

Angel Investment in the United States— What We Know and Don't Know.**

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****Views expressed here are those of the author, not of the institution he is associated with.**

Definition of An Angel Investor

- Definitional confusion: Informal investors, informal equity investors, angel investors, angel equity investors, etc.
- An angel investor: *a person who provides capital, in the form of debt or equity, from his own funds to a private business owned and operated by someone else who is neither a friend nor a family member.*

**Estimates from the Center for Venture
Research, UNH., "The Angel Investor
Market for the Year..." various years**

Table 1: Angel Investment in the United States, 2001-2007

	Total Values (\$ billion)	Number of deals	AVG investment @ deal (\$1000)	Number of active angels	AVG Investment @ angel ** (\$1000)	AVG Investment @ angel *** (1,000)
	(1)	(2)	(3)	(4)	(5)=(3)/5	(6)=(1)/(4)
2001	30.0	48,000	625.000		125.000	
2002	15.7	36,000	436.111		87.222	
2003	18.1	42,000	430.952	220,000	86.190	82.273
2004	22.5	48,000	468.750	225,000	93.750	100
2005	23.1	49,500	466.667	227,000	93.333	101.762
2006	25.6	51,000	501.961		100.392	
2007	26.0	57,000	456.140		91.228	

** assuming that 5 angels co-invest in a deal. Also, dividing Total value by the number of active angels.

*** assume that all active investors committed investment in the year.

Source: Center for Venture Research, UNH., "The Angel Investor Market for the Year..." various years.

An Alternative Estimate

Scott Shane

**“The importance of Angel Investing in
Financing the Growth of Entrepreneurial
Ventures”**

A report submitted to the Office of Advocacy, U.S. Small Business Administration under Contract Number: SBAHQ-O7-Q-0016, September, 2008.

Table 2: Data Sources Used and the Sample Sizes (from Shane, “Importance of angel...”)

Survey ²	Date	Sample Size	Informal Investor ³	Informal Equity ⁴	External Investor ⁵	External Equity Investor ⁶	Angel Investor ⁷	Angel Equity Investor ⁸
EUSA (Investor)	2004	13,891	492	112	117	64	26	19
EUSA (Deal) ⁹	2004	315	315	129	160	87	33	23
FRSSBF	2003	4,240		114				8
SBO	2002	322,327				4,123		
FRSCF	2004	4,522		67				
KFS	2004	4,930		185		85		
GEM	1998-2003	23,077	1,079		385		71	

Data sources used in this study

1. The U.S portion of the Global Entrepreneurship Monitor (GEM)
2. The Entrepreneurship in the United States Assessment (EUSA)
3. The Kauffman Firm Study (KFS 2004)
4. The 2004 Federal Reserve Survey of Consumer Finances (FRSCF or SCF)
5. The (2003) Federal Reserve Survey of Small Business Finances (FRSSBF or SSBF)
6. The Survey of Business Owners (SBO 2002)

Other sources: The Wisconsin Department of Revenue records on the use of the state's angel tax credit (WATC) in 2005; the Federal Reserve Angel Focus Group Study (FRAFG); the Angel Capital Association (ACA) Surveys of its member groups; the Business Information Tracking Series (BITS) of the U.S. Bureau of the Census; and the Angel Investment Performance Project (AIPP)

Primary findings:

The most significant differences in findings from Shane's report from the CVR estimates are the existence of a large number of very small angel investors and a large number of small "only-debt" angel investors in Shane's report.

- According to the EUSA and the GEM data, the estimated number of people who made an angel investment between 2001 and 2003 is between 331,100 and 629,000 people. (140,000 to 260,000 per year)
- According to estimates based on the EUSA data, between 2001 and 2003, angels invested an estimated \$23 billion per year.
- Estimates based on several sources suggest that the majority of angel investors are unaccredited investors, but that accredited investors provide the majority of dollars invested.
- Estimates based on data from the EUSA and the 2003 FRSSBF suggest that the number of companies that receive angel investments annually is between 50,700 and 57,300.
- According to the ACA, in 2006, the 5,632 accredited angel investors that make up its member groups made 947 investments in 512 companies, providing start-ups with a total of \$228.8 million.

