A Profile of Bank Angel Investors

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Profile of Bank Angel Investors

VStudy Design

- **General Angel Investor Data**
- **V**Bank Angel Profile
 - Demographics
 - Deal Characteristics
 - Investment Process
 - Investment Motivations
- **V**Findings & Implications
- **∀**Future Research



Study Design

- Objective: Develop a profile of angel investors that found new banks
- ✓ Motivation/Relevance:
 - Primary: Augment angel investor knowledge base using large/accessible data set (bank founders)
 - Secondary: Increase understanding of new bank phenomenon
- ✓ Methodology: Mixed Methods
 - Quantitative: Mailed-out survey
 - Qualitative: Interviews

Study Design

∀ Survey

- 4000 surveys mailed to every independent bank (n=325) founded in 2001 & 2002 (last two complete years at time of study design)
- Source: FDIC online database
- 330 responses
 - Broad representation: 109 banks in 33 states
 - 221 from non-employee directors/founders
 - 109 from employee founders (typically CEO)
 - Employee responses were not focus of this study; set aside for future research

✓ Interviews

- 21 open ended interviews
- Source: Contacts developed during research
- 11 de novo bank founders; 10 advisors to de novo bank founders (accountants, lawyers, investment bankers, etc.)
- Very helpful on subtle motivational issues

Key General Angel Studies Cited

- Bank Angel data was reported with general angel data as context (statistical testing between two groups was not objective of study).
- ✓ General angel investor profile compiled in Morrissette (2005) using data primarily from:
 - Gaston (1989)
 - Freear, Sohl & Wetzel (1990, 1992, 1993, 1994)
 - Hill & Power (2002)
 - Sullivan & Miller (1990, 1996)
 - Benjamin & Margulis (2001)
 - Van Osnabrugge (2000)
- \checkmark See Exhibits 3 & 4

Profile of Bank Angel Investors

🗹 Study Design

General Angel Investor Data

VBank Angel Profile

– Demographics

- Deal Characteristics

Investment Process

- Investment Motivations

VFindings & Implications

∀Future Research

Angel Investing Defined

- ✓ Angel investors provide capital to start-up companies
- Angels are one of three primary sources of new venture funding (Founder/Friends/Family, Angels, Venture Capital)
- ✓ Sometimes called *informal investors*, private investors, or business angels
- ✓ Term is derived from financial backers of theatrical productions (plays, operas, etc.) that are also called *angels*.
- ✓ Not a new dot-com phenomenon
 - Dates back to 13th century (in Marco Polo's time angels got 75% of profit; entrepreneur 25%)
 - Henry Ford had 5 angels that invested \$41,500; 15 years later their investment was worth \$145 million



✓ middle-aged, successful, somewhat wealthy entrepreneurs willing to invest in start-up companies seeking good return on their investment ✓ but also motivated by non-financial benefits such as the exhilaration of helping create another enterprise.

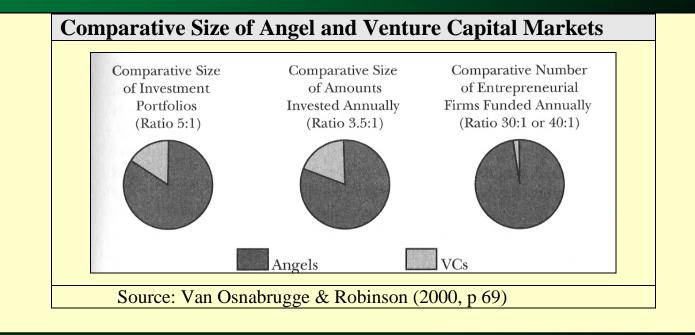
Angel Investing Statistics

Number of Angels Investing Each Year		
400,000	Benjamin & Margulis (2001, p 3 & p. 20)	
400,000	Timmons & Spinelli (2004, p. 472)	
300,000	Van Osnabrugge & Robinson (2000, p. 68)	
220,000	Sohl (2004, p. 1)	
300,000	Wetzel and Freear (1998)	

Number of Deals per Year	
60,000	Van Osanbrugge & Robinson (2000, p. 68)
50,000	Sohl (2003)
50,000	Hill & Power (2002, p. 26)
140,000	Benjamin & Margulis (2001, p. 2)

Amount of Investment per	Amount of Investment per Year		
\$40-60 billion	Benjamin & Margulis (2001, p. 2 and p. 20)		
\$30 billion	Timmons & Spinelli (2004, p. 471)		
\$50-60 billion	Van Osnabrugge & Robinson (2000, p. 69)		
\$100 billion	NCVA, Cullen (1998)		
\$40 billion	Sohl (2003)		
\$18 billion in 2003	Sohl (2004, p. 1)		
\$40 billion	Hill & Power (2002, p. 26)		
\$50-60 billion	Benjamin & Margulis (1996)		

Comparison to VCs



Comparison to VCs

"Angels invest their own money; VCs invest other people's money."

