



Fourth Quarter 2014 Private Equity Portfolio Review

Los Angeles • New York

Prepared for the Rhode Island State Investment Commission

April 29, 2015



Contents

Portfolio Goals and Strategy

Portfolio Summary

Performance

- Summary
- 2014 Performance Drivers
- Long Term Performance Drivers

Portfolio Diversification

Cliffwater Second Quarter 2015 Private Equity Outlook



ERSRI Private Equity Portfolio Goals and Strategy

Asset allocation goals

- Achieve and maintain 7% allocation target (on an invested basis)

Performance goals

- Public equities plus 300 basis points
- Exceed Venture Economics All Private Equity Pooled Return

Long Term Strategy

- Commit capital to a select number of top tier managers
- Focus on strategies where private equity has a competitive advantage
- Diversify by time, sector, industry, and geography

Near Term Strategy

- Reduce the quantity of manager relationships while upgrading the quality
- Increase the small buyout exposure and lower the large buyout exposure
- Increase the private debt exposure and lower the venture capital exposure
- Diversify the international exposure

Private Equity Portfolio Summary as of December 31, 2014 (estimate)

Portfolio Summary Since Inception

- Inception Date: December 20, 1982
- Total Commitments: \$1.9 billion
- Number of Partnerships
 - Committed: 119 partnerships
 - Liquidated: 39 partnerships
 - Active: 80 partnerships
- Cash Flows (millions)
 - Commitments: \$1,929
 - Contributions: \$1,726
 - Distributions: \$2,026
 - Market Value: \$551

ERSRI Private Equity Portfolio Performance

Net of Fees

Since Inception Annualized IRR	13.62%
Total Value to Paid in Capital	1.49x

- Mature private equity portfolio that has distributed more than invested

2014 Performance (estimate)

Commitments (000)

Beginning of Year		\$1,756,522
Net New Commitments (Closed)		\$205,000
Commitment Adjustments		-\$31,802
December 31, 2014		\$1,929,720

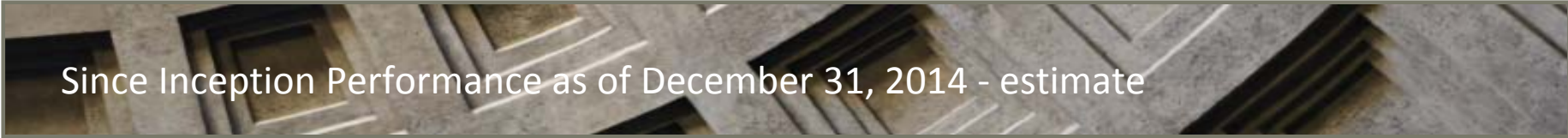
Cash Flows (000)

Beginning Market Value		\$568,871
Contributions	\$88,021	
Distributions	(\$135,064)	
Gains	\$28,801	
Ending Market Value		\$550,629

- Committed to 8 funds which closed in 2014
- Portfolio produced \$28.8 million in gains for the year
- Portfolio was cash flow positive with distributions exceeding contributions by \$47.0 million

Commitments Closed in 2014

Fund	Sector	Strategy	Commitment
Baring Asia Fund VI	Asia Private Equity	Middle Market Buyouts	\$15,000,000
Carlyle Asia IV	Asia Private Equity	Middle Market Buyouts	\$30,000,000
Centerbridge Capital Partners III	US Buyouts	Middle Market Value Buyouts	\$30,000,000
Industry Ventures III	Venture Capital	Primaries/Secondaries	\$25,000,000
Paine & Partners IV	US Buyouts	Sector Focus: Food and Ag	\$30,000,000
Riverside Micro Cap III	US Buyouts	Small Company Buyouts	\$20,000,000
Sorenson Capital Partners III	US Buyouts	Small Company Buyouts	\$30,000,000
Summit Credit II	US Private Debt	Small/Middle Market Lending	\$25,000,000



Since Inception Performance as of December 31, 2014 - estimate

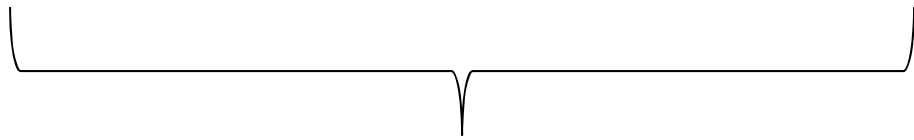
Performance	YE 2013	YE 2014	Change
Since Inception Annualized IRR	13.9%	13.6%	-0.3%
Total Value to Paid in Capital	1.50x	1.49x	-0.01

- Long term performance remains strong

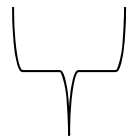
Vintage Year Performance through September 2014

Annualized Internal Rate of Returns

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2011	2012
ERSRI PE Portfolio	10.87	9.97	14.76	31.69	18.22	14.28	11.37	8.27	5.58	9.20	5.23	9.11	12.74
Median Return Cambridge Global PE/VC Universe	8.12	0.38	3.16	8.37	9.11	10.15	8.44	7.45	7.25	9.94	10.82	10.65	8.29



