Trends in Venture Capital

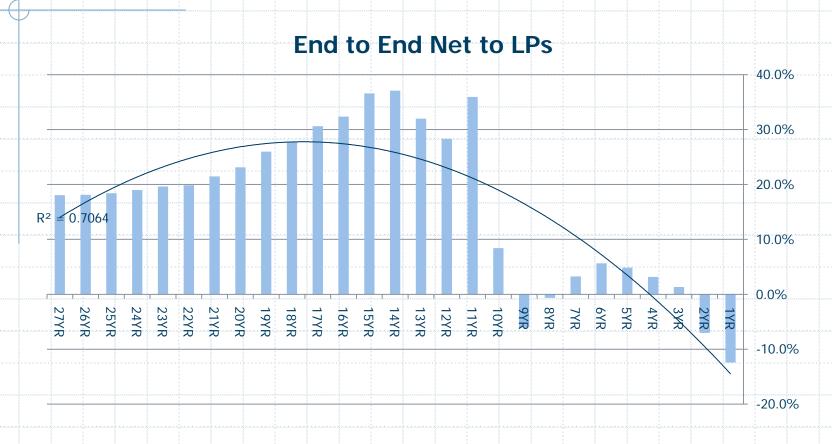
Presentation to the Federal Reserve Bank of Cleveland Conference on Venture Capital May 14, 2010

Scott Shane
Case Western Reserve University
Email: Scott.shane@case.edu
Phone: (216) 368-5538

The trends

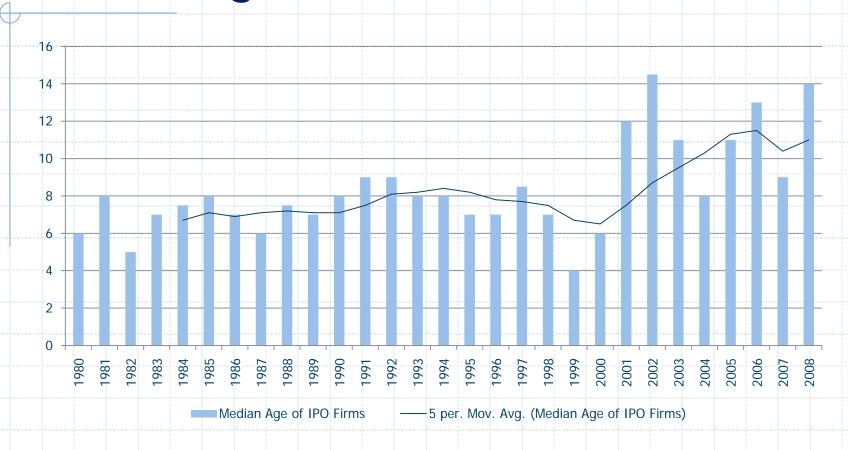
- Returns have been poor over the past decade
- The industry has begun to shrink
- Investment activity has plateaued
- VC funds are slowly reverting to their earlier form

LP's haven't been making money



Source: Created from data collected by Cambridge Associates, LLC

Portfolio company age at IPO is increasing

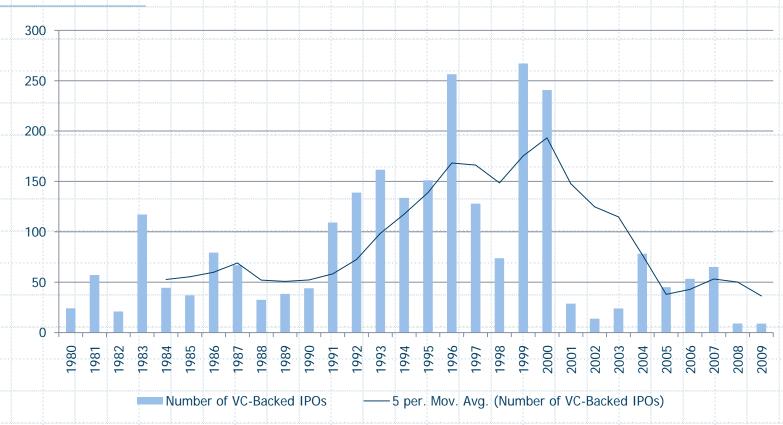


Source: Created from data collected by Professor Jay Ritter, University of Florida

