident in that more than 27.5 million people are now employed by women, and approximately 26% of the US labor force work for women-owned businesses in 1996 (Robinson, 2001; Anna et al., 2000). Women are creating sole proprietorships at a faster rate than men (CWBR, 2001a). Boden and Nucci (2000) point out that women business owners are likely to be at a disadvantage relative to male owned businesses when seeking capital due to more limited education and quantity of work experience.

A lack of financing may partially explain why women-owned firms are proportionally under-represented for all high-growth firms. The disparity in ability to attract equity funding is evident as women-owned firms attracted only 4% of venture capital investments in 2004 (Morris et al, 2006). Women-owned firms are smaller, younger, less profitable, and more concentrated in service businesses than men-owned firms.

Because of the difficulties experienced by women who attempt to raise capital, many women business owners are less likely to use external financing and more likely to rely on business earnings and private resources for financial needs (Coleman, 2000). A study by Brush et al (2001) found that equity investments in women-owned businesses lagged that of male owned businesses. In fact, equity investment in women-owned businesses has been extremely small in recent years. This lack of investment in women-owned firms diminishes opportunities for women as well as negatively impacting diffusion of innovations, job creation and US economic competitiveness.

### **B. Professional Experience**

Entrepreneurship is a process of identification and acquisition of resources to take advantage of perceived market opportunities (Bergmann-Lichtenstein and Brush, 2001). Experience and the associated accumulation of knowledge are essential for small firm success. The owner's background and experience are a resource that contributes to capital acquisition and the competitive advantage of the venture (Schutjens and Wever, 2000). Entrepreneurial knowledge can come from a variety of sources, such as formal education and previous managerial experience. The ability to extrapolate from previous experience to deal with new situations is of critical importance small firms (Alvarez and Busenitz, 1002); Honig, 2001). Entrepreneurs require a basis of knowledge, especially knowledge resulting from previous business experience, to make decisions regarding resource acquisition – including financial resources (Chrisman, McMullan, and Hall, 2005).

Opportunity recognition, a key aspect of the entrepreneurial process and fundamental to capital acquisition, was shown to be directly associated with an owner's previous experience (Ozgen and Baron, 2007). Business performance is also recognized as an important factor affecting the willingness of investors to fund companies. Early work by MacMillian et al (1985) found that equity investors relied on owner experience as a criterion for making investment decisions.

Professional experience has been cited as an important factor affecting many aspects of entrepreneurial firms (Van der Sluis et al., 2003). Lee and Tsang (2001) reported a positive relationship between owner experience and venture performance. Headd (2003) found that the lack of capital and owner experience are related and contribute to business failure. Owners with previous business ownership were less likely to fail than other firms.

The likelihood of failure was also found to be associated with the owner/manager's work experience prior to business launch and education. For example, businesses where the owners had 10 or more years of work experience and/or 4 or more years of college were less

likely to fail (Boden and Nucci, 2000). Chrisman, McMullan and Hal (2005) reported that the knowledge gained from previous experience is essential for small firm success.

### **C. Research questions**

The foregoing suggests that there are marked differences between the firms owned and run by females and by experienced entrepreneurs. What appears to be missing from previous research is whether these characteristics affect attitudes of owner/managers about capital acquisition. It is also apparent that capital acquisition plays a large role in the success of small firms but do attitudes and approaches by owner/managers affect the acquisition process?

In this research we address this issue. Specifically, we attempt to provide answers to several questions. What impact does gender and experience have on the owner/manager's approach and attitudes concerning:

- the difficulty of attracting investment financing,
- the value of governments in the capital acquisition process,
- the accessibility of capital at various stages of development,
- the flexibility in financing origination,
- any discrimination in financing small businesses, and
- the success or failure of the firm?

## **II. Methodology**

### **A. Sample and Questionnaire**

A questionnaire was developed and pre-tested in spring 2005. In addition to the findings from two focus groups the questionnaire was based on past research on small firm financing decisions, including Van Auken (2005), Carter and Van Auken (2005), Busenitz et al, (2003), Kuratko, Hornsby, and Naffziger (1997), McMahan and Stanger (1995), Petty and Bygrave (1993), Ang (1992) and primarily designed to address our research questions. The questionnaire was divided into two sections: "characteristics" questions and capital acquisition perception questions.