Outperformance



Outperformance

Performance Drivers in 2014 based on Change in Cumulative Gains

2014 Positive Drivers

Partnership	Sector	Vintage Year	Commitment (millions)
Venture Capital Fund	Venture Capital	2006	\$15.0
Venture Capital Fund	Venture Capital	2006	\$15.0
Canadian Buyout Fund	Intl Buyouts	2005	\$16.8
Venture Capital Fund	Venture Capital	2006	\$10.0
Venture Capital Fund	Venture Capital	2003	\$15.0

2014 Disappointing Drivers

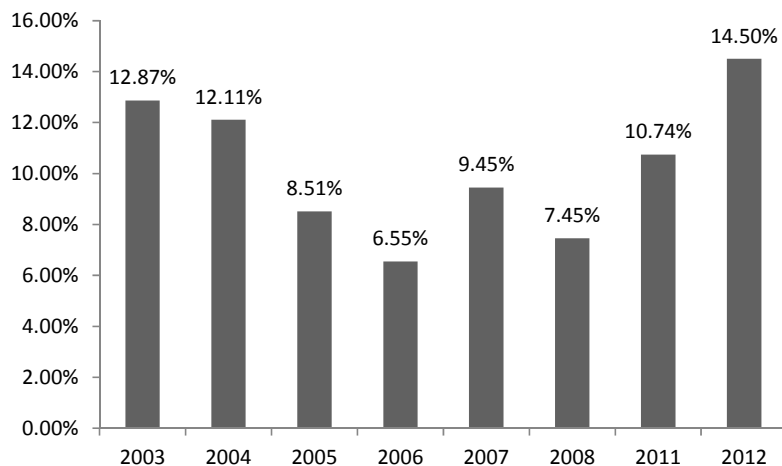
Partnership	Sector	Vintage Year	Commitment (millions)
Energy Fund	Energy	2006	\$20.0
Venture Capital Fund	Venture Capital	2002	\$15.0
Venture Capital Fund	Venture Capital	2006	\$15.0
Europe Buyout Fund	Intl Buyouts	2006	\$20.7
Venture Capital Fund	Venture Capital	2007	\$15.0

Long Term Performance Drivers (Vintage Years 2003-2014 excluding liquidated funds/ estimate)

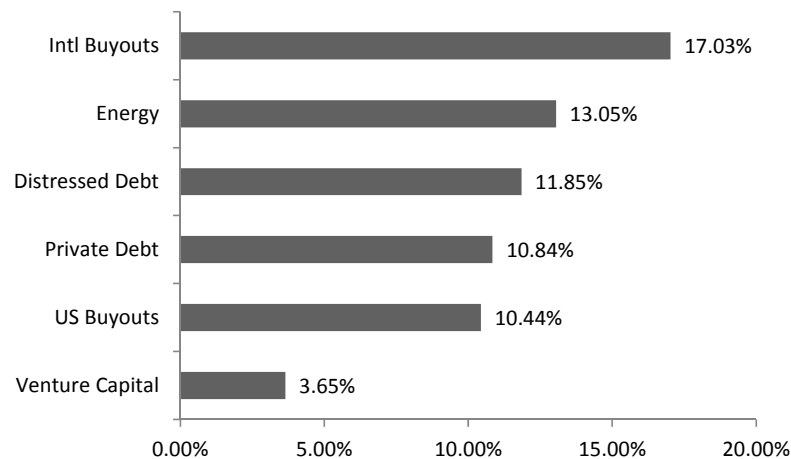
Top Five Performing Partnerships based on Since Inception IRR through December 31,2014

Partnership	Sector	Vintage Year	Commitment Amount	Since Inception Annual IRR
European Buyout Fund	European Buyout	2001	\$20.0	41.1%
European Buyout Fund	European Buyout	2012	\$20.0	36.5%
Energy Fund	Energy	2004	\$20.0	31.3%
US Buyout Fund	US Buyout	2002	\$20.0	26.1%
US Buyout Fund	US Buyout	2000	\$25.0	24.0%

