

**THE PROFILE AND MOTIVATIONS
OF BANK ANGEL INVESTORS**

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ABSTRACT

This study analyzes the profile and motivation of the angel investors that found new banks. This descriptive study includes quantitative data from 330 mailed-out survey responses from bank angels at 108 banks in 33 states and qualitative data obtained through 21 interviews. The study found that bank angel investors have a profile similar to general angel investors; however, expected returns and perceptions of risk for bank investments were both lower than typical angel investments. This study brings new data to the field of angel investing and is also relevant to bank industry structure research.

This study advances knowledge in the field of new venture funding, specifically on angel investing, by examining the angel investors who found new banks. Angel investors (sometimes called *informal investors*) are an important source of start-up capital; recent research estimates the amount of capital provided by angels to be 11 times the amount provided by venture capitalists (Reynolds, Bygrave, Autio, et al., 2004). Angel investing is not a recent phenomena, the role of wealthy individuals in new commercial ventures has a long history: In the 13th century, the famous traveler-merchant Marco Polo was funded by angel investors and 20th century industrial giants such as Henry Ford and Alexander Graham Bell were funded by angels (Gaston, 1989; Benjamin & Margulis, 2001; Hirsich & Peters, 2002). Also known as *private investors*, this term emphasizes the non-public and idiosyncratic nature of the angel investor capital market.

Starting a new bank, unlike most new ventures, requires significant public disclosure and, as such, provides a robust and more accessible database for the study of angel investors. The data collected on bank angel investors is laid next to a composite profile of general angel investors presented in Morrissette (2005) which drew upon the work of Benjamin, Freear, Gaston, Margulis, Robinson, Sohl, Van Osnabrugge, and Wetzel as well as Sullivan & Miller's work on angel investment motivations and angel investor type clusters. In addition to advancing the discipline's knowledge on angel investors, the study is also relevant to banking industry structure research. While there have been studies of economic factors leading to new bank formation, there has been no study of what motivates the angel investors that fund new banks.

1. RESEARCH METHODOLOGY AND DATA COLLECTION

This descriptive study used a mixed methods approach: Quantitative analysis of 330 mailed-out survey responses from bank founders at 108 new banks in 33 states (clearly a broad cross section) augmented by qualitative data obtained through interviews with 21 bank experts and bank angel investors.

Unlike most new ventures, starting a new bank requires significant public and regulatory disclosure which yields a robust and accessible database with good sample sizes (over 100 banks are founded each year). Over 4,000 surveys were mailed to the directors of all 325 independent banks founded in 2001 and 2002. Banks founded in these years were recent enough that the respondents would still be close to the founding event. The list of banks was drawn from the Federal Deposit Insurance Corporate (“FDIC”) online database of bank charters. The 330 responses were split into two groups: 109 were from employees, typically the Chief Executive Officer (“CEO”); 221 were from non-employee investors. The data reported below is based on the 221 non-employee respondents. The responses from employees were not the primary focus of this study and will be discussed in future work.

The researcher conducted 21 open-ended interviews: 11 de novo bank founders and 10 advisors to de novo bank founders (accountants, lawyers and investment bankers that had worked closely with bank founders). The breadth and scope of their perspective was extremely valuable in discussing subtle motivational issues.

2. DATA ANALYSIS AND INTERPRETATION

Overall, bank angel investors are similar to most angel investors with a few noteworthy differences. Exhibit 1 provides a tabular summary of the data.

2.1. Demographics

The demographics of a “typical” business angel are: male, around age 50, college educated, successful entrepreneur, wealthy – bank angels are slightly older and more affluent than general.

Age: The average age of bank angel investors is around 55, slightly older than angel investors in general. Most studies of angel investors have found the average age of angel investors to be between 47-50 years old (Hill & Power, 2002; Wetzel & Freear, 1994; Freear, Sohol & Wetzel, 1991; Van Osnabrugge & Robinson, 2000; Gaston, 1989; Aram, 1989). A recent study of Finnish investors is an outlier in that it found an average age of only 40 (Maula, Autio & Arenius, 2003). Hill & Power (2002) found 54% of angels were between age 46-55; whereas, Gaston (1989) found 31% in this bracket.