In the first section, respondents were asked to identify characteristics of their firms, including age of the business, primary activity of the business (retail, services, manufacturing, agriculture, and other), ownership structure (sole proprietorship, partnership, S-Corp., C-Corp, and limited liability corporation), number of employees, total assets, total sales, size of market served (local, regional, national, and international), whether their firm was "technology-based" and the gender of the primary owner.

The second section asked respondents to rank perceptions (1=strongly disagree to 5=strongly agree) of 25 issues related to three general areas of capital acquisition: equity capital; debt capital; and government policy. The 25 questions are displayed in Table I.

Surveys were sent to 400 small Iowa that had been clients of the Small Business Development Center (SBDC) during the previous two years. We isolated our analysis to one state for two reasons. The first was to facilitate data collection. For example, the state of Iowa provides lists of bankrupt firms and viable small businesses for a fee. The second reason was to minimize the number of extraneous variables. For example, states may provide differing support for small businesses. The samples should be reasonably representative of small firms in the state. The SBDC clients, which represent a wide range of firms throughout the state, include firms of all ages and industries. A total of 91 useable questionnaires were received (a 23.25 % response rate).

**A. Statistical analysis**

To find significant differences in responses between and among groups we used both non-parametric and parametric examinations – the former included to allay concerns about the nature of the distribution of responses. For characteristic variables we used differences in medians tests as the non-parametric examinations. To test for the significance of responses to the 25 capital acquisition perception questions we used both t-tests and sign tests.

To reduce the twenty five capital acquisition questions (CAQs) to sets with common themes, we used a principal components analysis with a varimax rotation. The principal components analysis reduces a dataset with multiple dimensions into a set of components with similar relationship structures. The principle components analysis resulted in four usable factors.

To examine the interaction between and among characteristic variables and CAQ components we used a general least square regression model (GLM). Only those respondents that indicated an interest in accepting debt or equity capital were included in the logistic regression analysis. This reduced the sample to 45 respondents.

Two GLM regressions were estimated. The first used gender (GEN) as the independent variable, and the second used experience (EXP) as the independent variable. The dependent variables were developed from the four CAQ components. Two control variables were included: the age of the firm at the time of the survey (AGE) and total assets (SIZE). We expect that by including age and size in the model results will depend more on the respondents’ attitudes and less on the dimensions of their particular firms. The regression models in found in equations (1) and (2):

$$F_i = \alpha_0 + \beta_1 (AGE) + \beta_2 (SIZE) + \beta_3 (GEN) + \epsilon, \quad (1)$$

$$F_i = \alpha_0 + \beta_1 (AGE) + \beta_2 (SIZE) + \beta_3 (EXP) + \epsilon, \quad (2)$$

where

- GEN = Gender of the primary owner (1=male; 2=female),
- EXP = Owner’s previous business experience (from 0=limited to 5=extensive previous ownership experience),
- AGE = Age of the firm,
- SIZE = Total assets of the firm, and
- F<sub>i</sub> = Factor 1, 2, 3, and 4 from the principle components analysis.

In a final analysis we estimate a multinomial logistic regression model. The dependent variable is the sales of the firm (SALES). In general the logistic regression employs a cumulative logistic probability function to transform the original model such that the fitted values of an ordinal dependent variable fall between zero and the maximum value. In this way all predictions are constrained such that they will fall within the censored limits. SALES is an ordinal variable, bounded by 0 and 5. The logistic regression technique is intended to make the proper adjustment for this type of variable.

