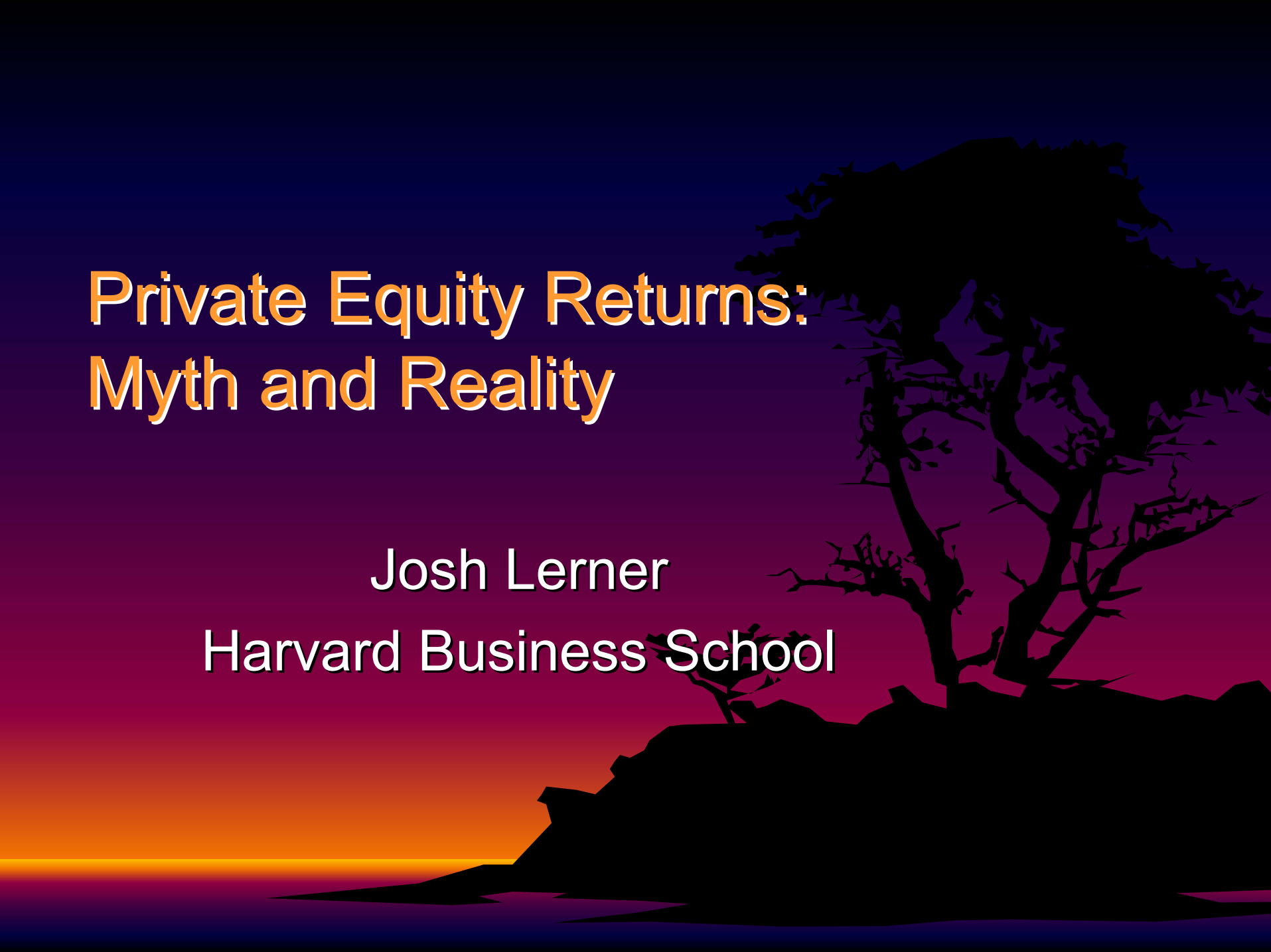


Private Equity Returns: Myth and Reality

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The paradox

- Private equity is among our most sophisticated industries.
 - Venture capitalists fund complex high-tech start-ups.
 - Buyout specialists engineer complex restructurings.
 - Smart, creative, and articulate people.



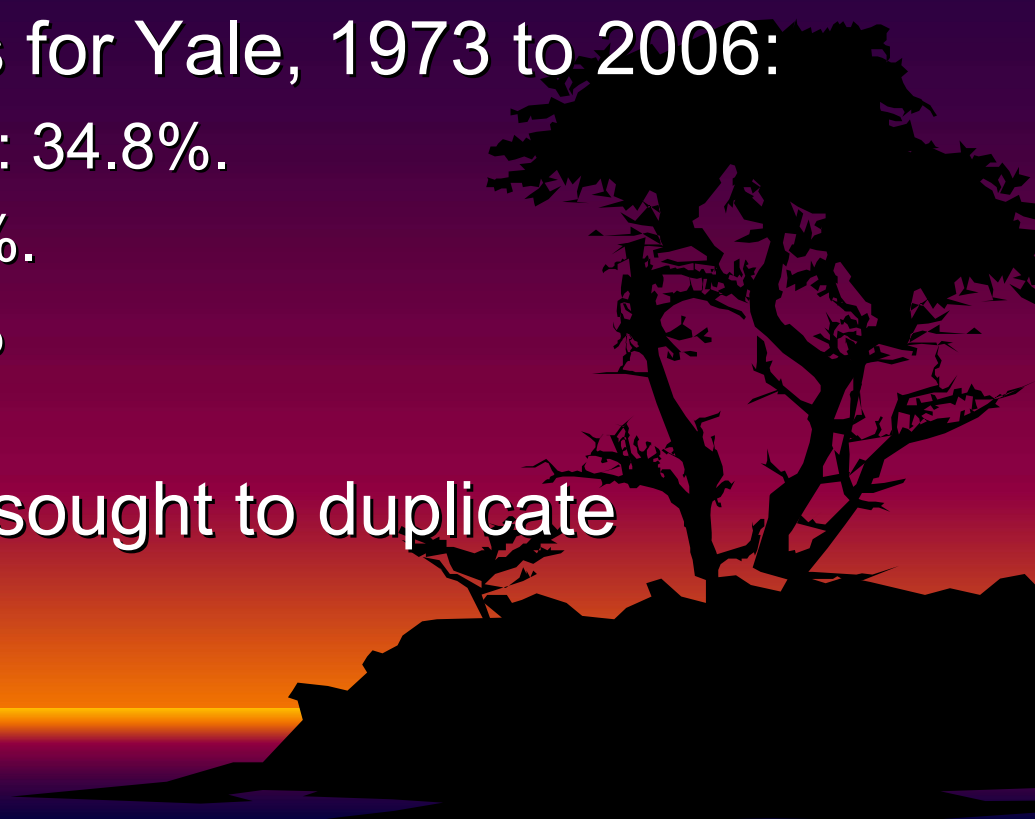
The paradox (2)

- Yet in many senses, backwards:
 - Emphasis on secrecy.
 - Little access to data.
 - Persistence of myths.
- In recent years, more access.



