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Review of Private Equity Portfolio

Rhode Island State Investment Commission

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Review of ERSRI Private Equity Portfolio

Private Equity Portfolio

Portfolio Summary Since Inception as of June 30, 2016

- Inception Date: December 20, 1982
- Total Commitments: \$2.1 billion
- Number of Partnerships

Committed	128 partnerships
Liquidated	46 partnerships
Active	82 partnerships

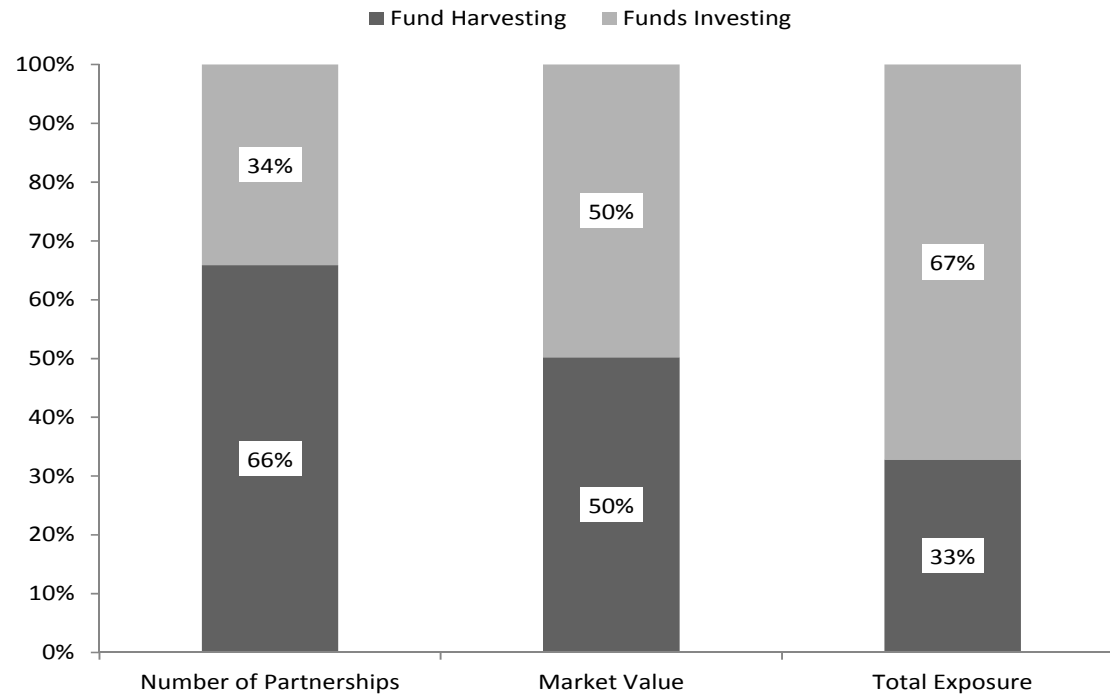
- Cash Flows (millions)

Commitments	\$2,117
Contributions	\$1,883
Distributions	\$2,260
Unfunded	\$293
Market Value	\$536

Since Inception Annualized IRR (net of fees)	13.4%
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Total Value/Invested Capital (net of fees)	1.48x
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Status of Active Partnerships (June 2016)



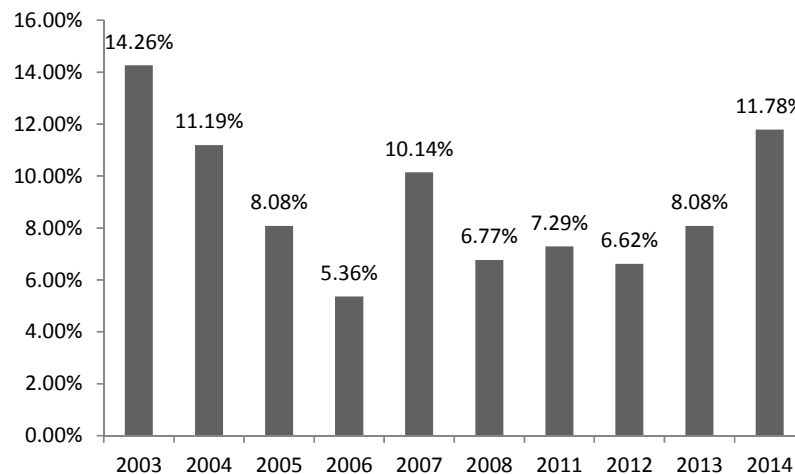
	Number of Partnerships	Market Value	Uncalled Capital	Total Exposure
Harvesting (Past Investment Period)	54	\$268,996,465	\$3,035,182	\$272,031,647
Investing (Still in Investment Period)	28	\$266,939,261	\$290,100,000	\$557,039,261
Total Active Funds	82	\$535,935,726	\$293,135,182	\$829,070,908

