

Investing in Life Science Innovation

RIVERVEST®

“Financial Downturn and Impact on Biosciences Development”

UM System Life Sciences Summit

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RiverVest Venture Partners

Introduction

- ❑ Will address three questions
 - How has financial downturn affected the VC industry?
 - How have VCs responded?
 - What are the implications for biosciences development?

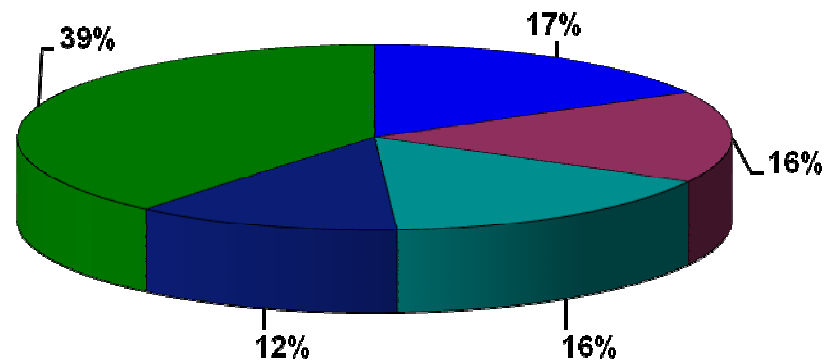
- ❑ First:
 - Brief description of VC investing model
 - Background on RiverVest

Venture Capital Investing

- ❑ Raise commitments from institutional and high-net-worth individual investors
 - Endowments
 - Foundations
 - Pension Funds
- ❑ Invest these funds in privately-held, technology-based companies participating in high-growth industries
 - IT/software
 - Life sciences
 - Cleantech
- ❑ Support entrepreneurs leading these companies in building businesses that can be sold to strategic investors or taken public through an IPO within specified timeframe

Heaviest venture-funded industries in the U.S. today are software, energy, biotech and medical devices