Myth 1: Private equity has had spectacular returns

- Track record of some endowments in private equity has been spectacular.
- E.g., annual returns for Yale, 1973 to 2006:
 - U.S. venture capital: 34.8%.
 - U.S. buyouts: 22.1%.
 - International: 17.1%
 - *Overall: 30.6%.*
- Many groups have sought to duplicate success.



But average returns are far lower

- Venture Economics returns, 1987-2006:
 - U.S. venture capital: 16.6%.
 - U.S. buyouts: 12.2%.
 - Europe: 10.4%.



Comparing to public markets

- Kaplan and Schoar [2005] compute “public market equivalents”:
 - U.S. venture slightly outperformed public markets.
 - U.S. buyouts did somewhat worse.
- But may also need to control for riskiness, e.g., leverage.
 - Will depress performance even more.



Myth 2: Private equity is an “asset class”

- Frequent claim among investors:
 - Emphasis on balancing portfolio by:
 - Type of fund.
 - Location of fund.
 - Vintage year.
- Similar to what’s seen in public market investing.

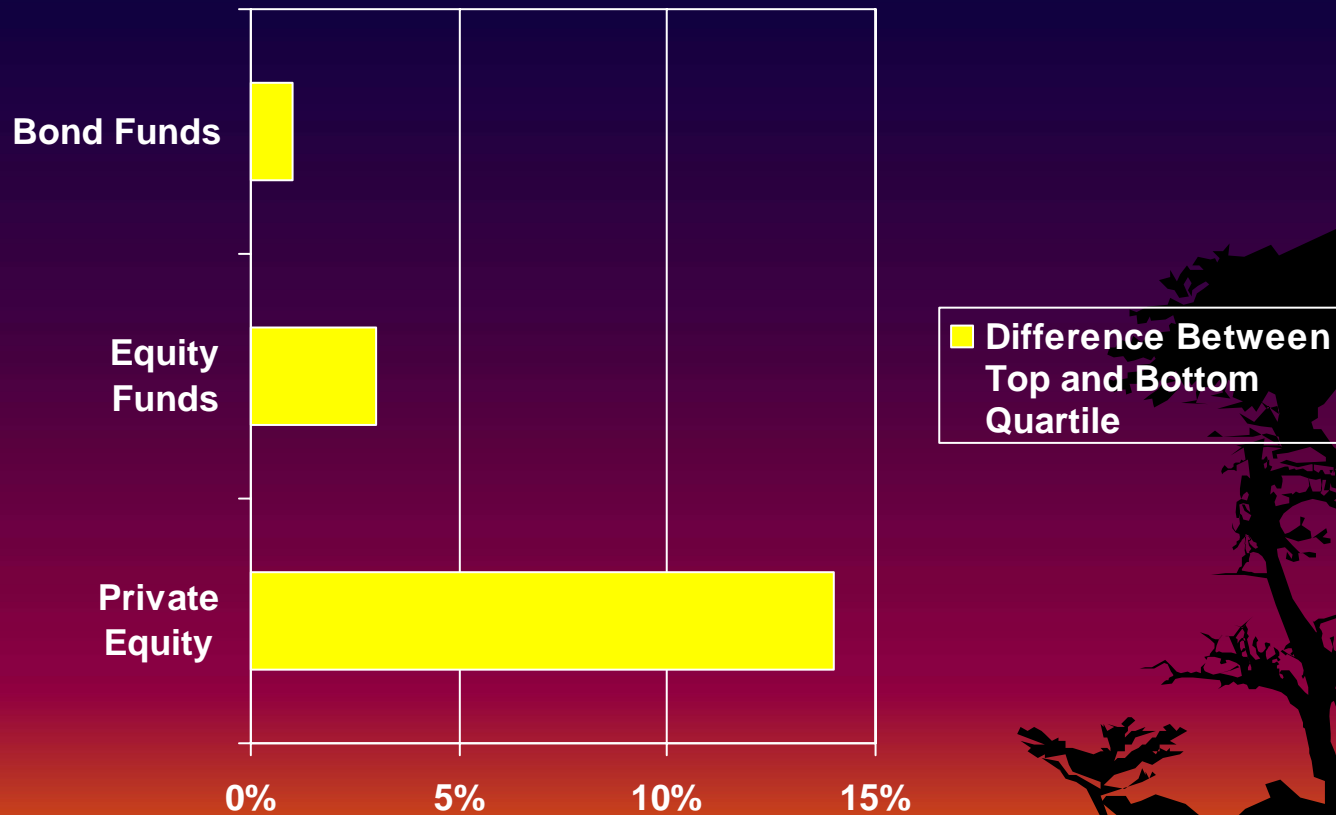


Recent work

- Has sought to understand how much difference is...
 - Between fund classes.
 - Between funds *in* private equity.
- Seeking to distinguish importance of individual performance.

