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MEMBERS' CONFERENCE BOSTON

MAY 31-JUN 2, 2017

Portfolio Management: Investing in Different Market Environments

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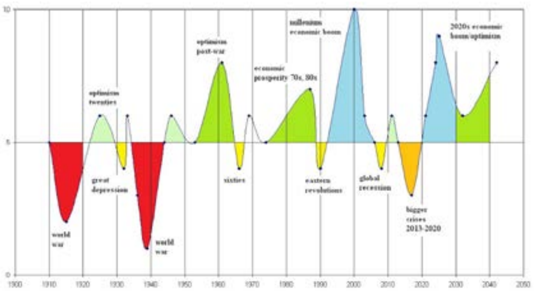
Agenda

I. Cycles Exist!
II. Impact of Market Cycles
III. Implementation Choices & Portfolio Management Techniques
IV. Lessons Learned

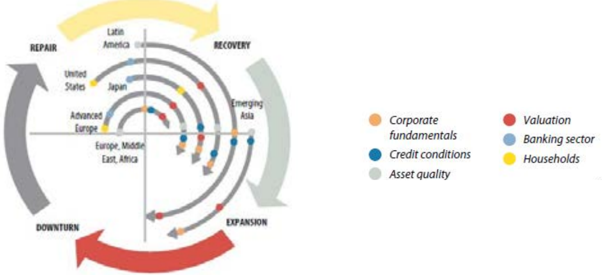
CYCLES EXIST!

Evidence of cycles in the macro environment

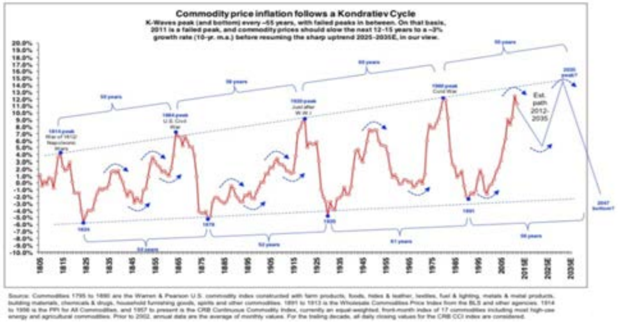
ECONOMIC CYCLE



CREDIT CYCLE



COMMODITY CYCLE

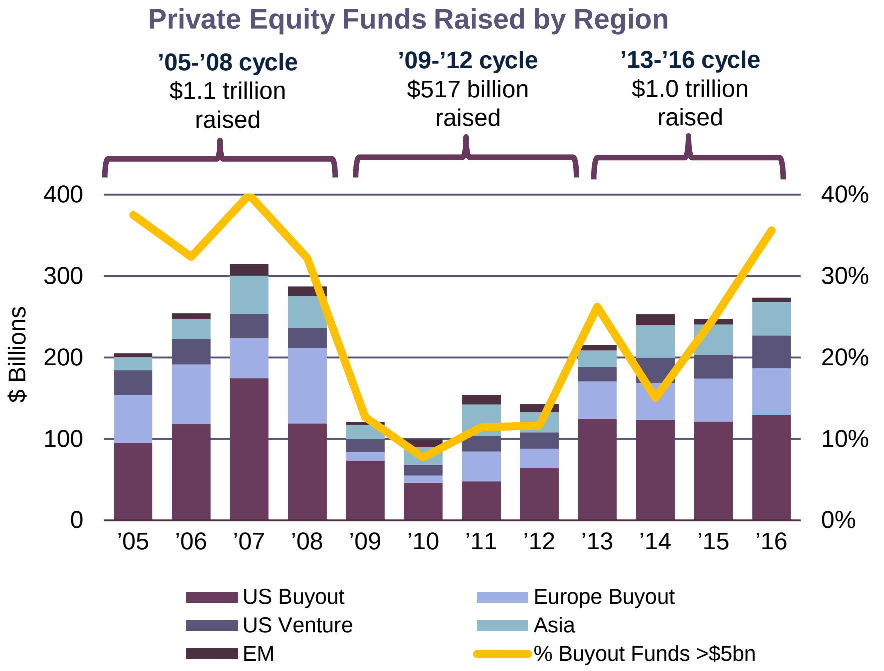


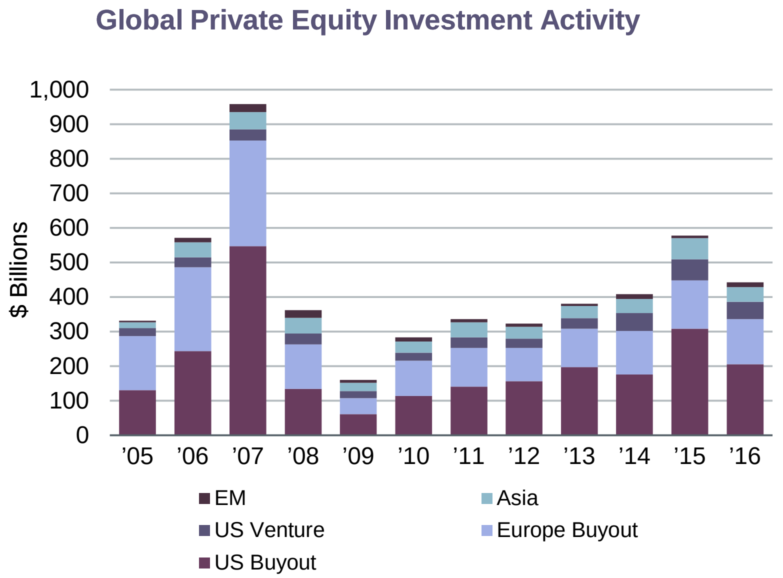
TECHNOLOGY CYCLE

Sources (clockwise from top left): Economic Cycle; IMF, 2011; Gartner, July'14; Stifel Nicoulas

Cyclicality in PE fundraising / investments

Investment levels have increased moderately post-GFC



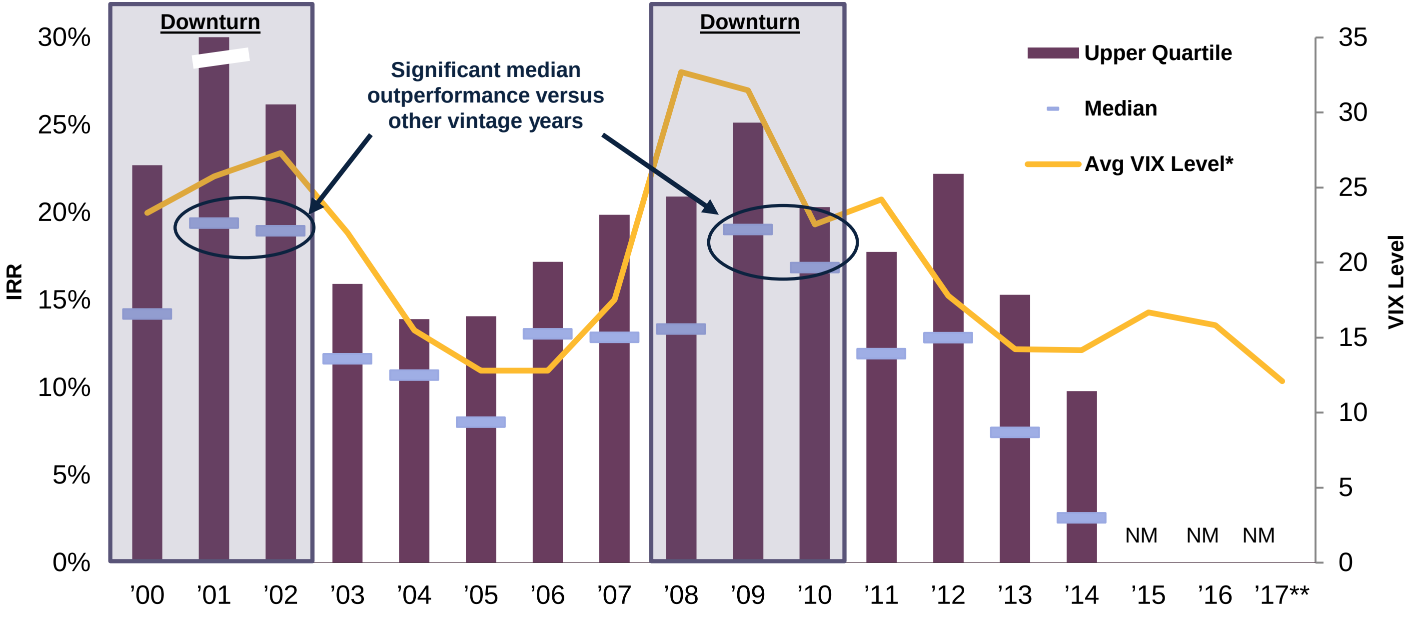


Source: Thomson Reuters, MergerMarket, S&P LCD and HarbourVest analysis of Asia from AVCJ, APER, EMPEA, and GP reporting

How does PE react to volatile markets?

Like other markets, PE returns cycle – volatile conditions offer the opportunity for differential returns

- 2009 and 2010 vintage year funds have outperformed, and still have significant unrealized capital, providing the potential for further upside as they continue to produce realizations



* Average of daily close levels
** Data through April 24, 2017
Source: US Buyout Returns: Cambridge Associates; VIX: Chicago Board Options Exchange.

