

Private Equity Trends & the Impact on the GIA

Private Equity 101

Let's level-set on the PE ecosystem



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MassMutual

Secular Trends in Markets

- Fewer public companies
- Companies are more mature at IPO

Academic Debates Over PE

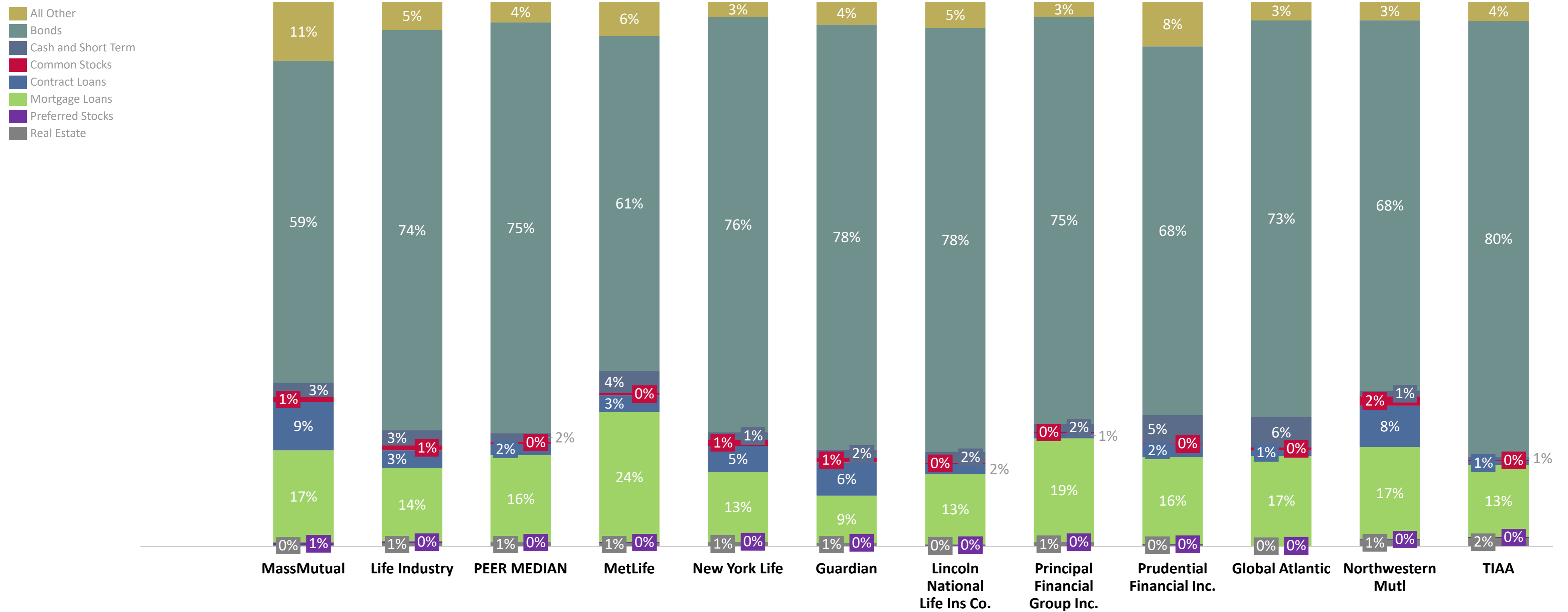
- It outperforms!
- There is zero alpha!
- It out-performs because idiosyncrasies risk discounts are passed onto diversified investors

The Future of PE for Insurance

- Purchase multiples are at all time highs, but debt is still cheap, so buyout markets will continue to thrive
- Selection-bias will continue to support Growth Equity
- Insurance company exposure may not change until RBC risk-charges change, but asset allocation will
- PE will eventually become exchange traded for retail investors—what then?

Asset Allocations of Insurance Companies

Most Life Insurance Companies have a 75% Allocation to Fixed Income



Source: SNL as of 12/31/19



Liquidity

Price Discovery



What was the first formal stock exchange?

- a) Amsterdam Stock Exchange
- b) Etruscan Stock Exchange
- c) London Stock Exchange
- d) New York Stock Exchange
- e) Venetian Stock Exchange



← 1-9
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What are the 'private markets'?

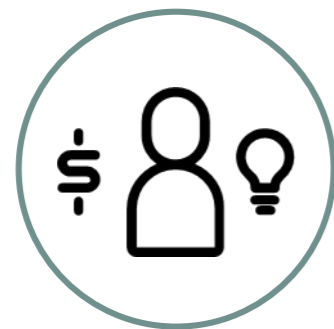


Private Markets

- Private Equity
 - - Venture Capital
 - Early Stage
 - Growth
 - Buyout
 - Large-cap
 - Mid-Market
 - Lower-Middle Market
- Real Estate
- Private Debt
- Natural Resources
- Infrastructure

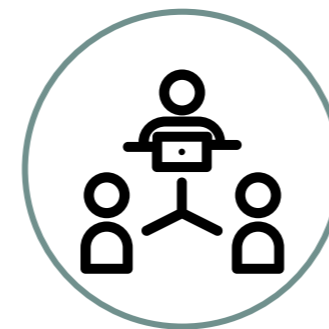
Private Equity

Historically there were two parties in private equity...