Long Term Performance

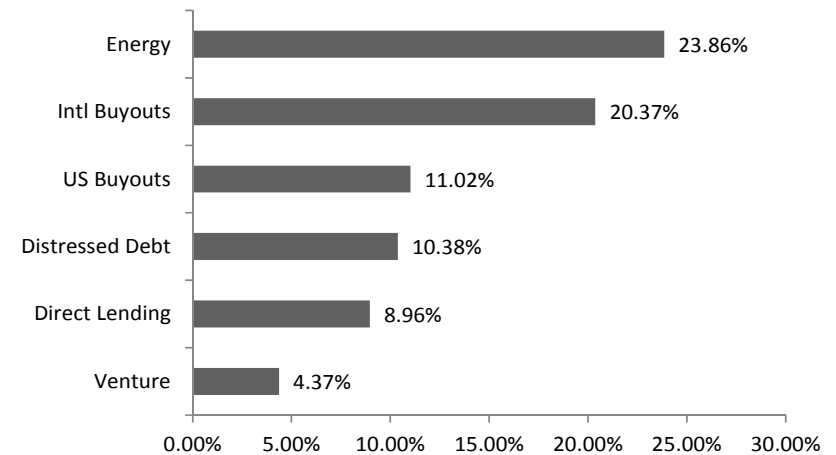
Top Five Performing Active Partnerships based
on Since Inception IRR through June 30, 2016

Partnership	Sector	Vintage Year	Commitment Amount	Since Inception Annual IRR
Nautic Partners VII	US Buyout	2014	\$20.0	87.8%
CVC European Equity III	European Buyout	2001	\$20.0	41.1%
First Reserve X	Energy	2004	\$20.0	31.0%
Providence Equity Partners IV	US Buyout	2001	\$25.0	23.4%
Nordic Capital Fund V	European Buyout	2003	\$15.9	21.1%

Returns by Vintage Year



Returns by Sector

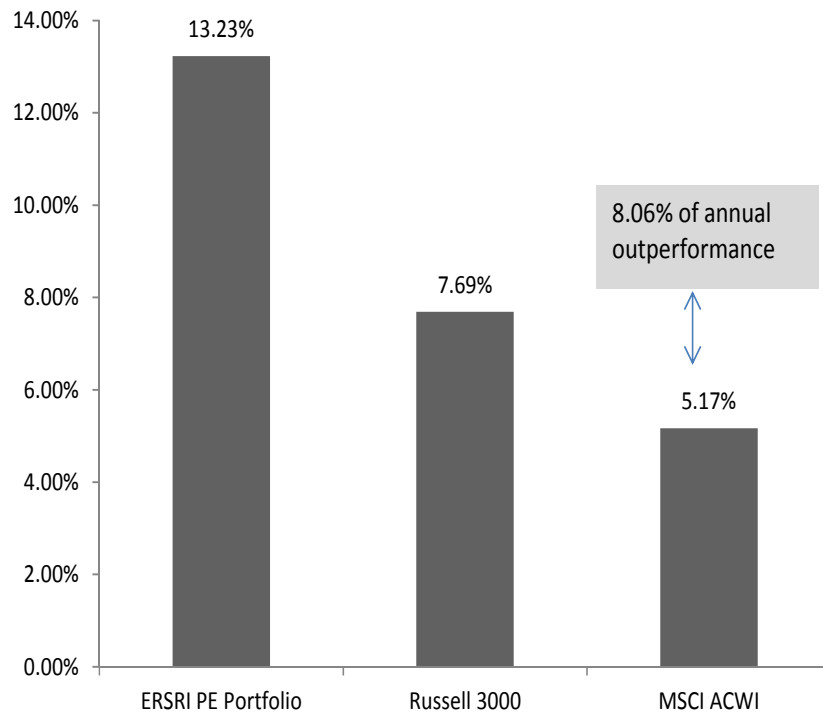


Notes: All returns are since inception annualized IRRs net of fees through June 2016. For Vintage Year returns, no commitments were made in 2009-10 and 2015-16 returns are too early to be meaningful.

Performance v. Public Equities and Vintage Years

Performance versus Public Equities*

Since inception annualized internal rate of returns net of fees



* Public index returns are calculated as private market equivalents where actual PE cash flows are applied to the index return. Note that this is a quarterly IRR calculation. The IRR for the portfolio using a daily calculation is 13.4%. Index IRRs assume reinvestment in respective index. Data as of 6/30/16.