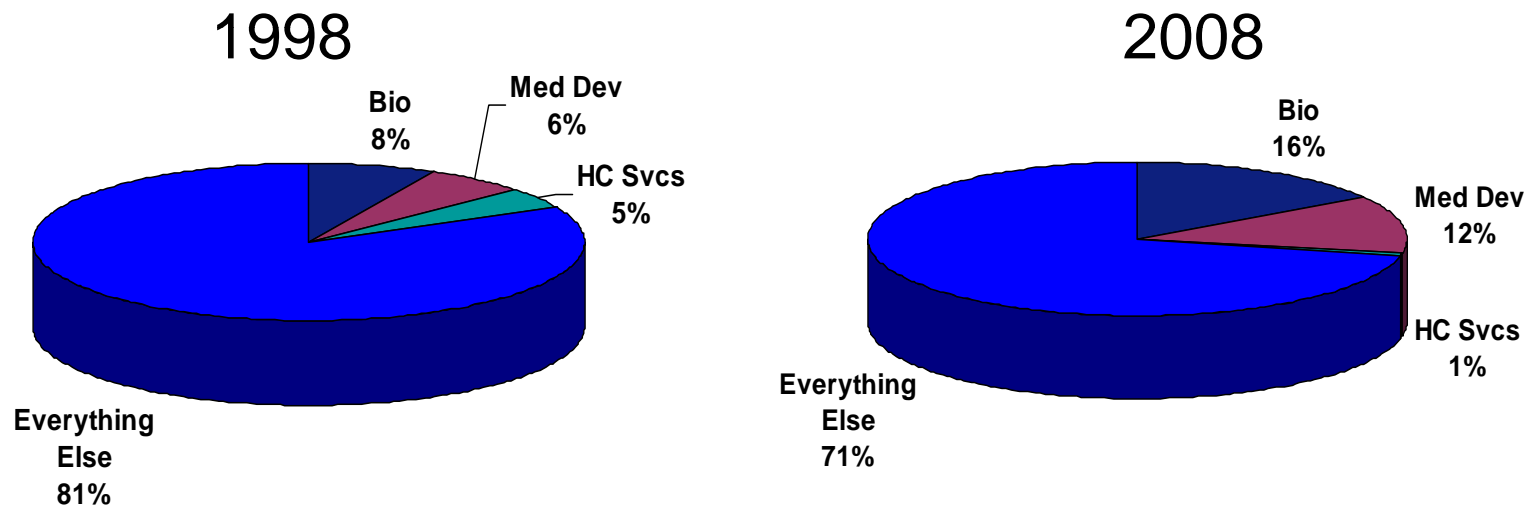
2008



■ Software ■ Energy/Ind ■ Biotech ■ Med Dev ■ Other

Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report

Life sciences share of total has grown by 50%
in last decade from 20 to 30%

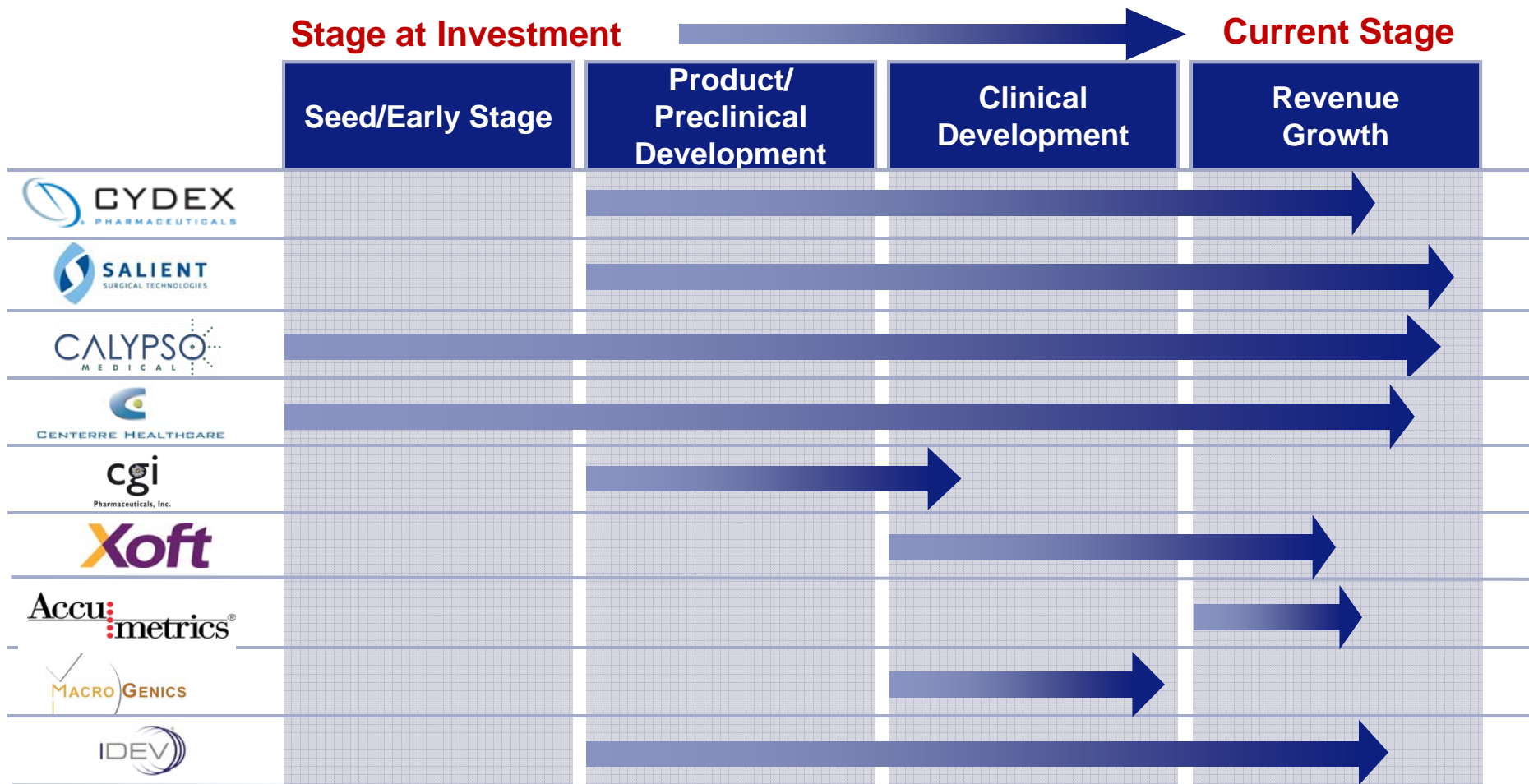


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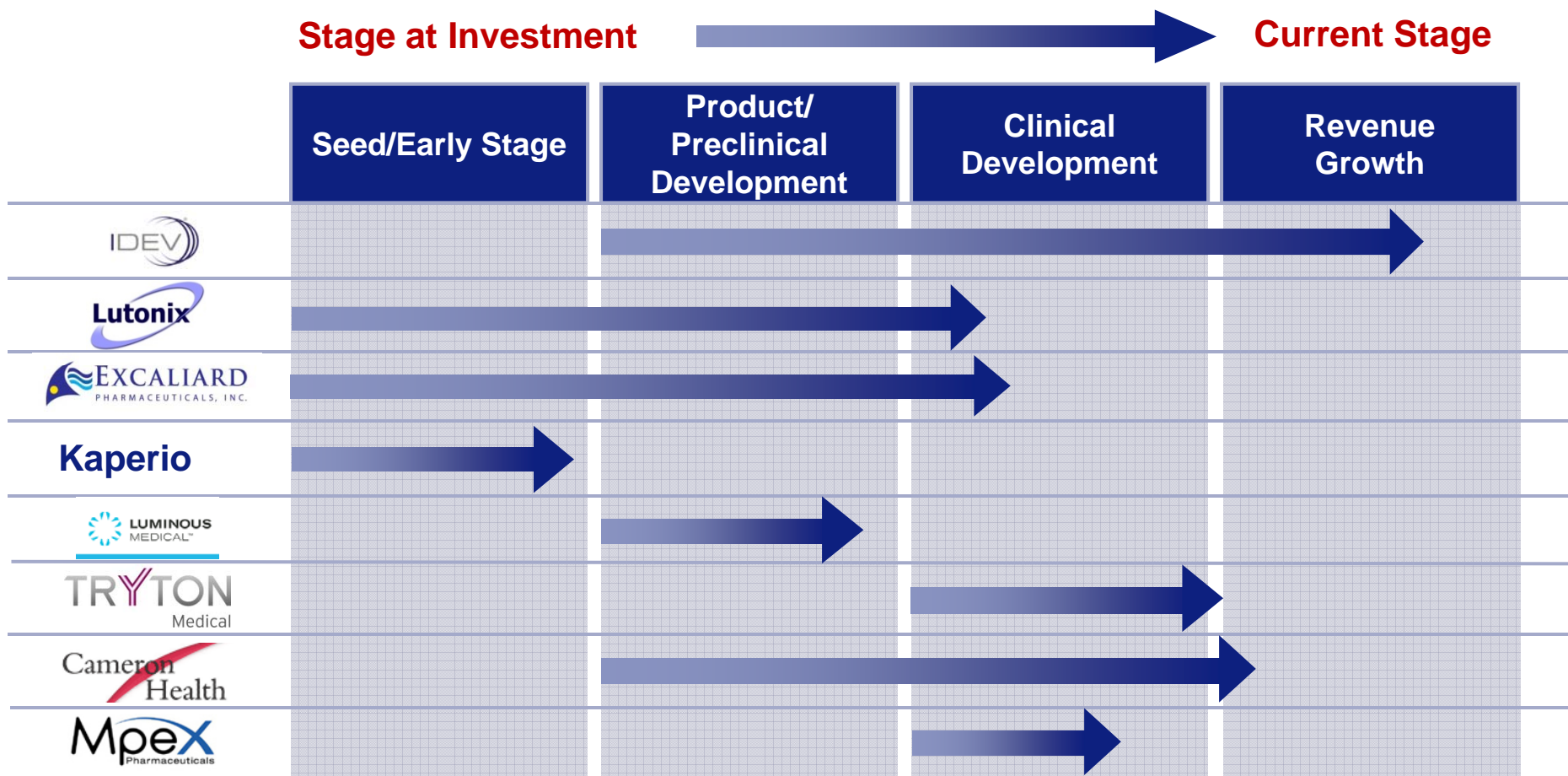
RiverVest Venture Partners

- Focus on life science investing (medical device, biopharma)
- Team with extensive research, clinical, operational, and investment expertise committed to helping entrepreneurs build successful companies
- Two funds totaling \$165 million in capital; investments in more than 20 portfolio companies
- Flexible with respect to stage; currently focused on later-stage opportunities, but have founded six companies in the past
- Located in St. Louis, MO