Business Owner

Portfolio Company



Portfolio Manager

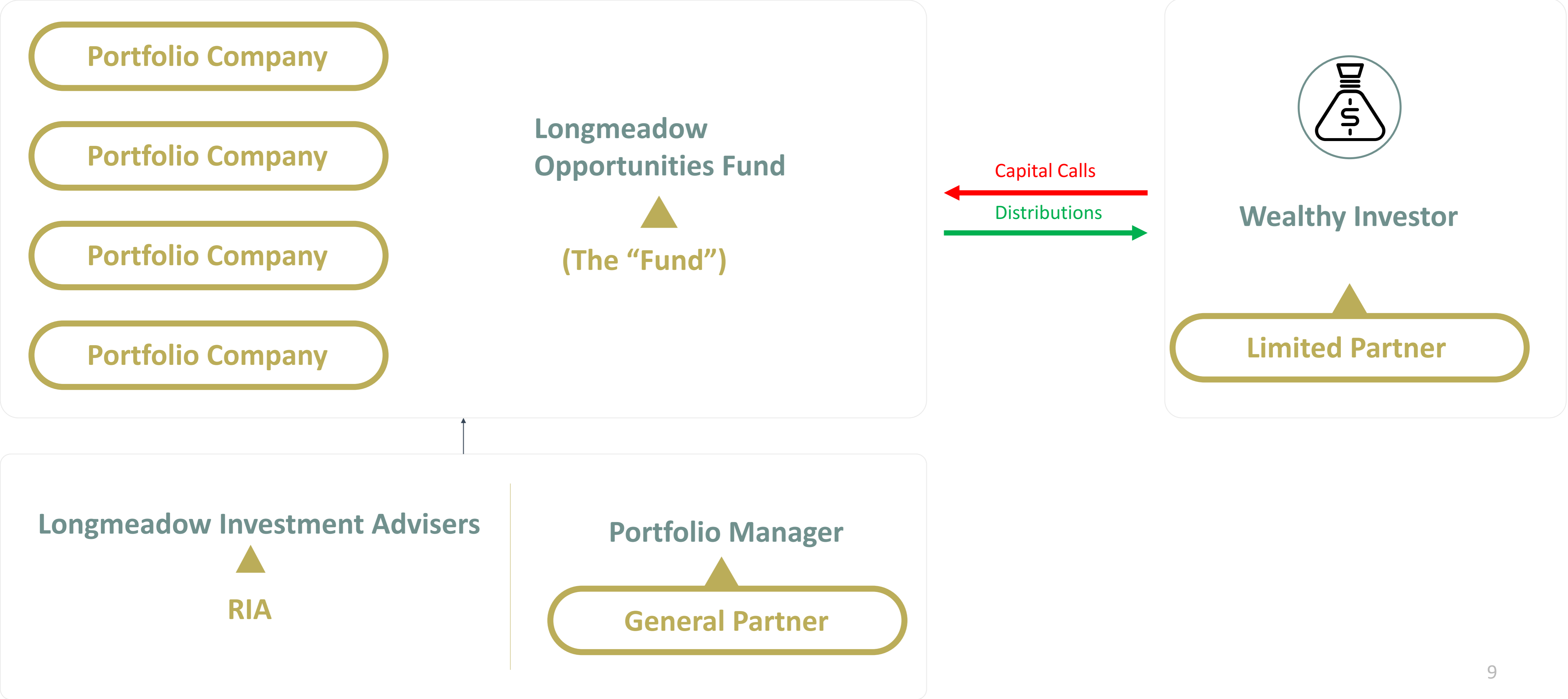
General Partner



Wealthy Investor

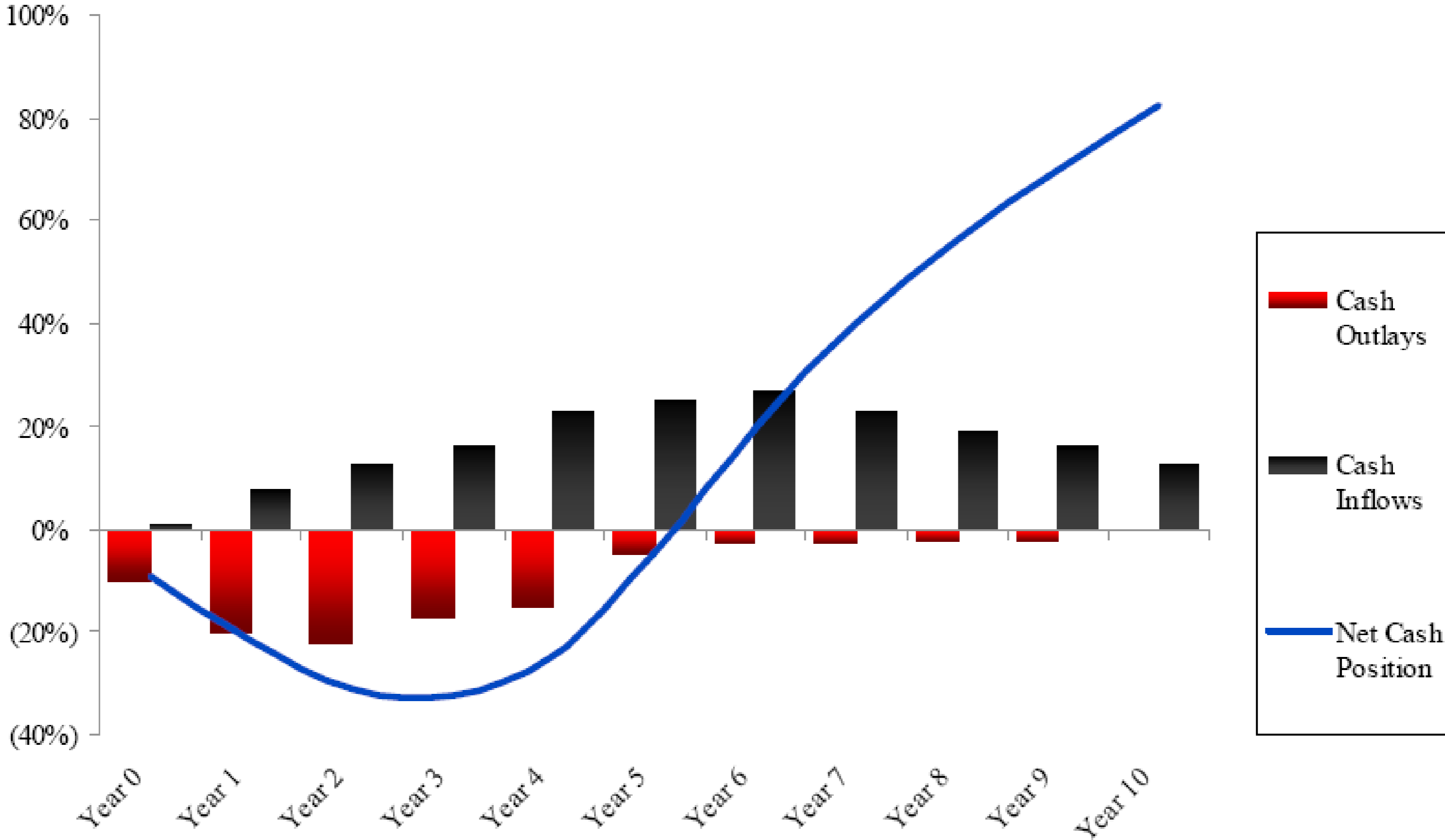
Limited Partner

Simplified Fund Structure

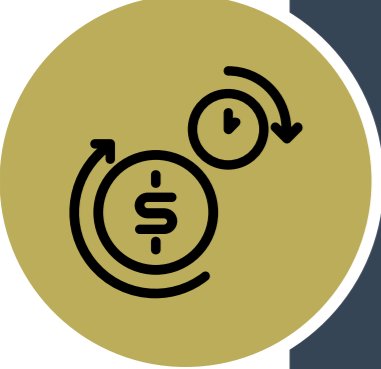





The Life of a PE Fund

Historically there were two parties in private equity...