Performance versus Private Equity Universe**

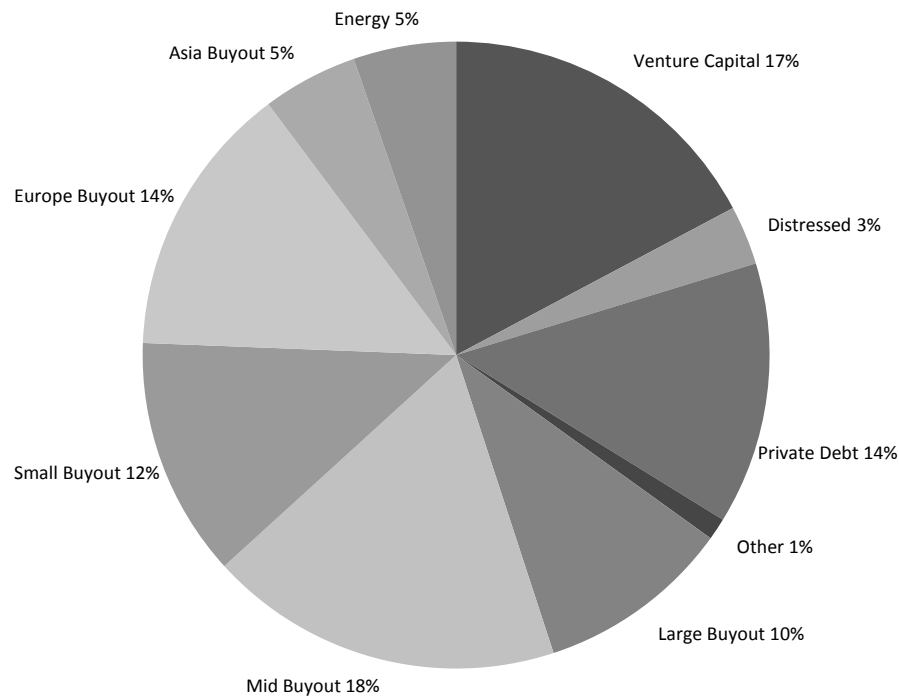
Since inception annualized returns net of fees

	Vintage Year	ERSRI PE Portfolio	Universe Median Return
Superior Performance	1998	10.86%	8.19%
	1999	9.97%	0.21%
	2000	14.74%	3.06%
	2001	31.60%	9.27%
	2002	17.78%	9.46%
Under Performance	2003	14.26%	9.87%
	2004	11.19%	8.02%
	2005	8.08%	7.30%
	2006	5.36%	7.42%
No investments	2007	10.14%	9.59%
	2008	6.77%	9.17%
	2009		12.92%
Young investments	2010		12.84%
	2011	7.29%	11.14%
	2012	6.62%	11.33%
	2013	8.08%	7.30%
	2014	11.78%	2.18%

** Cambridge Global Private Equity/Venture Capital Universe as of March 2016

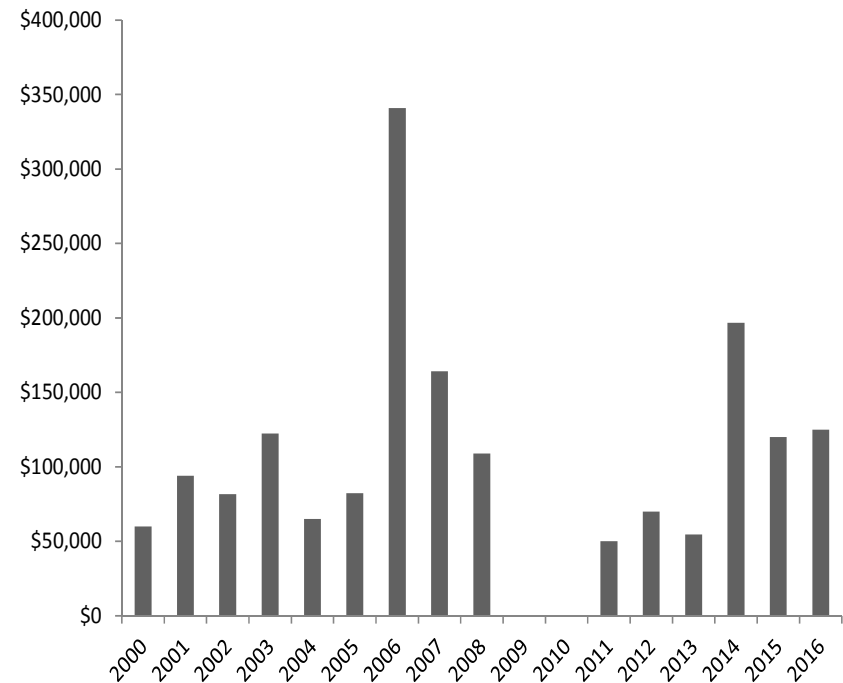
Exposures by Sector and Vintage Year

Exposure by Fund Sector Strategy
(exposure equals market value plus undrawn)