We are interested in whether gender, experience and general dissatisfaction with the capital acquisition process play a role in the success of a small business. Hence, a primary independent variable is DISS, a binary variable where a one indicates a respondent’s general

dissatisfaction with the capital acquisition process and zero otherwise. The variable is developed by identifying questionnaires with the most negative responses regarding their current capital acquisition environment, assigning those respondents a one and a zero to all others. The other independent variables are gender, experience and the control variables discussed above. The model is displayed in equation (3):

$$\text{SALES} = \alpha_0 + \beta_1(\text{DISS}) + \beta_2(\text{GEN}) + \beta_3(\text{EXP}) + \text{BX} + \varepsilon, \quad (3)$$

where

$$\begin{aligned} \text{DISS} &= \text{A dummy variable (1=general dissatisfaction with capital} \\ &\quad \text{acquisition process; and 0 otherwise), and} \\ \text{BX} &= \text{A vector of coefficients and control variables (AGE and} \\ &\quad \text{SIZE).} \end{aligned}$$

### III. Results

#### A. Characteristic variables

Demographic statistics for the characteristics of the 91 respondents and their firms are found in Table II. Over half of the respondents are female (60.44%). The average age of the firms is 5.3 years. This would suggest that our sample of firms survived through the critical formation period as recent evidence suggests 56% of firms are no longer active by the end of the fourth year (Knaup, 2005). However, sales and assets of just over \$2,000,000 and \$1,000,000, respectively does not indicate that these firms have considerable reliable assets. Moreover, the respondents do not appear to be either extensively experienced or educated.

Among our research questions is whether there are differences in attitudes concerning capital acquisition by gender and experience. In Table III we have included the characteristics of the respondents and their firms separated by gender and by experience in Panels A and B, respectively.

Characteristics for the male respondents and their firms appear to be significantly different than those for female respondents for six categories. Male-respondent firms are older, larger in terms of both assets and sales, are more likely to be technology-oriented and more likely to be an advanced organizational form than female-respondent firms. The male respondents are also more educated than female respondents. These results appear to be consistent with previous research.

What is most surprising about the results in Panel B is the lack of significant differences for any characteristic except the type of organization. While this is only marginally significant, it does suggest that owners with more experience tend to have a more advanced organizational form.

#### B. Capital acquisition questions

In Table IV we have presented the mean responses to the 25 capital acquisition questions (CAQs) along with the standard deviations, medians and both parametric and non-parametric tests evaluating whether the responses are significantly above or below 3 (the neutral response).

It seems obvious from the results that there is a general dissatisfaction with the process of capital acquisition for small business. For thirteen questions, the mean response is significantly above three while for only two the response is significantly below three. Mean ratings for CAQs 1, 3, 5, 11, 14 and 22 suggest that improvements in procedures are necessary whereas mean ratings for CAQs 7, 9, 15, 16, 17, 18, 19 and 25 suggest that more sources of capital are needed and that governments should be a catalyst. Overall, these responses suggest there is a general dissatisfaction with the current capital acquisition process for small firms.

### **C. Principal component analysis**

We are interested in the responses to the 25 CAQs as a function of gender and experience. However, it is more efficient to collapse the variables into related sets by means of a principal components analysis. The results of the analyses are found in Table V.

The eigenvalues indicate that there are five components. However, using coefficient values of .5 or greater to choose CAQs results in only four useable components. The first component appears to reflect *frustration* with the capital acquisition environment, available resources and government involvement. The second appears more related to demands from providers of capital and expanded support from the government. We label this component *demands*. Component three includes only one CAQ, a desire for governments to provide *facilities* for small business. Finally the fourth useable component also has only the CAQ about rigged government seed capital programs. We label this component *rigged*.

### **D. Regression analysis**

Table VI displays the results of the GLM regression analyses. While we estimated models with each component as a dependent variable, only the models using Demands were significant and are displayed. Panel A contains the results using gender as the independent variable and Panel B the results using experience as the independent variable.

As mentioned the regression is significant at the 1 % level. Moreover, the coefficient for gender is positive and significant. This suggests that male business owners are more apt to put responsibility of obtaining sufficient capital on outside sources. In the second regression, the coefficient for experience is also significant. This suggests that the more experienced owners are also more apt to look to outside sources for assistance in their capital acquisition endeavors.