Returns by Vintage Year



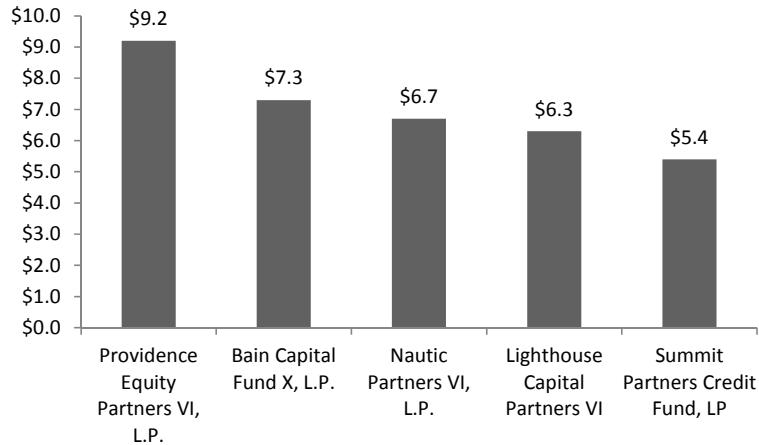
Returns by Sector



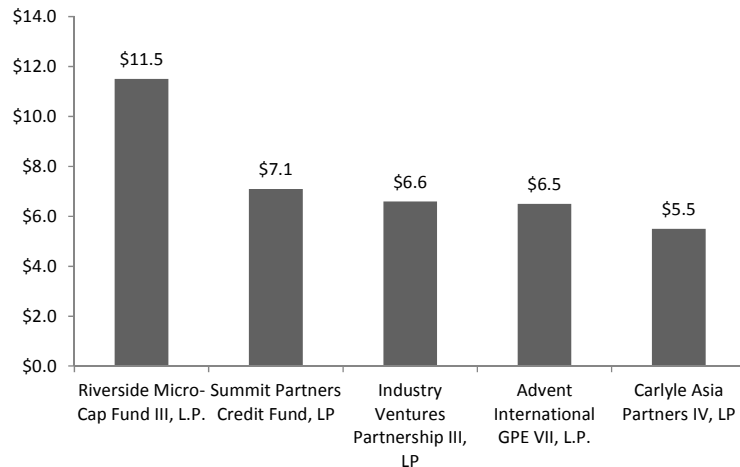
Notes: All returns are since inception annualized IRRs net of fees. For Vintage Year returns, no commitments were made in 2009-10 and 2013-14 returns are too early to be meaningful.

Portfolio Diversification: Partnership and Managers

Top Five Fund Distributions in 2014



Top Five Fund Contributions in 2014



Top Five Fund Exposures at 12/31/14

Fund	\$ Total Exposure	% Exposure
Paine & Partners Capital Fund IV	30,000,000	3.6%
Sorenson Capital Partners III, L.P.	30,000,000	3.6%
Carlyle Asia Partners IV, LP	28,853,217	3.5%
Centerbridge Special Credit Partners II, L.P.	27,266,583	3.3%
Summit Partners Credit Fund II, L.P.	25,000,000	3.0%

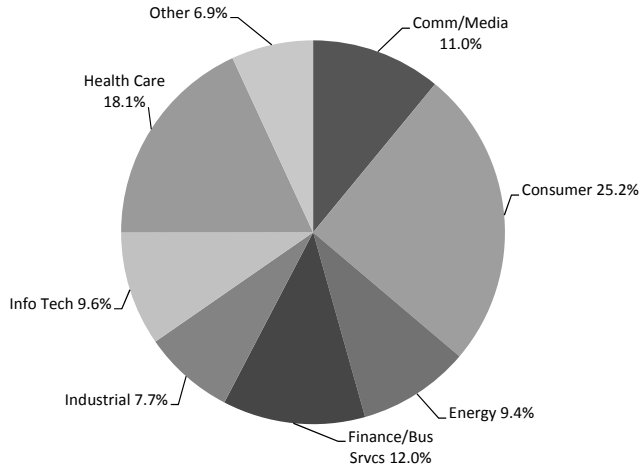
Top Five Manager Exposures at 12/31/14

Fund Manager	\$ Total Exposure	% Exposure
Nordic Capital	51,613,299	6.3%
Providence Equity Partners	49,874,458	6.1%
Nautic Partners	45,576,234	5.5%
CVC Capital Partners	42,028,314	5.1%
Centerbridge Capital Partners	36,405,687	4.4%

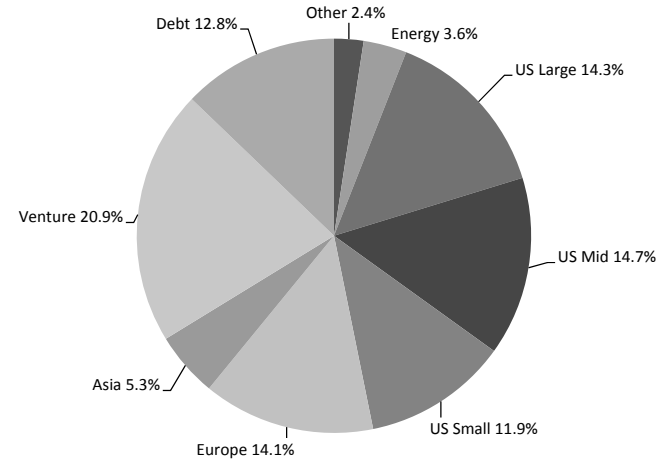
Note: Exposure is the sum of uncalled commitment market value

Portfolio Diversification: Time, Strategy, Geography and Industry as of December 31, 2014

Diversification by Sector
(market value)

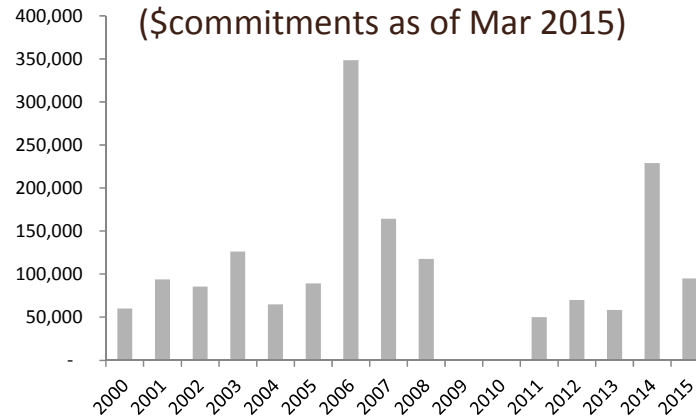


Diversification by Strategy
(market value + uncalled capital)