Sub-asset class performance varies across cycles

Legend	Rank	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	3 Yr IRR	5 Yr IRR	10 Yr IRR
Asia	1	104.3%	83.1%	33.4%	12.0%	17.3%	25.3%	29.8%	22.1%	20.3%	11.6%	9.1%	14.6%	16.4%	20.6%	25.0%	28.0%	21.8%	20.9%	16.8%	15.8%	12.2%
Euro Buyout	2	28.1%	18.7%	14.7%	10.2%	16.6%	23.8%	21.9%	20.3%	15.4%	10.9%	8.2%	11.3%	14.8%	20.2%	18.2%	22.8%	16.9%	15.3%	16.7%	15.0%	12.0%
Global Secondaries	3	19.1%	14.5%	11.4%	9.8%	15.3%	20.2%	18.6%	16.1%	13.4%	9.0%	8.0%	9.9%	14.5%	16.9%	17.5%	20.5%	16.3%	15.2%	15.7%	14.8%	11.2%
US Buyout	4	13.3%	10.4%	9.3%	8.9%	13.2%	18.8%	17.8%	16.1%	12.6%	8.8%	7.9%	9.4%	14.1%	15.8%	15.9%	18.2%	14.7%	14.2%	13.9%	14.2%	10.8%
US Growth	5	5.9%	10.1%	8.0%	6.1%	10.4%	13.4%	16.1%	12.2%	11.5%	8.6%	7.1%	9.4%	13.5%	15.2%	14.9%	16.5%	13.8%	11.3%	12.9%	13.4%	10.4%
US Venture	6	4.8%	9.9%	5.1%	2.6%	7.9%	10.1%	5.5%	8.3%	6.7%	7.8%	7.1%	8.9%	13.4%	14.6%	13.9%	15.9%	13.7%	9.4%	12.2%	12.7%	10.3%
Global PE	7			2.3%	-0.4%	0.0%	3.6%	1.6%		2.1%	6.5%	6.8%	7.7%	11.2%	8.9%	12.4%	15.4%	12.1%	8.6%	10.1%	10.0%	9.9%
US Economy																						
OECD Global Economy																						

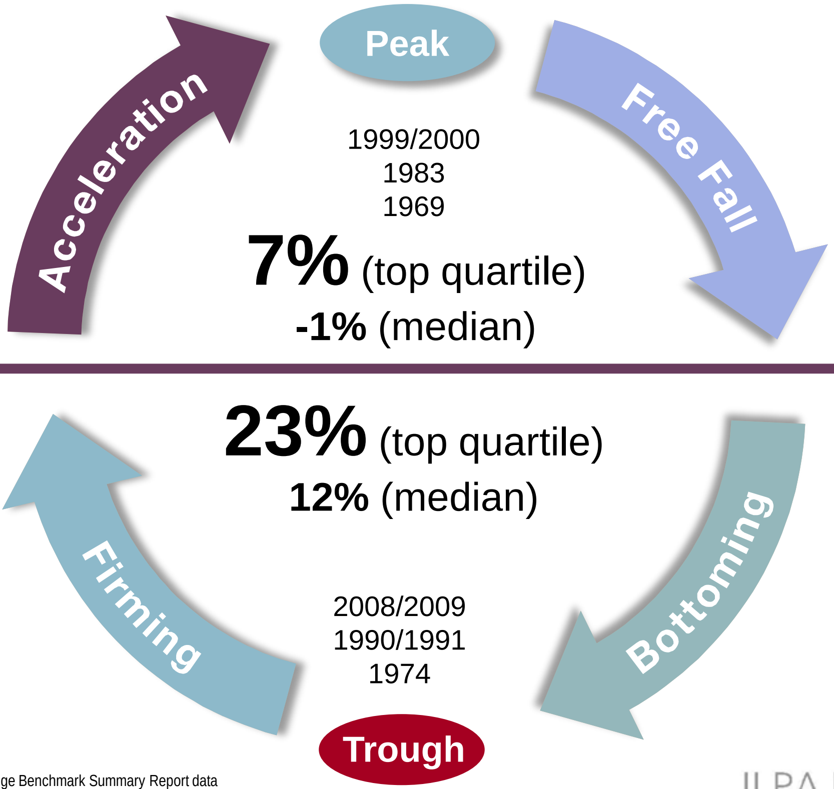
Source: Cambridge Associates net LP pooled returns as of September 30, 2016, RecessionAlert.com

Euro Buyout returns represent EUR

Example – How do market cycles affect US Venture performance?

Vintage Years	Top Quartile	Median
2014-2015	10.4%	-1.1%
1997-1999	17.6%	1.0%
1980-1983	11.5%	8.4%
1967-1969	N/A	N/A

Vintage Years	Top Quartile	Median
2000-2004	7.5%	0.7%
1983-1985	13.4%	9.3%
1969-1971	N/A	N/A



Vintage Years	Top Quartile	Median
2010-2013	20.6%	11.6%
1991-1996	53.5%	25.0%
1975-1979	44.8%	29.3%

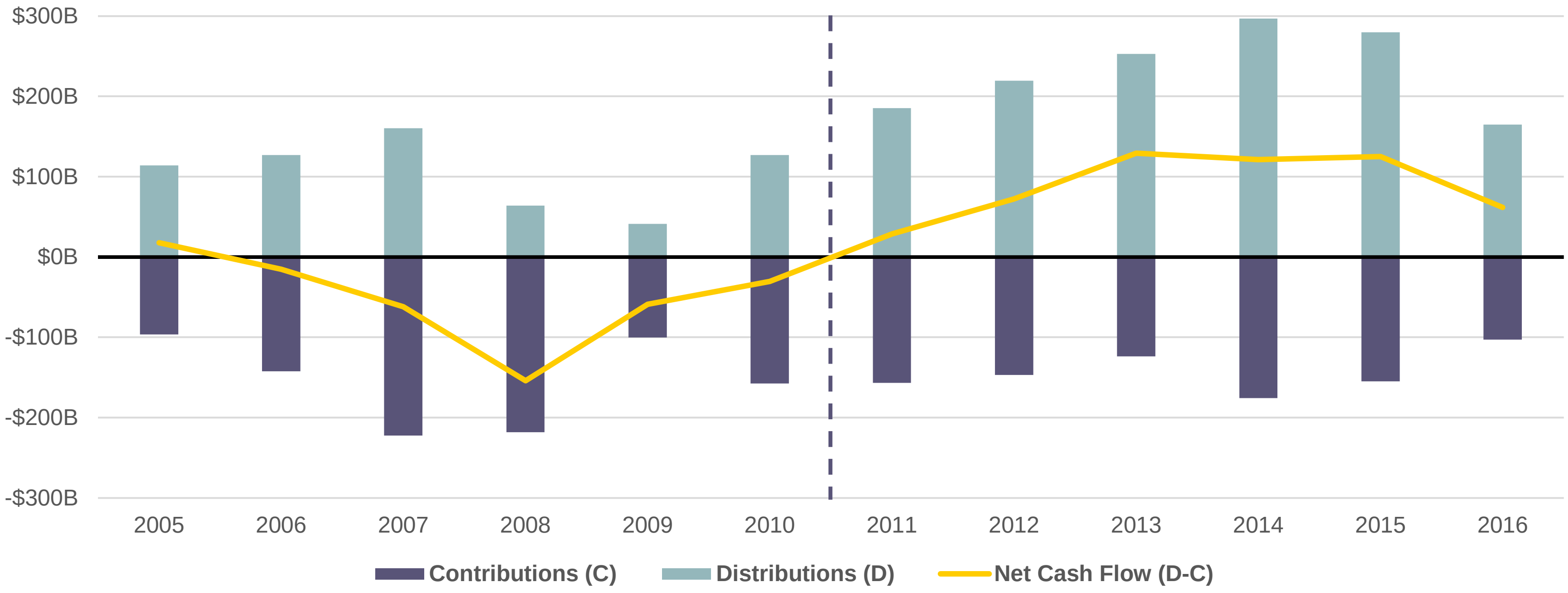
Vintage Years	Top Quartile	Median
2005-2007	13.5%	7.8%
1986-1989	19.7%	12.3%
1971-1974	26.1%	20.6%

Source: HarbourVest analysis; Cambridge Benchmark Summary Report data
US Venture as of September 30, 2016