The results of the logistic regression are found in Table VII. The regression is significant at better than the 1 % level suggesting a fairly good fit of the data. All but two of the coefficient estimates are significant. Neither the coefficient for dissatisfaction nor the coefficient for experience is significant. Assuming that relative sales are a measure of success, these results indicate that in general neither dissatisfaction nor experience are important in the success or failure of the firms in our sample. However, the coefficient for gender is significant suggesting that male-owned firms are more successful.

## **IV. Discussion**

The results from this study contribute to the research on small firm financing by providing more information about the relationship between capital acquisition, gender and previous business experience. The flow of capital to small firms is one of the most important factors facilitating liquidity, ability to pursue market opportunities, and growth potential. The research on small firm financing continues to recognize the limited (but expanding) supply of capital and expanding our understanding of the nature of capital flows to small firms. Previous studies have shown that the flow of capital is affected by market conditions and firm characteristics. Owner perceptions also affect capital acquisition through an inherent bias in which sources are pursued.

The dissatisfaction with capital acquisition would likely not be a surprise since so much research has continued to highlight constraints with small firm capital acquisition. Some research implies suggests that limitations are due to “structural” obstacles (Cassar, 2004; Berger and Udell, 1998) while other research states that the lack of good information affects an owner’s capital acquisition strategy (Gibson, 1992; Holmes and Kent, 1991).



Besides identifying a general dissatisfaction with the capital acquisition process, our study has also found two other important consistencies among responses. First, the owners appear to believe that a bias exists concerning the availability of capital in the Midwest. This perceived bias against small firms attempting to raise capital can have economic development implication (Van Auken, 2001). Firms believing that a bias exists may either opt not to search for or relocate to section of the US that is believed to have greater access to capital. Government programs that better match firm capital acquisition needs with provides of capital as well as facilitating the flow of information about capital acquisition strategies to owners of small firms.

Access to accurate and timely information is especially relevant for effective capital acquisition strategies. Government initiatives that target the dissemination of information on capital acquisition might be very useful. Such information could provide gender specific information as well as information about the role of debt versus equity in the capital structure. These types of programs might also improve the needed flow of capital women-led businesses (Greene et al., 2001). It is evident from our study that small business owners also look to the government for assistance in obtaining capital.

## **V. Summary and Conclusions**

This paper examines capital acquisition issues related to gender and previous business experience among 91 small firms. Capital acquisition decisions are some of the most important and challenging issues facing small firms. Inadequate capital can lead to illiquidity, lack of competitiveness, and bankruptcy. In this study we examine the importance of attitudes and perceptions about capital acquisition and whether they can bias an owner's search process and even the firm's level of success.

Sample characteristics indicate that male-owned firms were larger, more technology-based, and more complex organizations than female firms. More experienced owners tended to operate more complex organizations. The results suggest a general dissatisfaction with capital acquisition and that respondents believe there is a bias against small firms in the Midwest. They also indicated that more sources of capital are needed and that the government should provide more assistance. The results also suggest that females find venture capital more difficult to raise and are more they appear more interested in government assistance than males.

It appears that experienced business owners look to other entities to help with capital acquisition but we few other significant relationships. Overall we would have to conclude that that experience has little connection with perceptions and does not appear to affect the success of the firm – assuming you define success as the firm's relative revenues.

The results of this study provide information about factors impacting availability of and attitudes about capital. Impressions of issues affecting capital acquisition affect strategies. Capital that is perceived to be difficult to acquire will likely not be pursued, regardless of whether the perception is accurate. Women who believe capital acquisition is biased may be discouraged from starting a business or developing a sound strategy.

The results should also signal government policy makers about the need to consider targeting assistance toward niches of small business owners. Finally, this may also be a indication for venture capitalists about potential investment opportunities in the Midwest. Perceptions about the difficulty of acquiring venture capital are likely due to owners' experiences. The Midwest is not void of strong, viable companies worthy of investment. The lack of investment may be lack of visibility of worthy companies.