Gender: Bank angels are predominately male (96%) consistent with studies of general angels that found 84-97% of angels to be male (Wetzel & Freear, 1996; Freear, Sohol & Wetzel, 1991; Gaston, 1989).

Net Worth: Bank angel investors have significant wealth, with an average net worth of over \$5 million; 87% are millionaires. These findings are higher than found in studies of general angels. Gaston (1989) found 37% of angel investors had net worth of over \$1 million (adjusting for inflation the Gaston data would translate to approximately 50%).

Business Background/Entrepreneurship Experience: Bank angel investors are entrepreneurs: 80% consider themselves to be entrepreneurs (90% of those making larger investments) while 86% own or have owned a company. These statistics are similar to studies on general angels that found 70-85% were entrepreneurs (Sullivan, 1991; Gaston, 1989; Van

Osnabrugge & Robinson, 2000; Aram, 1989). Most bank angels are owner/operators (54% on average, 73% of larger investors, 67% of wealthy investors).

2.2. Deal Characteristics

Investment Size: Bank angels make sizeable investments in their banks with the average investment being over \$250,000; 41% invested more than \$250,000, which is considerably higher than the investment made by most general angel investors which most studies found make an average investment between \$50-75,000. Further research could examine if this difference is due to capacity to invest or perhaps is related to lower perceived risk.

Frequency: Over half the bank angels have been angel investors in other companies besides the bank. This fact was most pronounced with the larger bank investors: 61% of those investing \$250-500,000 in the bank had done other angel investing; this percentage rose to 69% for those investing more than \$500,000 in the bank. Again, these statistics are similar to those for general angels: Van Osnabrugge (1998) found that 35% of angels are one-time investors and 65% are repeat angels.

2.3. Investment Process

Sourcing/Co-investing: Invariably bank angels become involved in the bank through their network of business and personal contacts, consistent with the studies on general angel investors. Several interviewers commented that the bank investment process had the attitude that “we let our friends in the deal.” Survey respondents who invest with other angel investors: 75% indicate they usually or always invest with others; this statistic is consistent with general angel studies that have found somewhere between 70-90% of general angels prefer to invest with others (Gaston, 1989; Van Osnabrugge & Robinson, 2000; Van Osnabrugge, 1998; Freear, Sohl &

Wetzel, 1994). Furthermore, 45% of the respondents indicated that other angel investors were a very important influence on their decision to invest.

Diligence Process: The factors considered by angel investors in accepting or rejecting deals are an important part of the investment process. The founding CEO has the most influence on a bank angel's decision to invest and is cited as very important by 56% of the respondents. The emphasis on the founder is consistent with general angel studies. The emphasis on the founder is consistent with general angel studies. Comments made during the interviews also confirmed the influence of the founding CEO ("Joe is a good banker and we knew he would do well"; "We had a lot of confidence in Bill; he's a great banker."). The interviews also indicated the influence of fellow investors ("I've invested with Sam in other deals. They haven't all been homeruns. But if Sam was in, I was in."; "Everyone was talking about the new bank. I was glad I knew Steve; he got me in the deal.").

Role/Involvement: The construction of our survey sample (mailing to bank directors) implies that all respondents have an active role in the bank. It is noteworthy that 43% said they were involved in recruiting board members, 43% helped recruit/coach management, 81% were involved in recruiting other investors, and 85% helped recruit bank customers.

The interviews also confirmed a finding from general angel studies that angels like to have a sense of connection with or even control over their investments. The words of one very large bank investor (\$1.5 million investment) with significant net worth (over \$100 million) provide an example of this theme: "I don't like to own stocks and bonds. I'd rather invest in a business or buy land – stuff I can see – where I can do something to make it be successful. I don't like just sitting there waiting to see how my investment is doing by reading it in the Wall Street Journal." The survey data supports this interview finding: the entrepreneurs replying to

the survey had very small portions of their net worth invested in stocks and mutual funds, around 10-20% on average, compared to 25-40% in real estate and 40-50% in their own company and direct investment in other companies. Another interviewee with an 8 figure net worth commented on this: “I like things I can see and touch. I can’t stand passive investments like mutual funds. I want to be able to help make my investments successful. That doesn’t mean I’m a control freak. I can be a passive partner, but only when I know and trust the managing partner. I have only 5% of my money in Wall Street- and that’s only because my estate planner made me.” These are not people that put most of their money in mutual funds and leave it sit.