THE IMPACT OF MARKET CYCLES

Distributions drive private market velocity

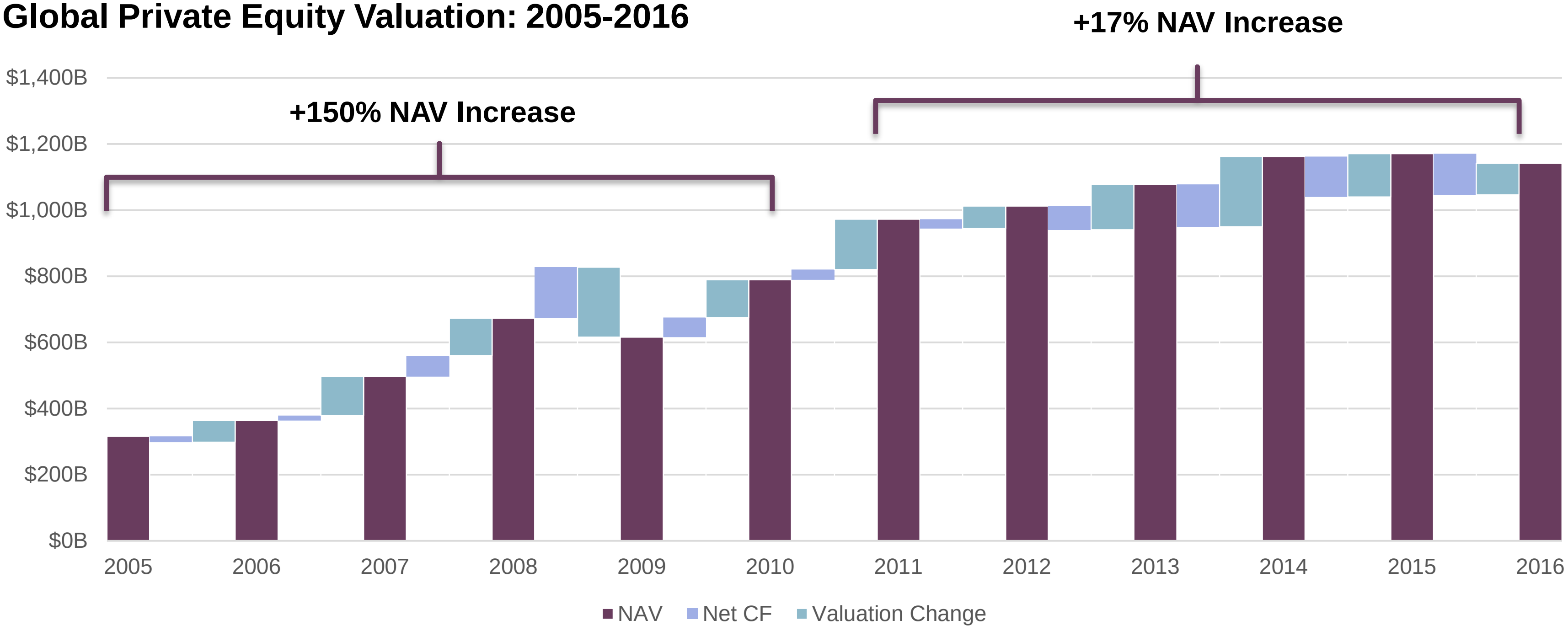
Global Private Equity Cash Flows: 2015-2016



Source: Cambridge Associates as of September 30, 2016

Excess cash fuels capital deployment at market peak

Global Private Equity Valuation: 2005-2016



Source: Cambridge Associates as of September 30, 2016

Impact of different market environments on PE program

	'05 – '07 (Acceleration)	'08 – '09 (Free Fall)	'10 – '16 (Firming)
Distributions	↑	↓	↑
Contributions	↑	↔	↔
NAV Change	↑	↓	↔
PE Commitment Pacing	↑	↓	↑
PE Allocation	Chasing target	Over allocated	Chasing target
Public Market Performance[1]	↑	↓	↑
PE Performance[2]	8.3%	13.7%	13.7%

[1] Public market performance based on MSCI World Index for time period listed.

[2] Cambridge Associates as of September 30, 2016. Represents net pooled IRRs for each vintage year in time period listed. Includes Global Venture Capital, Buyout, Growth Equity, Mezzanine, and Distressed.

Case study: Portfolio commitments by public pension plan

Private Assets Commitment Pacing - Actual Pacing: 2002-2016

Commitments as of June 30, 2016. For illustrative purposes only. Sample public pension portfolio information obtained from publically available data sources.
Performance Data: Cambridge Associates Global PE net pooled IRR as of September 30, 2016 (excludes Vintage Year 2016)

IMPLEMENTATION CHOICES & PORTFOLIO MANAGEMENT TECHNIQUES

Assess your goals and constraints

Before building out a strategy, allocate time to clearly identify your specific needs

- Cash flow & liquidity needs
- Return targets
- Time horizon
- Comfort with illiquidity risk

Key Considerations

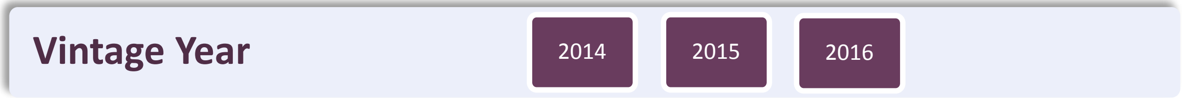
- Complement existing investments
- Who will make investment decisions?
- Tax issues
- Investment restrictions or constraints

Private equity portfolio management techniques

I. A well-balanced PE portfolio is **fully diversified** across strategies, vintage years, geographies, asset types, sub-asset types, and managers

II. The optimal combination of the “building blocks” included in a portfolio is determined by the **return target** and **risk tolerance** level of each individual investor

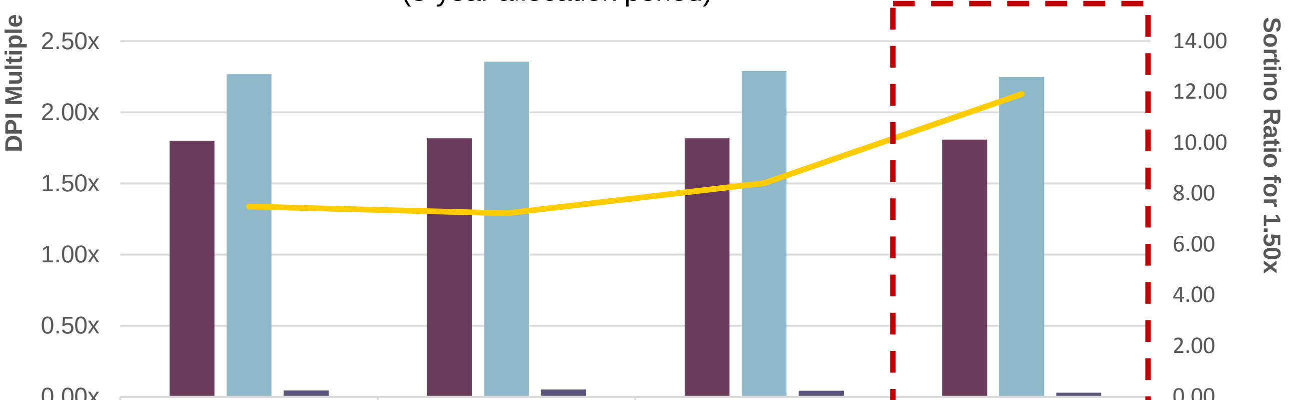
III. Each portfolio building block has to be diversified based on its own unique risk / return profile



Commit capital in even increments, irrespective of market conditions

Portfolios following even vintage year pacing strategy generate the highest risk-adjusted returns

Constructing a Diversified US Portfolio*
(3-year allocation period)



Deviation	10% 1st YR/45% 2nd YR/45% 2nd YR	70% 1st YR/20% 2nd YR/10% 3rd YR	50% 1st YR/30% 2nd YR/20% 3rd YR	33% 1st YR/33% 2nd YR/33% 3rd YR
Median Portfolio DPI	1.80x	1.82x	1.82x	1.81x
Expected Gain >75%	2.27x	2.36x	2.29x	2.25x
Target Downside Deviation	0.05x	0.05x	0.04x	0.03x
Sortino Ratio for 1.50x Target	7.49	7.23	8.41	11.92
% <1.0x	0.01%	0.02%	0.00%	0.00%

HarbourVest proprietary data set; Vintage years 1995 – 2012; Funds with residual value <20%.

*36-fund US portfolio with 15% Venture/85% Buyout weights. Past performance is not indicative of future returns.

The graphic and data above are based on a Monte Carlo simulation. See Note 6 for more information on the construction of this simulation. Past performance is not indicative of future returns

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Portfolios following even commitment sizing strategy generate the highest risk-adjusted returns

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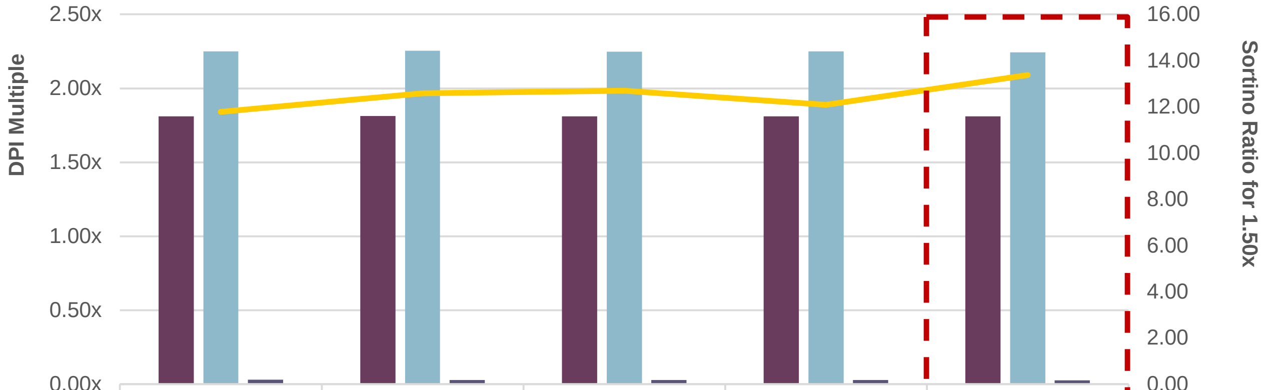

	Equal Size Venture + 10-100MM Buyout	2-20MM Venture + 10-100MM Buyout	2-20MM Venture + Equal Size Buyout 25MM	Equal Size Venture 20MM + Equal Size Buyout 50MM	Equal Size Venture 20MM + Equal Size Buyout 20MM
Median Portfolio DPI	1.81x	1.81x	1.81x	1.81x	1.81x
Expected Gain >75%	2.25x	2.25x	2.25x	2.25x	2.24x
Target Downside Deviation	0.03x	0.03x	0.03x	0.03x	0.03x
Sortino Ratio for 1.50x Target	11.78	12.59	12.70	12.09	13.38
% <1.0x	0.00%	0.00%	0.00%	0.00%	0.00%