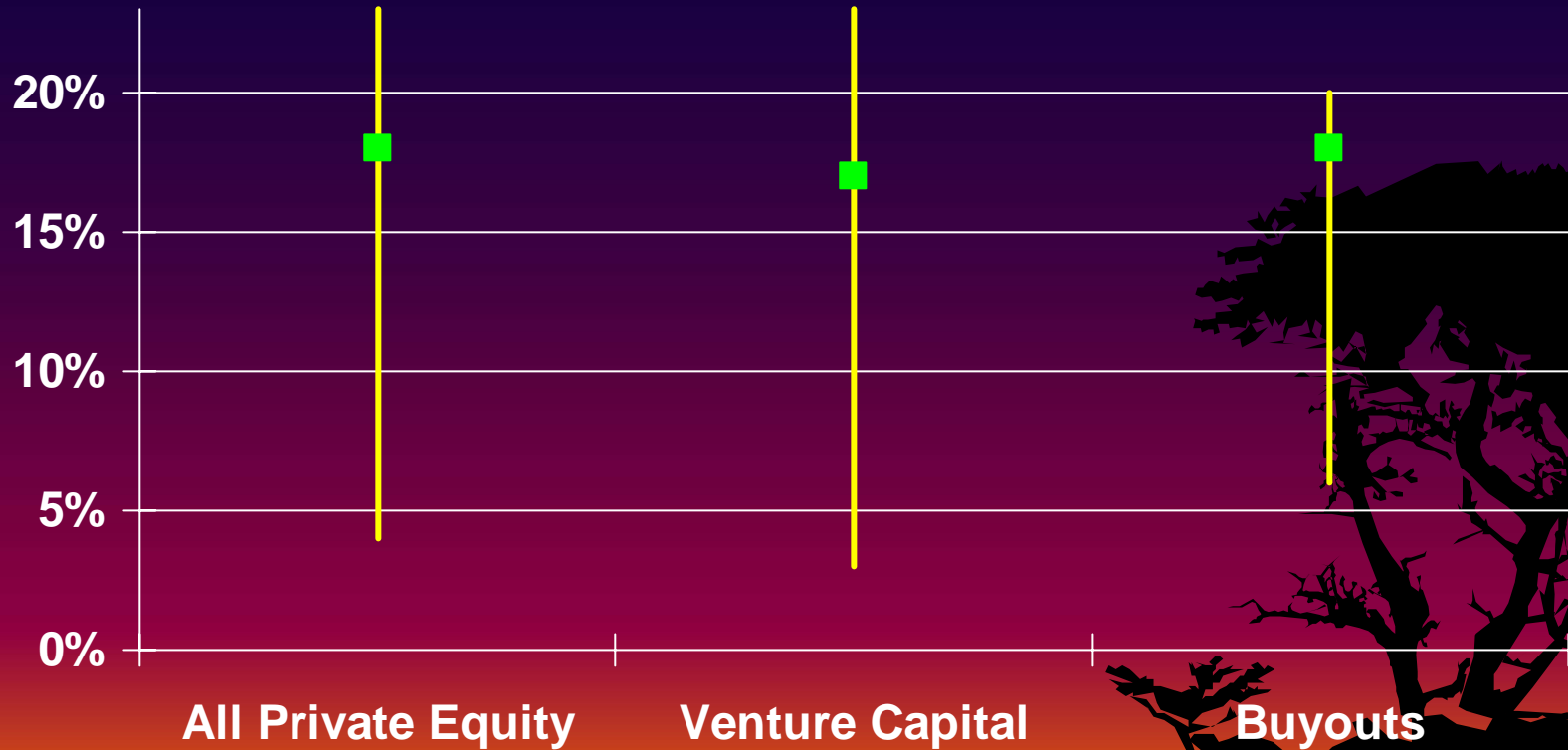


Evidence from the Yale endowment



Source: Lerner [2007]

More general patterns



Source: Kaplan and Schoar [2005]