Diversification by Vintage Year

(\$commitments as of Mar 2015)





Second Quarter 2015 Private Equity Outlook

Private Assets Sector Outlook – Q2 2015

Asset Class	Outlook	Description	Funds
Buyout (large)	negative	SEC leverage restrictions have caused a contraction in lending.	Blackstone, TPG, Warburg Pincus
Europe	neutral	Opportunity set encouraged by the Euro depreciation and economic stimulus.	Advent, Charterhouse, H2
Buyout (mid/small)	positive	Less efficient market yields better priced investments.	Accel-KKR, AIP, Clearlake, Flexpoint, Shamrock, Summit, TA Associates
Asia	negative	Slowing economic growth in China is moderating return expectations.	Citic, IDG, IMM Rosegold, PAG, RRJ
Latin America	neutral	Experienced managers continue to find attractive buying opportunities.	Axxon, HIG, Southern Cross, Victoria
VC (early / balanced)	positive	Innovations in technology and life science accelerating growth rates.	Mayfield, Third Rock, Trinity Ventures
VC (late / growth)	neutral	Competition and valuations remain high as a result of new entrants.	General Atlantic, Mainsail, Summit Ventures
Distressed Debt	neutral	Smaller assets provide deal flow despite low default environment.	AnaCap, Atalaya, Castlelake, Tenex, Victory Park
Direct Lending	neutral	Private BDC's and lending to smaller companies generate a yield premium.	Capital Spring, Falcon, Garrison, SilverPoint
Opportunistic Credit	positive	Specialty finance opportunities due to increased bank regulation.	Capital Royalty, Chorus, Shamrock, Visium
Energy	neutral	Commodity prices providing an upstream oriented investment opportunity.	Arclight, Carlyle Power, EnerVest, Lime Rock, Ridgewood

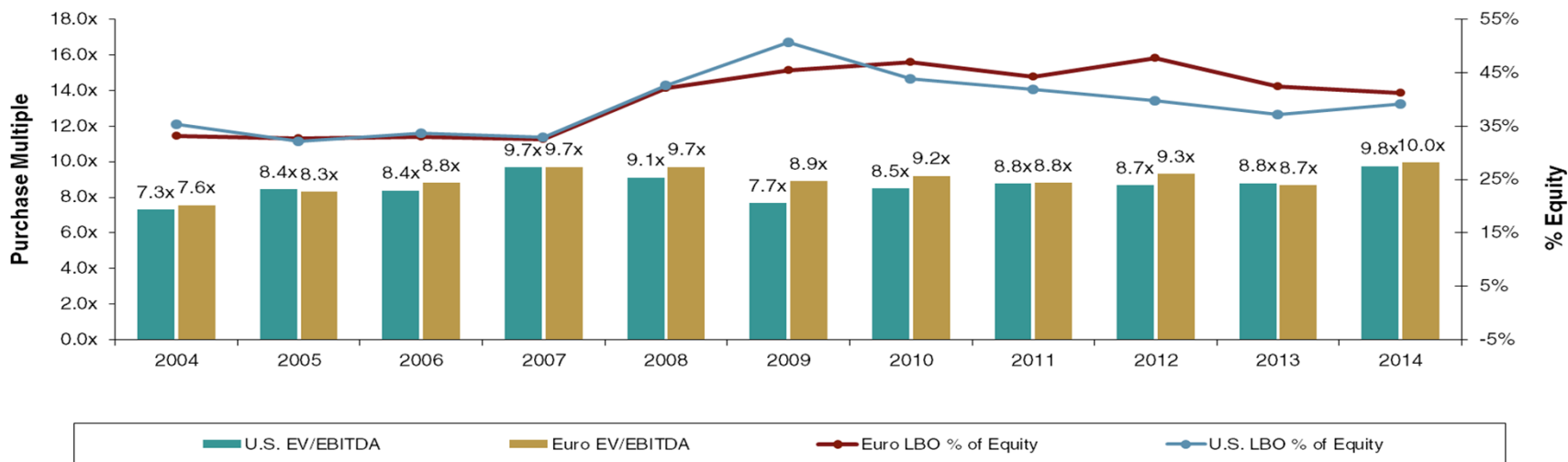
Buyouts: Investment Selection is Key in a Benign Fundraising Environment

Diversified firms with proven track records are expected to raise capital quickly.

