



Private Equity Update

12/10/2014



North Carolina Department of State Treasurer
Investment Management

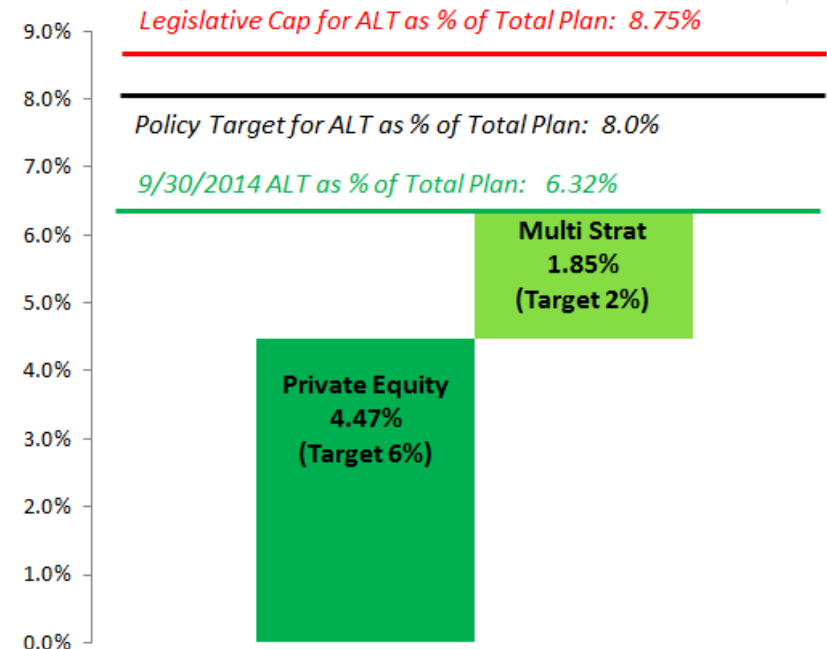
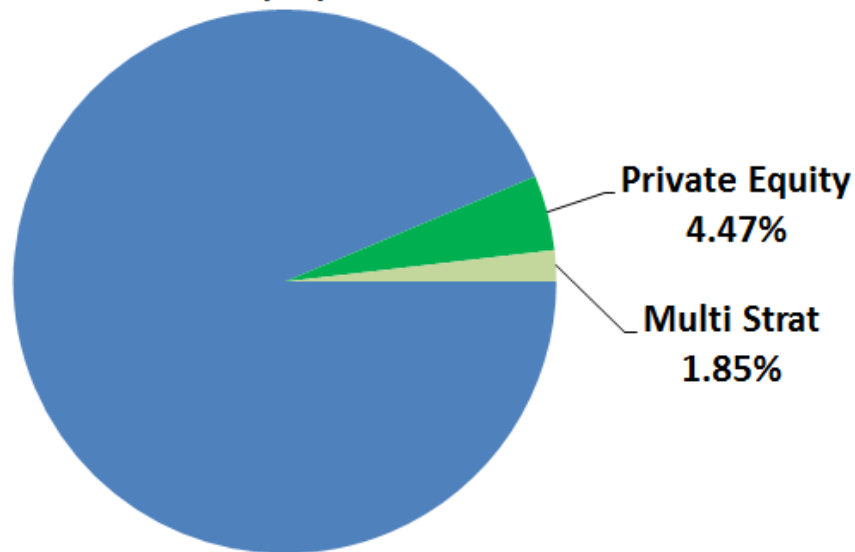
Learn. Invest. Grow. Prosper.