Hill & Power 2002

Differences between Business Angels and Venture Capitalists			
	Business Angels Venture Capital		
Funding Source	Angel's own money Investors		
Number of deals per year	1 every 2 years	5-10 per year	
Typical investment per company	\$25-250,000; average \$50- 75,000	\$1-10 million; average of \$4 mil	
Company Stage	Small, start-up, early stage	Larger, expansion stage	
Geographic Focus	Usually near (within 1-2 hours) of home	Usually nationwide, sometimes regional	
Industry Focus	No focus, but prefer industries they know	Often focus on 1-2 industries	
Source of deals	Other angels, friends, business contacts	Proposals submitted, other VCs	
Decision Maker	Individual, experienced entrepreneur, personal, 50 years old	Professional, MBAs, committees, 40 year olds	
Analysis/Due Diligence	Minimal, informal, subjective, judgment	Extensive, formal, analytical, spreadsheets	
Investment Structure	Simple, common stockComplex, Convertible Preferred Stock		
Involvement	Hands-on Strategic, Board Seat		
Investment Time/Horizon	Longer, 5 or more years	Shorter 3-5 years	
Exit/Harvest Strategy	Less important, long-term investment horizon	Important, IPO or Sell Company	
Return on Investment Expectations	20-30% but often don't have predetermined ROI expectation	Expect 30-50% ROI	
Sources: Van Osnabrugge & Robinson (2000, pp.106-111), Benjamin & Margulis (2001, pp 32-33); Hill & Power (2002, pp. 24-26, 61-67, 249), National Venture Capital Association website at www.ncva.org, Gaston (1989, pp. 14-27, 44-78), Freear, Sohl and Wetzel (1994).			

Profile of Bank Angel Investors

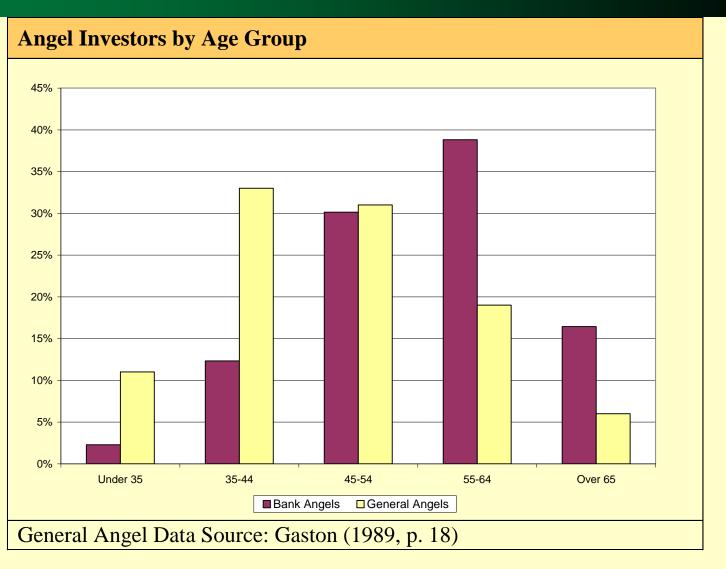
🗹 Study Design General Angel Investor Data **V**Bank Angel Profile – Demographics - Deal Characteristics – Investment Process - Investment Motivations **V**Findings & Implications **V**Future Research



Characteristic	General Angel	Bank Angel			
Demographic:	Demographic:				
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;	Similar; 86% own/have owned a			
	83% have entrepreneurial	company; 80% consider			
	experience themselves entrepreneurs				
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).					



Demographics



14

Demographics

87% of Bank Angels Are Worth >\$ 1 mil

Angel Investors Net Worth		
	Bank	Angels
	Angels	Overall
Under	3%	39%
\$500,000	570	5770
\$500 - \$ 1	10%	24%
million	1070	2-770
\$1 – 3 million	29%	
\$3 – 5 million	23%	37%
\$5 – 10 million	16%	(*55%)
Over \$10	19%	
million		
General Angel Data Source: Gaston		
(1989, p. 19)		

*adjusted for inflation

Deal Characteristics

Bank Angels Invest Much More

Characteristic	General Angel	Bank Ang
Deal Characteristics:		
Investment Size	Average is \$50-75,000; 85% is	Much higher. Average over
	<u>under</u> \$250,000	\$250,000; 41% <u>over</u> \$250,000
Frequency	1 deal every 18-24 months	Not applicable
Geography	Close to home (75-85% within	Data not collected
	50 miles of home)	
Industry	Eclectic; prefer industries they	Not applicable
	know; manufacturing most	
	common	
Company Stage	Most invest during formation or	Data were all new firms (new
	in company less than 2 years old	banks)
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).		