HarbourVest proprietary data set; Vintage years 1995 – 2012; Funds with residual value <20%

*36-fund US portfolio with 15% Venture/85% Buyout weights. Past performance is not indicative of future returns

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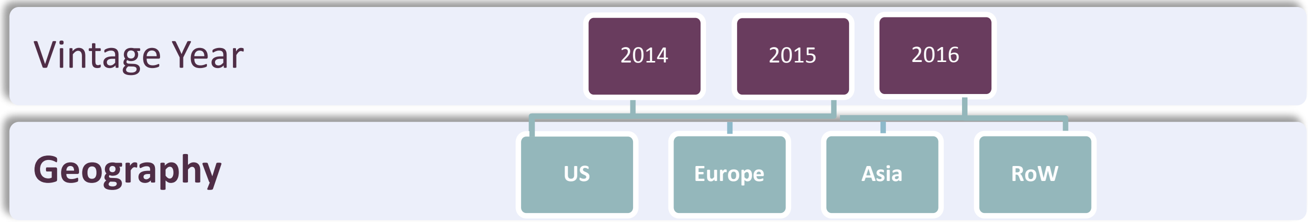
Private equity portfolio management techniques

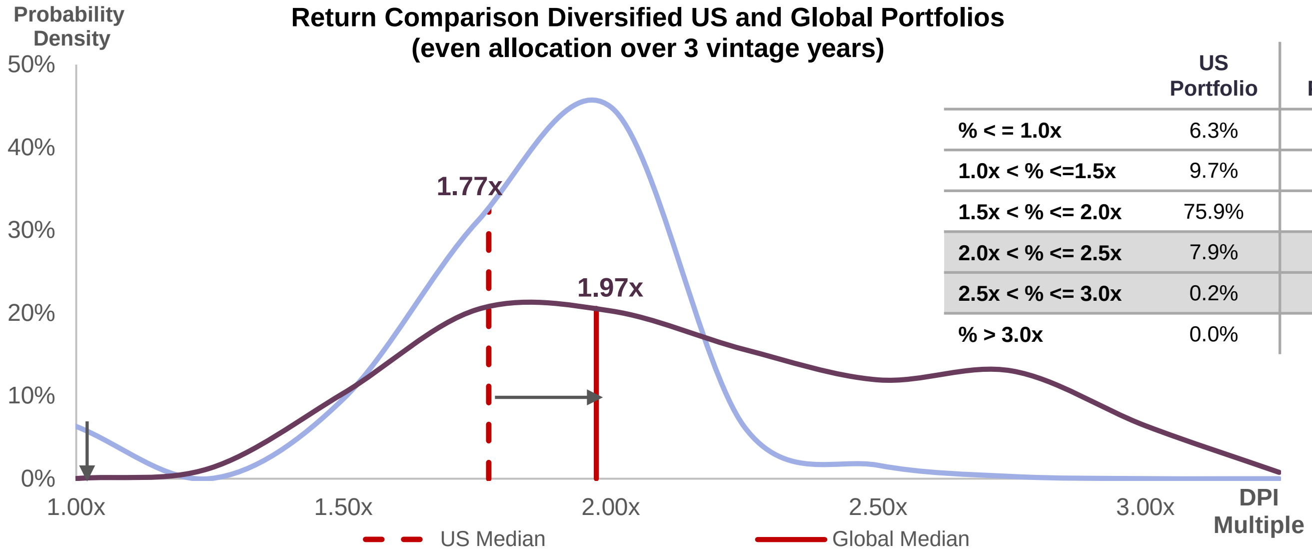


Diversify investments across geographies

Portfolios exposed to several geographic regions capture additional value

- Geographically diversified** portfolio has a median DPI of 1.97x compared to the median DPI of 1.77x for a diversified US portfolio with the same venture/buyout weights
- Diversified US portfolio*** delivers below 1.0x return in 6.3% of cases, while the return on a globally diversified portfolio is always above 1.0x

Return Comparison Diversified US and Global Portfolios (even allocation over 3 vintage years)



	US Portfolio	Global Portfolio
% < = 1.0x	6.3%	0.00%
1.0x < % <=1.5x	9.7%	11.60%
1.5x < % <= 2.0x	75.9%	40.70%
2.0x < % <= 2.5x	7.9%	27.50%
2.5x < % <= 3.0x	0.2%	19.40%
% > 3.0x	0.0%	0.8%

*HarbourVest proprietary data set; Vintage years 1995 – 2012; Funds with residual value <20%

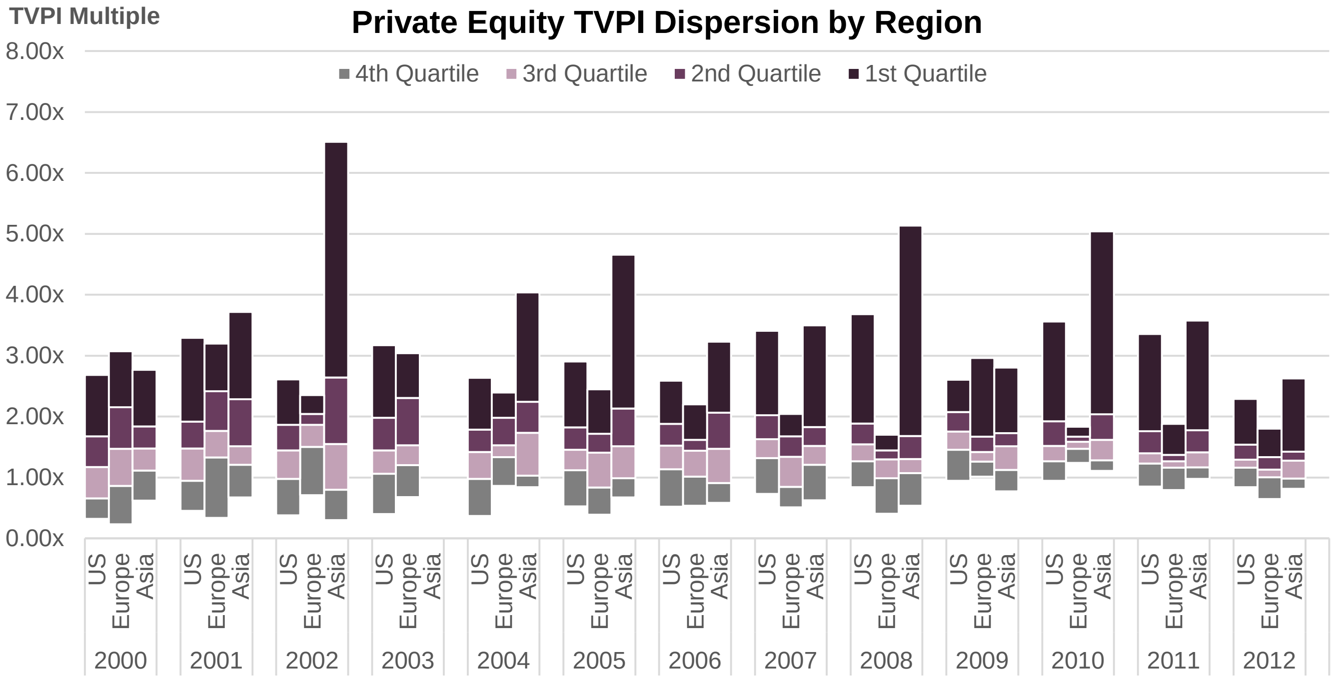
**Global portfolio weights are as follows: 55% US/15% Europe/15% Asia/15% RoW; 15% Venture/85% Buyout

***US portfolio weights are as follows: 15% Venture/85% Buyout.

The graphic and data above are based on a Monte Carlo simulation. See Note 6 for more information on the construction of this simulation. Past performance is not indicative of future returns.

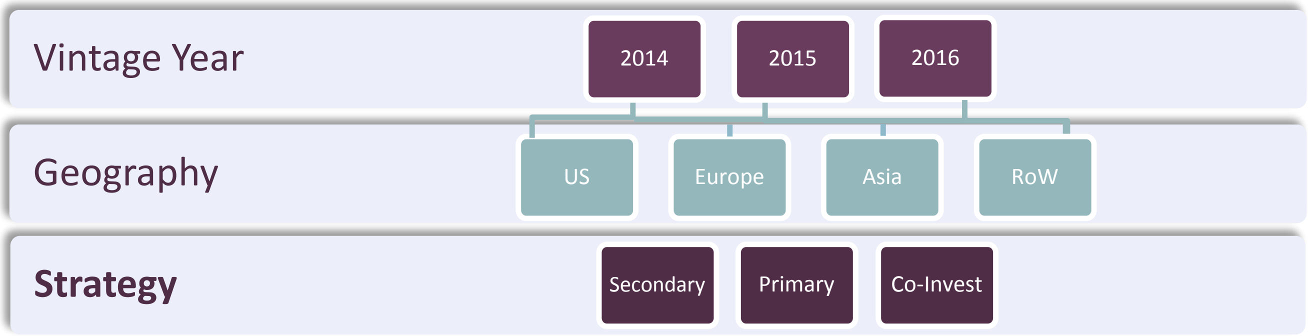
Diversify investments across geographies

The return dispersion is wider outside of developed markets



*Source: HarbourVest analysis; Cambridge Associates data as of September 30, 2016