Our study has several limitations which provide opportunities for future research. The sample was collected from a single state located in the Midwest. Additional work should

examine similar issues in other regions of the country, especially in regions that have a stronger network of entrepreneurial activity or urban areas, and provide comparative results. A larger, national study could provide regional comparisons. The data was also collected at a single point in time. A longitudinal study might provide evidence of changing attitudes and patterns over time. Such a study could be used to continually develop market-driven programs to assist all small firms in their search for capital. Better information has the potential to also improve chances of small firms' survival.

**REFERENCES**

- Alvarez, S., and L. Busenitz (2001), The Entrepreneurship of Resource-Based Theory, *Journal of Management* 27, 755–775.
- Ang, J. (1991), Small Business Uniqueness and the Theory of Financial Management, *The Journal of Small Business Finance* 1, 1-13.
- Ang, J. (1992) On the Theory of Finance for Privately Held Firms, *Journal of Small Business Finance* 1, 185-203.
- Berger, A., and G. Udell (1995), Relationship Lending and Lines of Credit in Small Firm Finance, *Journal of Business* 68, 351-381.
- Berger, A., and G. Udell (1998), The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle, *Journal of Business* 22, 613-673.
- Busenitz, L., P. West, D. Shepherd, T. Nelson, A. Zacharakis, and G. Chandler (2003), Entrepreneurship in Emergence: Past Trends and Future Directions, *Journal of Management* 29, 285-308.
- Busenitz, L., J. Fiet, and D. Moesel, Signaling in Venture Capitalist-New Venture Team Funding Decisions: Does It Indicate Long-Term Venture Outcomes? *Entrepreneurship Theory and Practice*, forthcoming.
- Brush, C., N. Carter, E. Gatewood, P. Greene, M. Hart (2001), An Investigation of Women-Led Firms and Venture Capital Investment, U.S. Small Business Administration, Office of Advocacy.
- Carter, R. and H. Van Auken (2005), Bootstrap Financing and Owners' Perception of Their Business Constraints and Opportunities, *Entrepreneurship and Regional Development* 17, 129-144.
- Cassar, G. (2004), The Financing of Business Start-ups, *Journal of Business Venturing*, 19, 261-283.
- Chrisman, J. E. McMullan, and J. Hall (2005), The Influence of Guided Preparation on the Long-Term Performance of New Ventures, *Journal of Business Venturing* 20, 769-791.
- Coleman, S. (2000), Access to Capital and Terms of Credit: A Comparison of Men-and Women-Owned Small Businesses, *Journal of Small Business Management* 38, 37-52.
- Dittmann, I., E. Maug, and J. Kemper (2004), How Fundamental Are Fundamental Values? Valuation Methods and their Impact on the Performance of German Venture Capitalists, *European Financial Management* 10, 609–638.

- Fluck, Z., D. Holtz-Eakin, and H. Rosen (1997), Where Does the Money Come From? The Financing of Small Entrepreneurial Enterprises, New York University working paper.
- Gibson, B., (1992), Financial Information for Decision Making: An Alternative Small Firm Perspective, *The Journal of Small Business Finance* 1, 221-232.
- Greene, P., C. Brush, M. Hart, and P. Saporito (2001), Patterns of Venture Capital Funding: Is Gender a Factor? *Venture Capital: An International Journal of Entrepreneurial Finance* 3, 63-83.
- Haber, S. and A. Reichel (2007), The Cumulative Nature of the Entrepreneurial Process: The Contribution of Human Capital, Planning and Environment Resources to Small Venture Performance, *Journal of Business Venturing* 22, 119-145.
- Knaup, A. (2005), Survival and Longevity in the Business Employment Dynamics Database, *Monthly Labor Review* 28, 50-6.
- Kuratko, D., J. Hornsby, and D. Naffziger (1997), An Examination of Owner's Goals in Sustaining Entrepreneurship, *Journal of Small Business Management* 35, 24-33.
- Lee, D. and E. Tsang (2001), The Effect of Entrepreneurial Personality, Background and Network Activities on Venture Growth, *Journal of Management Studies*, 38, 583-602.
- Manigart, S., K. Waele, M. Wright, K. Robbie, P. Desbrieres, H. Sapienza, and A. Keekman (2000), Venture Capitalists, Investment Appraisal, and Accounting Information: A Comparative Study of the USA, UK, France, Belgium, and Holland, *European Financial Management* 6, 389-403.
- McMahon, R., and A. Stanger (1995), Understanding the Small Enterprise Financial Objective Function, *Entrepreneurship: Theory and Practice* 19, 21-39.
- Morris, M., N. Miyasaki, C. Watters, and S. Coombs (2006), The Dilemma of Growth: Understanding Venture Size choices of Women Entrepreneurs, *Journal of Small Business Management* 44, 221-244.
- Norton, E. (1991), Capital Structure and Small Public Firms, *Journal of Business Venturing* 6, 287-303.
- Ozgen, E. and R. Baron (2007), Social Sources of Information in Opportunity Recognition: Effects of Mentors, Industry Networks, and Professional Forums, *Journal of Business Venturing* 22, 174-192.
- Post, C. and A. Wieland (2007), Gender Inequality in the Workforce: A Comparison of Corporate Women and Female Entrepreneurs, paper presented at the United States Association for Small Business and Entrepreneurship, Orlando, FL.

