



*Private Equity Fund of Funds – Process and Review
March 2012*

*Andrew Junkin, CFA, CAIA
Managing Director*

*Tom Toth, CFA
Managing Director*

Introduction – Key Terms



- Venture Capital (VC)
 - Illiquid investments in high potential, high risk businesses. Generally minority equity interests in young, very rapidly growing companies with the potential to become large, public companies
- Growth Capital
 - Equity or equity-like investments in public or private companies with sustainable businesses. The investment is used to expand the operations of the company
- Leveraged Buyouts (LBO's)
 - Equity-like investments in public or privately owned companies utilizing leverage, or borrowed funds, to purchase a significant portion or majority control of their ownership
- Mezzanine
 - Invests in the subordinated debt and/or equity of privately owned companies. Investors in subordinated instruments stand behind those with senior instruments – like bonds. To enhance investment returns, the subordinated instrument may have stock conversion features such as rights, warrants or options.
- Distressed Debt
 - Investments in debt securities of a firm that has declared or is about to declare bankruptcy. Investment strategies include bankruptcy workouts and turnarounds
- Secondary Investment
 - Involves the purchase of an existing interest in a private equity limited partnership from the original investor who is looking for an exit before the partnership terminates
- Internal Rate of Return (IRR)
 - Performance measured utilized for private equity investments which takes into account the timing of cash flows and the speed with which capital is returned to investors
- Vintage Year
 - The year in which a private equity investment is made. Vintage year diversification is a key pillar of Wilshire's private equity investment philosophy

Private Equity Pacing Model

- Wilshire modeled the Tacoma private equity portfolio to determine an appropriate yearly commitment level to reach the target private equity investment of 10%
- Factors taken into account
 - Total fund size and expected growth
 - Current remaining commitments
 - Drawdown schedule for currently committed capital
 - > Moderate (25%/year)) increase in drawdowns versus the standard assumption of 20%/year
 - Current market value of private equity investments
 - Expected return on private equity investments of 10.25%
 - Distributions from the private equity portfolio

	Distributions			
	<u>Future Commitments</u>	<u>Cumulative</u>	<u>Current Commitments</u>	<u>Cumulative</u>
Yr 1	0%	0%	20%	20%
Yr 2	5%	5%	10%	30%
Yr 3	5%	10%	20%	50%
Yr 4	10%	20%	15%	65%
Yr 5	10%	30%	15%	80%
Yr 6	20%	50%	10%	90%
Yr 7	15%	65%	10%	100%
Yr 8	15%	80%		
Yr 9	10%	90%		
Yr 10	10%	100%		

Private Equity Commitment Pacing Schedule



Year End	Year 1	Year 2	Year 3	Year 4	Year 5
Total Fund	\$1,163,365	\$1,204,083	\$1,246,226	\$1,289,844	\$1,334,988
Private Equity Investment Policy	\$116,337	\$120,408	\$124,623	\$128,984	\$133,499
Beginning Total Private Equity Investments	28,781	\$56,504	\$82,085	\$109,582	\$117,699
Distributions of Appreciated Drawdowns	(\$11,301)	(\$22,826)	(\$43,414)	(\$44,762)	(\$40,296)
Drawdowns	\$26,248	\$32,248	\$44,248	\$44,749	\$49,499
Ending Total Private Equity Investments including inv. Gains	\$56,504	\$82,085	\$109,582	\$117,699	\$129,912
Current Year Commitments	\$60,000	\$60,000	\$60,000	\$50,000	\$50,000
Remaining Commitments	44,994	72,745	\$88,497	\$93,748	\$94,248
Total Invested + Remaining Commitments	\$101,498	\$154,830	\$198,079	\$211,447	\$224,161
As a Percent of Total Fund	9%	13%	16%	16%	17%
Invested % Total Fund	4.9%	6.8%	8.8%	9.1%	9.7%
Over (under) Allocated	(\$87,556)	(\$38,323)	(\$15,041)	(\$11,285)	(\$3,586)
Footnotes: (1) Distributions are calculated over a ten year period (starting in the year after initial commitment) (2) Drawdowns are accelerated for remainder of past commitments and 20%/year for future commitments (3) Total Fund grows at 3.5% per year (4) Private Equity Investments grows at 10.25% per year					

- Pacing of commitments modeled with a target of 10% invested capital
- Importantly, future commitments are not set and can be adjusted as market conditions dictate and only when compelling opportunities are present

Private Equity Fund-of-Funds Review
March 31, 2012

Manager Structure



Valuation Date is December 31, 2011

Vintage Year	Fund	Inception ²	Total Commitment	Cumulative Capital Called	%	Cumulative Distributions	Market Value	Multiple ¹	Performance Since Inception	
									Calculated IRR ³	Investable Wilshire 5000 + 300 bps ⁴
2009	HarbourVest Dover Street VII	Q2 09	20,000,000	16,550,000	83%	1,529,379	19,488,517	1.27	21.6%	27.2%
2010	HarbourVest Int'l PEP VI ⁵	Q3 10	7,789,173	1,012,592	13%	-	894,274	0.88	-14.5%	25.0%
	Pantheon Global Secondary Fund IV	Q4 10	20,000,000	3,900,000	20%	-	4,618,632	1.18	20.0%	20.3%
2011	Hamilton Lane Fund VII (Series A)	Q2 11	9,000,000	2,340,000	26%	270,000	2,052,120	0.99	-4.2%	10.2%
	Hamilton Lane Fund VII (Series B)	Q2 11	6,000,000	1,980,000	33%	510,000	1,461,950	1.00	-4.5%	10.2%
	HarbourVest IX - Venture	Q3 11	2,200,000	110,000	5%	-	100,872	0.92	-19.4%	N/A
	HarbourVest IX - Buyout	Q3 11	4,500,000	135,000	3%	-	116,123	0.86	-45.0%	N/A
	HarbourVest IX - Credit Opps	Q3 11	800,000	48,000	6%	-	48,204	1.00	4.4%	N/A
Private Equity Composite			70,289,173	26,075,592	37%	2,309,379	28,780,692	1.19	18.8%	27.2%

¹ Multiple calculation = $(\text{market value} + \text{distributions}) / \text{capital called}$

² Inception date shown here is the quarter in which the first cash flow (capital call) occurred, marking the start of when Wilshire began calculating performance; inception date is not the date when manager accepts Subscription Agreement.

³ Internal Rate of Return shown here is calculated by Wilshire based on cumulative cash flows and annualized since inception.