Holding Period: Bank angels see their bank investment as a very long-term investment: the survey respondents had an average anticipated holding period of over 11 years (52% had expected holding periods of 11 years or more), twice the holding period of general angel investors. Many studies have found general angels expect to hold their investment about 5 years (Freear, Sohl & Wetzel, 1995; Linde & Prasad, 2000; Van Osnabrugge, 1998; Hoontrakul, 2001; Gaston, 1989; Benjamin & Margulis, 2001. Indeed, 92% of bank angels expect to hold their investment longer than the 5 years seen in average general angel. Not surprisingly, investors who placed great importance on the community’s need for a local bank when making their investment decision were also investors who had a longer holding period expectation.

The interview participants often commented on expected holding period when discussing their reasons for investing in the new bank. One angel who was the key organizer of the bank explained, “I told people, think of this as an investment you will leave for your kids. This is not like the real estate deals we’ve done together where we buy farm land for \$5,000 an acre, get it zoned and sell it to a developer for \$25,000 an acre two years later.” The survey data confirmed this finding; 41% indicated that this is a legacy investment. This finding is even more

pronounced for the largest bank investors: 52% of those investing more than \$500,000 plan to leave the stock as a legacy. Upon probing, one of the interviewees explained: “Banks are around for a long time. How many businesses do you know that stay around for a 100 years like the banks in this town before they sold? In our town, bank stock has been handed down for several generations.”

2.4. Bank Angel Motivation

Data on motivation was collected in both the mailed-out survey and the interviews and is reported here in 4 categories: return-on-investment expectations, other financial benefits besides return on investment (“ROI”), risk perceptions, and non-financial motivations.

ROI Expectations: Return on investment is generally considered the primary, if not sole, motivation for investors. To this end, the survey and interviews collected data on ROI expectations. Bank angels indicated considerably lower return expectations, 11% on average, compared to a 25-30% expected return found in many studies of general angels. The expected ROI varied when responses were stratified by investment amount: Larger investors had higher ROI expectations; respondents investing smaller amounts had lower ROI expectations. This same finding is seen in their response to the importance of ROI in the investment decision: large investors put more importance on ROI. It is noteworthy that over half of the bank angel respondents also do angel investing in non-banks and their expected rate of return in these deals is 21%, much closer to the general angel studies. This striking difference in ROI expectations for bank investments raises several questions:

1. Is it due to other financial benefits? (Directors fees? Contacts through bank that help the investor’s other business interests?)

2. Is it due to lower perceived risk? (Investors required rate of return is directly tied to the perceived risk of the investment)
3. Is it due to non-financial benefits? (Prestige? Community service?)

Each of these three questions is discussed in the following three sections.

Question #1: Other Financial Benefits: Involvement in any organization often creates a secondary financial effect or benefit, such as networking to identify prospects. This could be especially true in service businesses such as insurance, legal, or accounting, but can also be true for contractors and other vendors. For instance, a contractor on a school board might bid and win construction contracts for the school district. These types of benefits are magnified in a banking situation. Board members have the opportunity to garner business from the bank's clients, not just the institution. The mailed out survey collected some data on this issue: Networking/business contacts ranked 7th out of 10 when asked what factors influenced an angel's decision to invest in the bank. The interview results also indicated a low importance for these types of benefits. It is worth noting that bank regulations strongly prohibit any self-dealing by directors; they face severe sanctions and even monetary penalties if they use their role as a Bank Director for personal gain.

Question #2: Risk Perceptions: It would be entirely consistent with financial theory if bank angels were satisfied with a lower expected return because of lower perceived risk. The survey data indicates this may be true. Over half the respondents indicate that they perceive their bank investment to be less risky than investing in a Standard & Poors 500 ("S&P 500") mutual fund. Overall, bank angels saw their bank investment as having the same risk as the S&P 500. This finding is remarkable. Financial theory indicates that rarely is investment in a single security less risky than investing in a widely diversified basket of securities, especially high

quality securities like S&P 500 companies. Investing in a bank seems to enjoy risk perceptions normally reserved for the public utilities and government sponsored agencies, an analogy that might provide some insight. Indeed, banks are often perceived as a public utility. Likewise, given FDIC insurance of deposits and the extensive banking regulations, banks are often perceived as quasi-governmental organizations.