- Riquelme, H. and J. Watson (2002), Empirical Validity? Do Venture Capitalists' Implicit Theories on New Business Success/Failure Have Empirical Validity, *International Journal of Small Business* 20, 395 – 422.
- Robinson, S. (2001), Motives and Their Influence on the Way Rural Women Small Business Owners Manage Their Employees, *Journal of Developmental Entrepreneurship* 6, 151-168.
- Schutjens, V. and E. Wever (2005), Determinants of New Firm Success, *Papers in Regional Science, Urban Research Centre Utrecht, Utrecht University* 79, 135–159.
- Sorenson, O. and T. Stuart (2001), Syndication Networks and the Spatial Distribution of Venture Capital Investments, *American Journal of Sociology* 106, 1546–1588.
- Van Auken, H. (2005), A Model of Small Firm Capital Acquisition Decisions, *International Entrepreneurship and Management Journal* 1, 335-352.
- Van der Sluis, J., C. van Praag, and W. Vijverberg (2003), Entrepreneurship Selection and Performance: A Meta-Analysis of the Impact of Education in Industrialized Countries, Tinbergen Institute Discussion Paper, Amsterdam.
- Wiklund, J. and D. Shepherd (2005), Entrepreneurial Orientation and Small Business Performance: A Configurational Approach, *Journal of Business Venturing* 20, 71-91.

**Table I**  
**Questions Asked from Respondents**

<b>Question</b>	
1	<b>Question</b>
2	<b>Venture capital is hard to attract</b>
3	<b>Other owners are skeptical about new capital</b>
4	<b>Banks want excessive collateral</b>
5	<b>Venture capitalists have unrealistic expectations</b>
6	<b>Capital generally flows to larger more visible companies</b>
7	<b>Potential investors do not take me seriously</b>
8	<b>Money from government sources made me successful</b>
9	<b>Government seed capital doles are rigged</b>
10	<b>Governments should provide incentives to venture capital</b>
11	<b>Second &amp; third loans are harder to get than initial seed money</b>
12	<b>Capital flows to "connected" owners</b>
13	<b>I would accept equity from any qualified investor</b>
14	<b>I would accept debt capital from any qualified investor</b>
15	<b>Loan costs are excessive for small business</b>
16	<b>More capital sources are needed for mezzanine financing</b>
17	<b>More sources are needed for early-stage capital</b>
18	<b>Economic development programs are lacking</b>
19	<b>Entrepreneurship programs need more government support</b>
20	<b>Governments should invest more money directly into businesses</b>
21	<b>Governments should provide money to private funds</b>
22	<b>Government rules for capital acquisition are inadequate</b>
23	<b>Harder to raise capital in mid-west states than other parts of US</b>
24	<b>Raising capital via the Internet would be useful</b>
25	<b>Using invest bank to raise capital for me would be impractical</b>