Investment Process

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	Characteristic	General Angel	Bank Angel
	Investment Process:		
	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.
Very	ROI Expectations	Most expect 25-30%	Much lower. Expect 11-12%; 53% expect 10% or less.
ifferent	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-financial	Thrill/fun of helping start an 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).		

ROI & Holding Period Expectations Very Different

Clearly Bank Angel Investments are different. Why?

Motivation data provides insight.

✓ ROI:30% (vs Bank Angel 11%)

- 34% (Hill & Power, 2002, p. 238)
- 30% (Benjamin & Margulis, 2001, p. 23)
- 32% (Freear Sohl & Wetzel, 1995, p. 91)
- 32% (Linde & Prasad, 2000, p. 48)
- 28% (Sullivan & Miller, 1990, p. 302)
- 25% (Gaston, 1989, p. 44)
- 33% for repeat angels (Van Osnabrugge, 1998, p. 36)

✓ Holding Period: 5 years (vs Bank Angel 11 yrs)

- 4.8 years (Freear, Sohl & Wetzel, 1995, p. 92)
- 4 years (Linde & Prasad, 2000)
- 5-6 years (Van Osnabrugge, 1998, p. 38)
- 5-7 years (Hoontrakul, 2001)
- 5.1 years (Gaston, 1989, p. 45)
- 8 year (Benjamin & Margulis, 2001, p. 254)

Investment Motivations

Data was collected on motivation in four areas:

- 1. Return on Investment (ROI)
- 2. Risk
- 3. Other financial benefits
- 4. Non-Financial benefits

Investment Motivations: ROI

- ✓ Average expected ROI of 11% from bank angel investments (vs 30% for general angel)
- ✓ The difference is the investment not the investor:
 - Half of bank angel investors surveyed also do other angel investing in non-banks (which allows robust comparisons between bank angel investments and non-bank angel investments)
 - Expected return by bank angels on non-bank investments is 21%, very similar to general angel studies
- V Lower required return could be due to:
 - Lower perceived risk
 - Other non-ROI financial benefits
 - Non-financial benefits

Investment Motivations: Risk

Bank Angels perceive less risk in bank investment than in other angel investments

- Bank Angel Investments

- On average, respondents rated bank angel investment risk to be equal to S&P 500 mutual fund
- Over half rated it LESS risky than an S&P mutual fund investment

- Non-Bank Angel Investments

- On average bank angels said that their non-bank investments had 1.5-2x the risk of the S&P
- Over 40% said these investments had 2x or more risk than the S&P
- Data appears to indicate that bank angel investors see bank investments as different (less risky) and does not indicate a risk-underestimation problem (see Maula, Autio & Arenius, 2003)

Investment Motivations: Other Non-ROI Financial Benefits

Data showed no evidence of motivation from other financial benefits

 Ex. Insurance agent on bank board would see opportunity to sell insurance to bank or bank clients

 ✓ Of note: bank regulations strictly prohibit self-dealing by bank directors; a strong disincentive.

Investment Motivations: Non-Financial Benefits

- ✓ General angels studies have found non-financial benefits are a significant factor:
 - Freear, Sohl & Wetzel (1995) found that 50% of angels accept lower returns because part of their return is psychic income such as creation of jobs in the community or the satisfaction of helping another entrepreneur succeed.
 - Sullivan (1991) found that for one-third of angel investors return on investment was <u>not</u> their primary motivation

Sullivan & Miller (1990)		
Non-financial benefit	% willing to give- up financial return to obtain benefit	
Socially beneficial product	83%	
Fun to be a part of the company	66%	
Creation of local jobs	65%	
Firm nearby vs. 300 miles away	63%	
Interacting with highly regarded investors	61%	
Company committed to social ideals you support	59%	
Exciting investment	47%	

Linde & Prasad (2000)	
Non-Financial Reasons	Percent
Desire to "Give Back"	60%
Enjoy Involvement	56%
Networking	28%
Other	44%
Stay Up-to-date	24%
Challenge	24%

Investment Motivations: Non-Financial Benefits

- ✓ Bank angel data is consistent with general angel findings on non-financial benefits.
- ✓ Top 5 reasons for bank angel investments:
 - Community need (48%)
 - ROI (36%)
 - Excitement of new venture (33%)
 - Serving on bank board (30%)
 - Fun/enjoyment (21%)
- ✓ Interview respondents similar. Top three reasons:
 - Community need (80%)
 - ROI (80%)
 - Bank director (60%)

Investment Motivations: Non-Financial Benefits

While my study did not test to apply these clusters to bank angel investors, my interpretation of the data is that bank angels have a higher occurrence in the hedonistic and altruistic clusters (see Exhibit 2).