Private equity portfolio management techniques



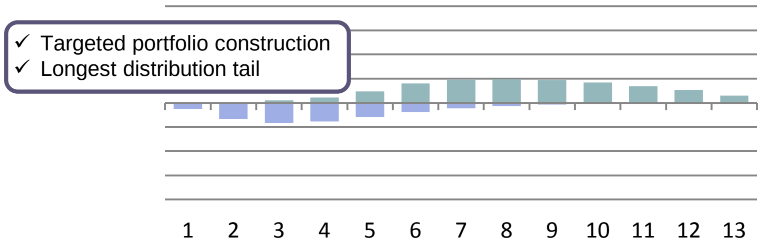
Combine investment strategies to complement varied characteristics

Each strategy offers a different capital deployment rate, fund development profile, and IRR characteristics

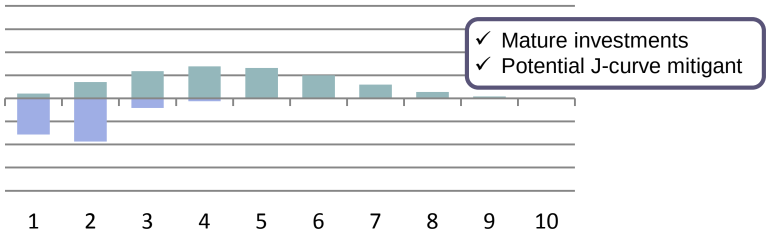
PRIVATE EQUITY STRATEGY	KEY CHARACTERISTICS	
	Fund Development Profile	**Typical Since Inception IRR Profile**
Primary	> Commits to newly-formed partnerships over 3-4 years, which call capital over 5+ years > Typically 45-50% of committed capital is called in first 4 years > Capital distributions are relatively uniform given time diversification, usually beginning in earnest after 5 years	> Can experience an IRR J-curve early in the investment period given time necessary to build portfolio value
Secondary	> Typically 80% of committed capital is called in the first 4 years > Capital distributions can begin immediately given the purchase of mature portfolios	> Potential for early IRR appreciation given the dynamic of purchasing diversified funded positions at discounts
Co-investment	> Typically 80% of committed capital is called in the first 4 years > Capital distributions are driven by exits of the portfolio companies	> IRR is more likely to fluctuate quarter-to-quarter given the more concentrated portfolio construction (20-25 companies)

Cash flow profiles by investment strategy

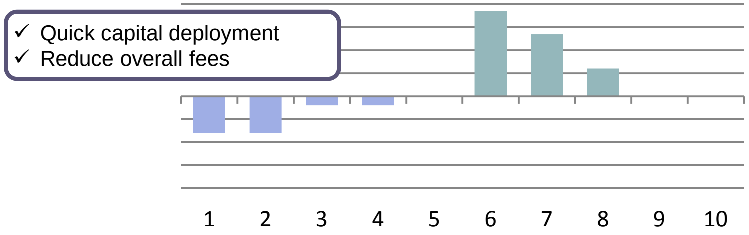
Primary Investments



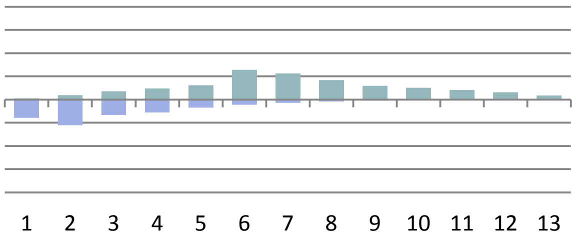
Secondary Investments



Co-investments



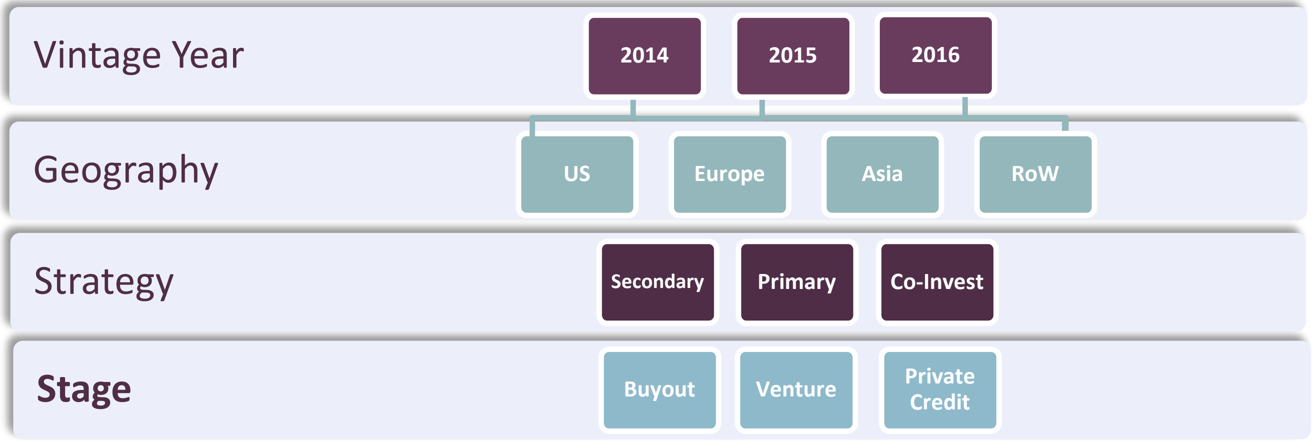
60% Primary / 25% Secondary / 15% Co-Investments



Capital calls **Distributions**

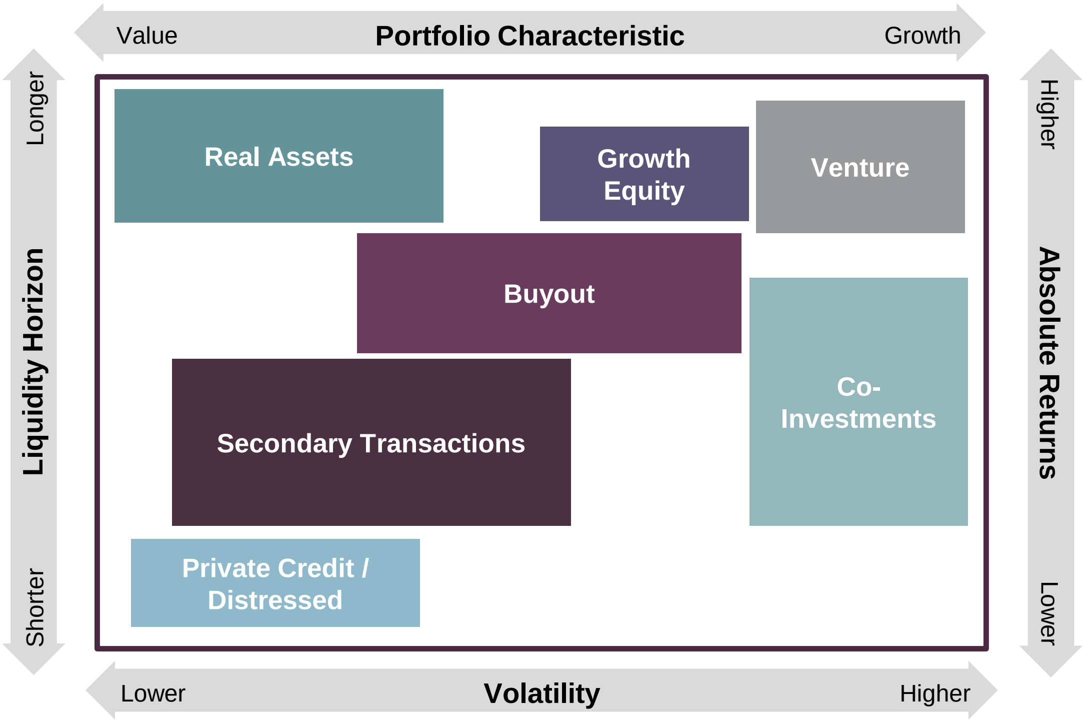
This is intended to be an illustrative example of the pace at which capital may be called by the fund. Investors and prospective investors should bear in mind that the future data presented is hypothetical and, as such, does not reflect actual timing or underlying investment performance and should not be construed as predicting the future. Hypothetical assumptions are based on experience of prior funds, current market conditions, and current fund expectations. The actual pace and timing of cash flows is likely to be different and will be highly dependent on the funds' commitment pace, the types of investments made by the funds, the investment pace of the underlying partnerships, and market conditions. Market conditions have a strong impact on investments and realizations and could materially change these projections. These projections should be used solely as a guide and should not be relied upon to manage your investments or make investment decisions. Past performance is not necessarily indicative of future results, and there can be no assurance that future funds will achieve comparable results. Investments in private funds involve significant risks, including loss of the entire investment.