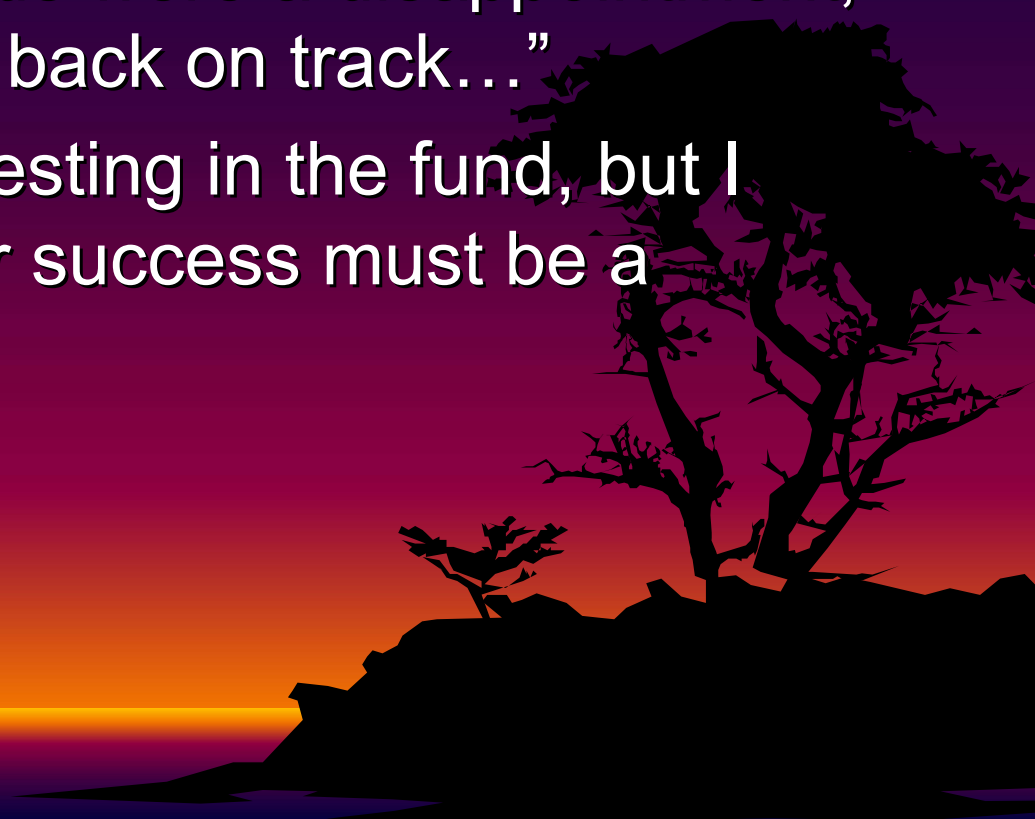
The reality

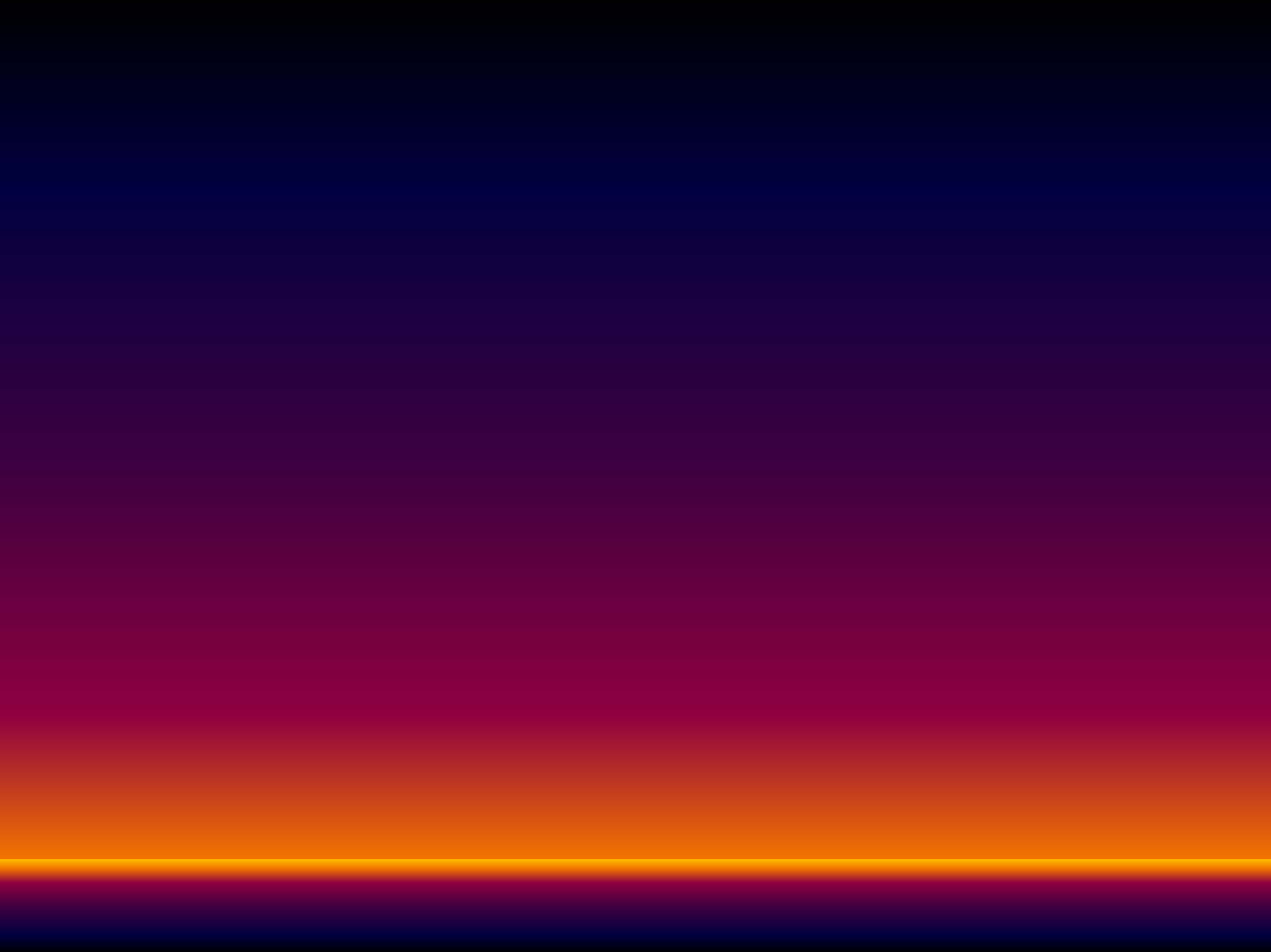
- The key difference is between different funds:
 - Unlike public investing.
- Investing in the right categories is not nearly as critical as getting into the right funds!



Myth 3: “Regression to the mean”

- Frequently heard stories...
 - “Our last two funds were a disappointment, but we’re getting back on track...”
 - “I considered investing in the fund, but I decided that their success must be a fluke...”





Persistence of performance

	Bottom	Medium	Top
Bottom Tercile	61%	22%	17%
Medium Tercile	25%	45%	30%
Top Tercile	27%	24%	48%

Source: Kaplan and Schoar [2005]

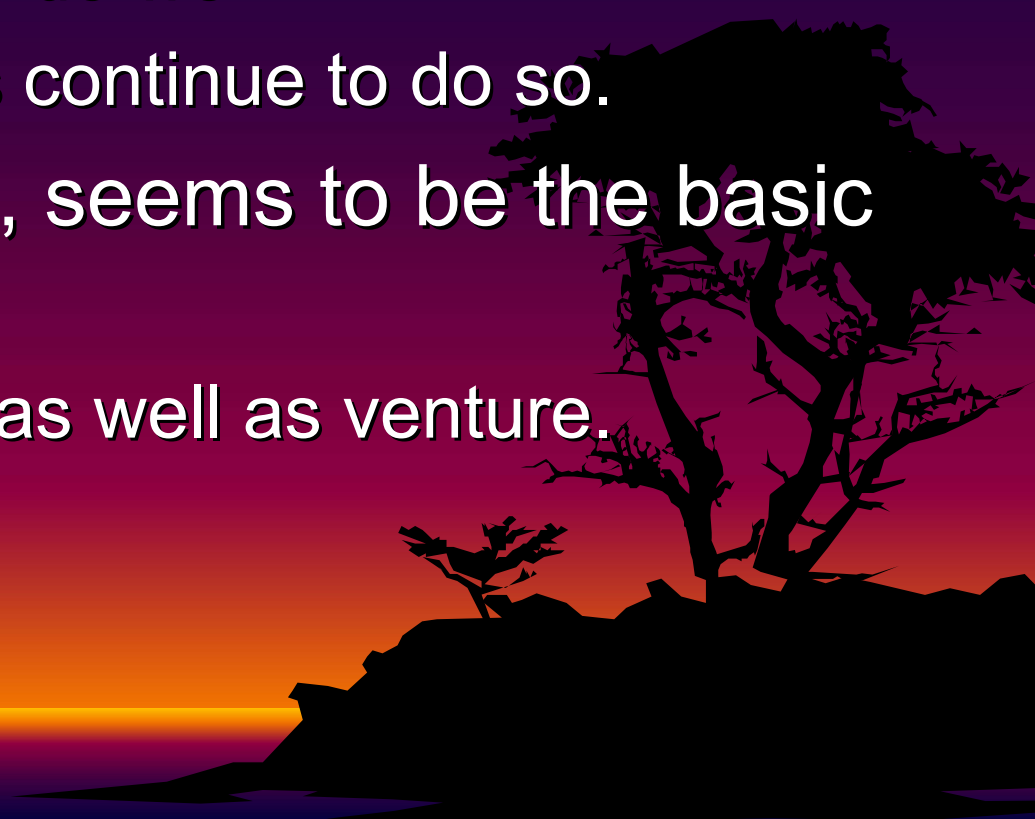
- High likelihood that the next funds of a given partnership stays in the same performance bracket

→ Persistence.