Sullivan & Miller (1996) study segmented angels into three types or clusters

- ✓ Economic Investor: (47% of total)
 - Financial motivations are very important
 - Highest ROI expectations (30% versus 21% for hedonistic)
 - Perceives more risk than other clusters (2-3x)
- ✓ Hedonistic Investor (31% of total)
 - Emphasis on enjoyment aspects of investing (enjoys entrepreneurial process, enjoys fun of interesting investment)
 - Lowest ROI expectations (21% versus 30% economic)
 - More likely to invest with a group
- ✓ Altruistic Investor (22% of total)
 - See value in supporting new business and/or socially beneficial product
 - More patient investors (longest holding period 7 years)

Findings & Implications

- Bank angels are very similar to general angel investors
- Bank angels aren't very different, but bank angel investments are. Less perceived risk and more emphasis on non-financial benefits.
- Solution Solution



Future Research

Test if Sullivan & Miller clusters vary by industry or deal type

Explore risk and return perceptions of angels (risk underestimation hypothesis)

✓ Banking policy implications (test correlations between angel characteristics and bank success/failure)

 Application of franchising theory to new bank start-ups

1: Bank Profile Exhibit Angel

Exhibit 1: Summary of Bank Angel Investor Characteristics		
Characteristic General Angel Bank Angel		
Demographic:		
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
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Deal Characteristics:		
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
Investment Process:	· · · · ·	
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Investment Criteria	Focus on quality of the entrepreneur	Data not collected.
Non-financials	Thrill/fun of helping start an new company significant motivation for most angels	Community service and excitement more important than ROI. Closer to Sullivan's altruistic or hedonistic clusters.
	es: Primary sources are Gaston (1989); F (2002), Sullivan & Miller (1990, 1996).	



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

Sullivan & Miller Cluster Characteristics	Consistency*	Related Bank Angel Survey Results		
*Consistency denotes consistency between bank angel data and Sullivan & Miller clusters.				
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.

Angel Literature

Exhibit 3 P	rimary	Sources of Gene	ral Angel Investor Characteristics
Authors	Date	Sample Size	Comment
Maula, Autio & Arenius	2003	6007 adults in Finland	Excellent theory-testing research using international data; extensive up-to-date literature review;
Hill & Power	2002	50	More anecdotal than statistical
Benjamin & Margulis	2001	n/a	Proprietary, only partial data published; would not provide full tabulation when requested
Amis & Stevenson	2001	50	Excellent survey of angel investor best practices
Van Osnabrugge & Robinson	2000	Mostly literature review, primary data on 70 Angel matching services	Comprehensive review of literature, little or no primary data
Sullivan & Miller	1996	214	Insightful work segmenting angels into three investor types (economic, hedonistic, altruistic).
Duxbury, Haines & Riding	1996	279 (Canada)	Thorough study of psychological attributes of angels
Freear, Sohl and Wetzel	1994 & 1992	184	Compares angels with non-angels
Freear, Sohl and Wetzel	1993	409	Seven year longitudinal survey of members of an investor matching network (1985-1992). Found demographic data consistent with other studies. Found investor behavior relatively constant over time.
Sullivan	1991	210	Found angels who are/were entrepreneurs perceive less downside risk in start-ups than do other angel investors
Sullivan & Miller	1990	214	Interesting study which tests if two aspects of finance theory (risk/return tradeoff and wealth-maximization objective) hold for angels
Freear, Sohl & Wetzel	1990	284	Studied investors in new technology firms
Gaston	1989	435	Extensive profile of angel investor characteristics including breakouts by angel subtypes.
Wetzel	1983	n/a	Considered the first/founding study of angel investors; the stream of angel investor literature begins here.

Exhibit 4 Summary of General Angel Investor Characteristics				
Demographics:	47.50 11			
Age	47-50 years old			
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Business Background	70% own/manage a business; 83% have entrepreneurial			
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