Fund I Unrealized Investments



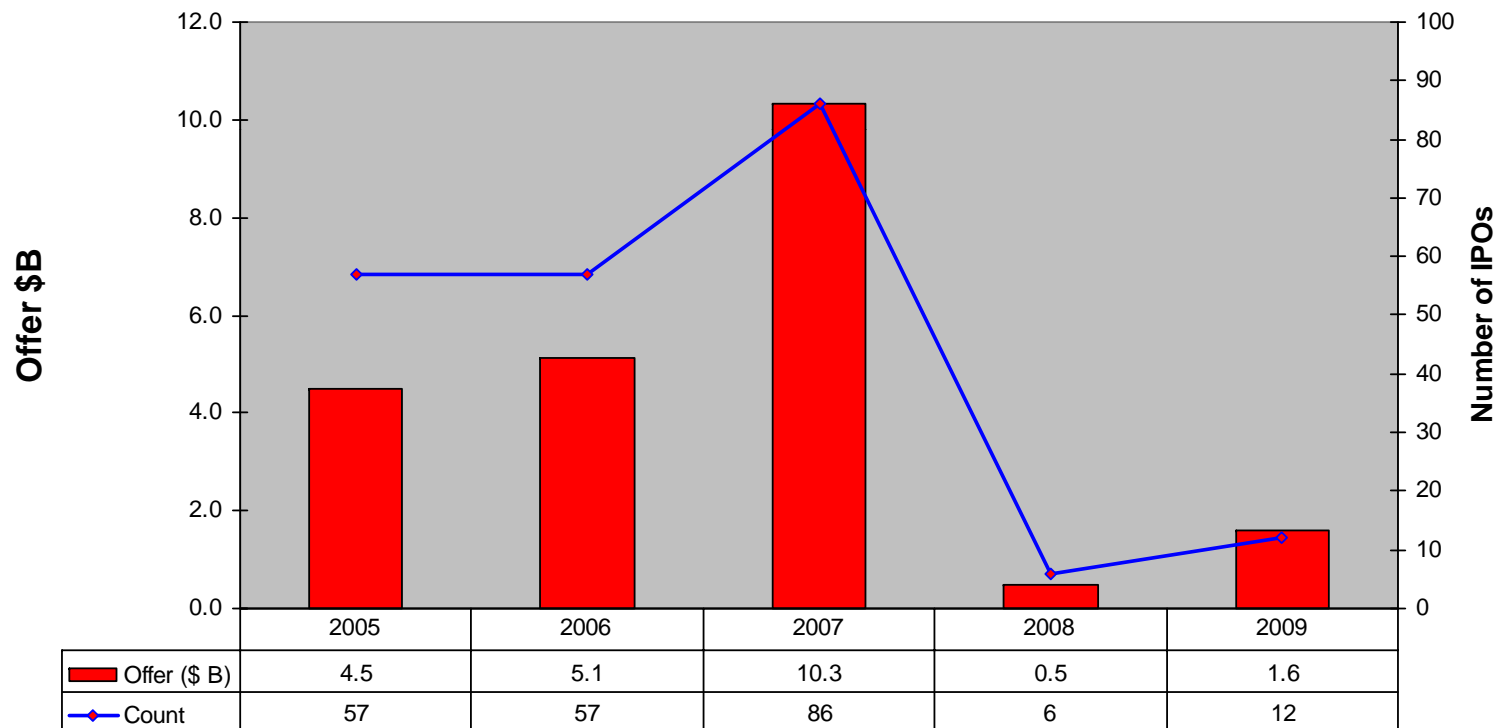
Fund II Unrealized Investments



I. How has financial downturn affected VC industry?

- ❑ Slowdown in exit activity
 - IPOs of VC-backed companies almost non-existent

IPO levels in numbers and dollars were down dramatically in 2008 and 2009

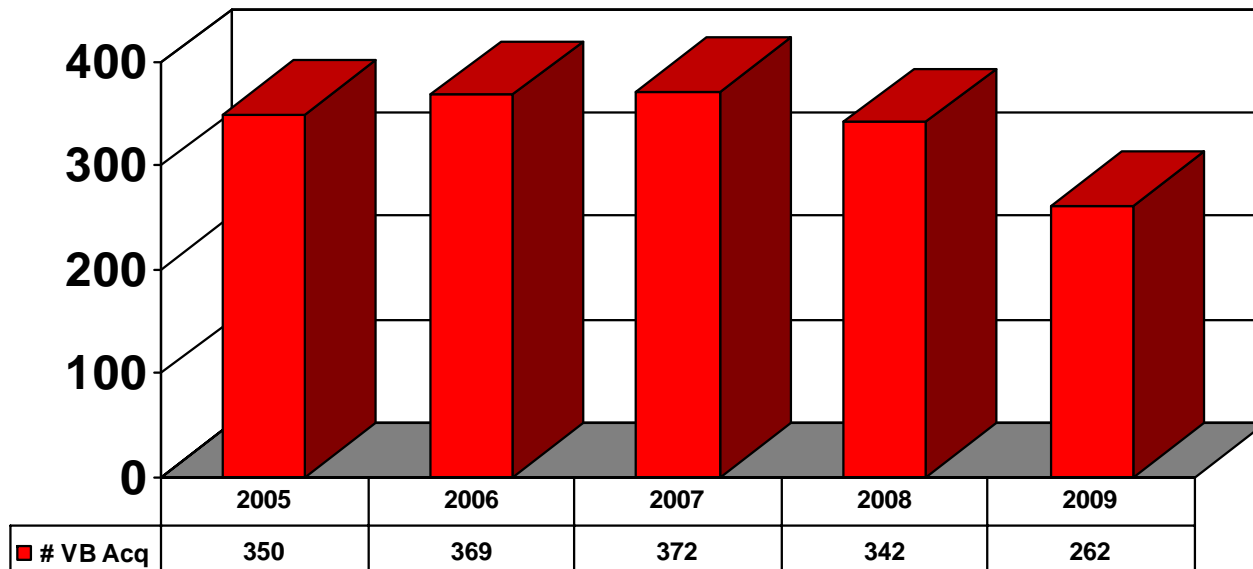


Source: Thomson Reuters/National Venture Capital Association

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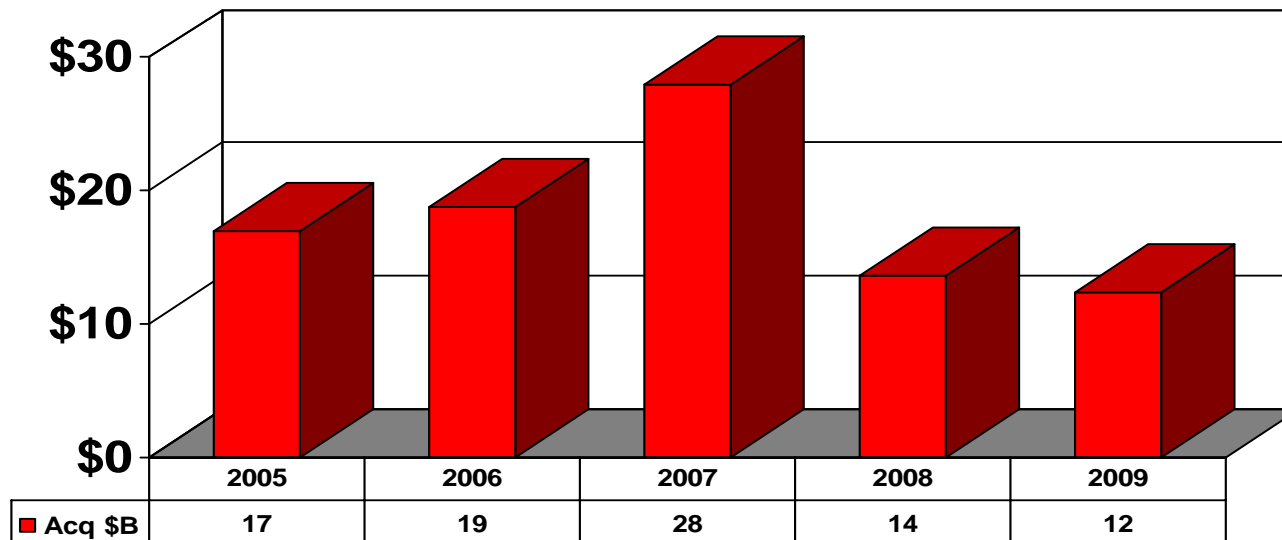