**Table II**  
**Descriptive statistics for the characteristics of 91 respondent firms**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Median</b>
Gender of respondents (% of total)	91	60.44		
Age of the firm at the time of survey	91	5.291	8.073	2
Technology-related firms (% of total)	91	51.65		
Sales (\$000s)	91	2,332	3,486	750
Total assets (\$000s)	91	1,095	2,639	300
Education: (1=HS to 4=masters +)	91	2.407	0.632	2
Experience: (1=limited to 4=substantial)	91	2.538	1.432	3
Market: (1=local to 4=international)	91	1.769	1.086	1
Organization: (1=sole prop. to 5=corp.)	91	3.538	1.294	4

Insert table III here



**Table IV**  
**Responses to 25 Capital Acquisition Attitude Questions for 91 Respondents**

Question <sup>1</sup>	Mean	Std Dev	NP test <sup>a</sup>		t-test <sup>b</sup>	
<b>Question</b>	3.36	1.31	28.0	***	2.64	***
<b>Venture capital is hard to attract</b>	3.16	1.27	24.0	***	1.24	
<b>Other owners are skeptical about new capital</b>	3.44	1.60	20.0	***	2.62	***
<b>Banks want excessive collateral</b>	3.21	1.27	23.5	***	1.57	
<b>Venture capitalists have unrealistic expectations</b>	3.54	1.46	27.0	***	3.53	***
<b>Capital generally flows to larger more visible companies</b>	2.73	1.29	7.5		-2.03	**
<b>Potential investors do not take me seriously</b>	2.23	1.48	-4.5		-4.97	***
<b>Money from government sources made me successful</b>	3.00	1.37	1.5		0.00	
<b>Government seed capital doles are rigged</b>	3.43	1.53	24.0	***	2.67	***
<b>Governments should provide incentives to venture capital</b>	2.88	1.16	1.0		-0.99	
<b>Second &amp; third loans are harder to get than initial seed money</b>	3.35	1.35	13.5	***	2.48	**
<b>Capital flows to "connected" owners</b>	2.73	1.54	-6.0		-1.70	*
<b>I would accept equity from any qualified investor</b>	2.84	1.49	-6.5		-1.05	
<b>I would accept debt capital from any qualified investor</b>	3.37	1.41	14.0	***	2.53	**
<b>Loan costs are excessive for small business</b>	3.65	1.55	18.0	***	4.00	***
<b>More capital sources are needed for mezzanine financing</b>	3.78	1.57	22.5	***	4.74	***
<b>More sources are needed for early-stage capital</b>	3.60	1.43	29.5	***	4.03	***
<b>Economic development programs are lacking</b>	3.68	1.52	20.0	***	4.28	***
<b>Entrepreneurship programs need more government support</b>	3.69	1.59	19.5	***	4.15	***
<b>Governments should invest more money directly into businesses</b>	3.08	1.56	4.5		0.47	
<b>Governments should provide money to private funds</b>	3.01	1.15	3.5		0.09	
<b>Government rules for capital acquisition are inadequate</b>	3.29	1.40	11.0	***	2.02	**
<b>Harder to raise capital in mid-west states than other parts of US</b>	3.10	1.46	6.5		0.65	
<b>Raising capital via the Internet would be useful</b>	3.06	1.40	5.0		0.37	
<b>Using invest bank to raise capital for me would be impractical</b>	3.40	1.53	14.5	***	2.47	**

<sup>a</sup>Respondents were asked to rank questions as to their perceptions on a 5 point scale where 1=strongly agree and 5=strongly disagree)

<sup>b</sup>The non-parametric test is a sign test. The test is whether responses are greater than or less than 3 – the neutral answer.