The IPO market has shrunk

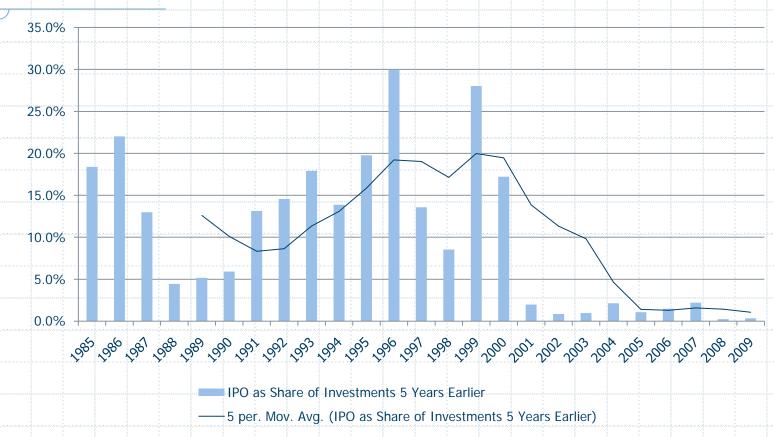
- VC-backed IPOs have been scarce since 2000
- IPOs as a percentage of companies financed five years earlier fell to a paltry 0.3 percent in 2009 from 25 percent in the 1990s
- In 2008 and 2009, the ratio of VC-backed M&As to IPOs was 47.5, a far cry from 2.0 for the 1992 to 1999 period.
- The real dollar value of the average IPO deal dropped from \$90.9 million in 2007 to \$58 million in 2009
- But the VC-backed share of IPOs was essentially the same from 2001-2009 as it was from 1990-1998 (36% versus 34%)

VC-Backed IPOs down substantially since 2000



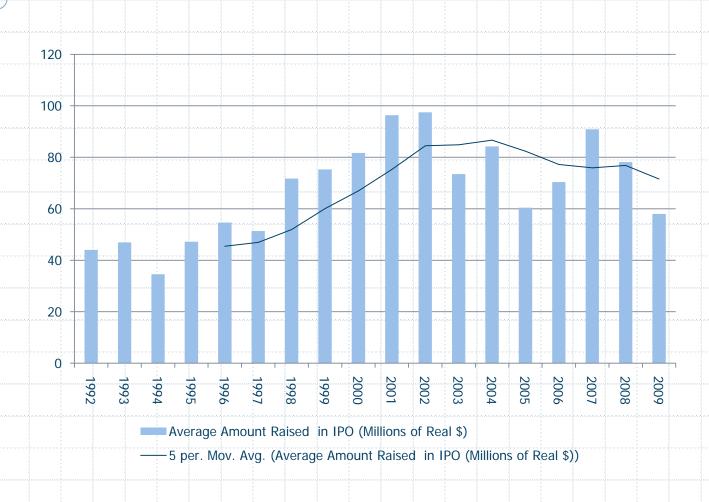
Source: Created from data collected by Professor Jay Ritter, University of Florida

IPOs as percent of VC investments five years prior have fallen more



Source: Created from data collected by the National Venture Capital Association (NVCA)