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 - IPOs of VC-backed companies almost non-existent
 - Strategic acquisition activity also down, as are total proceeds

Number of acquisitions of venture-backed companies down 30%
in 2009 vs 2007



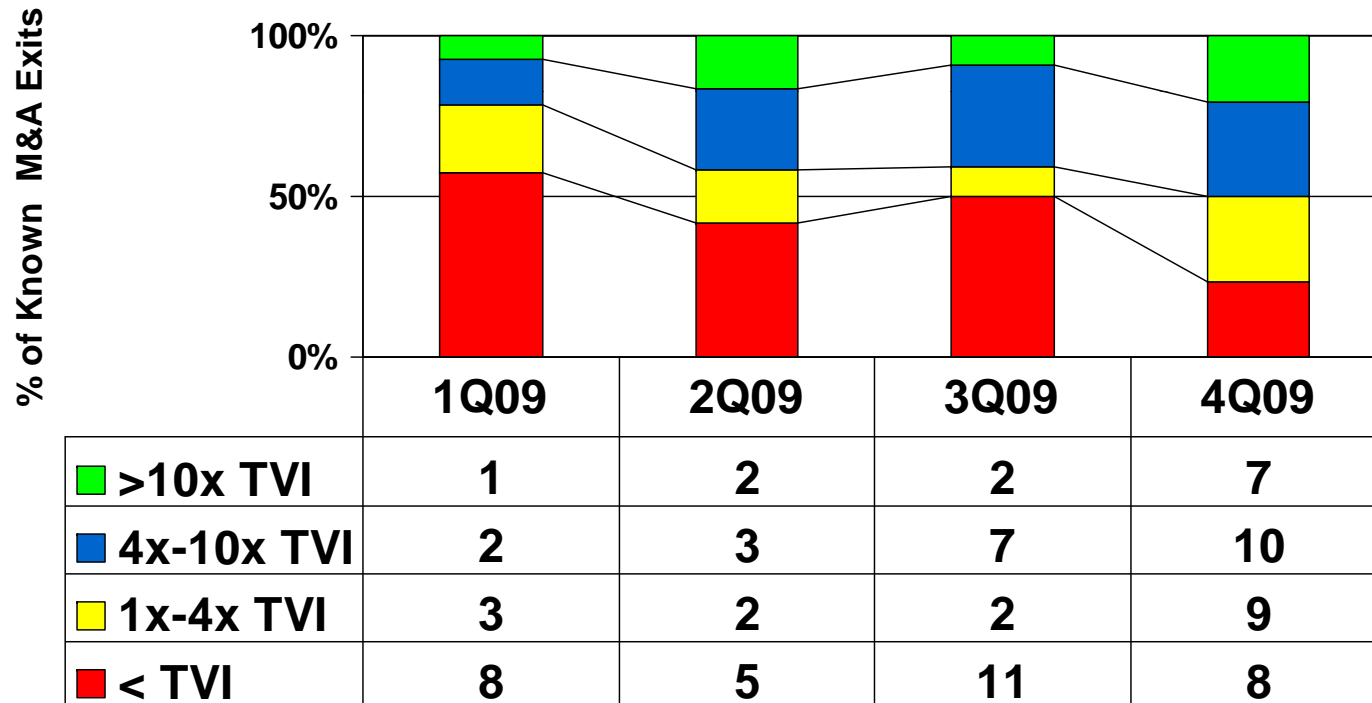
Source: Thomson Reuters/National Venture Capital Association

Aggregate acquisition proceeds down almost 60% 2009 vs 2007



Source: Thomson Reuters/National Venture Capital Association

Based on limited sample, acquisition proceeds in 2009 were less than dollars invested in 40% of transactions