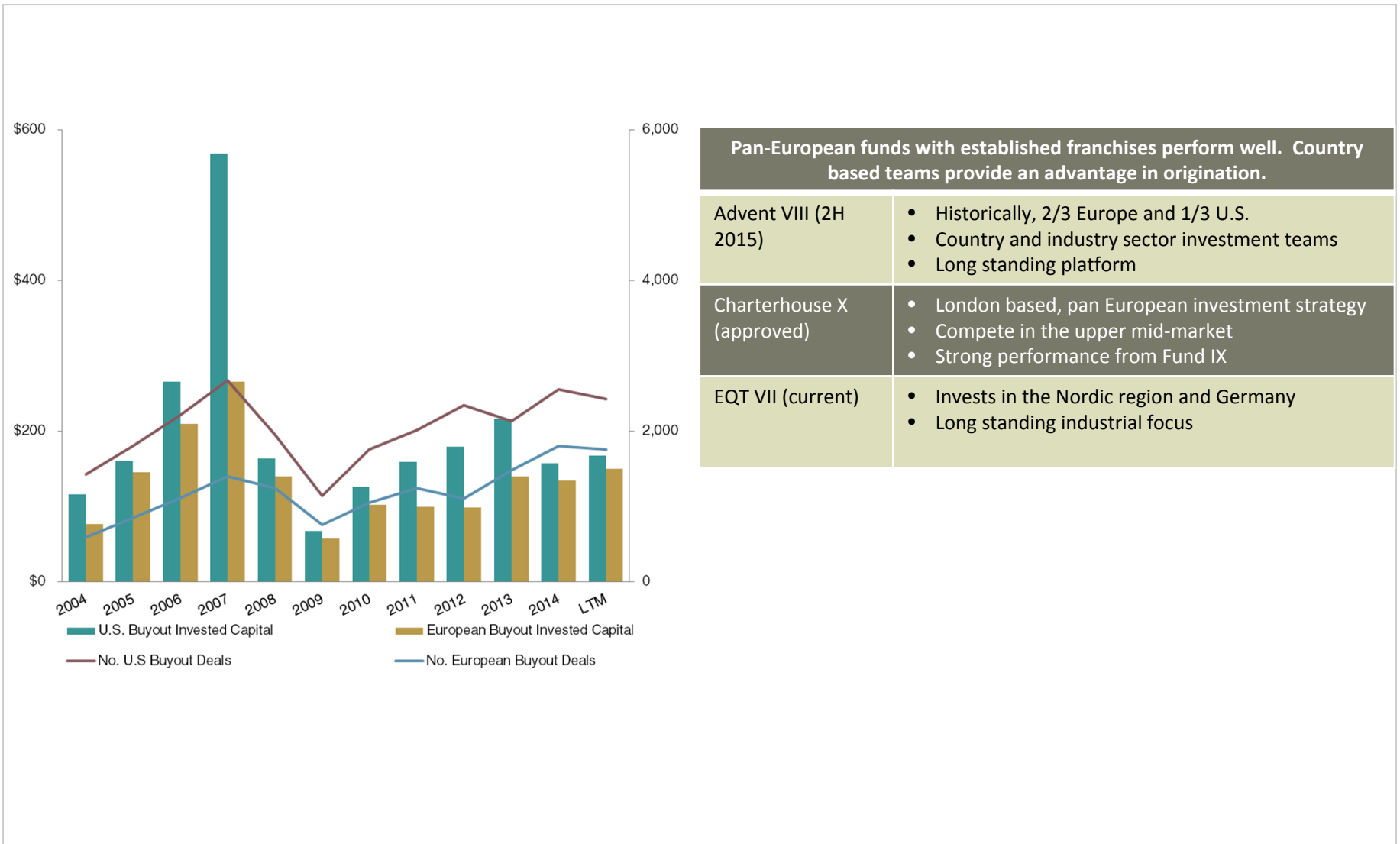
Clearlake III (current)	<ul style="list-style-type: none"> Industrial, consumer and service focused Turnarounds, distressed-for-control, and LBO
Summit IX (current)	<ul style="list-style-type: none"> Proactive investment origination strategy Majority and minority equity investments
TA XII (current)	<ul style="list-style-type: none"> Global presence, diversified by industry Buyouts and growth equity

Smaller and industry focused funds continue to find attractive investment opportunities.

Accel-KKR V (2Q 2015)	<ul style="list-style-type: none"> Software and IT focus Consistently strong performance
Flexpoint Ford III (current)	<ul style="list-style-type: none"> Focus on financial services and healthcare Unique portfolio
Riverside Micro-Cap IV (2Q 2015)	<ul style="list-style-type: none"> Strong realized track record Industry diversified portfolio
Shamrock IV	<ul style="list-style-type: none"> Media and communications focus



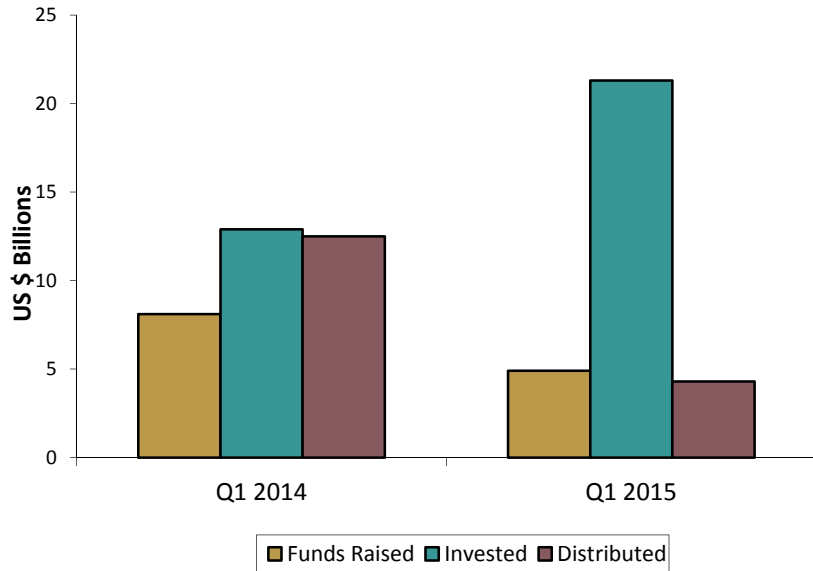
Favor Regional and Proven Strategies as European Activity and Pricing Increases