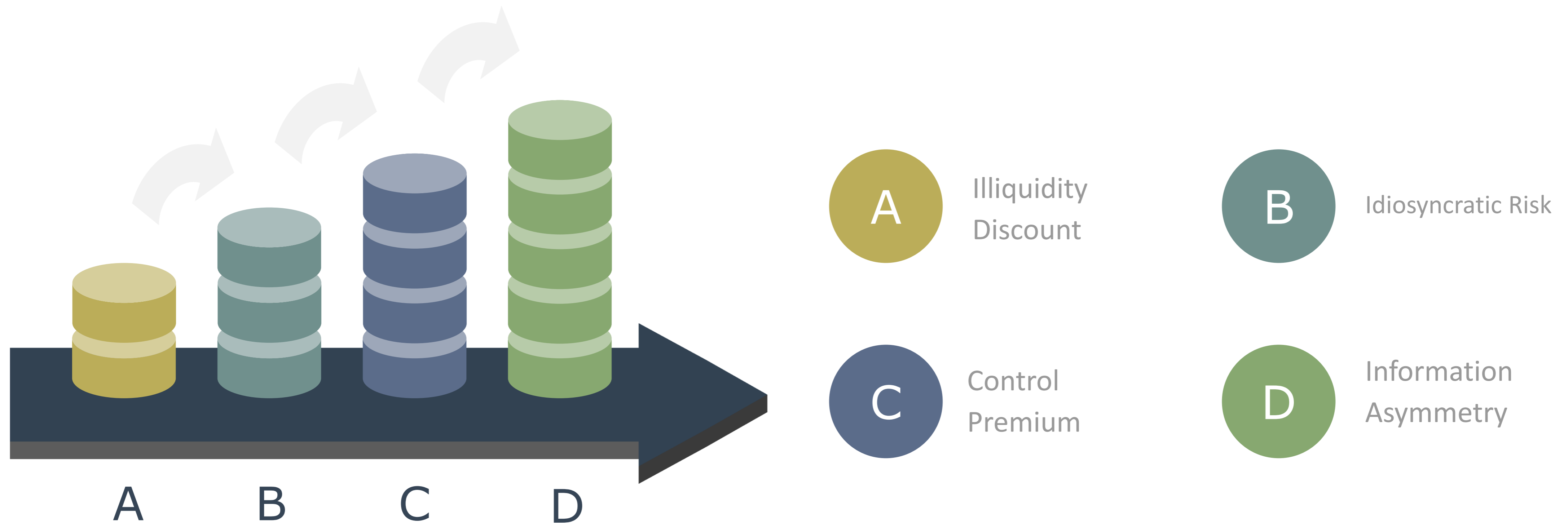


How Wealthy does an LP Need to Be?

	Minimum Investment per Fund:	\$\$15M
	Annual PE Investment:	\$150M
	PE Portfolio:	\$1.5B
	Total Assets	\$5B to \$75B

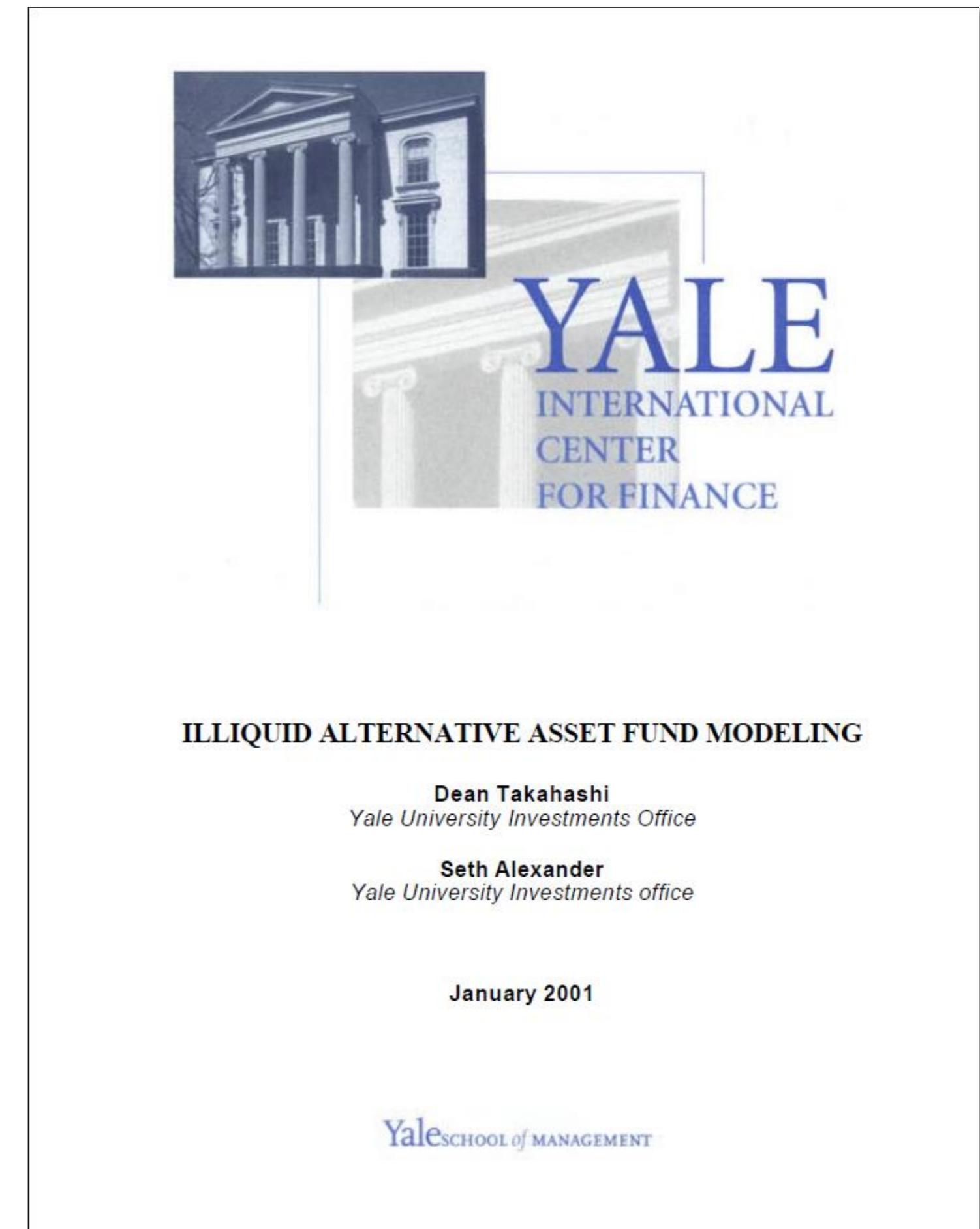
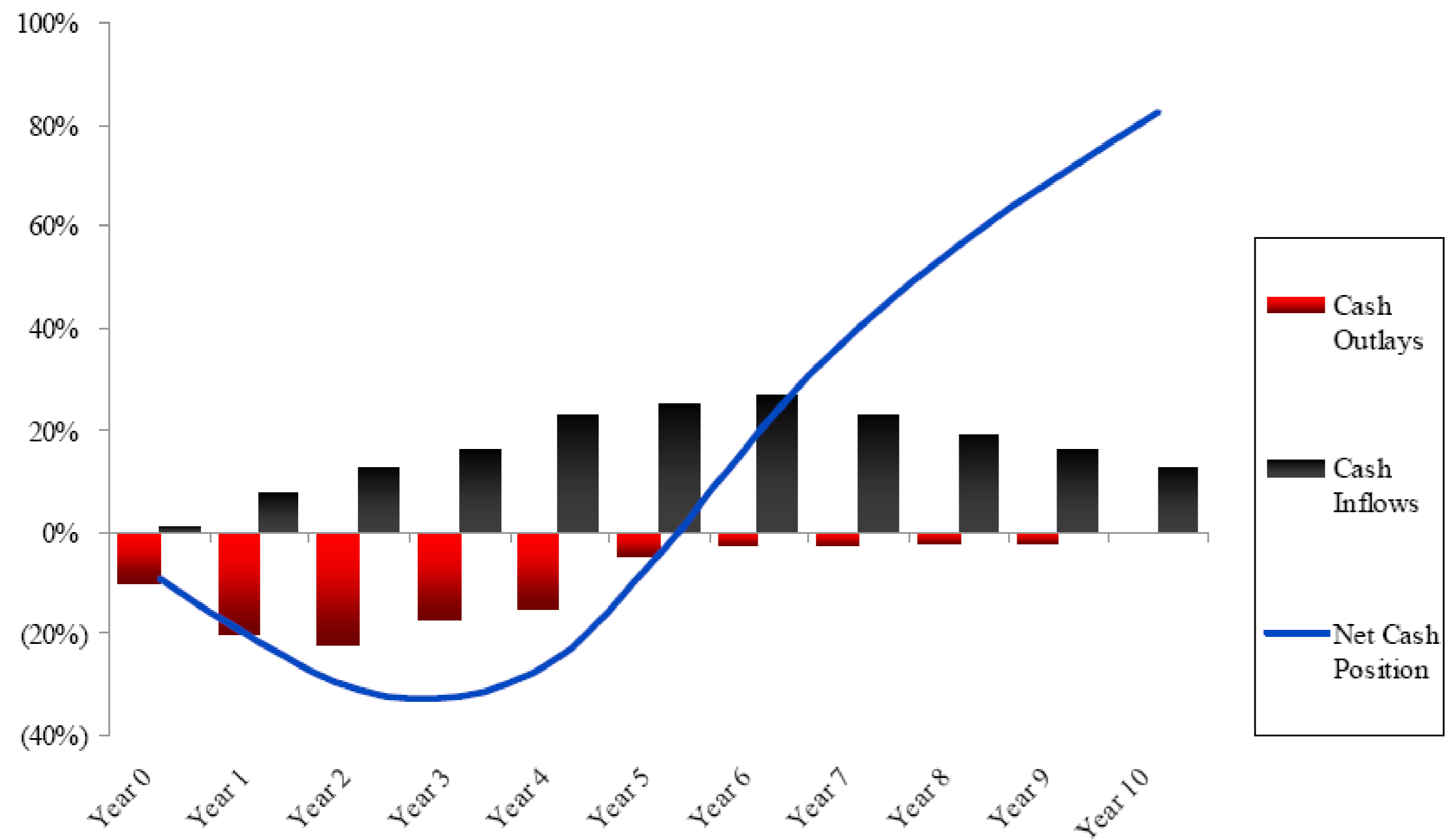
Private Equity Valuation