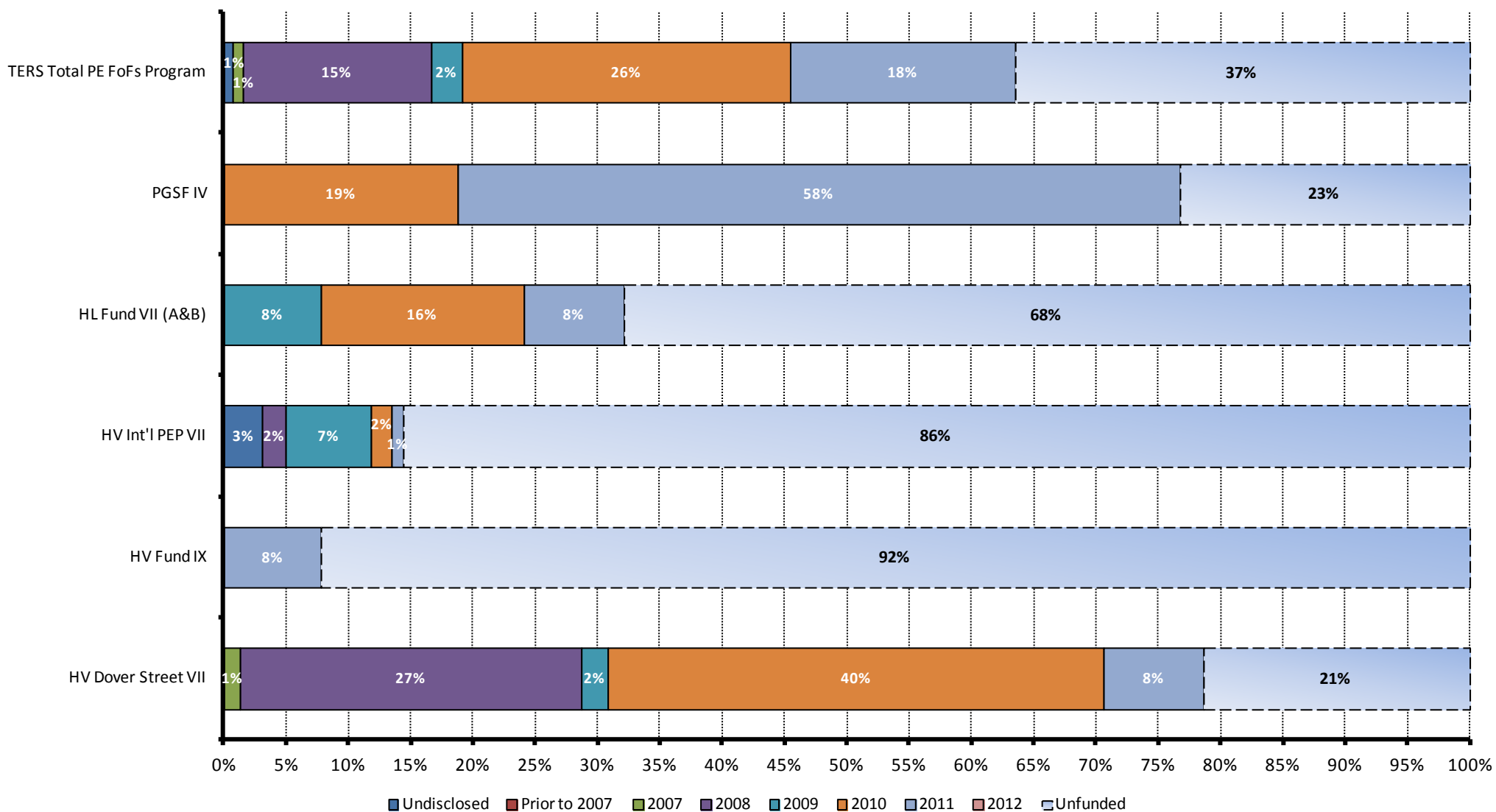
⁴ The performance shown here is the annualized return of the Wilshire 5000 Index since the quarter of inception for each fund, plus a 3% hurdle rate. Shown only for performance periods of one-year and greater.

⁵ The initial total commitment to HarbourVest Int'l Private Equity Partners VI is €6.0m. The valuations are converted to \$USD using the 12/31/11 EUR/USD spot rate of 0.7703.

Capital Deployment



Capital Deployment



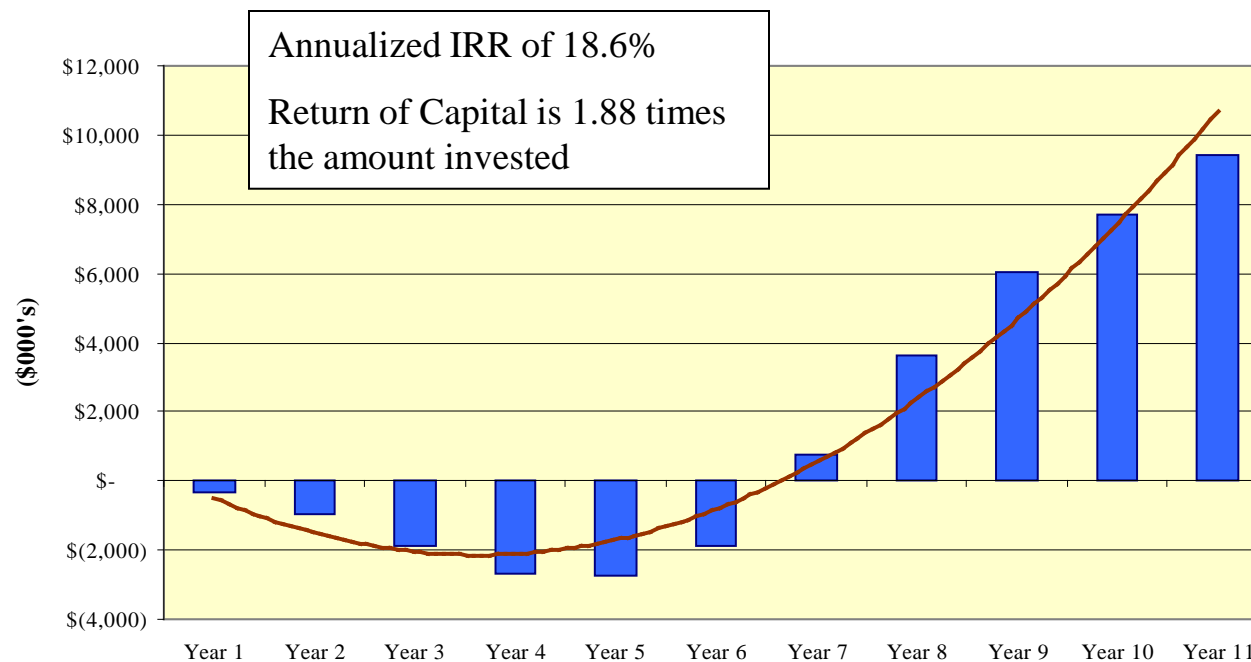
$$\text{Capital Deployment (for each vintage year)} = \frac{\$ \text{ Invested}}{\$ \text{ Committed}}$$

Holdings as of June 30, 2011.
Includes primary and secondary investments.

Private Equity J-Curve

- The investment cycle of a private equity investment is very long and exhibits a pattern that is referred to as the 'J-Curve'
 - Long term investment strategies
 - Accounting methodology
 - Fee structures are based on committed capital, not invested capital