Pan-European funds with established franchises perform well. Country based teams provide an advantage in origination.	
Advent VIII (2H 2015)	<ul style="list-style-type: none"> Historically, 2/3 Europe and 1/3 U.S. Country and industry sector investment teams Long standing platform
Charterhouse X (approved)	<ul style="list-style-type: none"> London based, pan European investment strategy Compete in the upper mid-market Strong performance from Fund IX
EQT VII (current)	<ul style="list-style-type: none"> Invests in the Nordic region and Germany Long standing industrial focus

Asia Private Equity Investing Requires Tactical Approach in 2015 and Beyond

Asia Private Equity Activity Quarter-over-Quarter Comparison



Source: APER

Investors with limited exposure to Asia should emphasize commitments to top-tier pan-regional funds in order to enhance diversification and mitigate single-country risk.

PAG Asia II (2Q 2015)

- Pan-regional buyouts and structured equity with China emphasis
- Early exits in Fund I. Experienced team.

RRJ III (Recommended)

- Focus on China, SE Asia, and opportunistic global
- Unique deal flow, fast return of capital

Investors with significant pan-regional and/or large-cap China exposure should focus on adding selective small-cap or early-stage China exposure and non-China exposure in markets such as Korea, SE Asia, and India.

IDG China Capital III (2Q 2015)

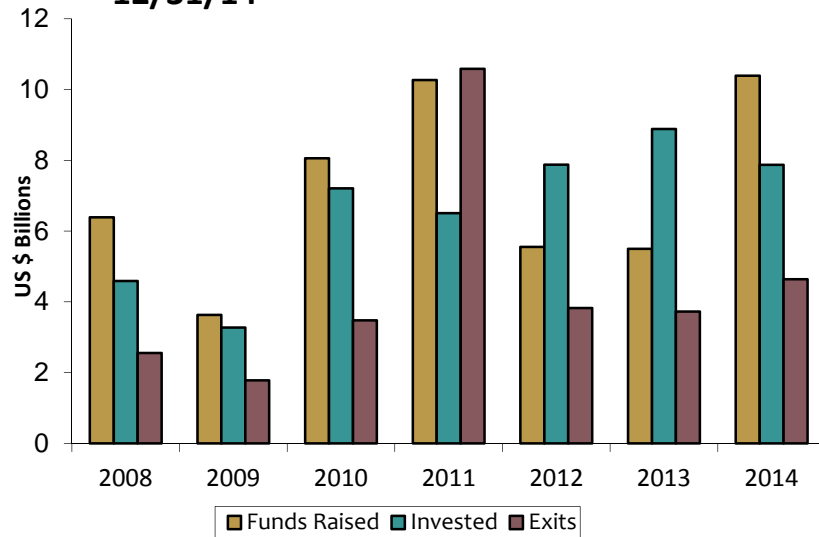
- China technology growth equity and late-stage venture
- Top-tier sourcing platform and track record

IMM Rosegold III (Current Diligence)

- Korea mid-cap minority and control investments
- History of high IRRs and short holding periods

Latin America Investment Opportunity Amongst Market Volatility

Latin America Private Equity Activity as of 12/31/14



Pan-regional funds remain the best option in Latin America due to country-level risks. Top pan-regional managers include Advent International, General Atlantic, Linzor, Patria, Southern Cross and Victoria Capital.

Southern Cross V (current)

- One of the longest established managers in Latin America with deep team
- Strong track record across four prior funds

Victoria Capital (late 2015 or early 2016)

- Mid-cap control buyouts across Latin America
- Patient investment pace, highly conservative

Small-to-mid cap country funds and sub-regional funds are effective diversification methods for investors with existing pan-regional Latin American portfolios. Top country-fund managers include Alothon, Altra, Axxon, HIG, Nexxus and Vinci.

Axxon III (current)