Private equity portfolio management techniques



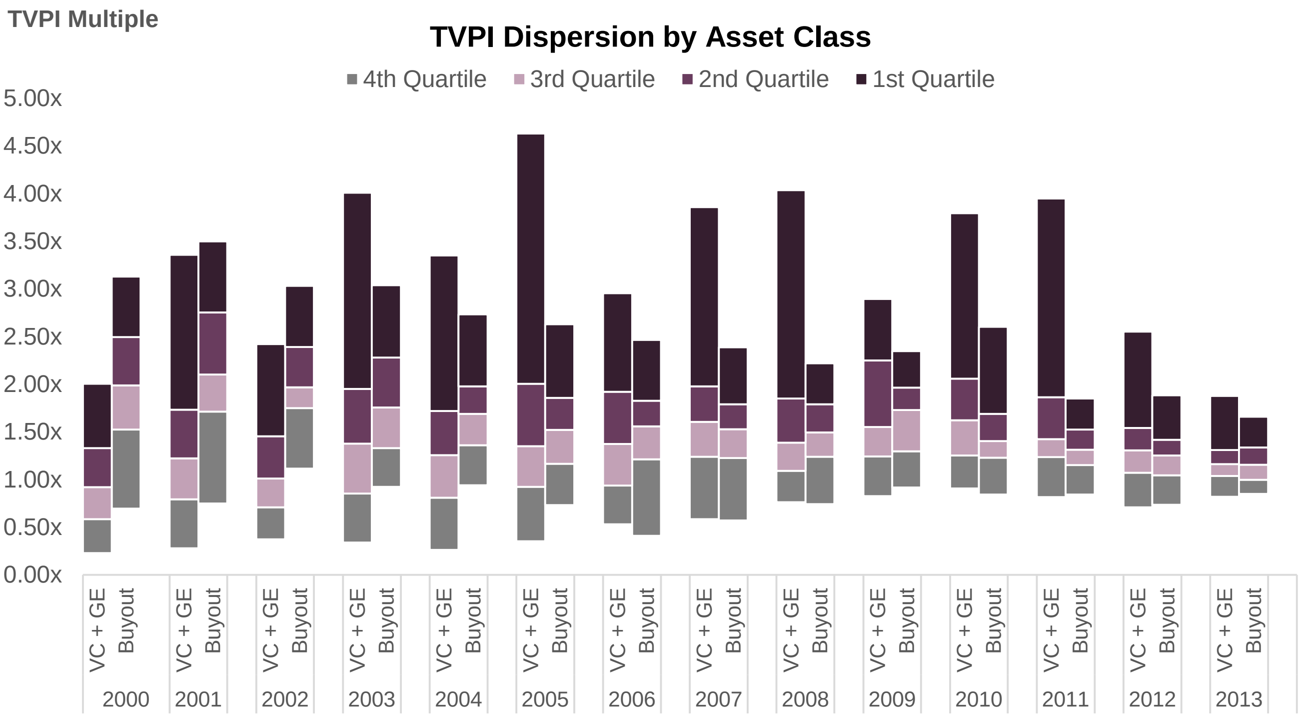
Balance risk and return through stage mix

Assess liquidity and return goals, identify desired risk tolerance, and determine desired stage exposure



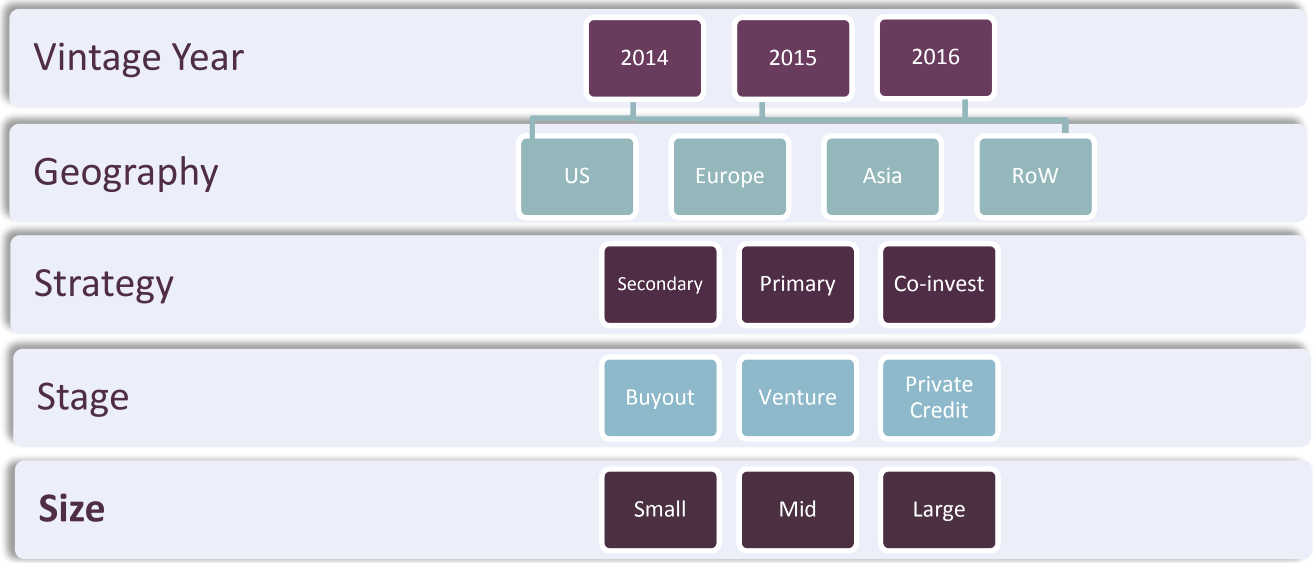
Apply careful manager selection in stages that offer outsize returns

Return dispersion is wider for Venture Capital and Growth Equity funds



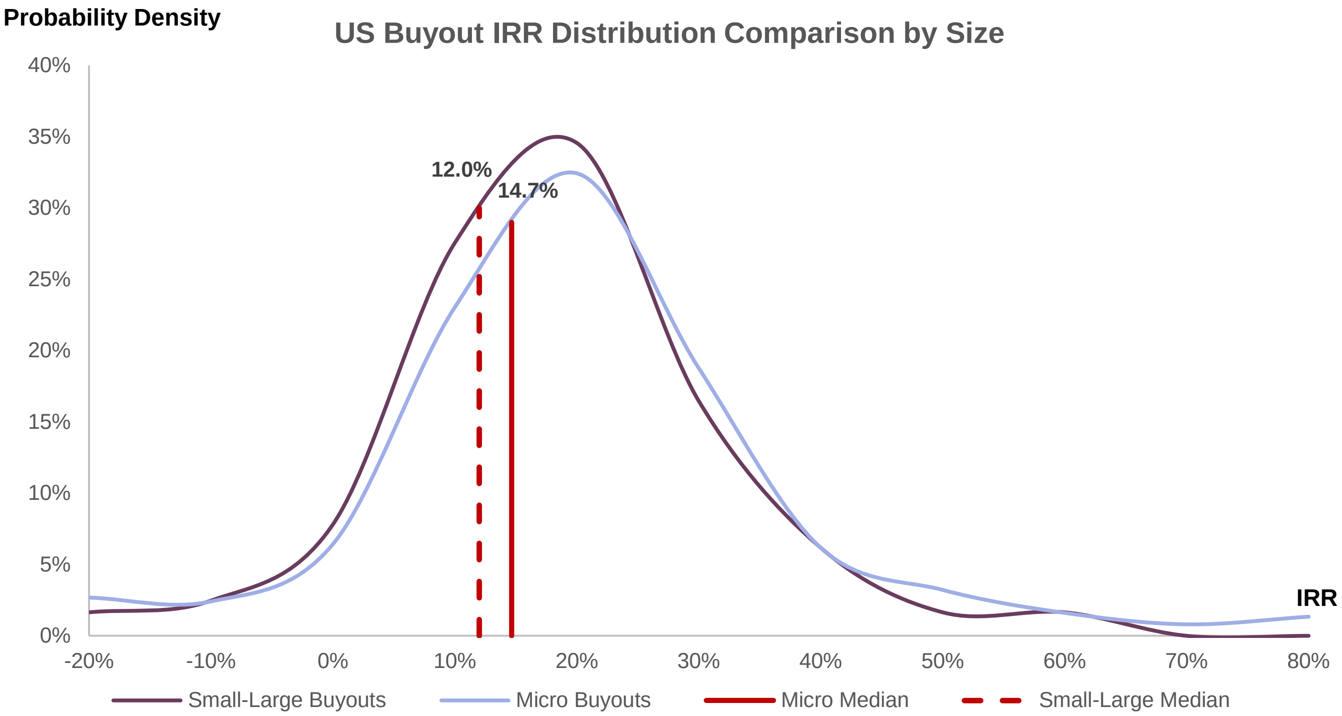
*Source: HarbourVest analysis; Cambridge Associates data as of September 30, 2016

Private equity portfolio management techniques



Consider a blend of large, medium, and small managers

Micro buyout funds have a higher median IRR and a higher dispersion of returns versus larger managers