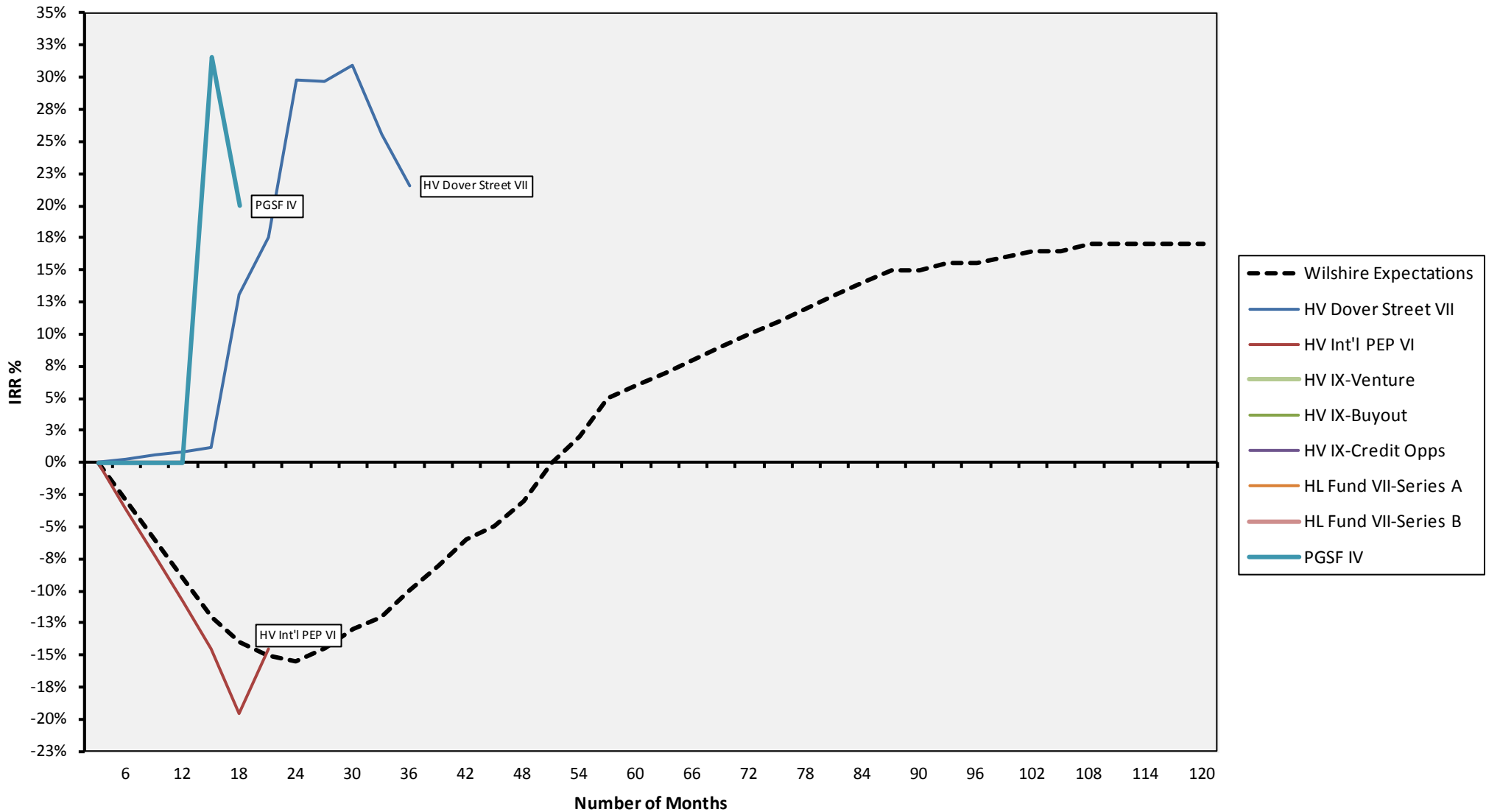
Expected Cumulative Value of a \$5 million commitment



Internal Rate of Return



Private Equity Fund-of-Funds
IRRs over Time

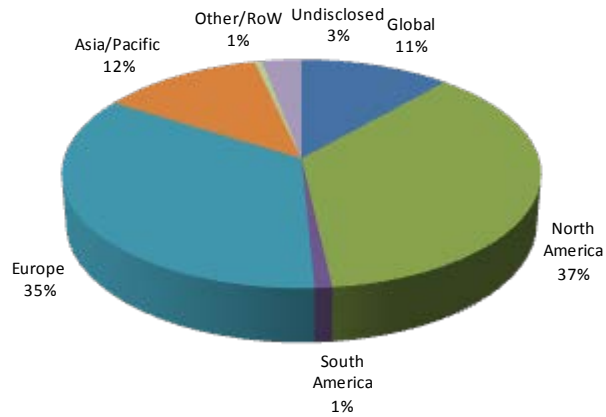


Note: IRR Curve is smoothed and estimated over the four quarters, with starting position at zero.

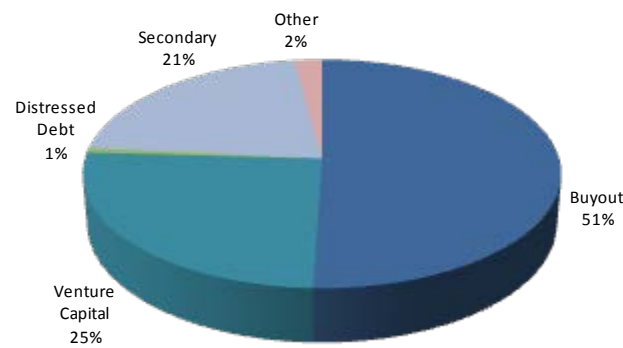
TERS Fund-of-Funds Program Holdings Analysis (Aggregated Total)



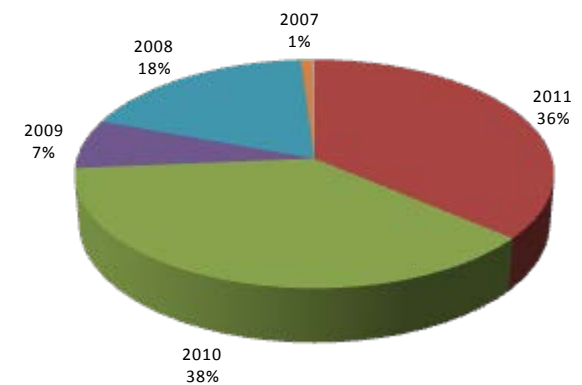
Region of Investment
By Total Commitment