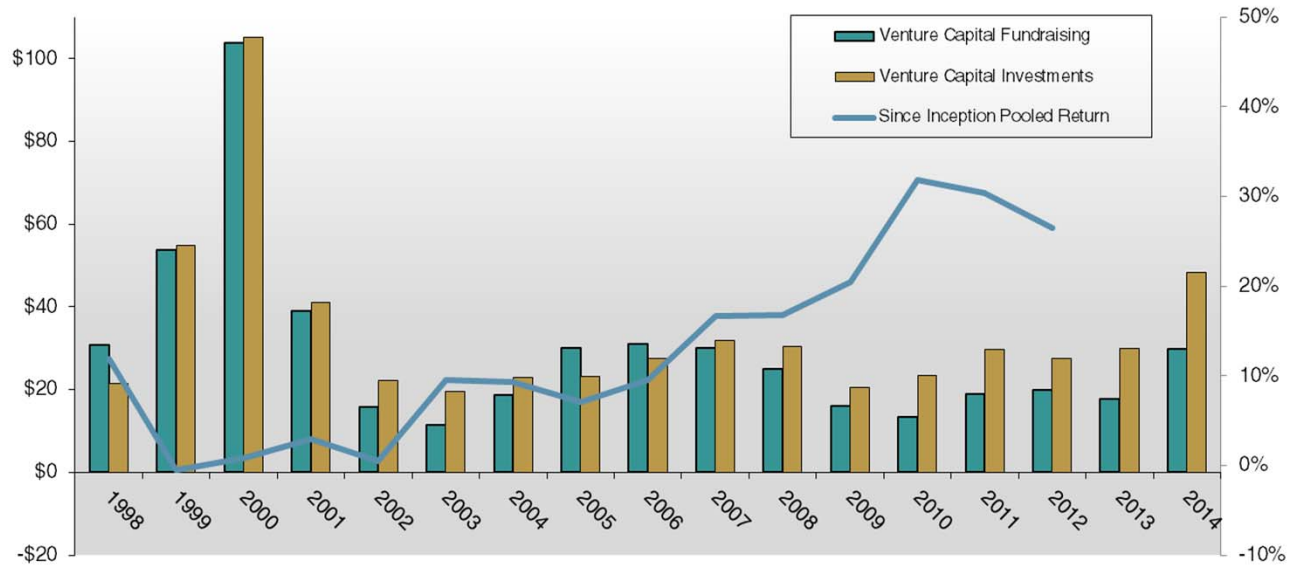
- Small to mid-cap buyouts in Brazil
- Strong reputation in market, attractive realized returns in Fund I

HIG Brazil and Latin America I (current)

- Minority and control investments in Brazil, plus opportunistic regional investments
- Short track record, but supported by HIG platform

Strong Venture Capital Returns Attracting Capital and Higher Valuations

U.S. Venture Capital Fundraising and Investments as of December 31, 2014
(\$ Billions)



Early-stage funds are less impacted by increasing VC valuations. Funds supported by a large number of late stage investors.

Trinity Ventures XI (2Q 2015)

- Early stage focus on technology companies
- Long track record, deep partnership

Third Rock VIII (4Q 2015)

- Early stage life science company investments
- Strong focus on science and innovation

Smaller growth equity firms benefit from technology innovation and high growth rates. Founder owned companies have lower valuations.

Summit VC IV (current)

- Technology and healthcare focus
- Top-tier sourcing platform and track record

Mainsail IV (3Q 2015)

- Small growth equity for technology and service companies
- Targets founder owned companies

Source: National Venture Capital Association, Cambridge Associates

Smaller Focused Managers and Alternative Strategies Are Well Positioned in a Competitive Credit Market

Managers focused on less efficient, smaller markets are best positioned to source opportunities, particularly those arising from changes in the regulatory environment.

AnaCap Credit Opportunities III (current)

- European performing and non-performing secured and unsecured debt
- Smaller focus and flexible approach

Atalaya Special Opportunities VI (current)

- U.S. distressed financial assets, corporate securities and real estate
- Strong performance, fast return of capital

Alternative fixed income strategies that are non-market correlated present compelling investment opportunities at current point in the credit cycle.

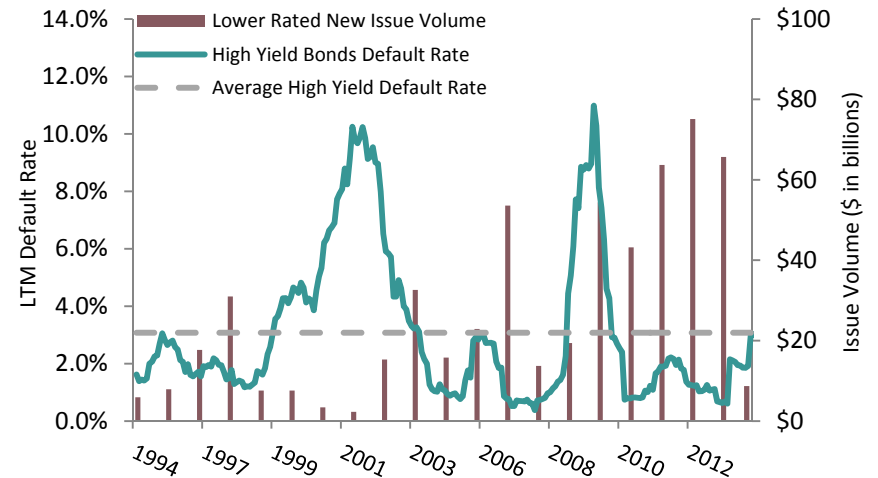
Shamrock Entertainment IP I (current)

- Intellectual property rights of film, television, video game and other entertainment
- Backed by high quality buyout firm

Visium Healthcare Partners (current)

- Small and mid-cap commercial and near commercial stage healthcare companies
- High cash yield with lower volatility and correlation to capital markets