Source: Thomson Reuters/National Venture Capital Association

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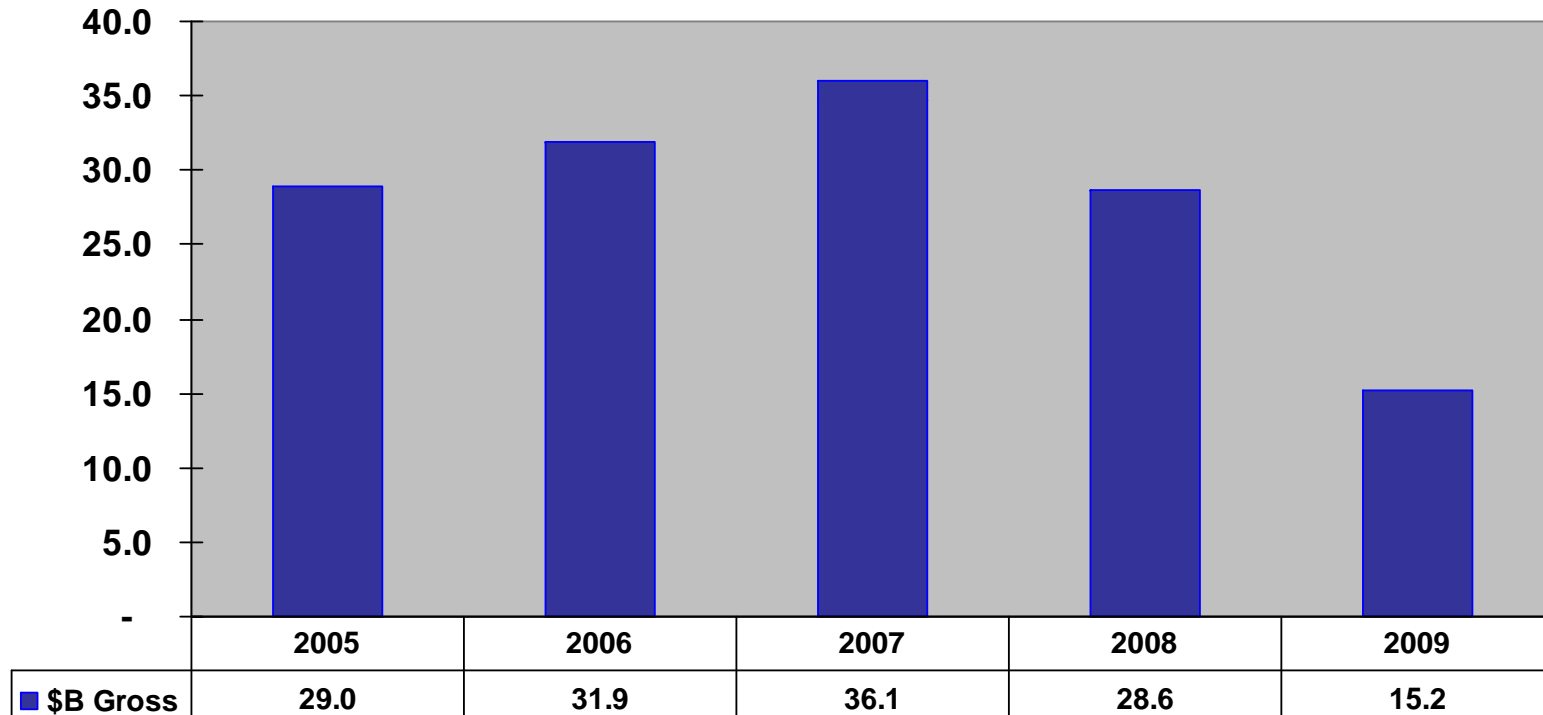
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- ❑ VC fundraising down dramatically in 2009
 - Numerator effect associated with fewer exits/distributions

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 - Denominator effect associated with decline in value of publicly-traded securities from pre-downturn highs