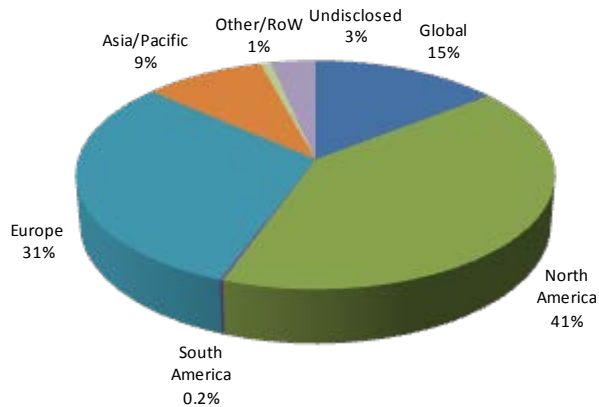
Strategy
By Total Commitment



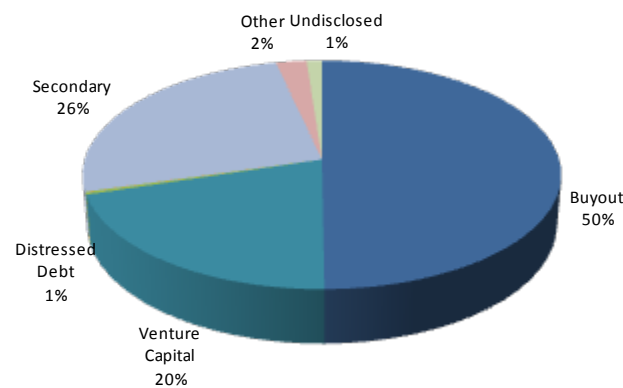
Vintage Year
By Total Commitment



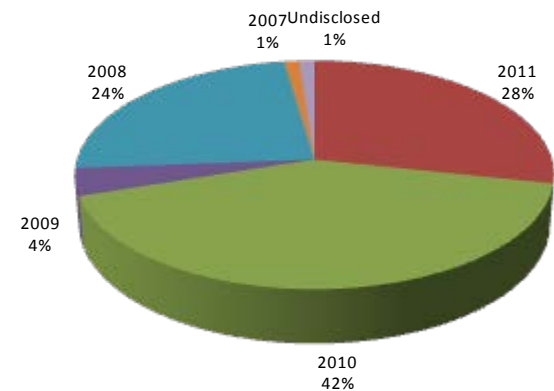
Region of Investment
By Amount Invested



Strategy
By Amount Invested



Vintage Year
By Amount Invested



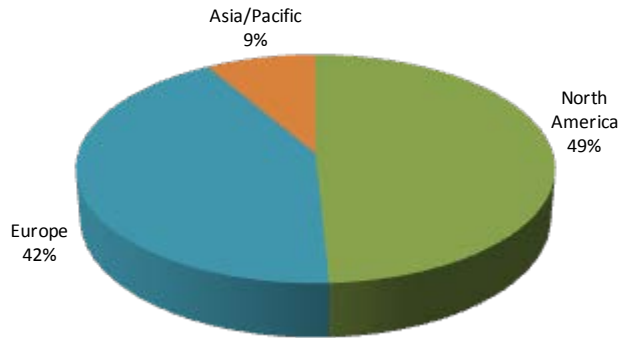
Holdings as of June 30, 2011.
Includes primary and secondary investments, aggregated for all managers in the program.

HarbourVest

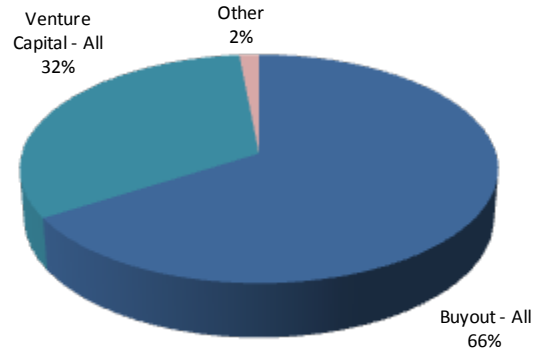
HarbourVest Dover Street VII



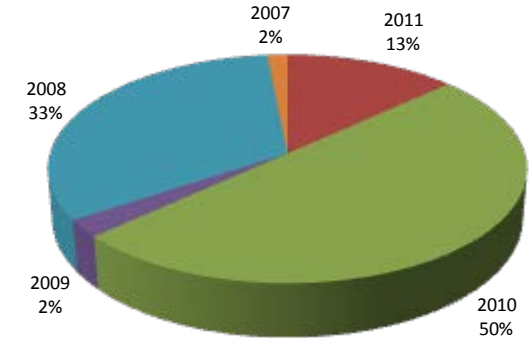
Region of Investment
By Total Commitment



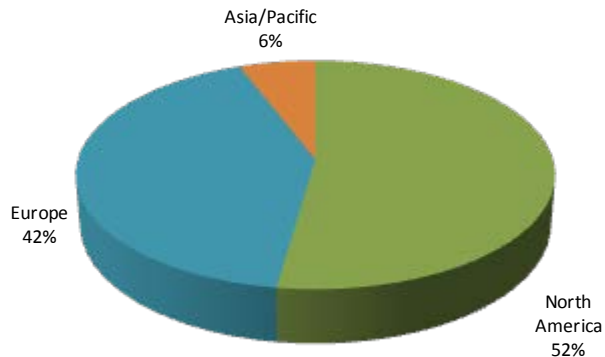
Strategy
By Total Commitment



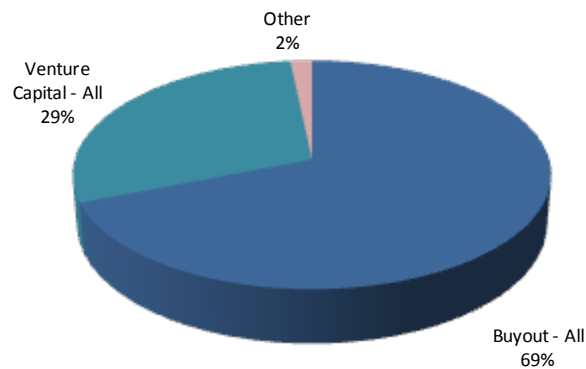
Vintage Year
By Total Commitment



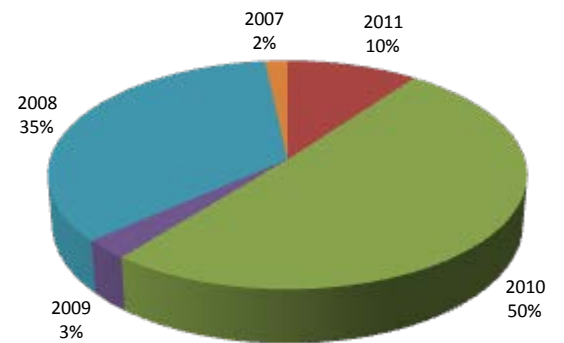
Region of Investment
By Amount Invested



Strategy
By Amount Invested

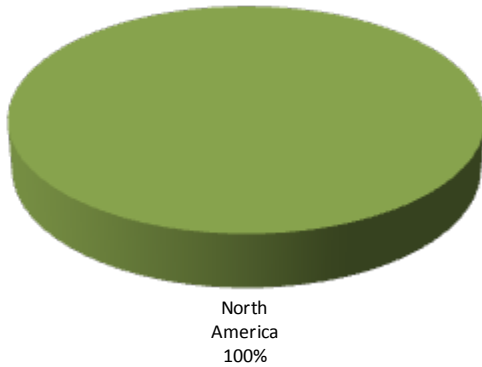


Vintage Year
By Amount Invested

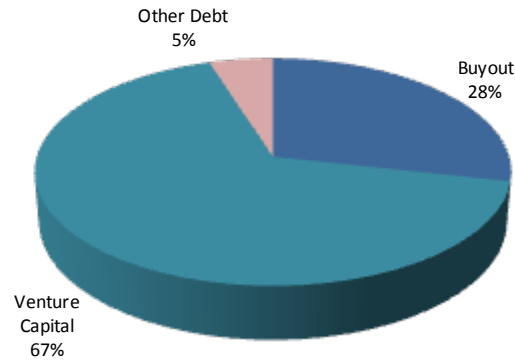


Holdings as of June 30, 2011.
Includes primary and secondary investments.

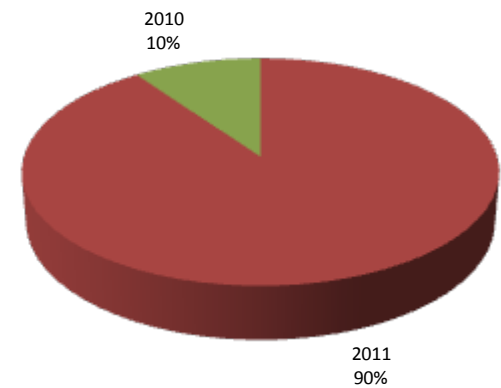
Region of Investment
By Total Commitment