Portfolio is diversified by strategy

Commitments by Vintage Year
In thousand of dollars



Some vintage year concentration with large exposure to 2006 and no exposure to 2009/10

Exposures by Fund and Manager

Exposure by Fund

(exposure equals market value plus undrawn capital)

Fund	\$ Exposure	% Exposure
Garrison Opportunity Fund IV, LLC	30,583,016	3.48%
CapitalSpring Investment Partners V, LP	30,000,000	3.42%
Southvest Fund VII, L.P.	29,540,239	3.36%
Sorenson Capital Partners III, L.P.	28,977,710	3.30%
Paine & Partners Capital Fund IV	28,553,207	3.25%

Portfolio is diversified by fund with largest exposure less than 4% of total

Larger fund exposures are represented by newer commitments that have yet to reach distribution stage

Exposure by Manager

(exposure equals market value plus undrawn capital)

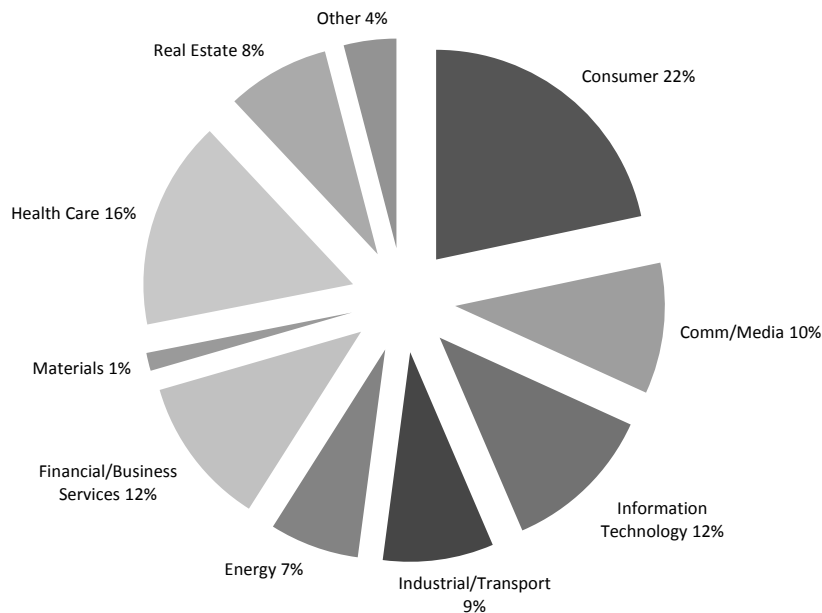
Firm	\$ Exposure	% Exposure
Nautic Partners	54,497,730	6.20%
Centerbridge Capital Partners	53,692,372	6.11%
Industry Ventures	52,051,001	5.93%
Nordic Capital	46,540,785	5.30%
Providence Equity Partners	43,257,611	4.92%

Portfolio is diversified by manager with largest exposure at 6.2% of total

Larger manager exposures represent managers who have performed well and commitments have been made to multiple funds over time

Exposures by Industry and Company as of March 2016

Exposure by Industry
Based on market value



Portfolio is diversified by industry

Examples of Largest Company Holdings

Company	Sector	Partnership
Griffin Holdings	Real Estate	Oaktree European Principal Fund III
Sleep Country Canada	Consumer	Birch Hill Equity Partners III
Lionsgate	Comm/Media	MHR Institutional Partners III
Veracode	Information Technology	Point 406 Ventures I
ConvaTec Group	Health Care	Nordic Capital Fund VII
Shred-it International	Business Services	Birch Hill Equity Partners III
Tate's Holding	Consumer	Riverside Micro-Cap Fund III
ConvaTec Group	Health Care	Nordic Capital Fund VII
Esperion Therapeutics	Health Care	Alta Partners VIII
CradlePoint Inc	Information Technology	Sorenson Capital III

Portfolio consists of over 950 companies with no company larger than 2% of total market value