- 1% boost in past performance → 0.77% boost in next fund's performance.

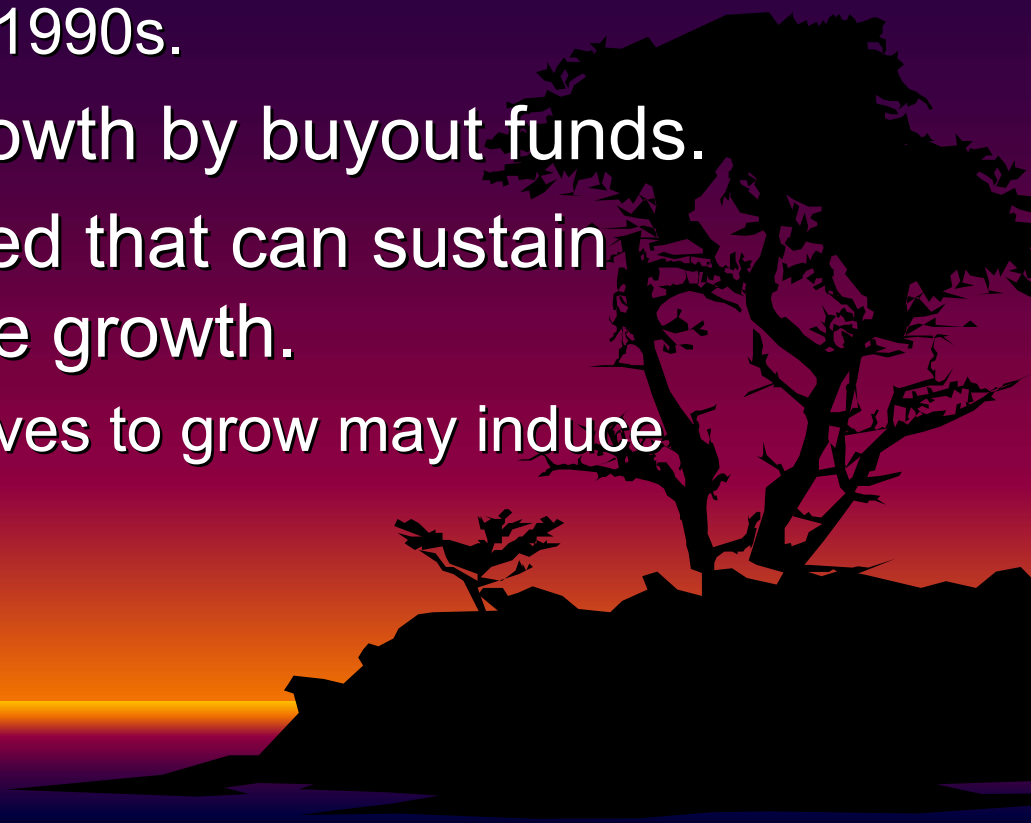
The reality

- Performance seems to be very “sticky”:
 - Good continue to do well.
 - Underperformers continue to do so.
- While exceptions, seems to be the basic rule:
 - Seen in buyouts as well as venture.



Myth 4: Growth doesn't hurt

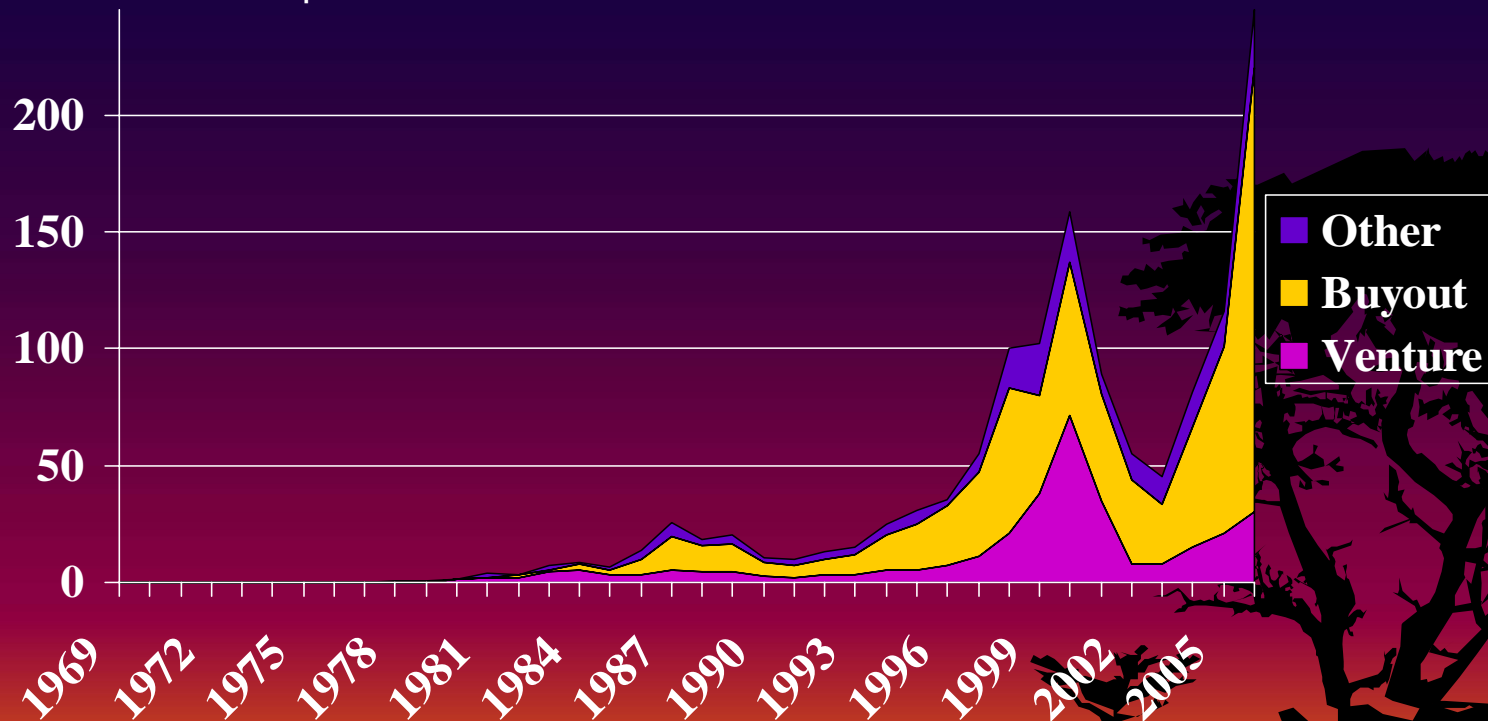
- Numerous venture groups have grown dramatically.
 - Mid 1980s and late 1990s.
- Recent dramatic growth by buyout funds.
- Have typically argued that can sustain performance despite growth.
 - But powerful incentives to grow may induce skepticism.