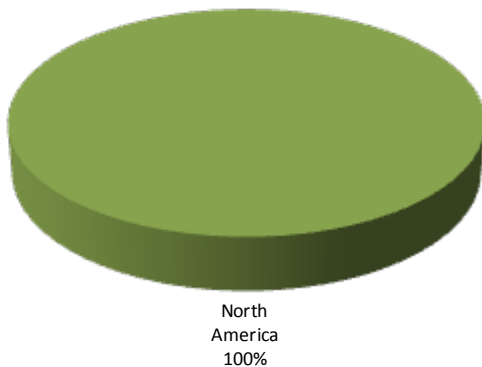
Strategy
By Total Commitment



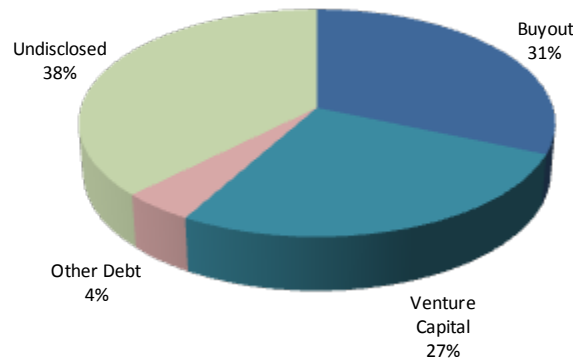
Vintage Year
By Total Commitment



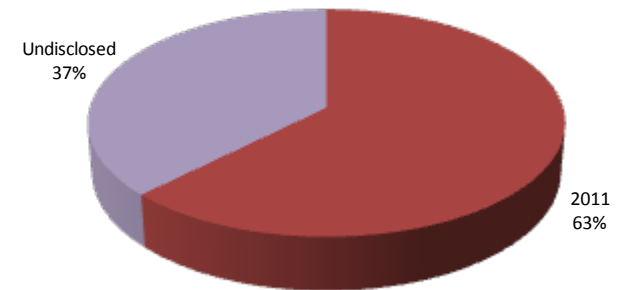
Region of Investment
By Amount Invested



Strategy
By Amount Invested



Vintage Year
By Amount Invested



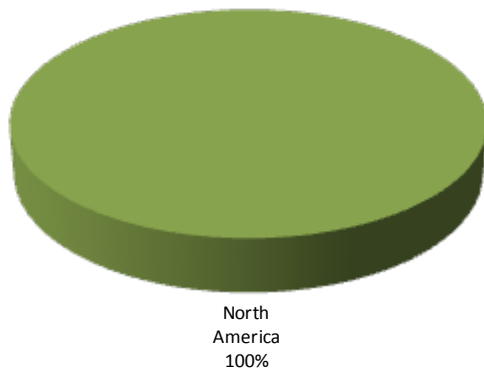
Holdings as of June 30, 2011.
Includes primary and secondary investments.

¹ Aggregate of all HarbourVest Fund IX sub-strategies: (1) Buyout; (2) Venture; (3) Credit Opportunities

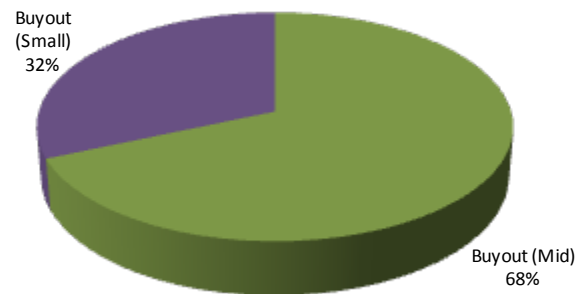
HarbourVest Fund IX – Buyout Fund



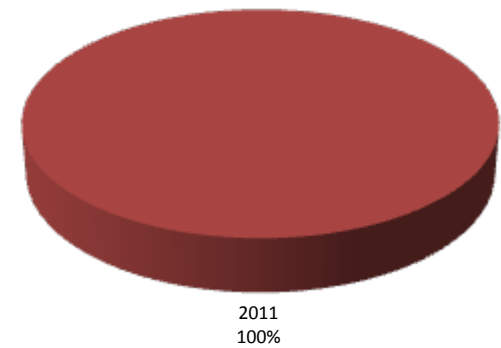
Region of Investment
By Total Commitment



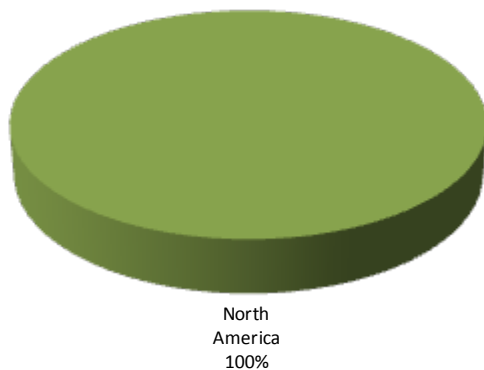
Strategy
By Total Commitment



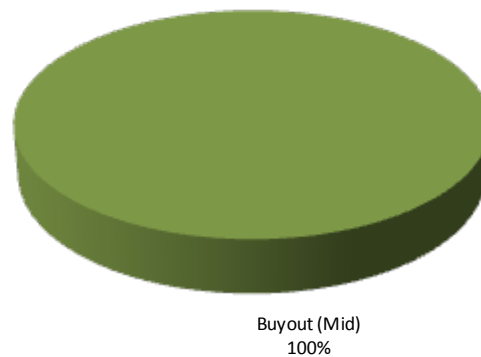
Vintage Year
By Total Commitment



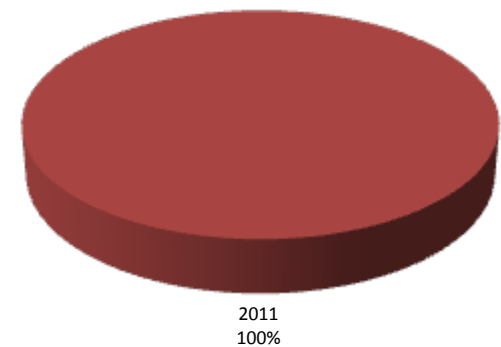
Region of Investment
By Amount Invested



Strategy
By Amount Invested



Vintage Year
By Total Commitment

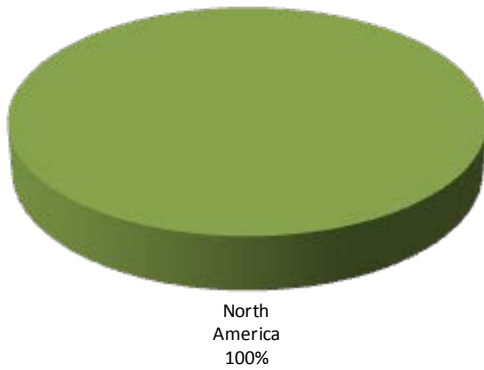


Holdings as of June 30, 2011.
Includes primary and secondary investments.