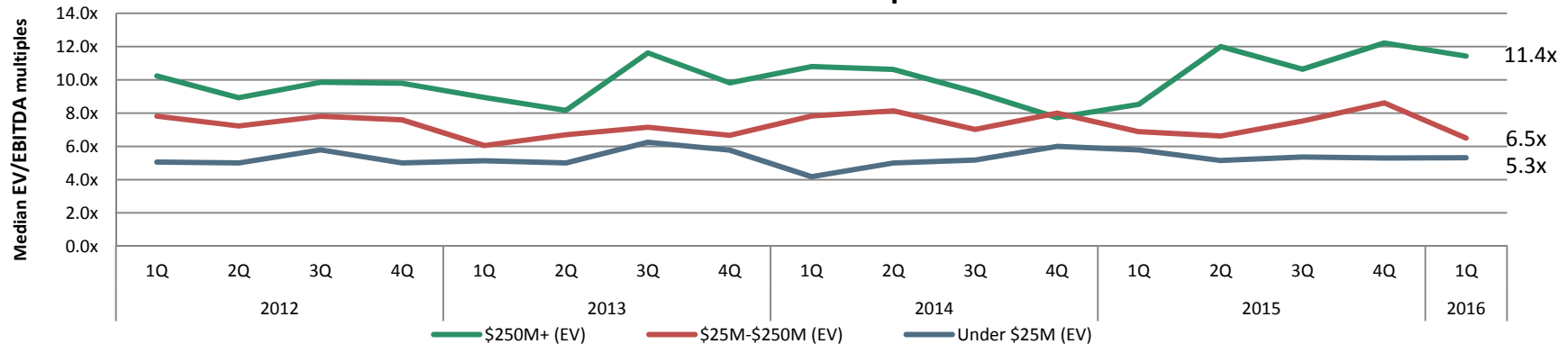
Private Equity Market Outlook 3rd Quarter 2016

Private Equity Outlook

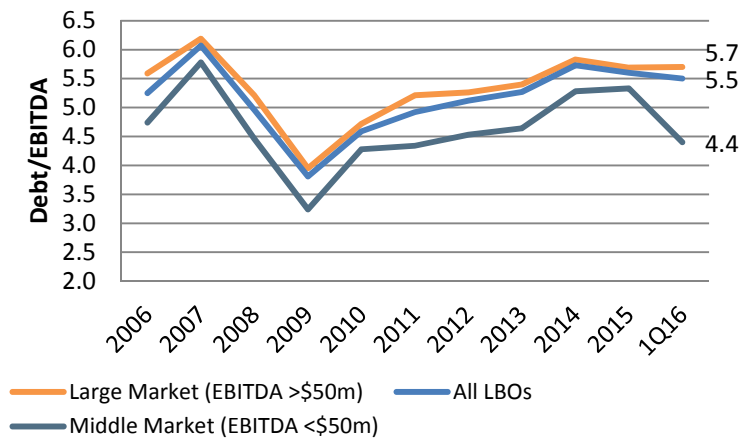
Private Equity	Company pricing remains high across strategies and geographies.	Neutral
U.S. Large Buyout	Investment pace remains slow. Distributions are expected to be muted for the next few years.	Neutral
U.S. Mid/Small Buyout	Pricing remains lower than larger cap transactions.	Positive
Distressed	Rising issuance of lower rated credit in a low growth environment.	Neutral
Private Debt	Given a pullback in bank lending, direct lending funds have greater opportunity.	Positive
Venture	Venture investment activity has slowed in 2016 as valuations reset to lower levels.	Neutral
Europe	Currency volatility and uncertainty post-Brexit raise the bar for new commitments to private asset funds.	Negative
Asia	Private equity investment in China continues to be robust despite weakening growth.	Negative
Latin America	Investors remain optimistic about the potential to acquire high-quality assets at low valuations.	Neutral
Energy	New regulations on energy debt are creating substantial restructuring and investment opportunities.	Positive