Private Equity Valuation Faces Several Complexities Relative to Public Peers



What is the Net Asset Value of a Portfolio Company or a Fund?

Back to the J-Curve and the 'Yale Model'



The Global PE markets account for nearly \$6T of capital. What percentage is VC?

a) 20%

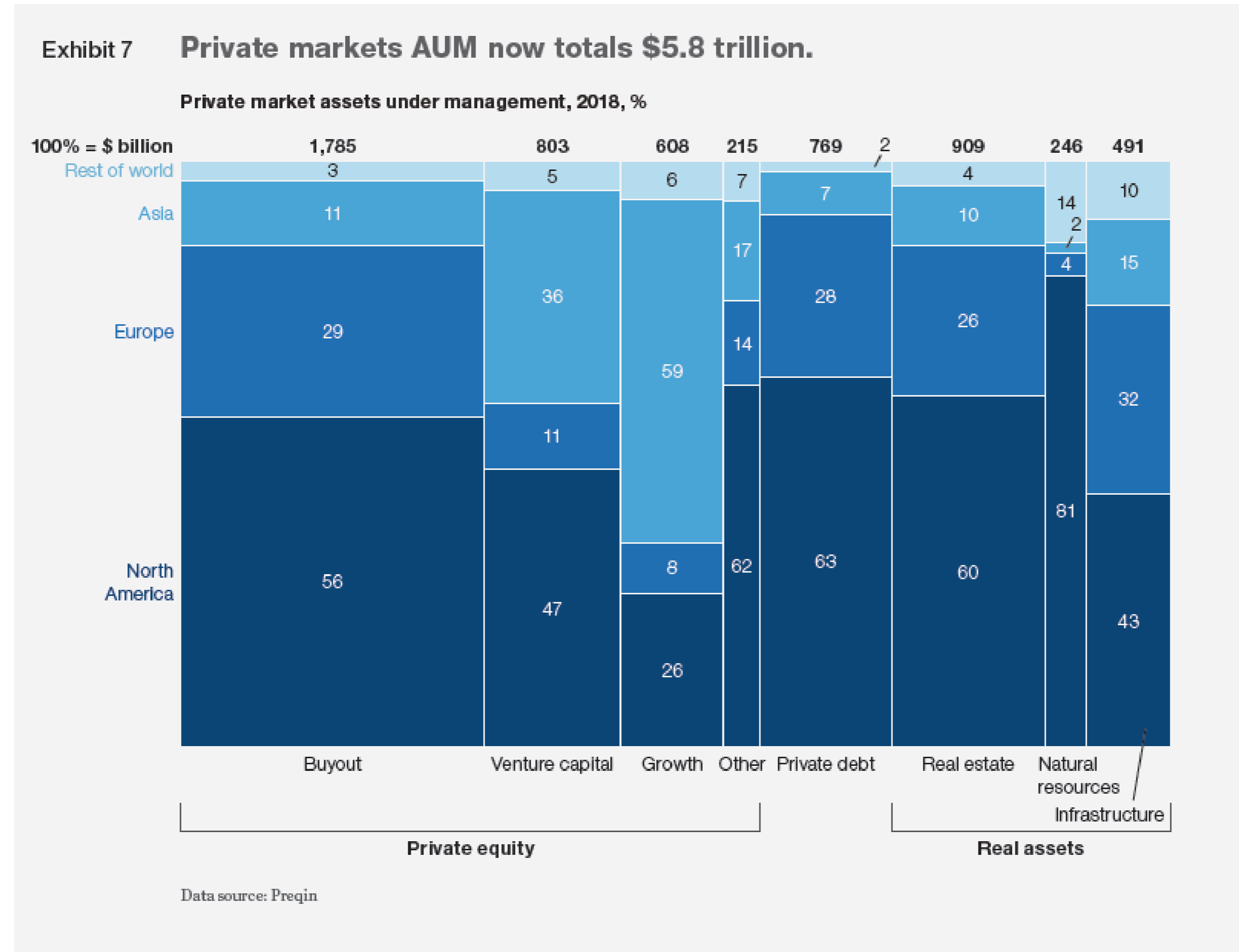
b) 15%

c) 13%

d) 9%

e) 5%

Back to the J-Curve and the ‘Yale Model’



US Securities Law



Regulatory Regime

- The Securities Act of 1933
- The Securities Exchange Act of 1934
- The Investment Company Act of 1940 (“40 Act”)
- The Investment Advisers Act of 1940 (“Advisers Act”)

Why Private Markets?



Regulatory Regime

- Pre-revenue, pre-product, and early-stage
- Abundant private capital
- Turn-around
- Risk and reward

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The Journal of THE AMERICAN FINANCE ASSOCIATION

They conclude that, “buyout funds have performance better than previously documented.” In fact, they find that, “...outperformance versus the S&P 500 averages 20% to 27% over the fund’s life and more than 3% annually.” According to the paper, these conclusions are “robust to various indices and risk controls.”

Replicating Private Equity with
Value Investing, Homemade Leverage, and Hold-to-Maturity Accounting

Erik Stafford*

December 2015

ABSTRACT

Private equity funds tend to select relatively small firms with low EBITDA multiples. Publicly traded equities with these characteristics have high risk-adjusted returns after controlling for common factors typically associated with value stocks. Hold-to-maturity accounting of portfolio net asset value eliminates the majority of measured risk. A passive portfolio of small, low EBITDA multiple stocks with modest amounts of leverage and