Value of companies at IPO is declining

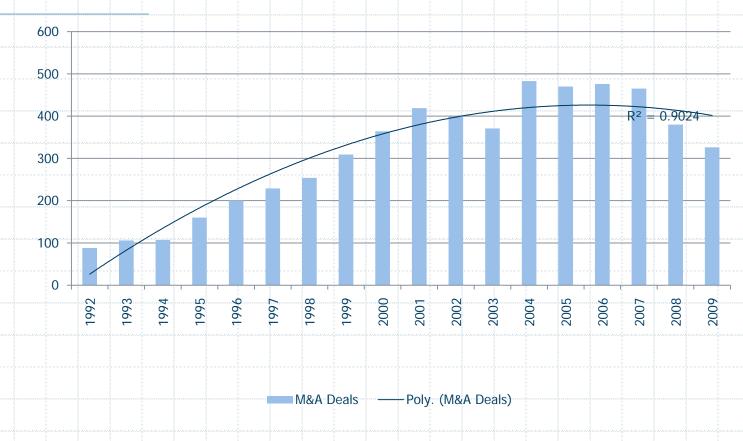


Source: Created from data from Dow Jones Venture Source

VC-backed M&A market is stagnant

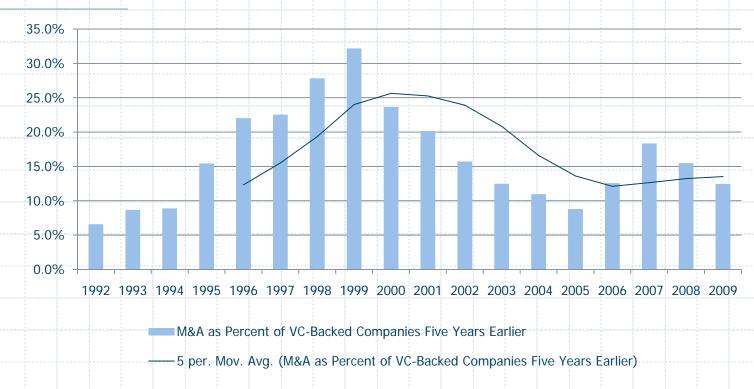
- In 2009, VC-backed M&As were 11 percent of companies financed five years earlier, down from 30 percent in the 1990s
- The average real dollar amount of money raised per VC-backed M&A deal dropped from \$114.6 million in 2007 to \$43.3 million in 2009

Exits through M&A began to decline in the mid-2000s



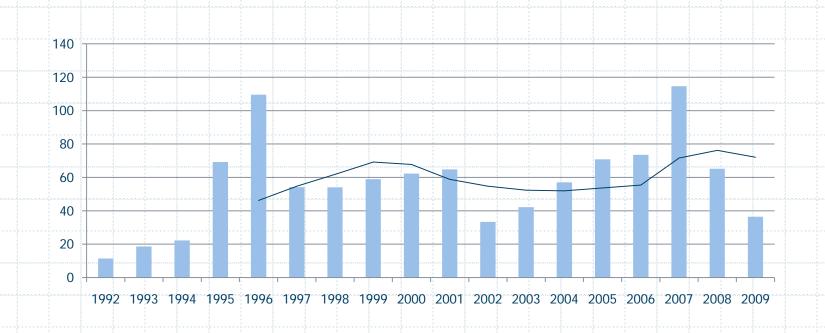
Source: Created from data in Dow Jones Venture Source

Decline in M&As as percent of investments five years prior



Source: Created from data collected by the NVCA and Dow Jones Venture Source

Value of companies at M&A hit by financial crisis



Average Amount Raised in M&A (Millions of Real \$)

5 per. Mov. Avg. (Average Amount Raised in M&A (Millions of Real \$))

Source: Created from data from Dow Jones Venture Source

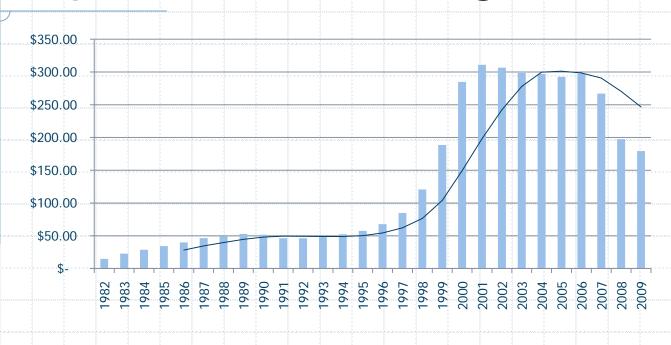
Investment outcomes are affecting the industry

- Low LP returns from venture capital investments leading them to reallocate capital away from VCs
- As poor VC returns have hit fundraising, capital under management has declined
- VCs have been exiting the industry
- Number of companies financed and dollars invested are stagnating