U.S. Buyout: Higher Prices Persist, Especially on the Larger End of the Market

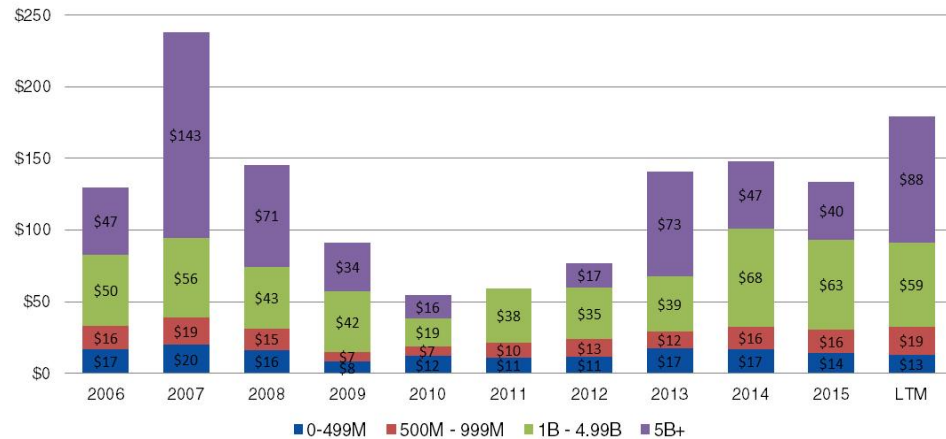
U.S. Purchase Price Multiples



LBO Debt/EBITDA Multiples

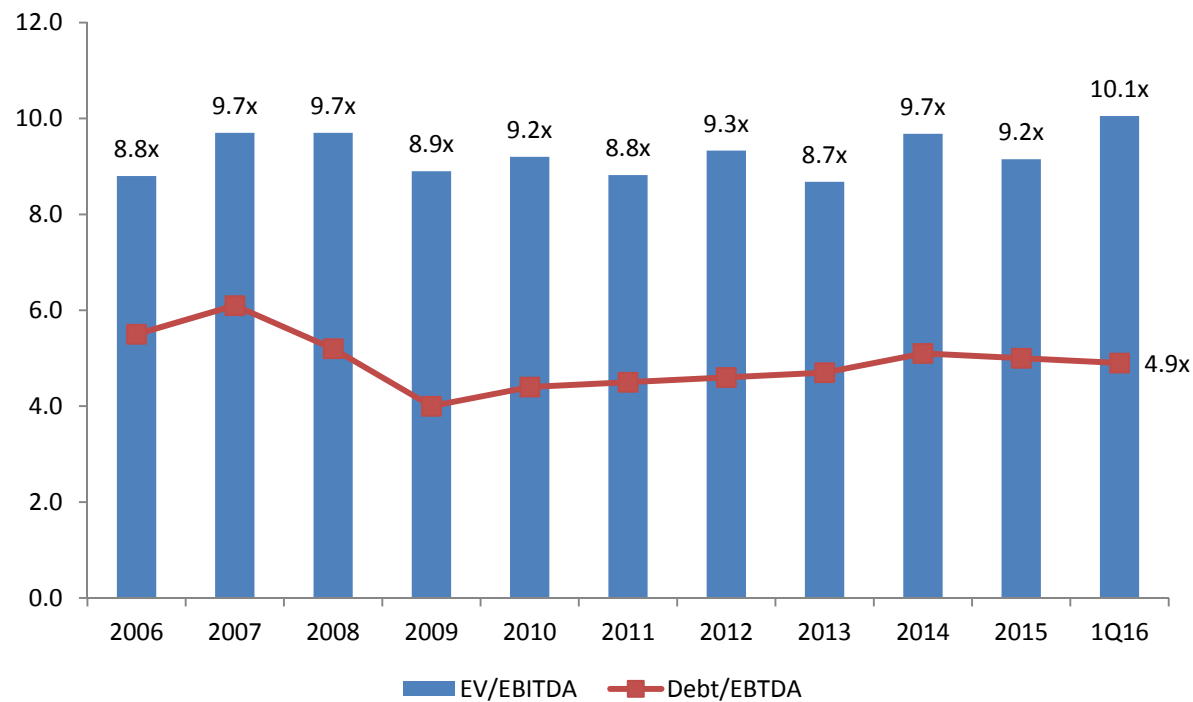


U.S. Buyout Fundraising by Fund Size



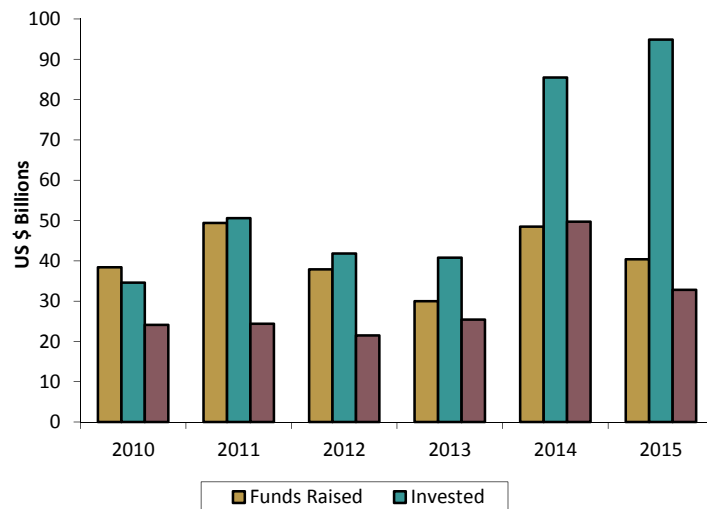
Europe Buyouts: Valuations More Stable but High