It is also noteworthy that over half of the bank angel respondents also do angel investing in non-banks and their perception is that their non-bank angel investments are riskier than their bank investment: 75% perceive their bank investment to be of equal or less risk than an S&P 500 mutual fund whereas only 42% feel this way about their other non-bank angel investments. Their perception of higher risk in non-bank investments correlates with their higher required returns on these investments. One California bank angel succinctly noticed, “As long as they don’t do something stupid, banks are a license to print money.” A similar view was expressed by an experienced bank investor: “A ROE [return on equity] of 12% might not sound great – but tell me where you can get a good return like that for little risk. We look all over the country for places to put our money – banks look like a pretty safe cash-on-cash yield to us.”

It is important to note that researchers have studied if angel investors habitually underestimate risk the risk of their angel investments (Maula, Autio & Arenius, 2003; Sullivan, 1991). If they do, then angel investing might be inefficient and decrease overall social welfare. The risk underestimation logic proceeds as follows:

- Most angels are entrepreneurs.
- Entrepreneurs tend to perceive less risk than non-entrepreneurs. Some think this tendency implies they underestimate risk, and/or overestimate their ability to

differentiate potentially successful projects from those likely to fail, and/or overestimate their ability to impact the firm's success.

- Therefore, angels are making inefficient investment decisions that destroy wealth and hurt overall social good by wasting capital in negative net present value projects.

The perceptions of considerably lower risk in bank angel investments could indicate risk-underestimation. This researcher's interpretation is that the data examined in this study shows no evidence that these investors underestimate the level of risk in their bank investment. To be clear, this study did not collect enough data to determine why investors see a lower level of risk than might be expected. Remarkably, the data only tells us that bank investors perceive less risk in their bank investment than most other equity investments and than in their other non-bank angel investments. While lower perceived risk may indeed explain bank angel's acceptance of lower returns, a third factor must be considered: studies have shown that non-financial benefits also impact angel investor required returns.

Question #3: Non-Financial Motivations: Studies show that general angel investors value the non-financial benefits of investing in new ventures. This study of bank angels yielded similar findings. General angel studies have found data supporting this "consumption benefits" view:

- Sullivan (1991) found that for one-third of angel investors, return on investment was not their primary motivation; rather, primary motivations included the fun of an interesting investment and enjoyment of an active role in starting the company.

- Freear, Sohl & Wetzel (1995) found that 50% of angels accept lower returns because part of their return includes *psychic income* such as creating jobs in community or the satisfaction of helping another entrepreneur succeed.
- Linde & Prasad (2000) observed that “[t]hese angels invest in early stage companies because they love the excitement of new venture start-ups. The insights, skills and funds they bring to emerging ventures are invaluable resources.” They found that 60% of high-tech angels were motivated by a desire to “give back” and 56% enjoyed being involved in their start-up company investment.
- Sullivan & Miller (1990) found a large percentage of angel investors were willing to accept a lower return in exchange for non-financial benefits such as a socially beneficial product (83%), the fun of being part of the company (66%), and interacting with highly regarded investors (61%).

The bank angel data is consistent with these studies. Clearly bank angel data shows they are requiring a lower expected return and place value on non-financial benefits: the 5 most important reasons for bank angel investors are community needs (48%), excitement (33%), ROI (36%), wanting to serve on a bank board (30%) and fun/enjoyment (21%). The interviews yielded similar findings. In response to an open-ended question in the 21 interviews (“Why do bank founders invest in the new bank?”), the top three mentions were (in general order of priority): community need (17), return on investment (17), and involvement/prestige as bank director (12). Community need was the first reason mentioned by more than half (13) of the interviewees.