hold-to-maturity accounting of net asset value produces an unconditional return distribution that is highly consistent with that of the pre-fee aggregate private equity index. The passive replicating strategy represents an economically large improvement in risk- and liquidity-adjusted returns over direct allocations to private equity funds, which charge average fees of 6% per year.

* Stafford is at Harvard Business School (estafford@hbs.edu). I thank Malcolm Baker, Josh Coval, Victoria Ivashina, Kristin Mugford, André Perold, David Scharfstein, and Adi Sunderam for helpful comments and discussions. Harvard Business School's Division of Research provided research support.

Idea in Brief

If you normalize the valuation assumptions for PE, *alpha appears to be zero.*

The Price of Diversifiable Risk in Venture Capital and Private Equity *

Michael Ewens[†]

Charles M. Jones[‡]

Matthew Rhodes-Kropf[§]

February 19, 2013

*We thank Larry Glosten, Alexander Ljungqvist, Steven Kaplan, Ramana Nanda, Mike Riordan, Tano Santos, Antoinette Schoar, Per Stromberg, S. Viswanathan and participants at the 2003 American Finance Association meeting, the NYSE-Stanford conference on Entrepreneurial Finance and IPOs, the Yale conference on Entrepreneurship, VC and IPOs, and the New York University conference on Entrepreneurship, VC and IPOs for their comments. We are grateful to The Eugene M. Lang Entrepreneurship Center for financial support. Special thanks go to Jesse Reyes and Thomson Venture Economics, who provided the Venture Economics data and to Maryam Haque and Brendan Hughes of Dow Jones who provided LP Source. All errors are our own.

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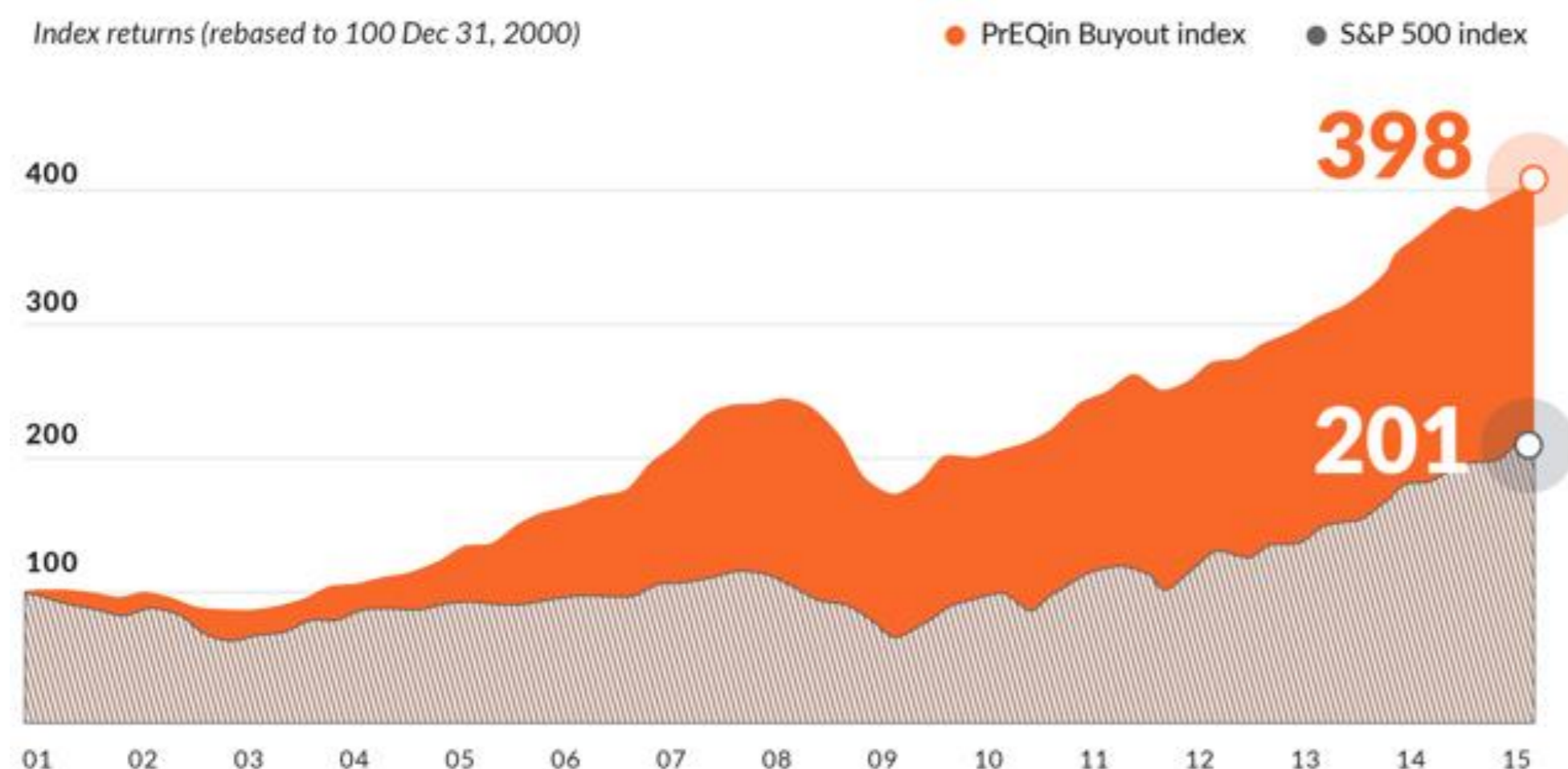
Idea in Brief