**European LBO Purchase Price & Debt Multiples
As of March 31, 2016**



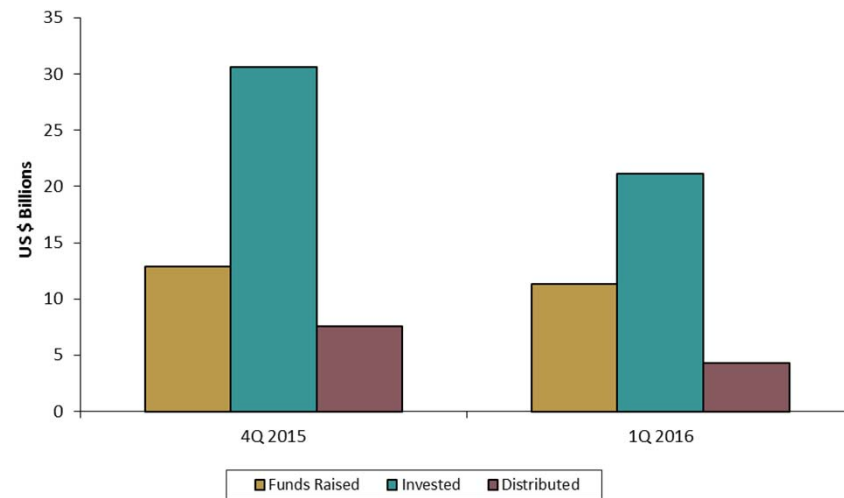
Asia: Private Equity Activity Remains Robust but China Growth Concerns Remain