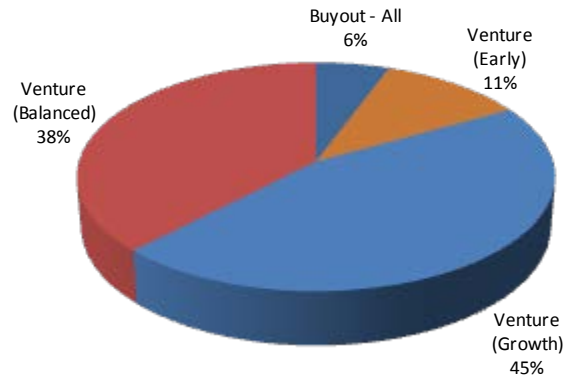
HarbourVest Fund IX – Venture Fund



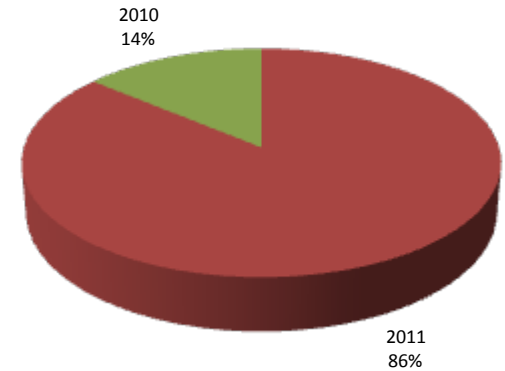
Region of Investment
By Total Commitment



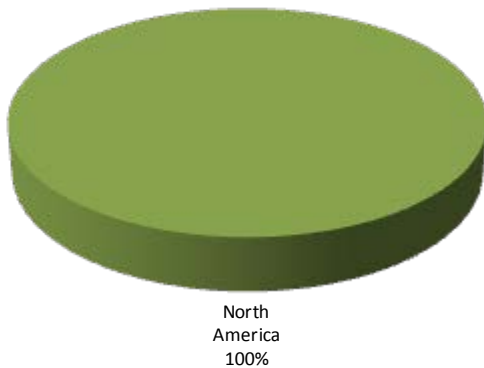
Strategy
By Total Commitment



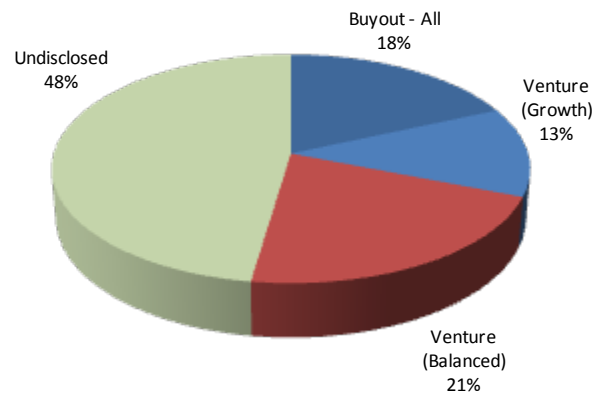
Vintage Year
By Total Commitment



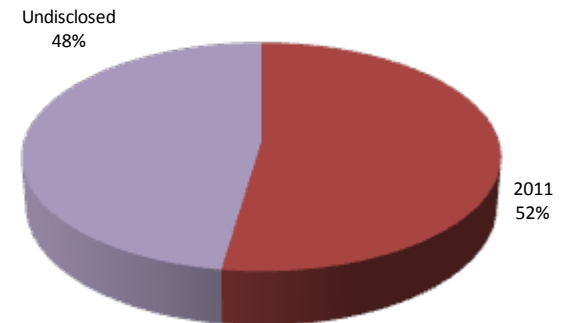
Region of Investment
By Amount Invested



Strategy
By Amount Invested



Vintage Year
By Amount Invested

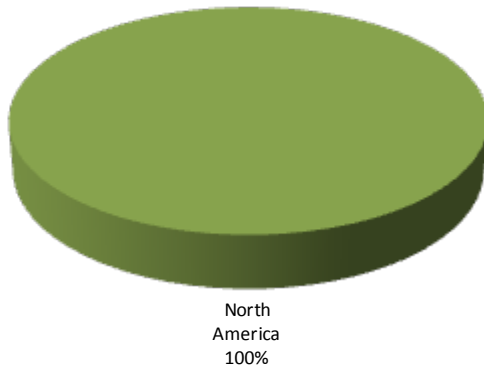


Holdings as of June 30, 2011.
Includes primary and secondary investments.

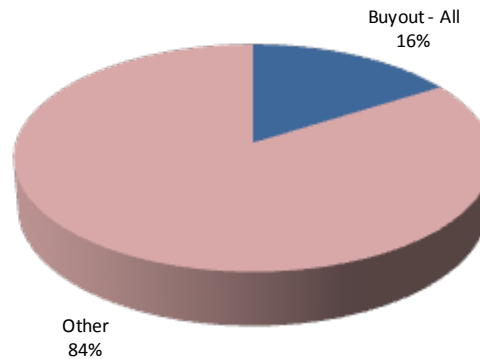
HarbourVest Fund IX – Credit Opportunities Fund



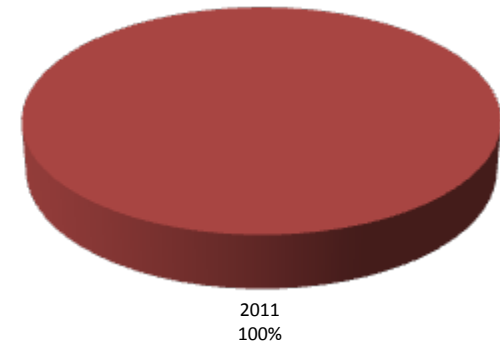
Region of Investment
By Total Commitment



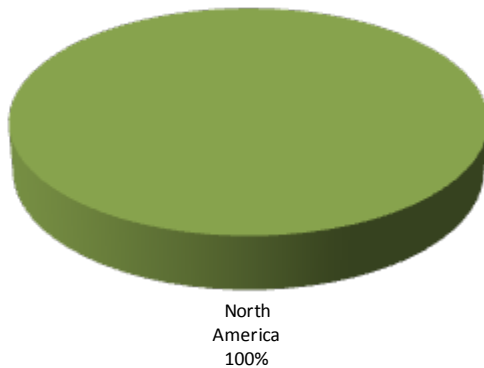
Strategy
By Total Commitment



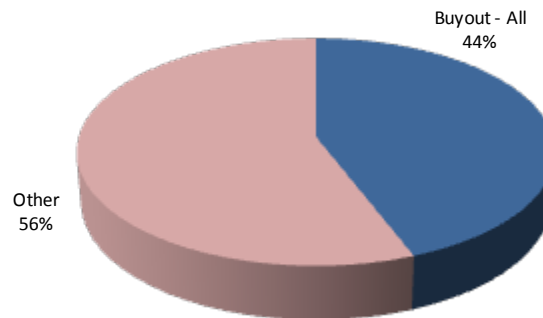
Vintage Year
By Total Commitment



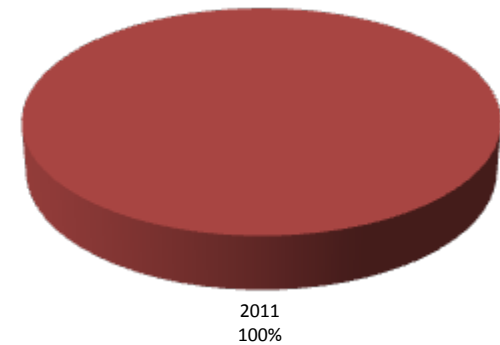
Region of Investment
By Amount Invested



Strategy
By Amount Invested



Vintage Year
By Amount Invested

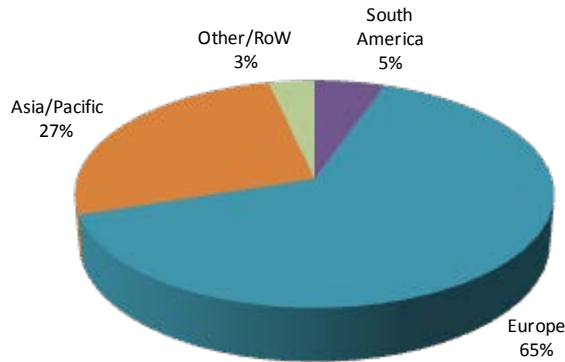


Holdings as of June 30, 2011.
Includes primary and secondary investments.