Findings (continued)

- According to estimates from the BITS, 3,608 companies founded in 1996 achieved the \$10 million or more in sales by 2002 that many experts say angels target.
- According to the EUSA data, the typical angel investment made between 2001 and 2003 was \$10,000.
- According to the ACA, in 2006, the average dollar value invested per angel in an angel group deal was \$31,457.
- According to the EUSA data, debt accounted for 40.2 percent of the money angels provided to startups between 2001 and 2003.
- Estimates based on the 2003 FRSSBF and the EUSA data suggest that between 0.17 and 0.2 percent of the companies financed by angels go public, and between 0.8 and 1.3 percent are acquired.
- Estimates of the rate of return net of opportunity cost of high-net-worth accredited angels affiliated with groups and willing to talk about their investments is 19.2 percent, according to data from the AIPP

Findings (continued)

- According to the EUSA data, 25 percent of angel investments made between 2001 and 2003 went into retail businesses, and 12.5 percent went into personal service businesses.
- According to the 2003 FRSSBF, the typical business of any age—the average age was 13.3 years—that received an informal equity investment in the previous year had sales of \$435,000, employment of seven, and profits of \$7,500.
- According to data from the 2002 SBO, only 11 percent of firms that were five years old or younger and had received an external equity investment had a female primary owner; only 3.8 percent had an Hispanic primary owner, and only 1.4 percent had a Black primary owner.
- According to data from the 2002 SBO, over two-thirds of the entrepreneurs whose businesses had received an external equity investment and were less than six years old were between the ages of 35 and 54 years.

Table 3: A comparison

	CVR (2003-2005)	Shane (2001-2003)
Number of investors: (number)	220k-230k	140k-266k (330k to 660k)
Non-accredited investors (in number)		75%
Accredit investors—in number	All (?)	25%
In Investment (\$)	All (?)	75%
Investment (\$) by angel		
Typical investment (median)	N/A	\$10,000
Average investment	\$90,000	\$77,000
Investment per deal (\$)	\$430k-\$480k	\$375k
Annual angel investment (\$)	\$25B	\$21-\$23B

Table 4: Range of values of angel investors/investments from the EUSA samples

Table 4 identifies possible sources of discrepancies--

Concerns about the quality of the survey responses.

- The wide range of the number of co-investors for all debt investments—from zero to 40
- The small amount of investment by the investors—as small as \$600 for equity investment;
- With a median investment of \$10,000, i.e. 50% of investors invested not more than \$10,000 per investment, and with an average investment of \$77,000, a conjecture on the distribution of investment by individual angels is a challenge.

Table 4: Range of values of angel investors/investments
from the EUSA sample

	External Equity Investors	External All Debt Investors	Angel Equity investors	All Angel Investors
Sample Size	87	34	23	33
Number of Co- investors: (low- median –high)	0--2—100	0--2—40	0--2--20	0--2—20
Range of Investment: (Low-Median-High)	\$80-- \$10K- -\$15Mil	\$200--\$5K-- \$250K	\$600--\$10K-- \$500K	\$600--\$10K-- \$500K
Ranges of Net Worth of Investor (Low- Median-High)	Negative-- \$250K- \$500K--\$4 million	Negative-- \$100K-\$250K-- \$4 million	Negative-- \$250K- \$500K--\$4 million	Negative-- \$250K- \$500K--\$4 million

Recommendations for Data Collection

One of the major problems with understanding angel investment activity has been a paucity of data from large, representative samples of angel investors. This lack of data has led researchers to either draw inference from non-representative convenience samples or small representative samples.

- A large representative sample of angel investors could be created by dramatically increasing the scale of data collection for the EUSA. By increasing the size of the EUSA ten-fold, data could be collected from between 200 and 300 business angels, a sample size large enough to draw inference with confidence.

Recommendations for Data Collection (continued)

- To get a better understanding of subsets of angel investors, particularly accredited angels, would require new research designs. For instance, the creation of an adequate sample for the examination of accredited angel investors—those high net worth and high income individuals to be oversampled (similar to the approach adopted by SCF). Otherwise, the sample size necessary to obtain data from a representative sample several hundred