



## Follow the Money: Venture Capital Does Not Foster Innovation

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Venture capital is a class of long-term private equity funding that emerged after World War II and has become a global financial force, with tens of billions of dollars under management, for funding the commercialization of a wide variety of innovative products and services that we take for granted today. Roughly one-third of the total market value of NASDAQ is in computer and communication stocks; many of these companies, such as Google, Intel, Oracle, PeopleSoft, BEA Systems, Symantec, Adobe, eBay, Amazon.com and Cisco were venture capital-funded.

Despite this, we claim that the venture capital industry as it exists today does **not** foster innovation! This is based on our review of the numbers:

As a starting point, we believe that for some time, there has been limited VC funding for significant innovation. We coauthored for *IEEE Spectrum* (<http://www.spectrum.ieee.org/apr05/1300>) in April 2005 an article where we reviewed 1,303 electronic high tech IPOs from 1993 to 2002 and rank-ordered the level of technology innovation on a scale from 1-5, with 1 being a significant disruptive technology. Only **3%** of all IPOs met this criterion. **The great majority of IPOs did not involve profoundly new technologies.**

Despite the fact that most startups in that 'golden age' of VC funding were not that innovative, the market rewarded VCs willing to fund startups with disproportionately high returns – making it at least **possible** to fund innovation. As illustrated in Exhibit 1 prepared by Thomson Financial with the National Venture Capital Association, over a 10-20 year time horizon (e.g., investments dating back to 1987-1997) early/seed stage VC funds outperformed balanced and later stage funds by 1.5-4.0 times, and public equities by even more. **So, there was a reward for investing in new companies with new ideas.**

Despite this, the proportion of VC funding for new startups has been declining steadily since 1995, and now is no greater in absolute terms than the levels seen in 1995 (Exhibit 2). In addition, the most recent 1-3-5 year VC investment returns indicate that early stage funds since 2002 have been lagging balanced and late stage funds by a substantial margin (Exhibit 1)

What's going on? For one thing, having experienced lots of good startups dying during the high tech nuclear winter of 2002-2005, the private equity market has become extremely risk-averse. Valuations for Series B/C/D rounds no longer sell at step-ups. They frequently sell at flat levels or even step-downs. Series A investors who don't invest their pro capita shares in the later rounds typically find that their investments are washed out by converting to common. As a result, even VCs willing to invest in Series A rounds must reserve most of their capital for later rounds. In other words, in today's environment, one cannot be an early stage fund. To survive, you must be balanced.



Another factor is the sheer size of A-list VC funds and the need to find investment homes for billions of dollars of committed capital; we are told that 50 or so of the 700 odd VC funds return half the the total returns of all VC funds. It's hard to do this investing \$2M-5M in Series A rounds; but a lot easier to invest \$20M-\$50M in later rounds. So the very success of some of the A list VCs in raising capital inexorably pushes them into looking more like LBO funds than true VCs.

Net-net, we're not that sanguine about VCs as a robust source of innovation. Even in the good old days, there was less VC-funded innovation than one might believe, and now the cash engine has moved to late stage funding. What is the lesson for entrepreneurs with good ideas? They will need to figure out alternative ways to make it to the expansion phase, when capital becomes broadly available.

Exhibit 1

<b>Thomson Financials' US Private Equity Performance Index (PEPI)</b>					
<b>Investment Horizon Performance through 9/30/2007 (Annual Percentage)</b>					
	<b>1 Yr</b>	<b>3 Yr</b>	<b>5 Yr</b>	<b>10 Yr</b>	<b>20 Yr</b>
Early/Seed	23.6%	6.8%	3.1%	34.5%	20.8%
Balanced	38.0%	14.4%	9.9%	15.1%	14.3%
Later	41.4%	10.5%	8.4%	8.3%	13.8%
All	32.3 %	10.4%	6.7%	17.9%	16.4%
NASDAQ	14.2%	12.2%	17.9%	4.8%	9.4%
S&P 500	10.8%	10.7%	13.1%	4.9%	8.1%
Ratio: Early/Balanced	0.62	0.47	0.31	2.28	1.45
Ratio: Early/Later	0.57	0.65	0.37	4.16	1.51
Ratio: Early/NASDAQ	1.66	0.56	0.17	7.19	2.21
Ratio: Early/S&P	2.19	0.64	0.24	7.04	2.57

Exhibit 2

<b>Thomson Money Tree Survey</b>						
	<b>VC Investment 1995 \$B</b>		<b>VC Investment 1997 \$B</b>		<b>VC Investment 2007 \$B</b>	
	<b>1995 \$B</b>	<b>% of Total</b>	<b>1997 \$B</b>	<b>% of Total</b>	<b>2007 \$B</b>	<b>% of Total</b>
Startup/Seed	1.30	16.2%	1.35	9.1%	1.15	3.9%
Early	1.77	22.0%	3.57	24.0%	5.19	17.6%
Expansion	3.71	46.2%	7.71	51.8%	10.85	36.9%
Later Stage	1.26	15.6%	2.25	15.1%	12.22	41.6%
<b>Total VC</b>	<b>8.03</b>	<b>100.0%</b>	<b>14.88</b>	<b>100.0%</b>	<b>29.41</b>	<b>100.0%</b>

# Startup/Seed