VC fundraising down somewhat in 2008, but almost 40% in 2009

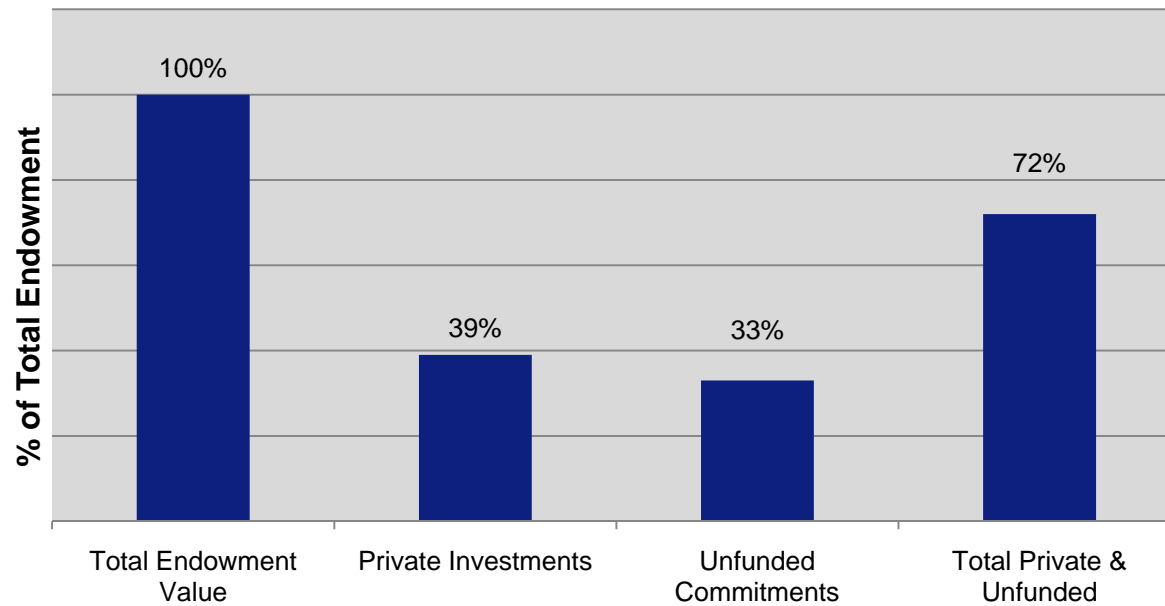


Source: Thomson Reuters/NVCA

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 - Premium on liquidity in an over-leveraged economy

Private investments of five major university endowments 6/30/2008



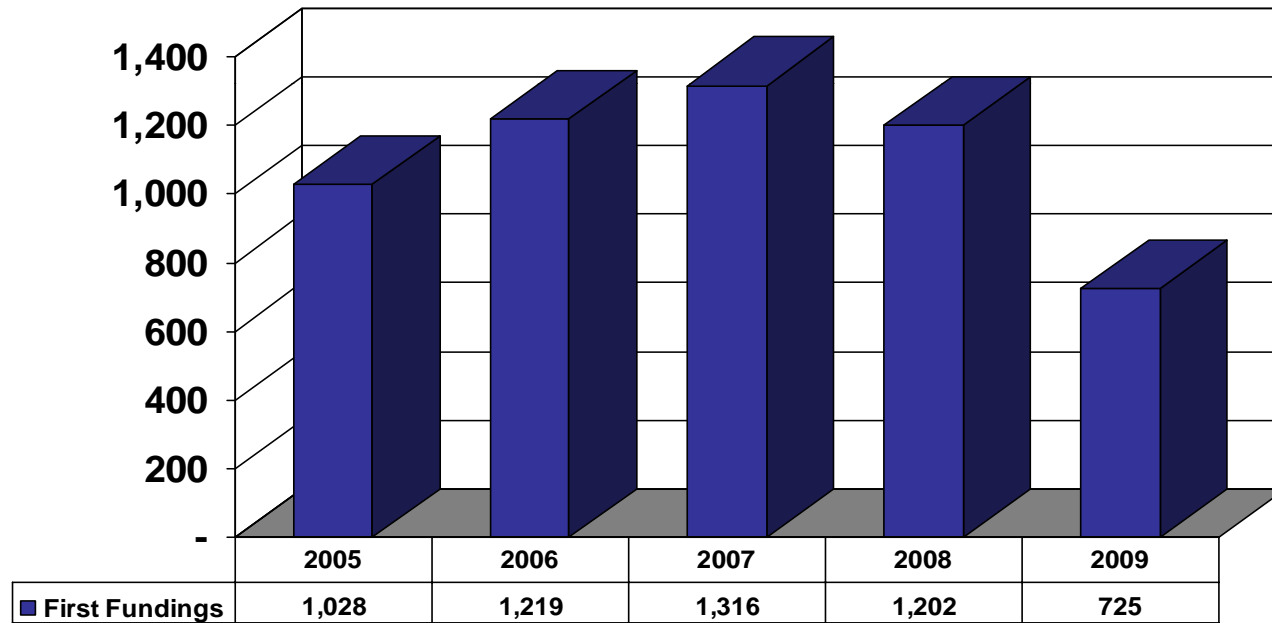
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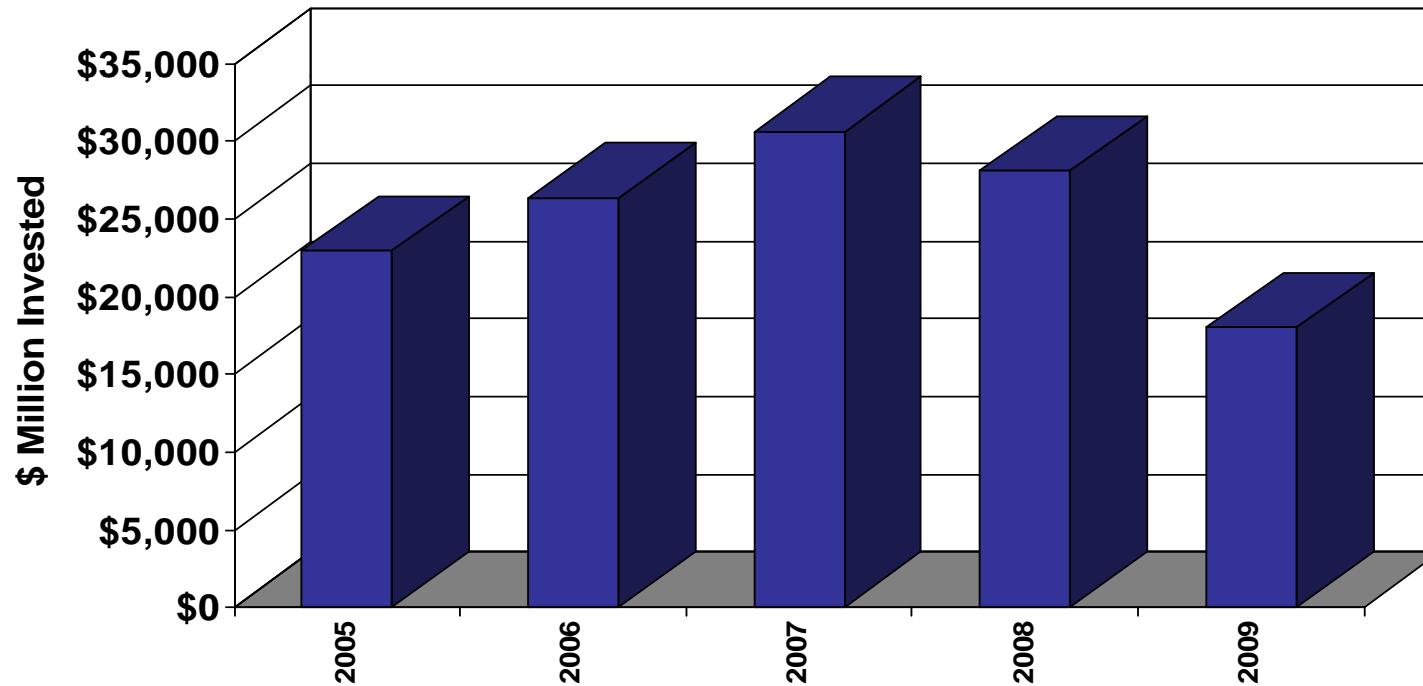
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 - Slowed down pace/reduced size of investments in new portfolio companies