A few highlights of the pervasive comments about non-financial benefits from the interviews:

- “The guys are all very successful. They made a bunch of money in their own company and maybe some other real estate deals. The bank is like another notch in the bedpost. Like being named to the hospital board or the university in town, it’s a sign that they’ve made it.”
- “I enjoyed building the relationships. I knew some of the board members before the bank project but I got to meet and now work closely with some new people – very interesting people. In my experience, you don’t look back and remember the ROI – you remember the people you worked with on the thing. Projects are more fun with good people.”
- “It’s a lot like buying a country club membership.”
- “Lots of our investors plan to leave the bank stock for their kids. Sometimes the ego thing is a bigger deal for the younger up-and-comers in the group. Some guys see this as another trophy on their shelf of accomplishments. But we think the legacy thing is a big deal – this is a trophy in the middle of town they can point to for a long time.”
- “ROI is pretty far down the list in our experience. Investors do want a reasonable return. Banks give you that given how low the risk is. We see a lot of what we call the ‘legacy attribute.’ They have been successful and like that the bank will endure – they’ll always be able to point at it and say ‘I helped start that bank.’”
- “All these guys are alpha males. They all founded their own company and have done great. So, sure, the visibility and prestige of being a bank founder and director matters; every one of these guys wants to be known as a leader of the pack.”

- “We see a few types of investors. The biggest group is the 50-60 year olds that made it big in their business and see this as a good investment but also like the idea of being a bank director. Some of them had fathers or relatives that were on bank boards and grew up thinking or hoping they’d be on the bank board – but then that bank got sold.”
- “These guys are already successful and have great reputations. They’ve already made it. They are known as stars. But then again, the honor of being on a bank board is a little different than the recognition they earned being put on the hospital board.”

Regarding the importance of non-financial benefits, Sullivan & Miller (1996) performed very insightful research that segmented general angels into three types or clusters: economic (maximize wealth), hedonistic (non-economic or *psychic income*), altruistic (help entrepreneur and/or society). This study was not designed to test if bank angels are clustered in the same way as found by Sullivan & Miller (1996); however, the data collected provides some insights. My interpretation of the survey data indicates that most bank angels are more consistent with the characteristics of hedonistic and altruistic investor segments and less consistent with the economic investor segment. Like the survey, the interviews were not designed to test the Sullivan & Miller model; however, in eight instances the interviewer had the opportunity to ask how bank angels might compare to these clusters. All eight respondents felt that the hedonistic and altruistic segments would be a larger proportion among bank angel investors and the economic segment would be a smaller proportion than found in general angels. See Exhibit 2 for my comparison of the bank angel data with the Sullivan & Miller Clusters.

2.5. Summary of Bank Angel Investor Data

This study has accomplished its objective to describe the profile and motivations of bank angel investors. Like general angel investors, they are mostly wealthy, male entrepreneurs who are not just investing for the financial returns, but enjoy their involvement in their investment.

There are however some noteworthy, interesting and even remarkable differences: Bank angels are somewhat older, their bank investment is much larger, and they have more personal wealth than the typical general angel. It is interesting, but not surprising to this researcher, that non-financial motivations such as meeting community needs and the enjoyment, fun and prestige of being a bank director are more important to bank angels. The remarkable difference between bank angels and general angels is that bank angels see their bank investment as considerably less risky, require a much lower rate of return and intend to hold their investment for a very long time, often for posterity. These last differences indicate that angels see bank investments as a different kind of investment.

3. FINDINGS AND IMPLICATIONS

This dataset provides a robust addition to our understanding of angel investing as highlighted in findings #1 and #2. For banking researchers and regulators, the data from this study provides a first-ever comprehensive and rigorous description of the people founding new banks and suggests several findings and implications relevant to banking policy and regulation as described in #3 and #4 below:

1. **Finding:** This study found that bank angel investors match the profile of general angel investors: mostly wealthy, middle-aged, male entrepreneurs that are not just interested in financial returns, but enjoy their involvement in their investment.

Implication: Given that the individuals making bank angel investments are very similar to individuals making non-bank angel investments, differences in responses regarding perceived risk and expected returns on bank investments versus non-bank investments are likely not attributable to differences in the individuals making the investment but attributable to differences in the investments themselves as discussed below. Bank angels aren't different, but bank investments are.

2. **Finding:** Bank founders perceive less risk in the bank investments than general angel investors. More noteworthy, half of the bank angels surveyed also made angel investments in non-bank deals and see their bank angel investment as less risky than their other angel investments.