Numbers are back to mid-1990s levels

- Number of venture capital funds was down to 1,188 in 2009, the lowest number since 1999
- Only 127 funds were raising money, the lowest level since 1993
- Capital under management fell to \$179 billion in 2009, the lowest level in real dollar terms since 1998
- VCs invested \$18 billion in start-ups, the smallest amount in real terms since 1996
- VCs made 2,802 deals, investing in 2,372 companies, also the lowest number since 1996
- The 728 companies that received first-time and the \$3.3 billion in first-time financing were the lowest since 1994

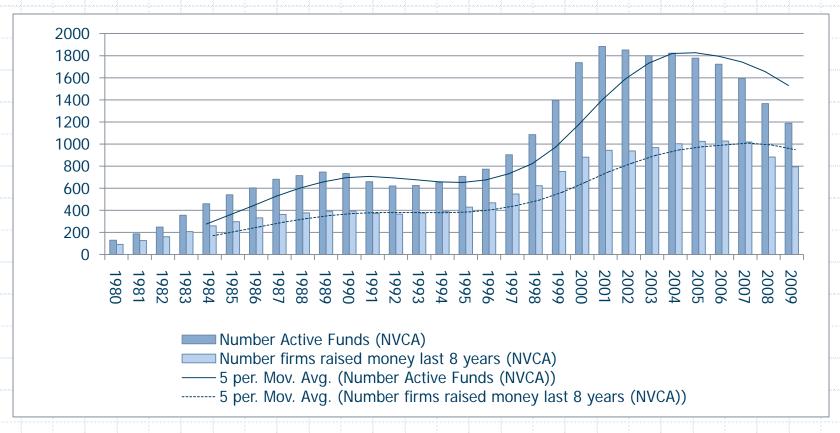
Capital under management



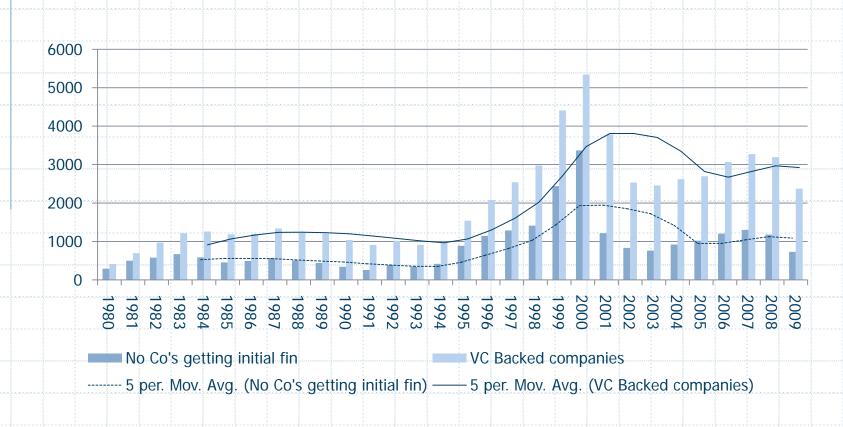
Capital under management in billions of real dollars

5 per. Mov. Avg. (Capital under management in billions of real dollars)