U.S. private equity fundraising, 1969-2006

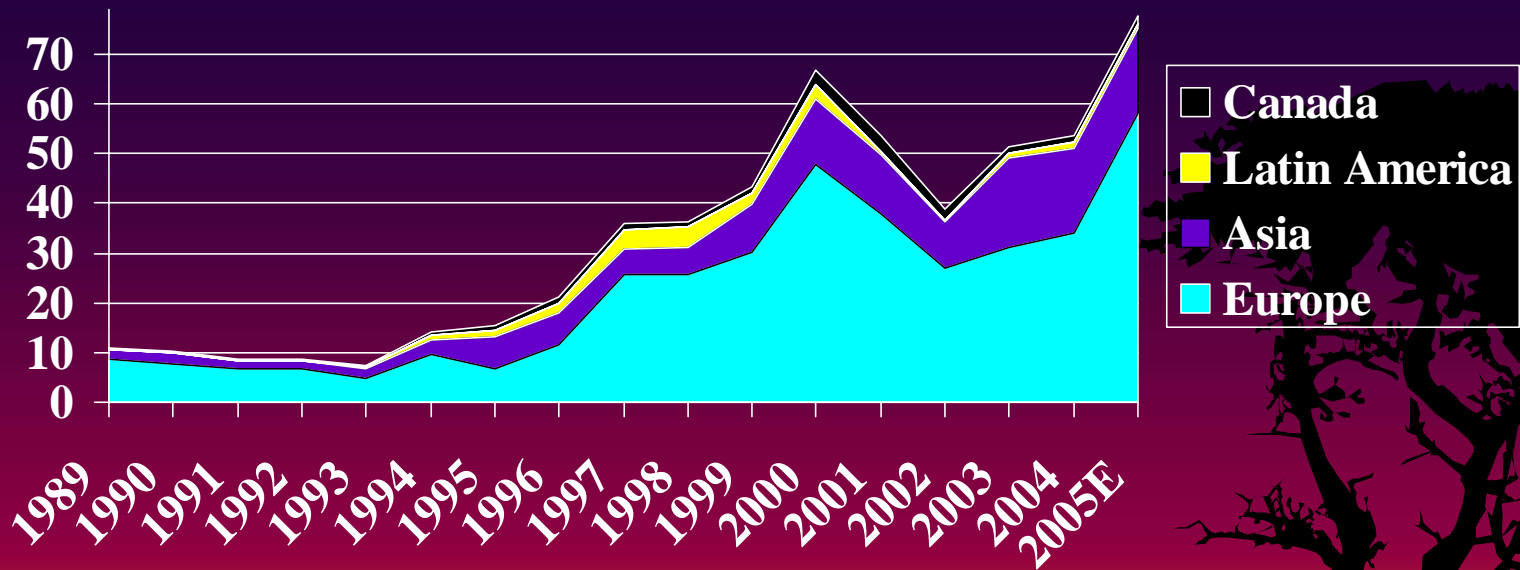
Billions of 2002 \$s

Source: Venture Economics and Asset Alternatives.



Private equity fundraising outside the U.S., 1989-2005

Billions of 2004 \$s



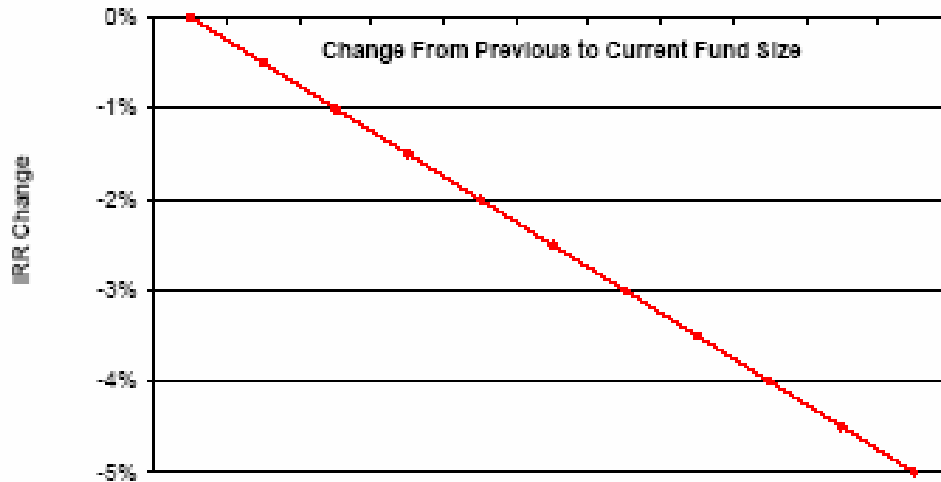
Asian data are investments rather than funds raised.
Source: Various national venture capital associations.

Change in fund size

Fund Growth and IRR Change

0 20% 40% 60% 80% 100% 120% 140% 160% 180% 200%

Change From Previous to Current Fund Size



- Negative relationship between change in IRR and change in fund size for a given firm.
- Fund size is measured as capital committed at closing.
- Regression results control for vintage year effect, fund category, and firm fixed effects.