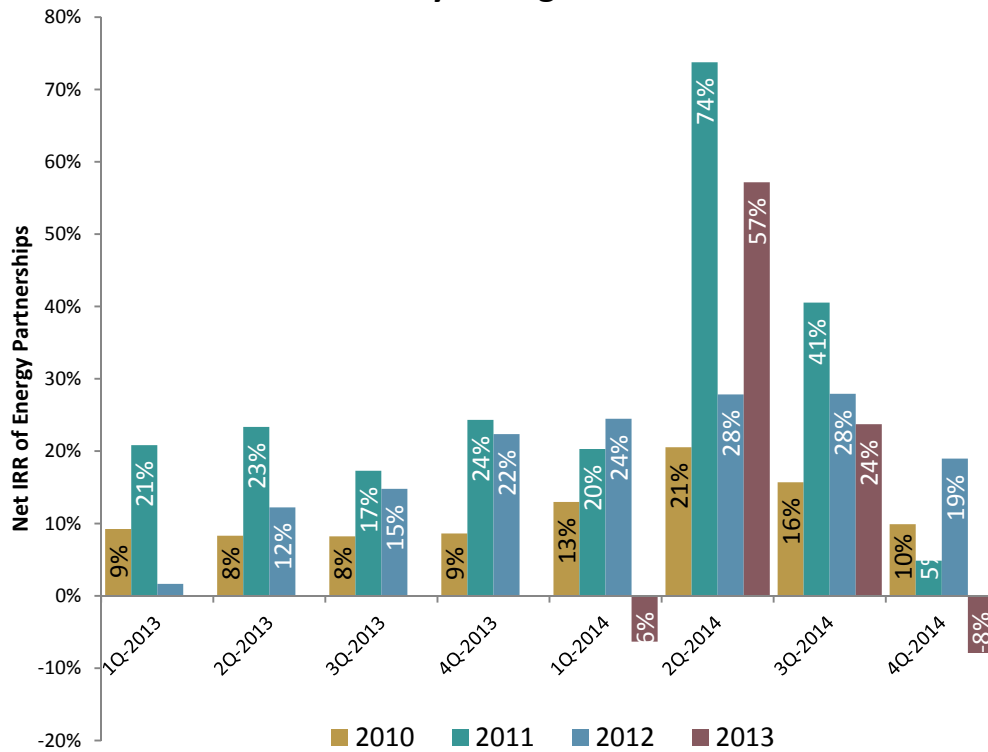
U.S. Lower Rated New Issue Volume and High Yield Default Rates As of March 31, 2015



Source: JPMorgan

Private Energy Valuations Will Likely Remain Flat to Down in 2015

Cliffwater Client Portfolio Net IRR by Vintage Year and Quarter*



Source: Cliffwater

*Q4 2014 values are preliminary.

Energy remains the core allocation in a real asset portfolio. Working with experienced managers who have invested across multiple cycles will help mitigate market risk.

Arclight VI (approved)	<ul style="list-style-type: none"> Focus on midstream and power Long tenured team investing in the space Large asset management team
Carlyle Power Partners II (current)	<ul style="list-style-type: none"> Sole focus on value add power generation Team experienced in all aspects of power plant management and development
EnerVest XIV (current)	<ul style="list-style-type: none"> Low risk, high yield strategy Risk mitigated through hedging and low cost of production assets Fully integrated team of more than 900
Lime Rock VII (current)	<ul style="list-style-type: none"> Focus on upstream and oilfield services International diversification Experienced investment team
Ridgewood Energy (current)	<ul style="list-style-type: none"> Unique strategy led by a top tier team Crude oil production of \$30 per barrel Risks shared with partners

Important Notice

This presentation has been provided to you for the purpose of discussing an investment advisory relationship. The material contained herein is confidential and is intended for one-on-one or small group meetings with qualified, sophisticated, institutional investors. It may not be copied, transmitted, given, or disclosed to any person other than your authorized representatives. This presentation is not an advertisement and is not intended for public use for distribution. This material is not meant to be, nor shall it be construed as, an offer or solicitation of an offer for the purchase or sale of any security.

This presentation was prepared exclusively for information and discussion purposes, and is not meant to be, nor shall it be construed as, an attempt to define all information that may be material to you. All information including opinions or facts expressed herein are current as of the date appearing in this presentation and is subject to change without notice. All information has been obtained from sources believed to be reliable. No representation, warranty, or undertaking, express or implied, is given as to the accuracy or completeness of the information or opinions contained in this presentation. The information and opinions in this presentation do not constitute investment advice. The list of clients included in this presentation is a partial list selected to illustrate size and type and does not represent an endorsement or approval of Cliffwater or the advisory services provided.

This presentation may include sample or pro forma performance. Such information is presented for illustrative purposes only and is based on various assumptions, not all of which are described herein. Such assumptions, data, or projections may have a material impact on the returns shown. Nothing contained in this presentation is, or shall be relied upon as, a representation as to past or future performance, and no assurance, promise, or representation can be made as to actual returns. Past performance does not guarantee future performance.

References to market or composite indices (such as the S&P 500), benchmarks or other measures of relative market performance over a specified period of time (each, an “index”) are provided for information only. Reference to an index does not imply that a portfolio will achieve returns, volatility or other results similar to the index. The composition of an index may not reflect the manner in which a portfolio is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility or tracking error targets, all of which are subject to change over time.

- Hedge Fund Research, Inc. (“HFR”) is the source and owner of the HFR data contained or reflected in this report and all trademarks related thereto.
- Frank Russell Company (“FRC”) is the source and owner of the Russell Index data contained or reflected in this material and all trademarks and copyrights related thereto. The Russell Index data may contain confidential information and unauthorized use, disclosure, copying, dissemination or redistribution is strictly prohibited.
- Thomson Financial Inc. is the owner and/or licensor of the Cambridge Associates LLC data contained or reflected in this material.