Implication: Perceptions of risk are a subtle issue. If the *risk underestimation* or *over-optimism* hypothesis is true, bank regulators might worry that these entrepreneurs-turned-bank-directors might underestimate credit risk in bank lending decisions and put the bank's safety and soundness at undue risk. Are bank angel investments efficient from a risk return trade-off perspective? Are risk perceptions accurate or habitually biased? Do they contribute to the social good by an optimal allocation of capital? This study did not attempt to tackle this important albeit difficult-to-answer question. However, the responses by the investors that have done both bank investments and non-bank angel investments provide directly comparable data that would refute the hypothesis of habitual risk underestimation bias; rather these investors see their bank investments as less risky than their other angel investments.

Further research could be performed using the tools of investment theory research as well as those from the burgeoning field of behavioral finance.

3. **Finding:** Bank founders are wealthy/successful (net worth averaging \$5 mil) individuals experienced at starting a new venture (over 80% are entrepreneurs) and make a significant commitment to the bank (average investment exceeds \$250,000).

Implication: New banks are being founded by substantial and successful business persons which bodes well for the safety and soundness of new banks. It seems these entrepreneurs-turned-bank-founders know how to start businesses and succeed. Further research could examine any correlation between de novo performance and bank founder characteristics. Are some bank angel characteristics correlated with better bank performance?

4. **Finding:** Respondents place little emphasis placed on secondary financial benefits such as directors using the bank to source clients or contracts for the director's primary business. No evidence of excessive return on investment expectations (i.e., "greed") is found in the data. They did, however, place much importance on non-financial benefits such as meeting community need and the fun/excitement of founding the new bank.

Implication: Founders have "good" motives that do not appear to threaten the safety and soundness of new banks. Given this researcher's familiarity with bank founders, the importance of non-financial motivations was not surprising. In fact, the data could lead to a hypothesis that non-financial benefits are more important to bank angels than general angels. Perhaps follow-on research might examine this question using a Sullivan & Miller style analysis. Also, further analysis on the founding CEO data collected in the survey but not analyzed as part of this study might yield additional valuable insights relating motivations to the safety and soundness of de novo banks.

4. CONCLUSION

This study brings new data to the field of angel investing. It finds that bank founders are similar to other angel investors – wealthy, successful entrepreneurs. However, bank angels are somewhat older, their bank investment is larger, and they have more personal wealth than the typical general angel. It is interesting, but not surprising to this researcher, that non-financial motivations such as meeting community needs and the enjoyment, fun and prestige of being a bank director are more important to bank angels. The remarkable difference between bank angels and general angels is that bank angels see their bank investment as considerably less risky, require a much lower rate of return and intend to hold their investment for a very long time, often for posterity. These last differences indicate that angels see bank investments as a different kind of investment.

This study also provides data relevant to banking industry structure research and policy/regulation. New banks are being founded by substantial and successful business persons; this bodes well for the safety and soundness of new banks. It seems these entrepreneurs-turned-bank-founders know how to start businesses and succeed. And it seems they are efficient investors in terms of risk-reward tradeoffs.

REFERENCES

- Aram, J. D. (1989) Attitudes and behaviors of informal investors toward early-stage investments, technology-based ventures, and coinvestors. *Journal of Business Venturing*, 4 (5), 333-347.
- Benjamin, G. A. (2001) Overview: How to raise and invest in private equity. Retrieved on April 7, 2003 from <http://www.icrnet.com/seminar/home.html>.
- Benjamin, G. A., & Magulis, J. (1986) *Finding your wings: How to locate private investors to fund your venture*. New York: John Wiley & Sons.
- Benjamin, G. A., & Magulis, J. (2001) *The angel investor's handbook*. Princeton, NJ: Bloomberg Press.
- Freear, J., & Wetzel, W. (1989) Equity capital for entrepreneurs. In *Frontiers of Entrepreneurship Research 1989*. Wellesley, Mass.: Babson College.
- Freear, J., Sohl, J., & Wetzel, W. (1990) Raising venture capital: entrepreneurs' view of the process. In *Frontiers of Entrepreneurship Research 1990*. Wellesley, Mass.: Babson College.
- Freear, J., Sohl, J., & Wetzel, W. (1991) Raising venture capital to finance growth. In *Frontiers of Entrepreneurship Research 1991*. Wellesley, Mass.: Babson College.