“So, the VC requires a price reduction from the entrepreneur to compensate for *personal* risk.” This price reduction also benefits the diversified investor.

Private Equity has delivered diversification and performance benefits for qualified purchasers.

While structural challenges, such as capital calls, complicated fee structures, and illiquidity, have historically made Private Equity unsuitable for mass market investors, the upside is appealing.

Buyout funds have far outperformed S&P 500...



SOURCE: Prequin

...and have enhanced investors' total return while mitigating downside risk.

Historical alpha over S&P 500¹

- Active management of portfolio companies is proven to deliver improvement in EBITDA margins.

Lower beta than S&P (0.4 to 0.7)²

- A replicating portfolio of small cap stocks lost 86% of value during 2008 financial crisis. The buyout index lost 20% of value.
- Individual general partners incorporate idiosyncratic risk into valuation prices, but LPs can diversify risk.³

Diversification of portfolio

- Fewer companies are public now than ever before

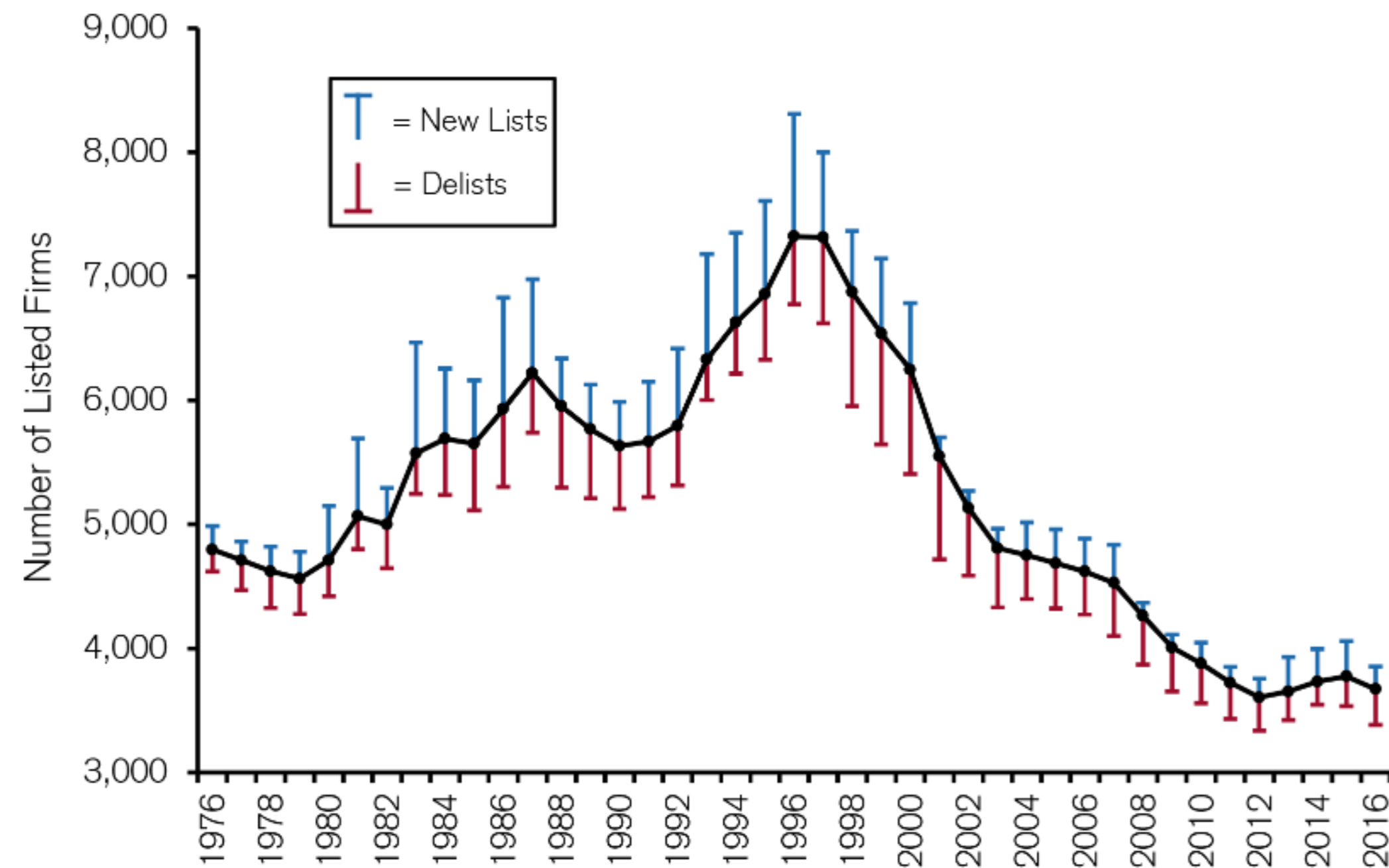
¹ Harris, Robert S., Tim Jenkinson, and Steven N Kaplan, 2013, "Private Equity Performance: What do we Know," forthcoming Journal of Finance

² Stafford, Erik, 2015, "Replicating Private Equity with Value Investing, Homemade Leverage, and Hold-to-maturity accounting"

³ Ewens Michael, Charles M Jones, Matthew Rhodes-Kropf, 2013, "The Price of Diversifiable Risk in Venture Capital and Private Equity"

The number of public companies in the U.S. dropped nearly 50% between 1996 and 2016.

Fewer public companies in the U.S. reduces investment opportunities for retail investors and signals challenges for America's capital markets.