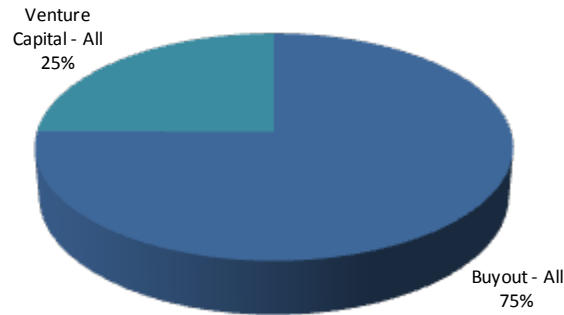
HarbourVest International Private Equity Partners VI



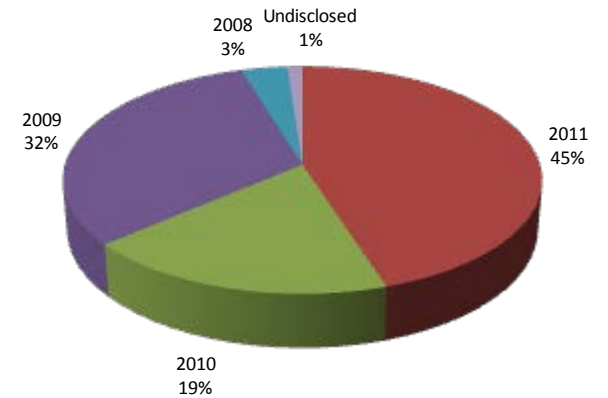
Region of Investment
By Total Commitment



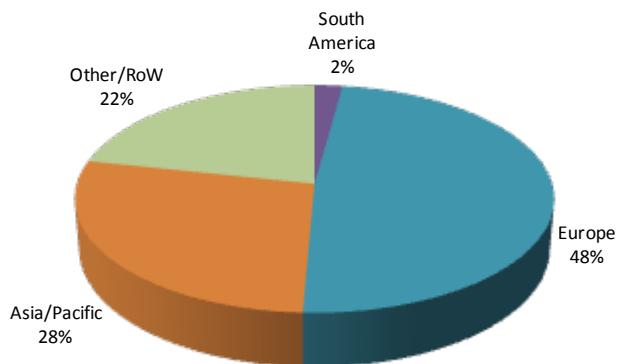
Strategy
By Total Commitment



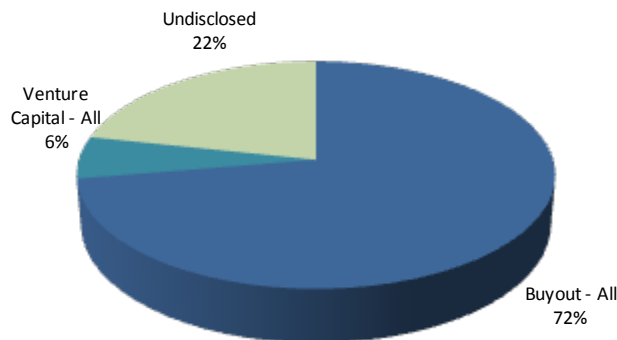
Vintage Year
By Total Commitment



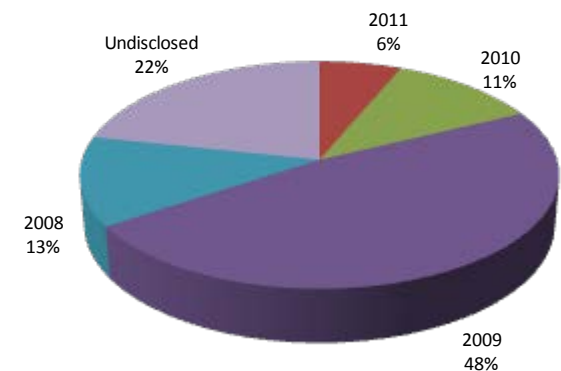
Region of Investment
By Amount Invested



Strategy
By Amount Invested



Vintage Year
By Amount Invested



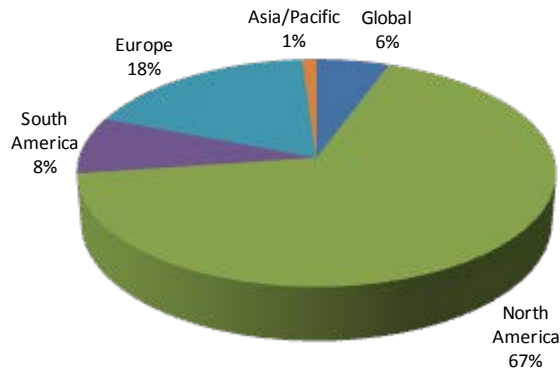
Holdings as of June 30, 2011.
Includes primary and secondary investments.

Hamilton Lane

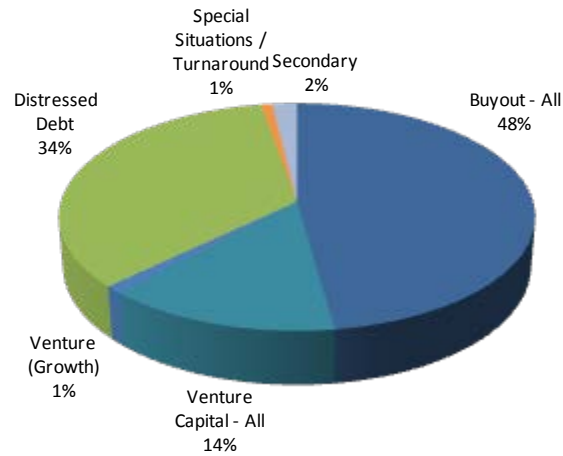
Hamilton Lane Private Equity Fund VII¹



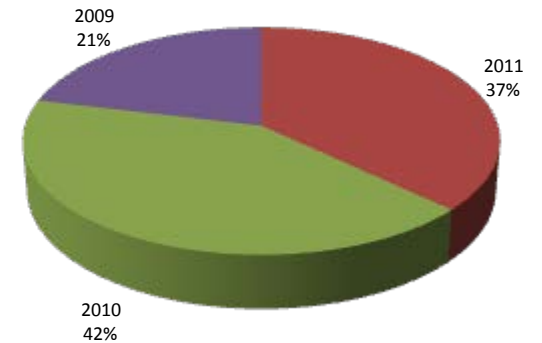
Region of Investment
By Total Commitment