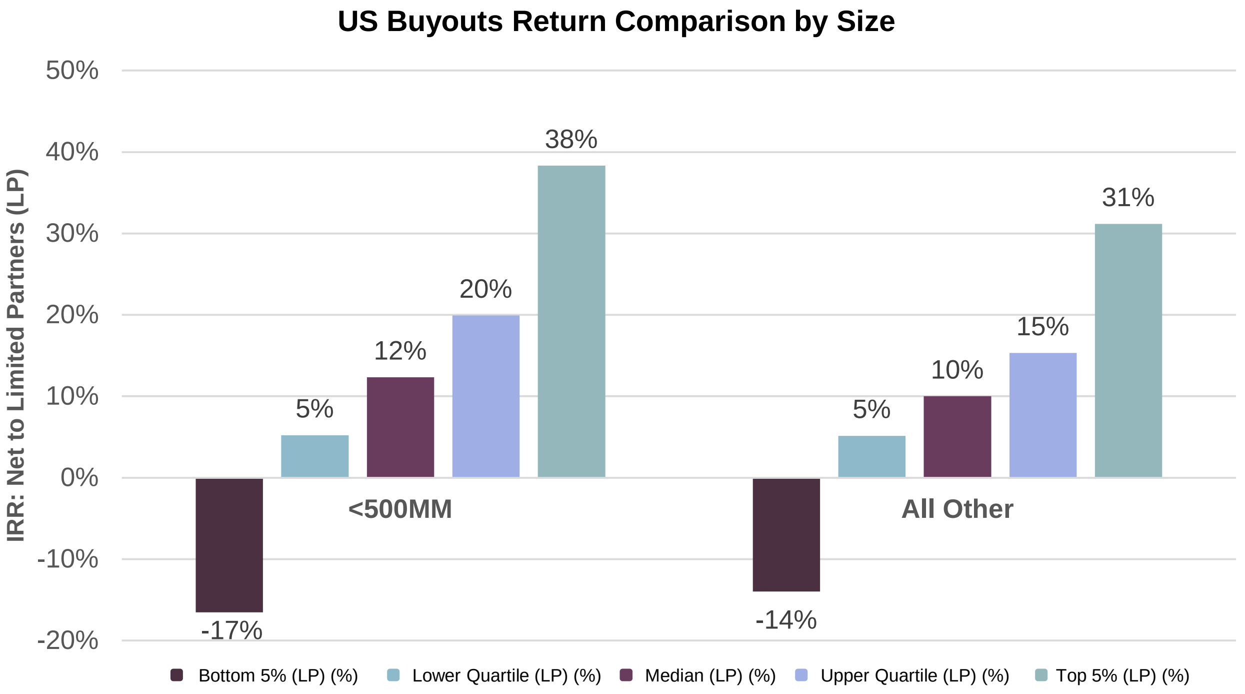
*Vintage years 1995 – 2012; Funds with residual value*** <20%

**Micro Cap: <= $500MM

***Residual Value = 1- $\frac{\sum \text{Cumulative Distributions}}{\text{Total Value}}$

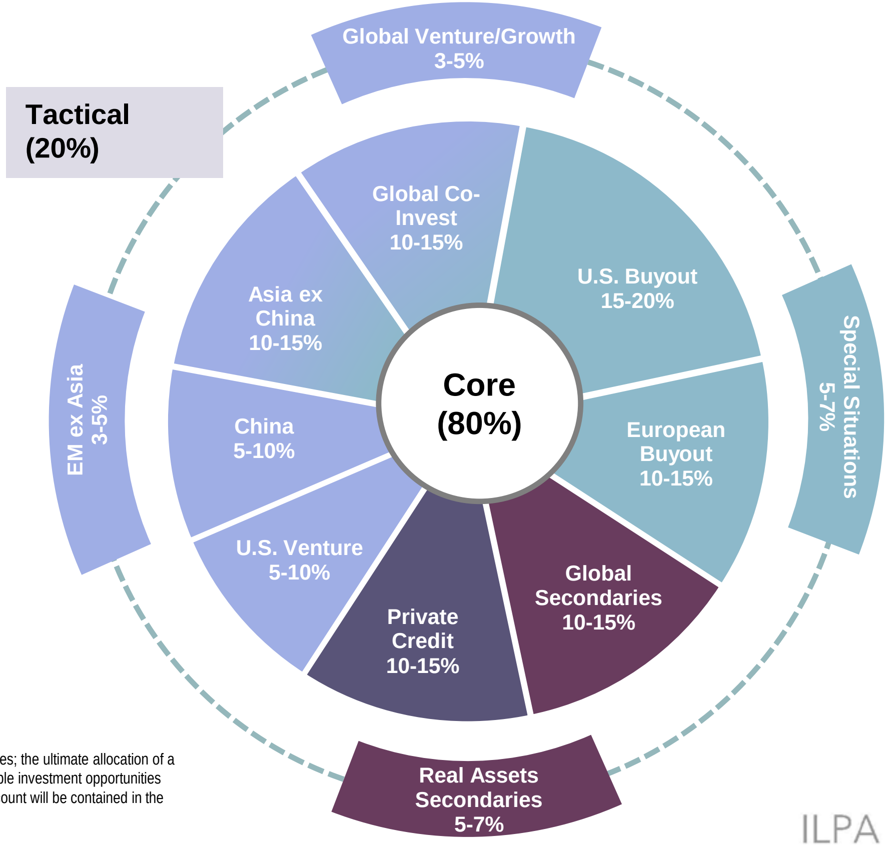
Include smaller managers to capture potential outsize returns

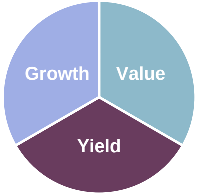
Micro US buyout funds exhibit a wider dispersion of returns, higher median return, and greater outperformance potential



*Source: Cambridge Associates as of September 30, 2016
**Vintage years 2005 and younger

Example – global, well-diversified PE portfolio





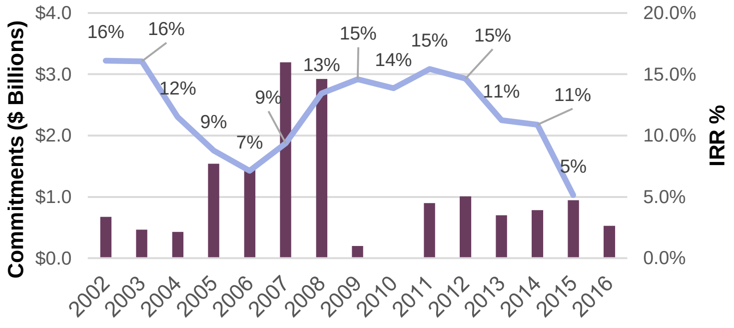
For illustrative purposes only. These are not prescriptive guidelines; the ultimate allocation of a fund/account will differ based upon market conditions and available investment opportunities over the life of the Fund. The investment guidelines of a fund/account will be contained in the respective fund/account governing documents.

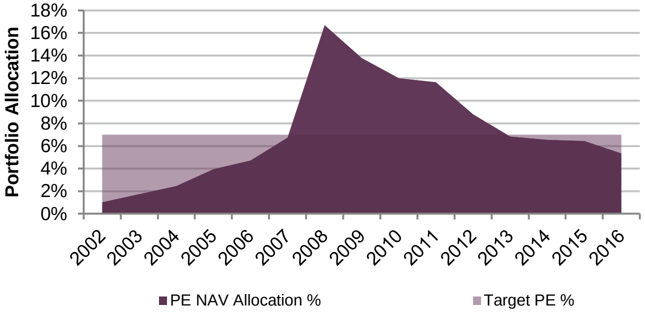
Case study: Public pension plan commitments revisited

Commitment Pacing

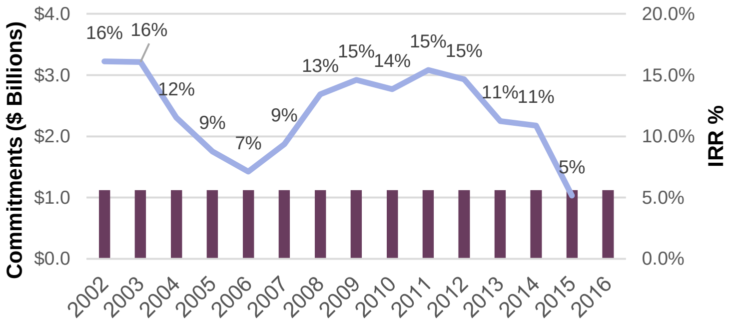
PE Allocation %

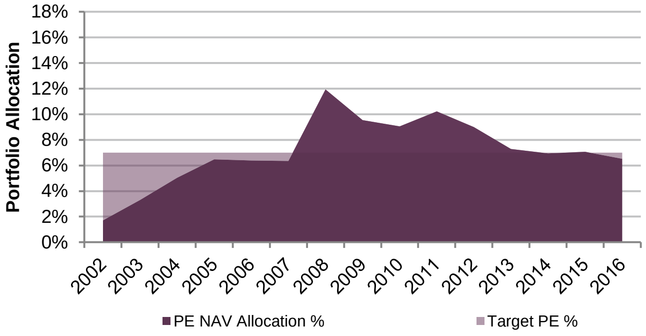
Unequal





Equal





As of June 30, 2016. For illustrative purposes only. Sample public pension portfolio information obtained from publically available data sources.

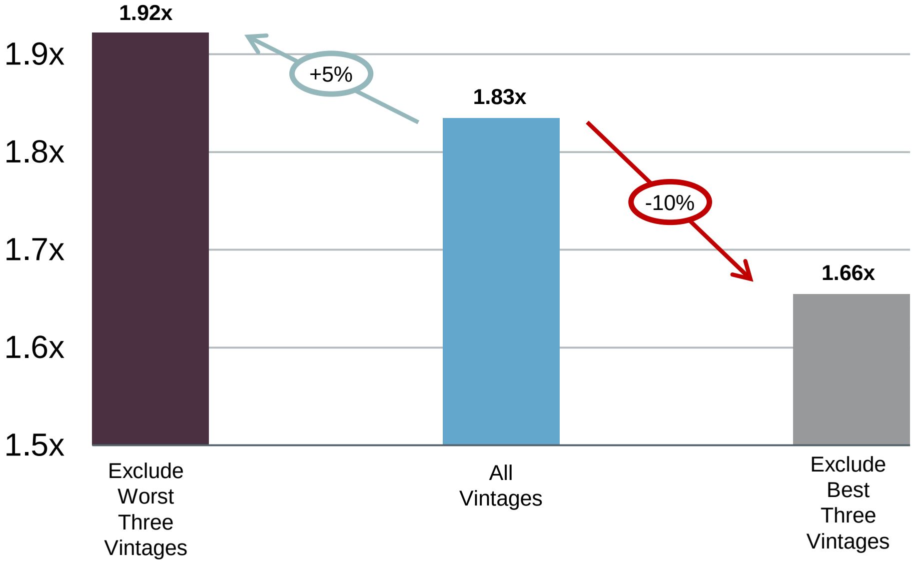
Performance Data: Cambridge Associates Global PE net pooled IRR as of September 30,.2016 (excludes Vintage Year 2016). Total AUM reflects annual changes in MSCI ACWI

LESSONS LEARNED

The importance of staying invested, regardless of conditions

The cost of missing good vintages outweighs the cost of being invested during low-performing vintages

The Impact of Market Timing



As of September 30, 2015. Includes all HarbourVest fund/account primary partnership commitment gross returns from 1992 – 2011. Past performance is no guarantee of future returns.