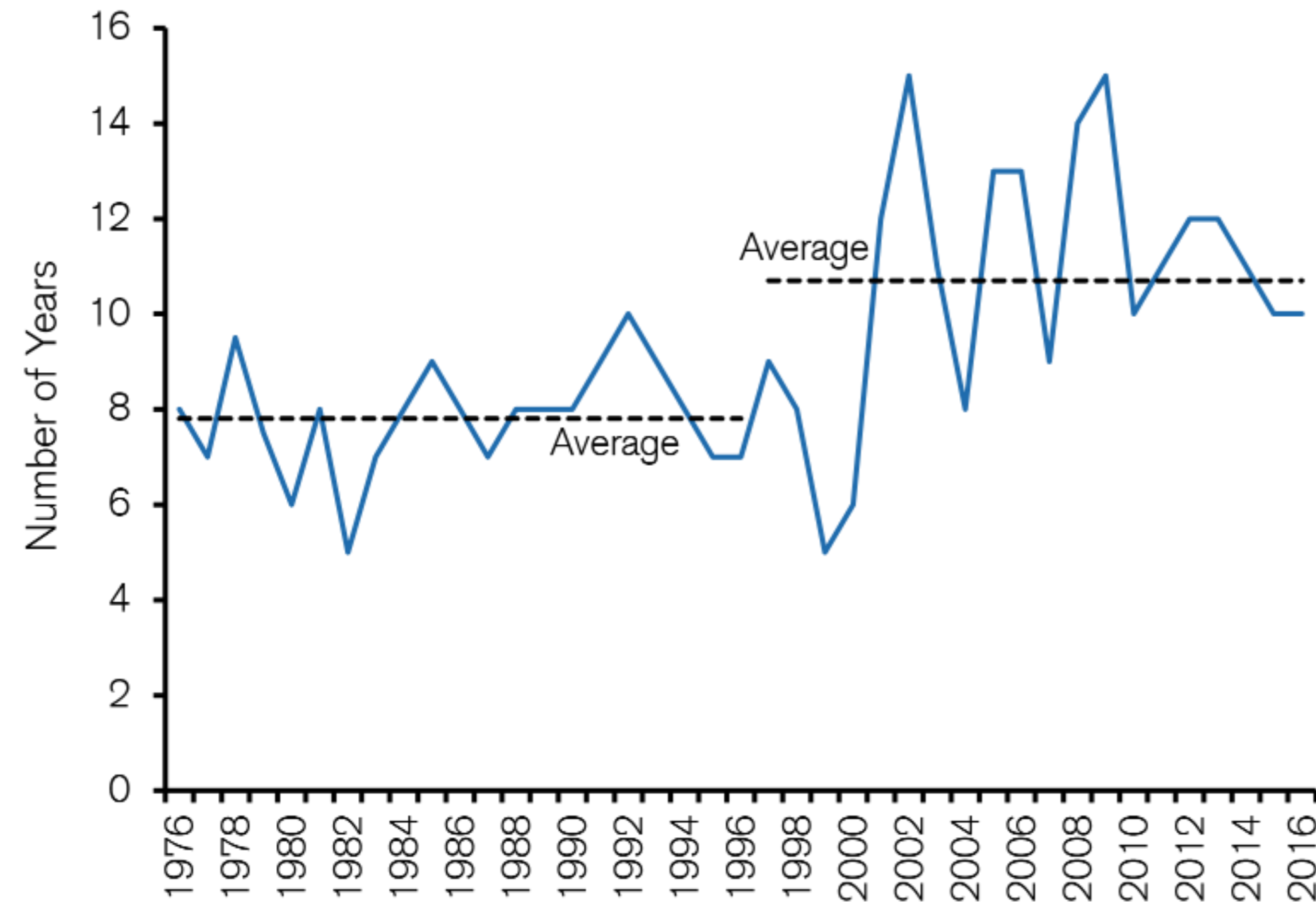


During the same time period, the number of public companies increased globally, implying that American investors could shift a larger portion of their portfolios to international equities, unless the U.S. broadens access to the private markets for retail investors.

Source: Craig Doidge, G. Andrew Karolyi, René M. Stulz, "The U.S. Listing Gap," *Journal of Financial Economics*, Vol. 123, No. 3, March 2017, 464-487 and Credit Suisse estimates.

The average age of a company at IPO has increased from 8 years to 11 years.

Small capitalization “growth” companies are an important source of yield for investors.