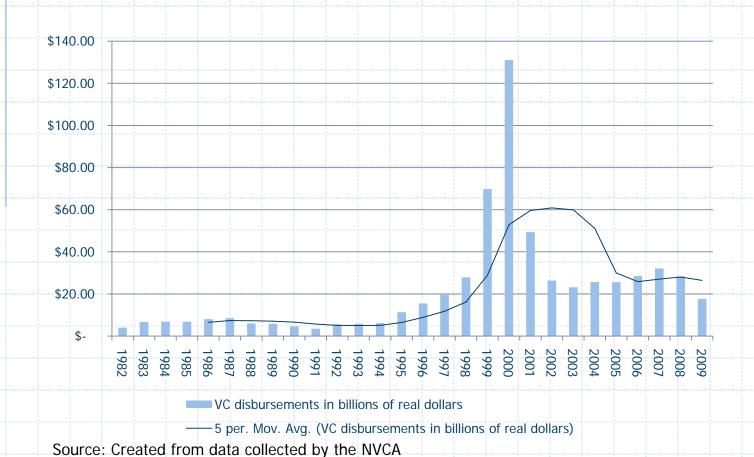
Number of VC Funds



Number of companies being financed by venture capital



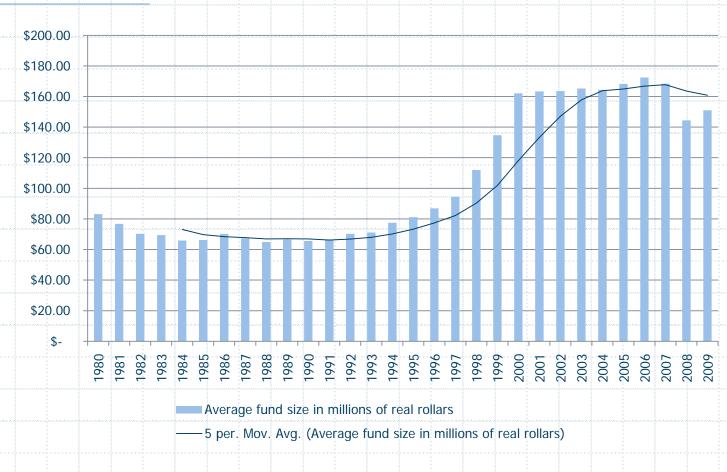
VC disbursements



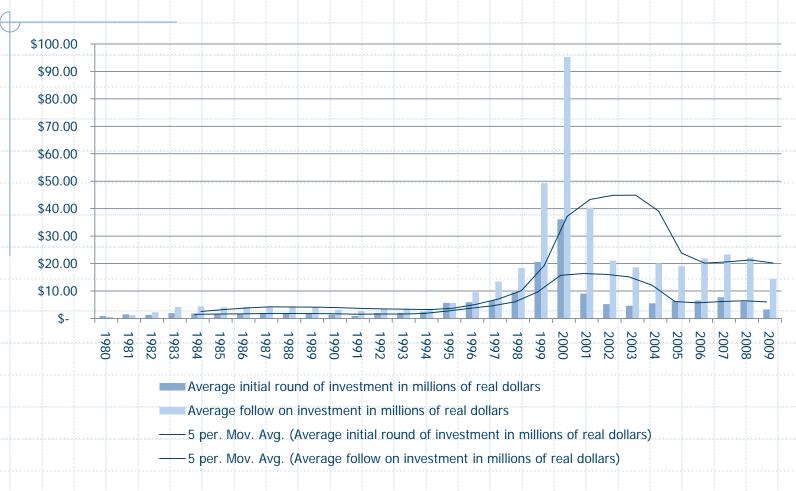
VC funds are changing

- Average fund size no longer growing
- Size of investment rounds remaining stable
- Investments starting to move back to earlier stages?
- Corporate venture capital has pulled back to historical levels