Despite recession Q4, VCs funded 1,202 new companies in 2008, but number funded down 40% in 2009



Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report

VC dollar investment was down only 8% in 2008,
but down another 35% in 2009



Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report

II. How have VCs responded?

- ❑ Cut back on investment activity
 - Culled portfolios
 - Marshaled reserves to support existing portfolio companies
 - Slowed down pace/reduced size of investments in new portfolio companies
- ❑ Focus on later-stage opportunities
 - Need to provide support to companies that haven't exited
 - Attractive valuations
 - Prospect of earlier future exits

Share of later stage deals has tripled in last year

Metric	1995-1998	Most recent 4 qtrs*
# Venture Deals/Year	2,802	2,814
# Later Stage Deals/Year	311	848
Later as % of Deals	11.1%	30.1%

* *Through 3Q 2009*

Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report

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- ❑ Closed up shop
 - Number of VC firms falling
 - Capital under management declining

The number of US VC firms and managed capital have declined by 22% and 35%, respectively, from 2006 to 2009

At Year End	# Venture Firms	Capital Under Management
1970	28	\$1B
1980	91	\$4B
1990	390	\$29B
2000	882	\$225B
2006	1022	\$277B
2009	794	\$179B

Source: 2008 NVCA Yearbook, prepared by Thomson Reuters, figure 1.04

III. What are implications for bioscience development?

- Growing funding gap between founding and becoming venture-ready
- Heightened capital risk for private, venture-backed companies, particularly those at an early-stage
- Need to access alternative funding sources

What alternative sources are there?

- R01 grants
- Relatively new NIH Clinical and Translational Science Awards (“CTSAs”)
- University funds, like WUSTL’s Bear Cub Fund
- Other community-based funding, like that from BioGenerator in St. Louis

What alternative sources are there? (cont.)

- Corporate research collaborations
- SBIR/STTR grants after startup company founded
- Angel funding
 - St. Louis Arch Angels
 - Mid-America Angels (Kansas City)
 - Centennial Angels (Columbia)

IV. Conclusions

- ❑ Recent financial downturn created short-term dislocations in the capital markets and exposed longer-term issues, like inadequate attention to liquidity
- ❑ Focus on liquidity has had a particularly adverse impact on private investments
- ❑ Accordingly, access to venture capital for early-stage technologies is even more difficult than it had been
- ❑ This has encouraged doing more development under the university umbrella, a trend that was already underway

IV. Conclusions (cont.)

- ❑ It is also encouraging established businesses to consider expenditures on earlier-stage technologies, often in collaboration with universities, to assure a future pipeline of opportunities
- ❑ Could imply more licensing deals with established businesses and fewer startups, at least for a time
- ❑ Innovative technologies will remain a key factor in assuring the future competitiveness and growth of the U.S.; those with merit will ultimately be funded, but the process won't be easy



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Questions?