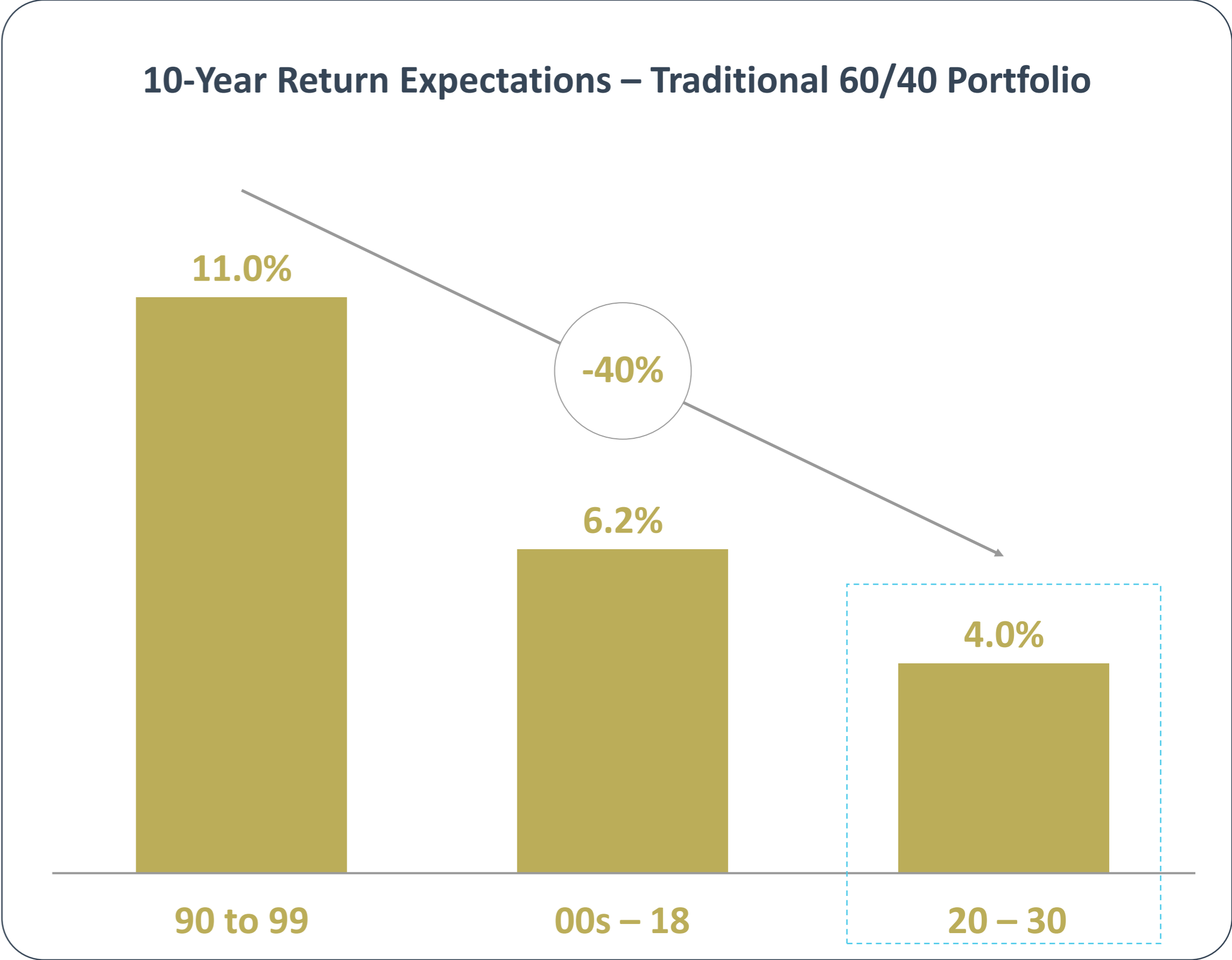
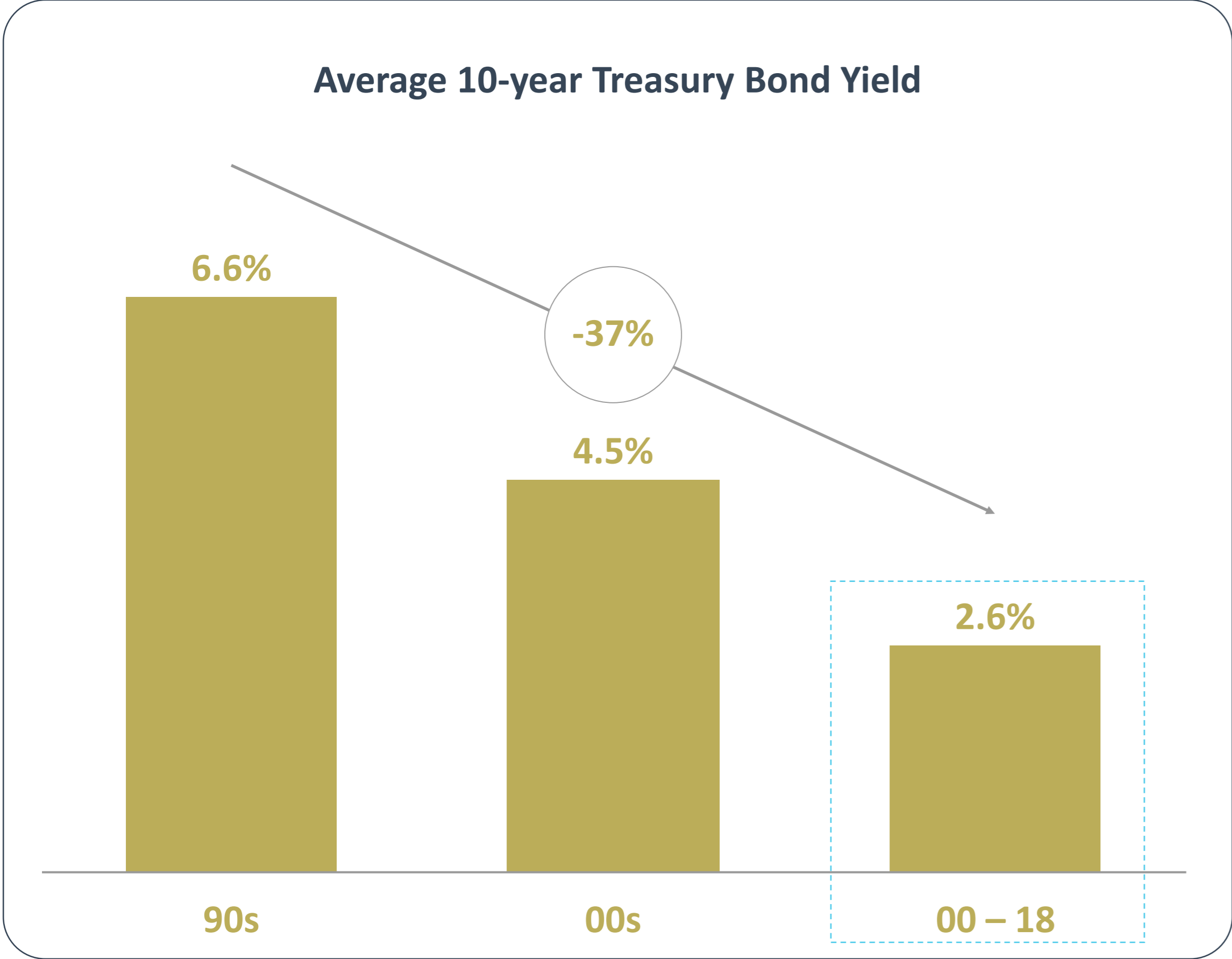
The “small cap premium” is eroding for American investors — an especially glaring concern in light of the economy’s expansion over the last decade.

Source: Jay R. Ritter.

Source: Credit Suisse

Long term capital market expectations are less favorable than previous decades

Private Equity exposure could help to mitigate the impact of long-term yield compression.



What should insurance company CIOs do with their PE allocations?

- a) Reduce them! Multiplies are at an all time high! Go from 3% to 1.5%!**
- b) Keep the good times rolling! Keep allocations around 3%.**
- c) Increase from 3% to 4% or 5%. The risk is worth the reward!**
- d) Shift PE allocations from buyout to venture capital (and growth funds)**
- e) Other?**

PE and Insurance Companies

- Risk Based Capital (RBC) limits private equity exposure on a practical level for insurance companies
- But PE is probably less risky than some expect, especially for a multi-vintage, multi-fund GIA
- Mutual companies with a dividend have an inherent advantage when investing in illiquid or “lumpy” cash flows
- Insurance companies value the low correlation of PE to public markets (uncorrelated risk if talking to a salesman) just as much as the yield
- Selection bias between public and private markets is a real concern
- What does the **potential negative selection bias** of the **public markets** imply about the **credit quality** of investment grade **fixed income securities**, which constitutes the majority of both Health and Life insurance company GIAs?

Some Bold Predictions

- PE access will become available to retail investors within the next 20 years!
- If PE does become listed, the relatively low beta (0.4 to 0.7) will no longer be an advantage of the asset class for insurance companies
- Insurance companies have not meaningfully allocated PE portfolios to growth companies—instead buyouts remain the focus—as high growth companies stay private, CIOs will start to think about “growth funds”

THANK YOU!