Freeear, J., Sohl, J., & Wetzel, W. (1992) The investment attitudes, behavior and characteristics of high net worth individuals. In *Frontiers of Entrepreneurship Research 1992*. Wellesley, Mass.: Babson College.

Freeear, J., Sohl, J., & Wetzel, W. (1993) Summary: Angel profiles: a longitudinal study. In *Frontiers of Entrepreneurship Research 1993*. Wellesley, Mass.: Babson College.

Freeear, J., Sohl, J., & Wetzel, W. (1994) Angels and non-angels: Are there differences? *Journal of Business Venturing*, 9 (2), 109-123.

Freeear, J., Sohl, J., & Wetzel, W. (1995) Angels: personal investors in the venture capital market. *Entrepreneurship & Regional Development*, 7, 85-94.

Freeear, J., Sohl, J., & Wetzel, W. (1996) The informal venture capital market: milestones passed and the road ahead. Paper presented at the fourth State of the Art in Entrepreneurship Research Conference, May 9-11, 1996.

Gaston, R. J. (1989) *Finding Private Venture Capital for Your Firm: A Complete Guide*. New York: John Wiley & Sons.

Hill, B. E. & Power, D. (2002) *Attracting Capital From Angels*. New York: John Wiley & Sons.

Hoontrakul, P. (2001, April 26) Angel Financing. A presentation at 123 Forum.

Linde, L., & Prasad, A. (2000) *Venture Support Systems Project: Angel investors*. Unpublished manuscript, MIT Entrepreneurship Center.

- Maula, M., Autio, E., & Arenius, P. (2003) *What drives micro-angel investments? A large sample study of the factors explaining micro-angel investments*. Working Paper Series 91-WP-2003-001. Espoo, Finland: Helsinki University of Technology.
- Morrisette, S. G. (2005) *Profiles and Investment Motivations of De Novo Bank Founding Investors*. Unpublished dissertation.
- Roberts, M. J., Stevenson, H. H., & Morse, K. P. (2000) *Angel Investing*. Boston: Harvard Business School Publishing.
- Seelig, S. A., & Critchfield, T. (1999) Determinants of de novo entry in banking. Federal Deposit Insurance Corporation Working Paper.
- Sohl, J. E. (2002) The private equity market gyrations: what has been learned? *Venture Capital*, 4 (4), 267-274.
- Sohl, J. E. (2003) The U.S. angel and venture capital market: recent trends and developments. *Journal of Private Equity*, 6 (2), 7-18.
- Sohl, J. E. (2004) The angel investor market in 2003: The angel market rebounds, but a troublesome post seed funding gap deepens. Retrieved August 21, 2004 from http://unh.edu/cvr/press_release%202004.htm
- Sohl, J., Van Osnabrugge, M., & Robinson, R. (2000) Models of angel investing: Portals to the early stage market. In *Frontiers of Entrepreneurship Research 2000*. Wellesley, Mass.: Babson College.

Sullivan, M. K. (1991) Entrepreneurs as informal investors: Are there distinguishing characteristics? In *Frontiers of Entrepreneurship 1991*. Wellesley, Mass.: Babson College.

Sullivan, M. K., & Miller, A. (1990) Applying theory of finance to informal risk capital research: promise and problems. In *Frontiers of Entrepreneurship 1990*. Wellesley, Mass.: Babson College.

Sullivan, M. K., & Miller, A. (1996) Segmenting the informal venture capital market: economic, hedonistic, and altruistic investors. *Journal of Business Research* 36 (1), 25-35.

Van Osnabrugge, M. (1998) Do serial and non-serial investors behave differently? Empirical and theoretical analysis." *Entrepreneurship: Theory and Practice*, 22 (4), 23-42.

Van Osnabrugge, M., & Robinson, R. (2000) *Angel Investing: Matching Start-Up Funds with Start-Up Companies*. San Francisco, CA: Jossey-Bass.

Wetzel, W. E. (1983) Angels and informal risk capital. *Sloan Management Review*, 24 (4), 23-34.