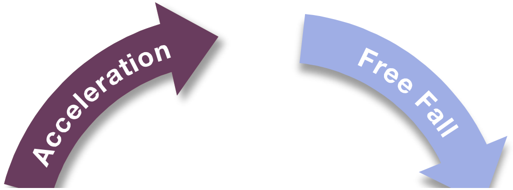
Common pitfalls in private equity portfolio construction

Lessons Learned

- Trying to time the market
- Manager proliferation
- Being too tactical
- Staff turnover

- Failing to take a long-term (patient) perspective
- Reaching target exposure
- Factoring in J-curve effect
- Investing outside areas of expertise

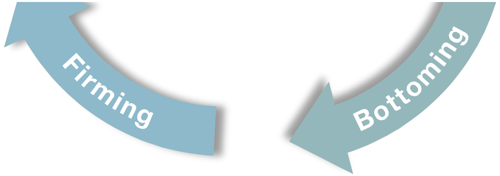
Conclusion



Private markets are not insulated from capital market trends…

…but managing volatility within your program is a key to success…

…and top quartile returns exceed public markets in all market cycles



- The private equity industry is cyclical
- Private equity is patient capital as investors are not forced to invest or divest
- Diversification is critical; diversify by vintage, strategy, stage, size, manager, and geography
- Careful selection of proven managers and investments is key to ensure top quartile performance
- Don’t let public market inflation impact your private market portfolio construction

THANK YOU

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Appendix

Additional information

Includes data (prior to 1998) related to transactions that occurred when the HarbourVest team was affiliated with Hancock Venture Partners, Inc.

In considering the prior performance information contained herein, prospective investors should bear in mind that past performance is not necessarily indicative of future results, and there can be no assurance that the Fund will achieve comparable results or be able to implement its investment strategy.

The foregoing performance information includes realized and unrealized investments. Unrealized investments are valued by the applicable general partner in accordance with the valuation guidelines contained in the applicable partnership agreement. Actual realized returns on unrealized investments will depend on, among other factors, future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions on which the valuations used in prior performance data contained herein are based. Accordingly, the actual realized returns on these unrealized investments may differ materially from returns indicated herein.

1. DPI (Distributions / Paid-In Capital), TVPI (Total Value / Paid-In Capital) and Net IRR (Internal Rate of Return) through the applicable date are the returns to limited partners after all fees, operating expenses and carried interest. These returns reflect the combined return for all limited partners in a fund and may not reflect an individual limited partner's actual return. The Net IRR is calculated using daily cash flows to and from limited partners. In this calculation, the final cash flow to limited partners is the fair market value of all limited partners' capital accounts at the applicable date as determined by the general partner of the respective HarbourVest fund or account in accordance with the valuation policy. The net multiples (DPI and TVPI) are calculated based on the same cash flows..
2. This information (Distributed / Funded, Total Value / Funded, Gross Portfolio IRR, Gross IRR) is presented on a gross basis and reflects the performance of the investment portfolio, including primary fund investments, secondary investments, and/or direct co-investments. For primary and secondary investments, these returns reflects the fees, expenses, and carried interest of the underlying partnership investments, but do not reflect management fees, carried interest, and other expenses borne by investors in the HarbourVest funds/accounts, which will reduce returns. Gross Portfolio IRR represents the annual return calculated using daily cash flows from the funds managed by HarbourVest to and from the various partnerships or companies in which the HarbourVest funds invested during the period specified. These returns do not represent the performance of any specific fund or the return to limited partners.
3. Portfolio company performance is based on the cost and value of underlying company investments within the primary and secondary portfolios of the HarbourVest funds. These figures do not reflect the fees, expenses, and carried interest of the partnership investments or the HarbourVest funds, which will reduce returns. Performance may be aggregated when a company is held through multiple primary and secondary investments. These returns do not represent the performance of any specific fund or the return to limited partners.
4. Public market comparison represents performance if the respective index had been purchased and sold at the time of the limited partners' capital calls and distributions, with the remainder held at the date noted. Dividends are not reinvested. Using this methodology, the capital calls for the purchase of the public market index are the same as the capital calls for the HarbourVest fund. The distributions for the sales of the public market index are scaled to represent the same proportion of the fund's NAV at the time of the distribution. (For example, if the fund distributes 5% of NAV, then 5% of the index NAV is distributed.) The securities comprising the public market benchmarks have substantially different characteristics than the investments held by the HarbourVest funds, and accordingly a direct comparison may not be meaningful.
5. HarbourVest vintage classification is based on year in which capital was first funded to each underlying fund (for primary fund investments) or the year of HarbourVest's purchase (for secondary investments).
6. These model (hypothetical) portfolios are intended for illustrative purposes only. Performance information for each hypothetical portfolio utilized a Monte Carlo Simulation and are based on the actual cash flows of a proprietary data set that includes partnership investments made by HarbourVest Funds and accounts, along with partnership data from external sources. The capital calls and distribution data is based on historic partnership investment cash flows, but does not represent the actual experience of any investor or any HarbourVest fund. The results of the simulation are impacted by an uneven representation of funds with different vintage years, sizes, mangers, and strategies, and a limited pool of investment cash flow data. The actual pace and timing of cash flows is likely to be different and will be highly dependent on the underlying partnerships' commitment pace, the types of investments made by the fund(s), market conditions, and terms of any relevant management agreements. The results presented are based entirely on the output from numerous mathematical simulations. The simulations are unconstrained by the fund size, market opportunity, and minimum commitment amount, and do not take into account the practical aspects of raising and managing a fund. The simulated hypothetical portfolio results should be used solely as a guide and should not be relied upon to manage your investments or make investment decisions. Past performance is not a guarantee of future returns, and there can be no assurance that future funds or accounts will achieve comparable results. Investments in private funds involve significant risks, including loss of the entire investment.

Notes continued on next page.

Additional information

The information contained herein is highly confidential and is being provided to you at your request for informational purposes only and is not, and may not be relied on in any manner as, legal, tax or investment advice or as an offer to sell or a solicitation of an offer to buy an interest in any investment sponsored by HarbourVest Partners L.P. or it's affiliates (the "Fund"). A private offering of interests in the Fund will only be made pursuant to a confidential private placement memorandum (the "Memorandum") and the Fund's partnership agreement and subscription documents, which will be furnished to qualified investors on a confidential basis at their request for their consideration in connection with such offering. The information contained herein will be superseded by, and is qualified in its entirety by reference to, the Memorandum, which will contain information about the investment objective, terms and conditions of an investment in the Fund and will also contain tax information and risk disclosures that are important to any investment decision regarding the Fund. No person has been authorized to make any statement concerning the Fund other than as will be set forth in the Memorandum and any such statements, if made, may not be relied upon. The information contained herein must be kept strictly confidential and may not be reproduced or redistributed in any format without the express written approval of HarbourVest Partners L.P. (together with its affiliates, "HarbourVest").

Investment in the Fund will involve significant risks, including loss of the entire investment. Before deciding to invest in the Fund, prospective investors should pay particular attention to the risk factors contained in the Memorandum. Prospective investors should make their own investigations and evaluations of the information contained herein. Prior to the closing of a private offering of interests in the Fund, HarbourVest will give investors the opportunity to ask questions and receive additional information concerning the terms and conditions of such offering and other relevant matters. Each prospective investor should consult its own attorney, business advisor and tax advisor as to legal, business, tax and related matters concerning the information contained herein and such offering.

Certain information contained herein (including financial information and information relating to investments) has been obtained from published and non-published sources. Such information has not been independently verified by HarbourVest. Except where otherwise indicated herein, the information provided herein is based on matters as they exist as of the date of preparation and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available, or circumstances existing or changes occurring after the date hereof.

In considering any performance data contained herein, you should bear in mind that past performance is not indicative of future results. Certain information contained herein constitutes forward-looking statements, which can be identified by the use of terms such as "may", "will", "should", "expect", "anticipate", "project", "estimate", "intend", "continue" or "believe" (or the negatives thereof) or other variations thereof. Due to various risks and uncertainties, including those discussed above, actual events or results or actual performance of the Fund may differ materially from those reflected or contemplated in such forward-looking statements. As a result, investors should not rely on such forward-looking statements in making their investment decisions.

None of the information contained herein has been filed with the Securities and Exchange Commission, any securities administrator under any state securities laws or any other governmental or self-regulatory authority. No governmental authority has passed on the merits of the offering of interests in the Fund or the adequacy of the information contained herein. Any representation to the contrary is unlawful.