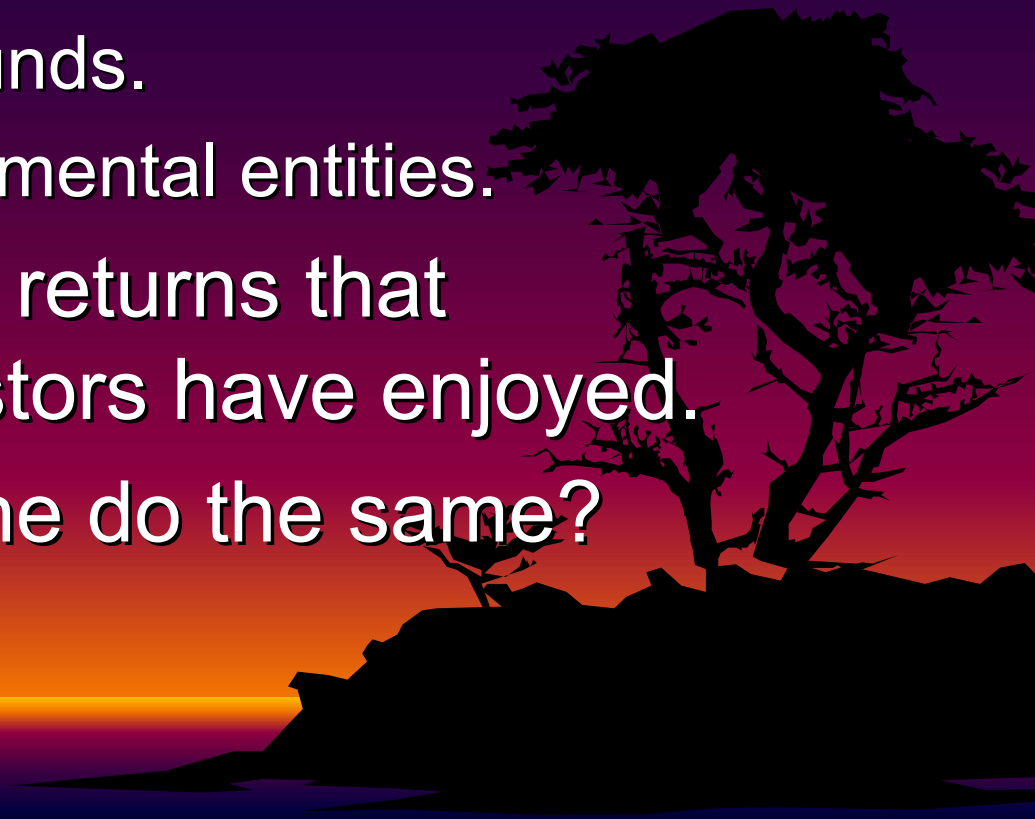
The reality

- Funds with higher sequence number, i.e., established funds, perform better.
- But rapid growth in capital under management is associated with performance deterioration.
- May be driven by dilution of impact of partners.

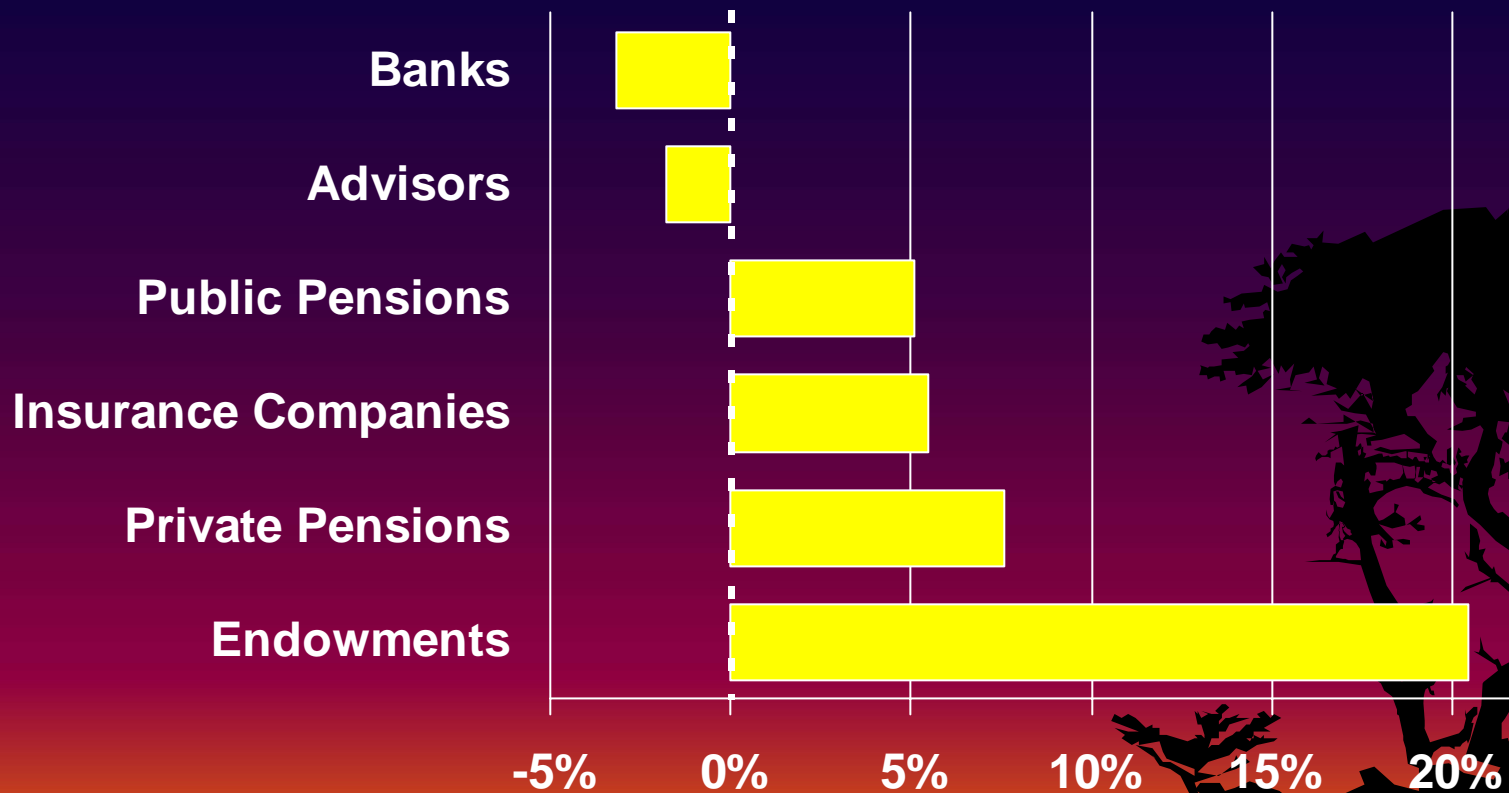


Myth 5: Anyone can play

- Lately, great deal of interest from new investors:
 - Public pension funds.
 - Non-U.S. governmental entities.
- Attracted by high returns that established investors have enjoyed.
- But does everyone do the same?