Asia Private Equity Activity Year-Over-Year

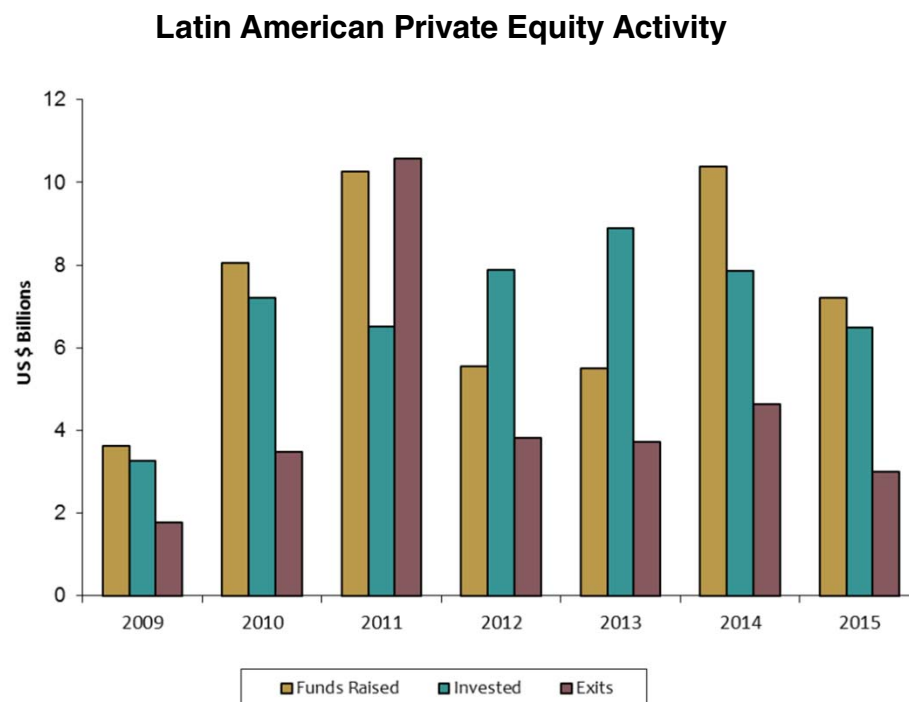


Source(s): APER

Comparison of 4Q 2015 vs. 1Q 2016

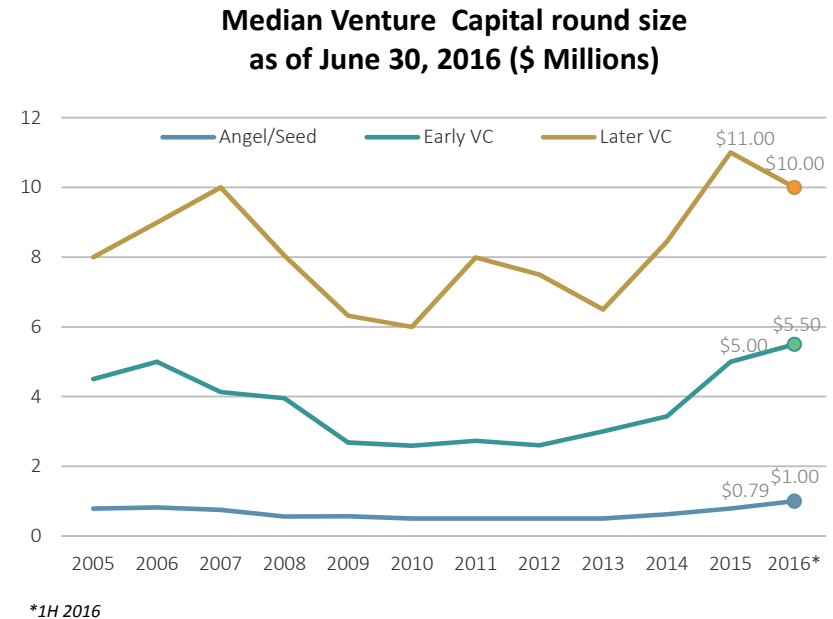
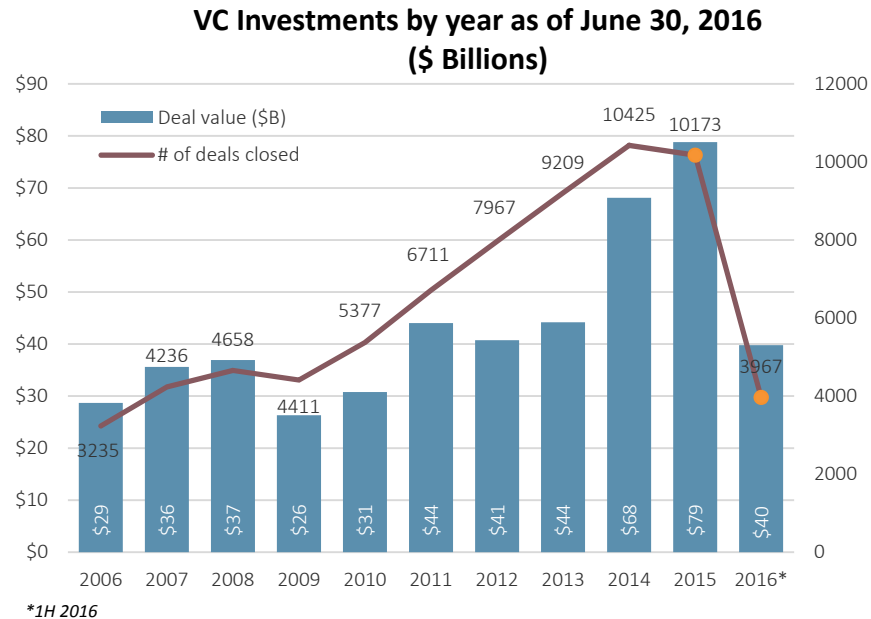


Latin America: Volatility Presents Opportunities and Challenges



Source(s): LAVCA

Venture Capital Undergoing a Market Correction

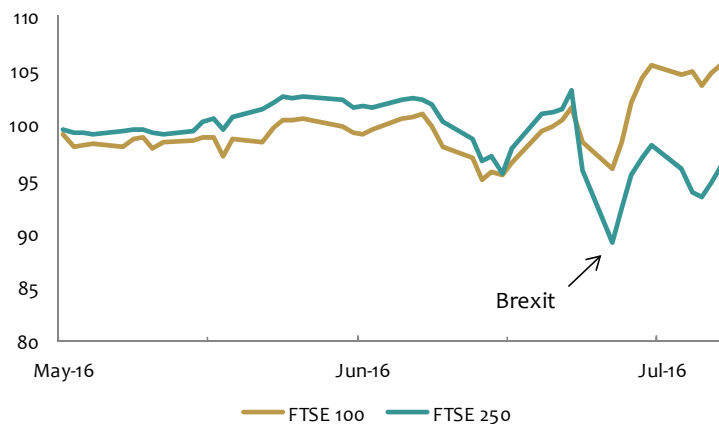


Valuations and investment levels declined in the first half of 2016 due to weak IPO market and struggles of the “Unicorns”

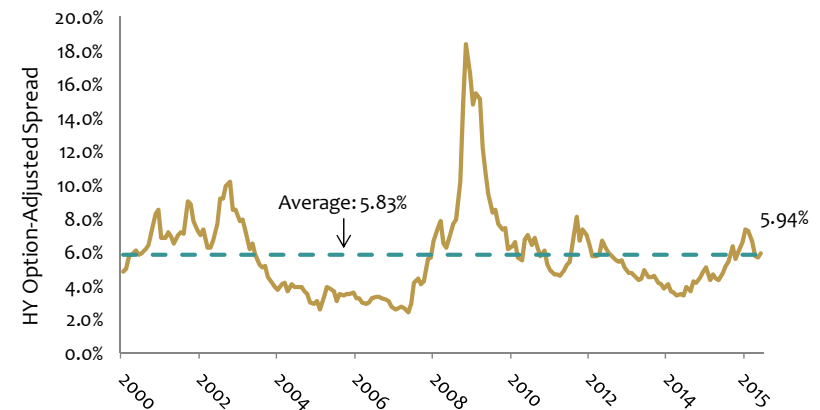
Technology and business formation remain attractive with positive trends in biotechnology, big data, and cybersecurity

Distressed and Private Debt: Market Volatility Creates Opportunities

**Normalized European Equity Market Performance
As of July 8, 2016**



**U.S. High Yield Bonds Option Adjusted Spread
As of June 30, 2016**



Source: Barclays

Brexit may create distressed debt opportunities in domestic UK companies

US credit markets subject to more volatility due to less liquid markets

Continued opportunities to provide private debt where banks are no longer present

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