**Table V**  
**Principal Components Analysis Rotated via Varimax Procedure**  
**(n=91)**

Question	Comp1	Cpmp2	Comp3	Comp4
Venture capital is hard to attract	0.3056	0.6174	0.4089	0.2172
Other owners are skeptical about new capital	0.1461	0.6222	0.2520	0.4559
Banks want excessive collateral	0.3250	0.6305	0.5169	0.2724
Venture capitalists have unrealistic expectations	0.3075	0.7579	0.0726	0.2798
Capital generally flows to larger more visible companies	0.4506	0.4970	0.3184	0.1253
Potential investors do not take me seriously	0.2557	0.7072	0.1816	0.1202
Money from government sources made me successful	-0.0671	0.0603	0.1566	0.8375
Government seed capital doles are rigged	0.2859	0.6758	0.2732	-0.2796
Governments should provide incentives to venture capital	0.6045	0.2126	0.4991	0.0665
Second & third loans are harder to get than initial seed money	0.4456	0.4319	0.1969	0.4838
Capital flows to "connected" owners	0.5138	0.3613	0.4751	0.0871
I would accept equity from any qualified investor	0.2765	0.1623	0.7402	0.2012
I would accept debt capital from any qualified investor	0.2382	0.2488	0.7839	0.1502
Loan costs are excessive for small business	0.5384	0.4705	0.3040	0.1442
More capital sources are needed for mezzanine financing	0.6892	0.3456	0.4841	0.1028
More sources are needed for early-stage capital	0.7704	0.3372	0.3613	0.1210
Economic development programs are lacking	0.7643	0.3868	0.2877	0.0343
Entrepreneurship programs need more government support	0.7705	0.3542	0.2393	0.0371
Governments should invest more money directly into businesses	0.8511	0.3052	0.0815	0.0674
Governments should provide money to private funds	0.7338	0.0375	0.2965	0.1110
Government rules for capital acquisition are inadequate	0.5992	0.3302	0.3786	0.1267
Harder to raise capital in mid-west states than other parts of US	0.6804	0.2328	0.4455	-0.0264
Raising capital via the Internet would be useful	0.6770	0.2118	0.4736	-0.0557
Using invest bank to raise capital for me would be impractical	0.4483	0.2838	0.2182	0.4900
Governments should provide facilities for small businesses	0.7076	0.2999	-0.0655	0.3825
Number	Eigenvalue	Difference	Proportion	Cumulative
1	13.536	11.812	0.541	0.541
2	1.724	0.593	0.069	0.610
3	1.131	0.076	0.045	0.656

**Table VI**  
**General Least Squares Regression Analysis**  
**(n=45)**

<b>Panel A (Gender)</b>	
<b>Dependent Variable = Demands</b>	
<b>(F-Value = 19.74 ***)<sup>a</sup></b>	
<b>Variables</b>	<b>Coefficient</b>
Intercept	7.655
Age of the firm at the time of survey	0.702
Total assets: (000s)	1.562
Gender	2.375 ***
<b>Panel B (Experience)</b>	
<b>Dependent Variable = Demands</b>	
<b>(F-Value = 37.99 ***)</b>	
<b>Variables</b>	<b>Coefficient</b>
Intercept	5.075 ***
Age of the firm at the time of survey	0.398
Total assets: (000s)	0.465
Experience	3.775 ***

<sup>a</sup>Significance at the 10, 5 and 1% levels is indicated by one, two or three asterisks, respectively.

**Table VII**  
**Multinomial Logistic Regression Analysis**  
**Dependent Variable is Sales (n=45)**

Test	Chi-Square <sup>a</sup>			
Likelihood Ratio	55.22 ***			
Score	34.79 ***			
Wald	31.66 ***			
Variable	Coeff	Std Err	Wald X <sup>2</sup>	
Intercept	-2.940			
DISS <sup>b</sup>	-0.364	0.502	0.526	
Gender (1=male; 2=female)	1.293	0.565	5.225	**
Experience: (0-5 where 0=limited to 5=substantial)	0.046	0.170	0.075	
Total assets: (Millions \$)	0.370	0.124	8.909	***
Age of the firm at the time of survey	0.201	0.056	12.776	***

<sup>a</sup> Significance at the 10, 5 and 1% levels is indicated by one, two or three asterisks, respectively.

<sup>b</sup> DISS is a dummy variable where a 1 indicates responses where owners agreed or strongly agreed that the process is in need of improvement and 0 otherwise.