Wetzel, W. E. (1987) The informal venture capital market: aspects of scale and market efficiency. In *Frontiers of Entrepreneurship Research 1987*. Wellesley, Mass.: Babson College.

Wetzel, W. E., & Freear, J. (1996) Promoting informal venture capital in the United States: reflections on the history of the Venture Capital Network. In Harrison, R. T., & Mason, C. M. (Ed.), *Informal venture capital: Evaluating the impact of business introduction services* (pp. 61-74). New York: Prentice-Hall Woodhead Faulker.

Exhibit 1: Summary of Bank Angel Investor Characteristics		
Characteristic	General Angel	Bank Angel
<i>Demographic:</i>		
Age	47-50 years old	Older; average 55 years old; 55% are age 55 or older
Gender	85-95% male	96% male
Education	60-80% have college degree	Data not collected
Net Worth	Most over \$1 million	Much higher; average \$5 million; 87% worth \$1 million or more.
Business Background	70% own/manage a business; 83% have entrepreneurial experience	Similar; 86% own/have owned a company; 80% consider themselves entrepreneurs
<i>Deal Characteristics:</i>		
Investment Size	Average is \$50-75,000; 85% is under \$250,000	Much higher. Average over \$250,000; 41% over \$250,000
Frequency	1 deal every 18-24 months	Not applicable
Geography	Close to home (75-85% within 50 miles of home)	Data not collected
Industry	Eclectic; prefer industries they know; manufacturing most common	Not applicable
Company Stage	Most invest during formation or in company less than 2 years old	Data set was all new banks
<i>Investment Process:</i>		
Sourcing	Friends and business associates	Data not collected
Co-Investing	Not invest alone; 80-90% of deals have multiple angels	Not applicable; all banks in data set had multiple investors
Due Diligence	Informal, subjective, focus on entrepreneur	Data not collected
Contract Structure	80% of deals are simple common stock structure	Data not collected
Role/Involvement	Hands on; meet or talk with entrepreneur several times each month; full or part-time employee 40% of the time	Sample was bank directors; all were involved.
ROI Expectations	Most expect 25-30%	Much lower. Expect 11-12%; 53% expect 10% or less.
Holding Period	Average is 5 years	Much longer. 52% plan to hold more than 10 years.
Investment Criteria	Focus on quality of the entrepreneur	Data not collected.
Non-financials	Thrill/fun of helping start a new company significant motivation for most angels	Community service and excitement more important than ROI. Closer to Sullivan's altruistic or hedonistic clusters.
General Angel Data Sources: Primary sources are Gaston (1989); Freear, Sohl & Wetzel (1990, 1992, 1993, 1994), Hill & Power (2002), Sullivan & Miller (1990, 1996), and Benjamin & Margulis (2001).		

Exhibit 2: Comparing Sullivan & Miller Clusters to Bank Angel Survey Results

Sullivan & Miller Cluster Characteristics	Consistency*	Related Bank Angel Survey Results
<i>*Consistency denotes consistency between bank angel data and Sullivan & Miller clusters.</i>		
Economic Investor: (47% of total)	Low	
Only financial motivations are important	Low	Non-financial motivations are very important; ROI ranked below community need and fun/excitement
Highest ROI expectations (30% versus 21% for hedonistic)	Low	Much lower ROI expectation (11-12%)
Perceives more risk than other clusters (2-3x)	Low	Perceives less risk than average
Largest average investment	High	Bank angels have very large average investment (over \$250k)
Hedonistic Investor (31% of total)	High	
Emphasis on enjoyment aspects of investing (enjoys entrepreneurial process, enjoys fun of interesting investment)	High	Enjoyment/fun/excitement second most important investment factor
Lowest ROI expectations (21% versus 30% economic)	High	Low ROI expectation (11-12%)
More likely to invest with a group	High	Average size of founder group is 10 versus 2-3 for general angels
Slightly older than other clusters	High	Bank angels average age is 55 versus 50 for general angels
Altruistic Investor (22% of total)	High	
See value in supporting new business and/or socially beneficial product	High	Community need most important highest investment
More patient investors (longest holding period - 7 years)	High	Average holding period of 11 years
Average investment smaller	Low	Bank angels have very large average investment (over \$250k)
Source: Sullivan & Miller, 1996; Morrissette, 2005.		