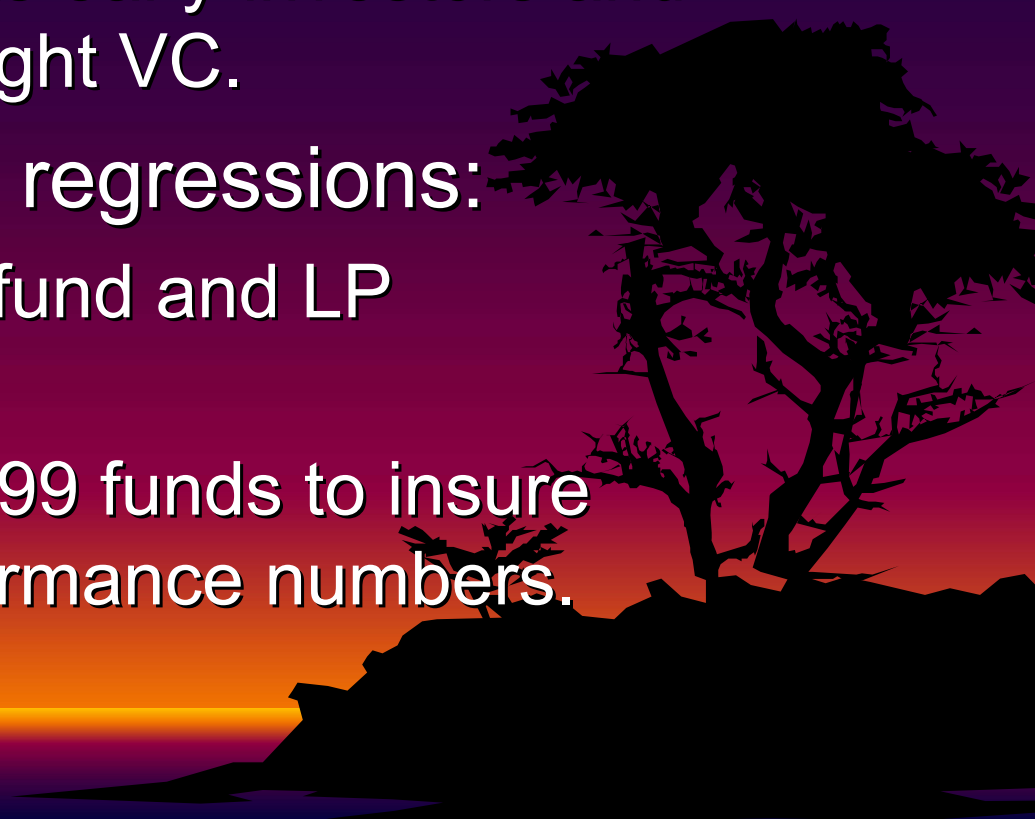
Performance by investor type



Source: Lerner, Schoar and Wang [2007]

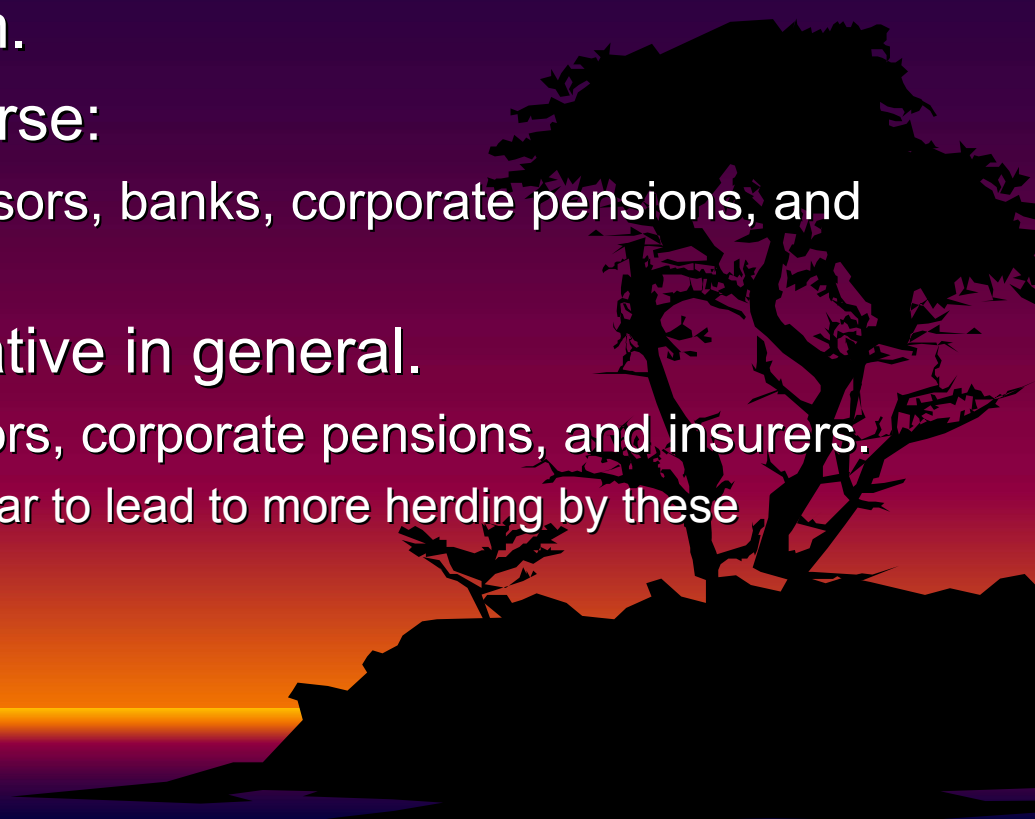
Concerns with univariate tests

- Do these reflect other differences:
 - E.g., endowments early investors and more heavily weight VC.
- Examine through regressions:
 - Regress IRR on fund and LP characteristics.
 - Only include <1999 funds to insure meaningful performance numbers.



Regression analyses

- Differences persist:
 - Endowments outperform; corporate pensions and banks underperform.
 - Younger LPs do worse:
 - At least among advisors, banks, corporate pensions, and insurers.
 - Market inflows negative in general.
 - Especially for advisors, corporate pensions, and insurers.
 - Hot markets appear to lead to more herding by these investors.



Reinvestment decisions

- Reinvestment decision should be made with better information and without access constraints.
- Look at follow-on funds in our sample:
 - Only look at same classes of funds.



Reinvestment and *future* returns



Source: Lerner, Schoar and Wang [2007]

Is access an explanation?

- Do endowments do well because they were “there first”?
- Other way to look at:
 - Funds that were undersubscribed.
 - Funds which took a long time to raise.
- Same patterns appear!



The reality

- Huge disparities in performance.
- Superior performance has been largely confined to endowments.
- Raise substantial questions about ability of new entrants to succeed.