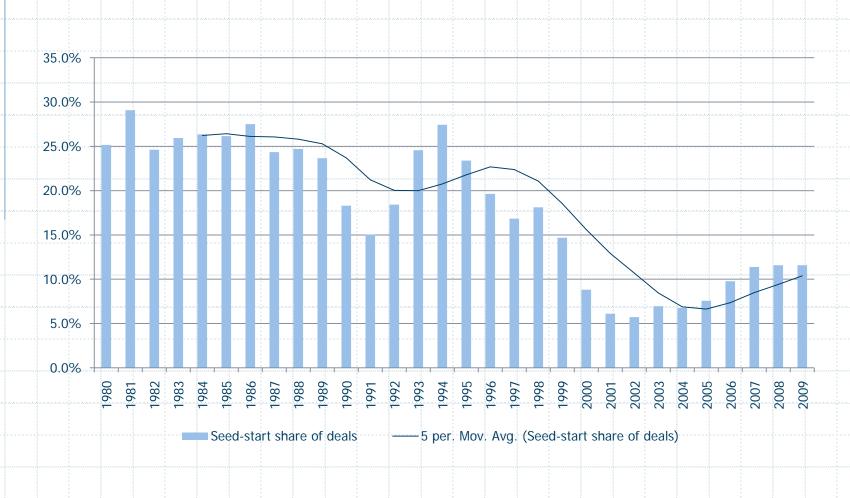
Average fund size



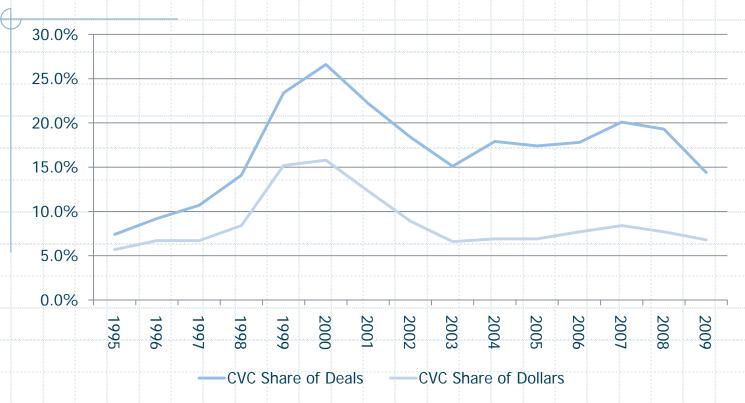
Size of initial and follow on rounds



Movement back to seed and start-up stage deals?



Corporate Venture Capital Back to Historical Levels

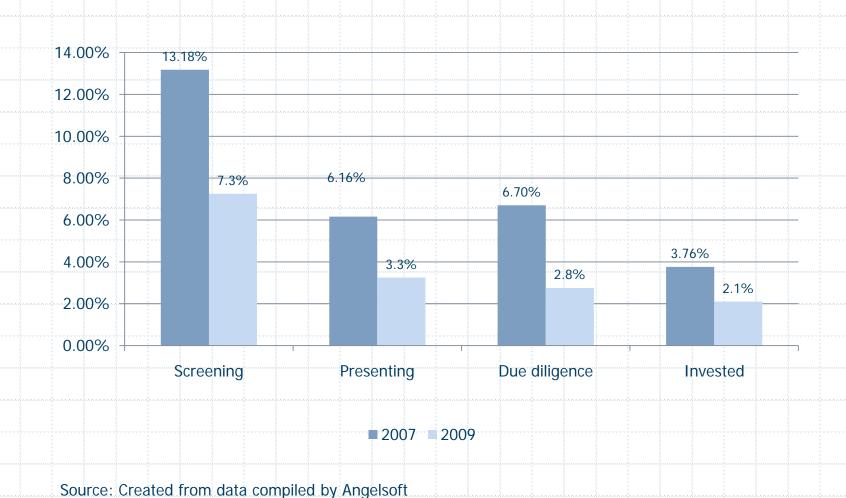


Source: Created from data collected by the Pricewaterhouse Coopers MoneyTree Report and Thomson Reuters

The problem: No good substitute for venture capital

- Venture capital is important for building high growth companies
 - VC backed 150X more likely than average start-up to create jobs
 - VC-backed account for 10% of sales and private employment, but well less than 1 percent of companies
- No good substitute for venture capital
 - Not angel groups: In 2008, average VC investment was \$7.4 million, but average angel group investment was only \$275,000, and angel groups made only 1/4 the investments of VCs
 - Not individual angels: Average individual angel investment is only \$77,000, half of individual angel capital is provided as debt, and more than 2/3 of individual angels are unaccredited
 - Not debt providers: Providing appropriate rates of return using debt would violate usury laws.

And angel groups are getting pickier



What happens if VC market doesn't come back?

- Fewer firms that need substantial equity investments to grow rapidly will get financing
- That could mean fewer successful companies like Google and Genentech that provide innovative products that are valuable for all of us

The \$64,000 questions

- Are the trends in the venture capital industry a result of the financial crisis, structural changes, or just regression to the mean?
- What, if anything, can be done to get the industry back to its form in the golden years of the 1990s?