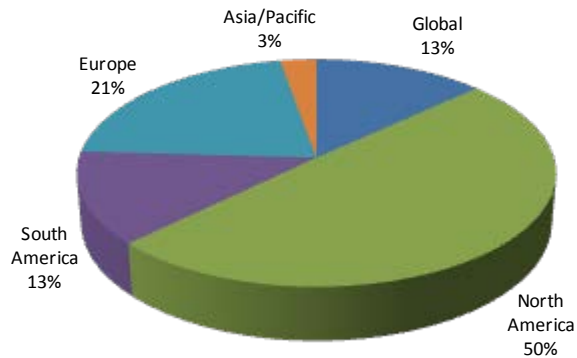
Strategy
By Total Commitment



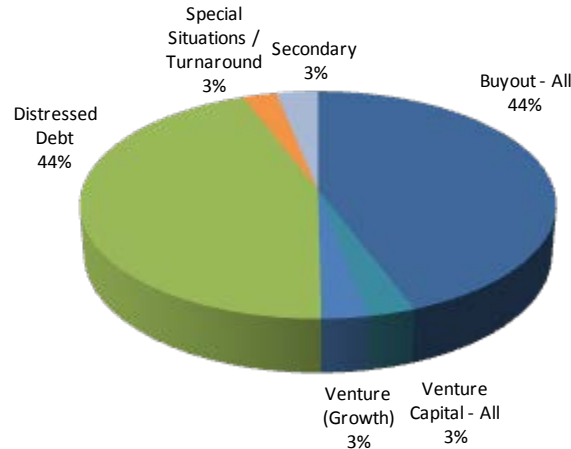
Vintage Year
By Total Commitment



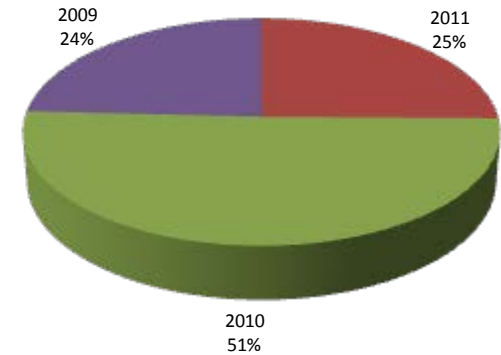
Region of Investment
By Amount Invested



Strategy
By Amount Invested



Vintage Year
By Amount Invested



Holdings as of June 30, 2011.
Includes primary and secondary investments.

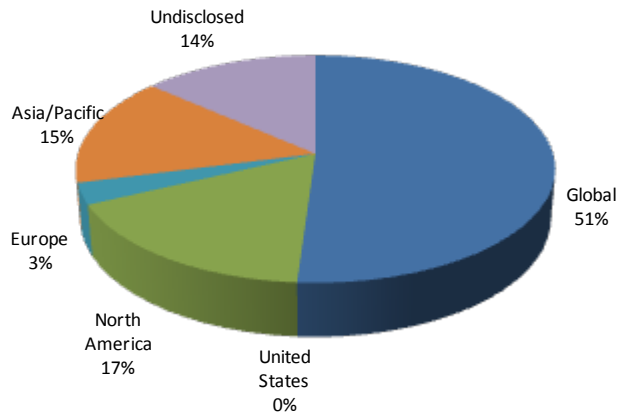
¹ Includes both Series A and Series B.

Pantheon

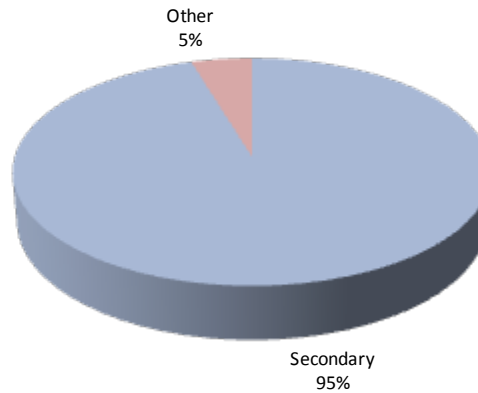
Pantheon Global Secondary Fund IV¹



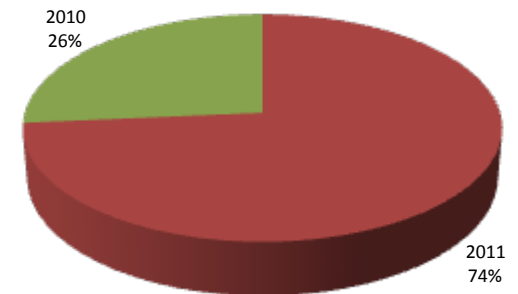
Region of Investment
By Total Commitment



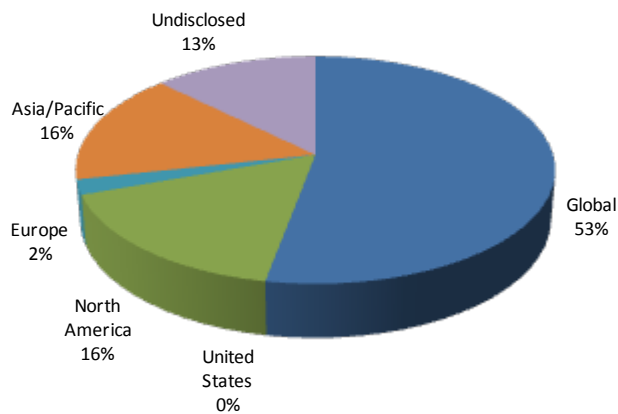
Strategy
By Total Commitment



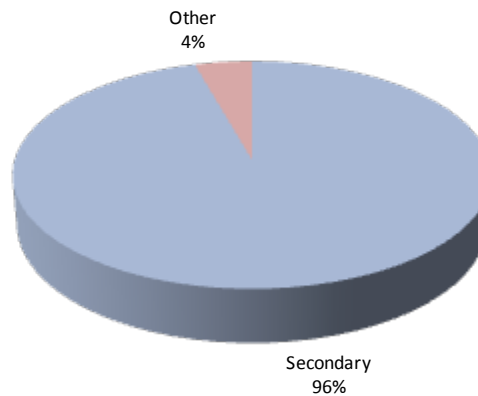
Vintage Year
By Total Commitment



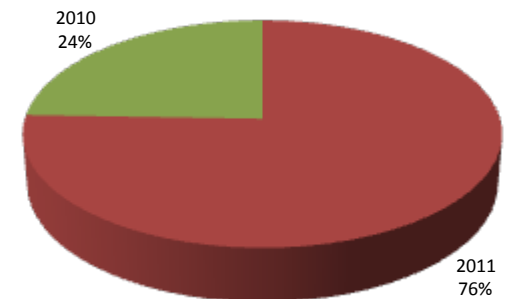
Region of Investment
By Amount Invested



Strategy
By Amount Invested



Vintage Year
By Amount Invested



Holdings as of June 30, 2011.
Includes primary and secondary investments.

¹ Pantheon Secondary Fund breaks out only list of deals, not list of underlying funds.

Important Information



This material contains confidential and proprietary information of Wilshire Consulting, and is intended for the exclusive use of the person to whom it is provided. It may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity without prior written permission from Wilshire Consulting. The information contained herein has been obtained from sources believed to be reliable. Wilshire Consulting gives no representations or warranties as to the accuracy of such information, and accepts no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in such information and for results obtained from its use. Information and opinions are as of the date indicated, and are subject to change without notice.

This material is intended for informational purposes only and should not be construed as legal, accounting, tax, investment, or other professional advice.

This presentation represents the current opinion of the firm based on sources deemed reliable. The information and statistical data contained herein are based on sources believed to be reliable. Wilshire does not represent that it is accurate and should not be relied on as such or be the basis for an investment decision. This Presentation is for information purposes only. Past performance is no guarantee of future results.

Any opinions expressed in this Presentation are current only as of the time made and are subject to change without notice. Wilshire assumes no duty to update any such statements. Any holdings of a particular company or security discussed herein are under periodic review by the author and are subject to change at any time, without notice.

This report may include estimates, projections and other "forward-looking statements." Due to numerous factors, actual events may differ substantially from those presented.

This presentation is not to be used or considered as an offer to sell, or a solicitation to an offer to buy, any security. Nothing contained herein should be considered a recommendation or advice to purchase or sell any security. Wilshire, its officers, directors, employees or clients may have positions in securities or investments mentioned in this publication, which positions may change at any time, without notice.

Wilshire® is a registered service mark of Wilshire Associates Incorporated, Santa Monica, California. All other trade names, trademarks, and/or service marks are the property of their respective holders.

Copyright © 2011 Wilshire Associates Incorporated. All rights reserved.