Alternatives Allocation

As of September 30, 2014

- Alternatives represented 6.32% of the Total NCRS Plan
- Private Equity represented 4.47%, below the Policy Target of 6%

NCRS ALT Asset Allocation
based on 9/30/2014 MV

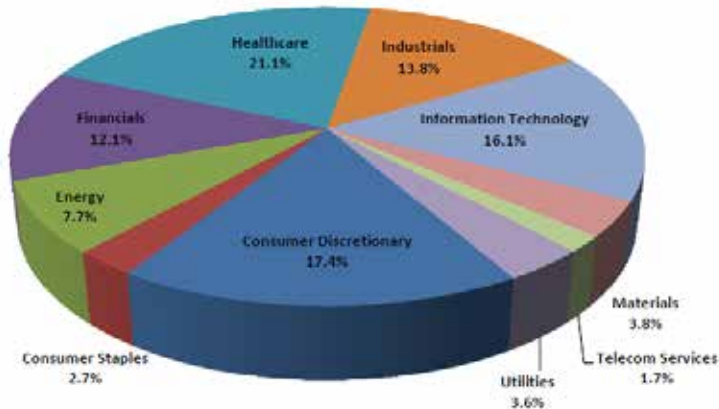


Private Equity Allocation

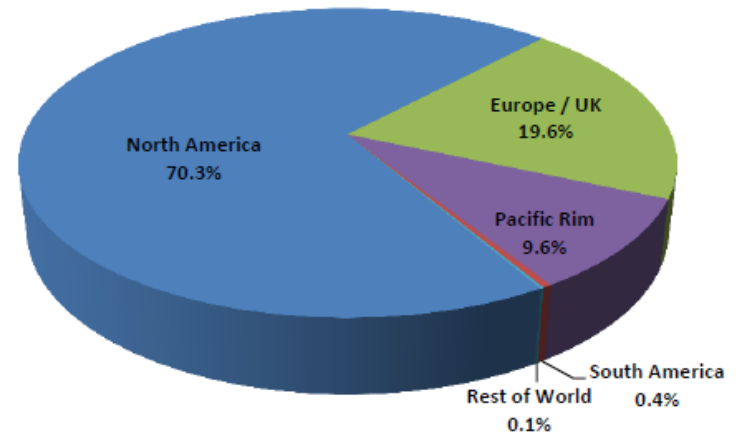
Policy Relative to Actual Portfolio Weights*				
	Policy Range			Actual (11/1)
Strategy	MIN	TARGET	MAX	(FMV)
Buyout	35%	50%	65%	49.3%
Growth/Venture	10%	20%	30%	29.0%
Special Situations	15%	30%	45%	21.7%

*Data includes Fund of Funds' underlying exposure to given strategy.

GICS Industry Allocation**



Geographic Allocation**



**Data includes Fund of Funds' underlying exposure to industry or geography, based on latest available FMV.



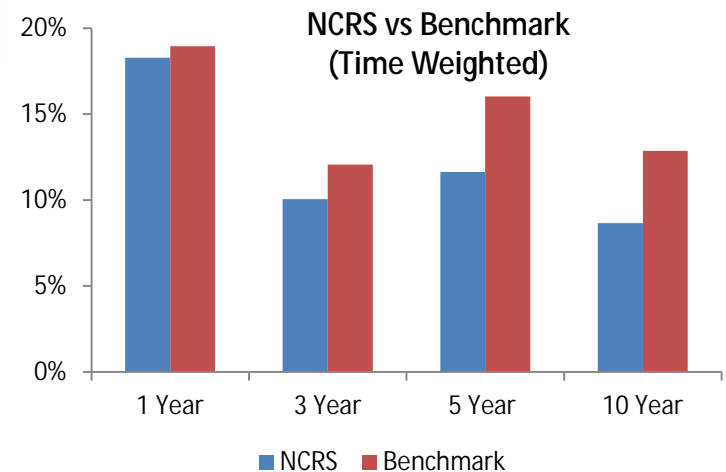
Private Equity Performance

PE IRR inception through 6/30/14



Ø PE IRR through 6/30/14 is 7.97%

Ø Time weighted performance lagging the benchmark. The gap is smaller over the shorter duration, implying weaker performance in the earlier years.



Prior & Current Activities

Fund commitments by calendar year in which commitment was made.

FUND COMMITMENTS COMPLETED IN 2012				FUND COMMITMENTS COMPLETED IN 2013				FUND COMMITMENTS FOR 2014			
FUND	COMMITMENT AMOUNT (\$ millions)	VINTAGE YEAR	RELATIONSHIP	FUND	COMMITMENT AMOUNT (\$ millions)	VINTAGE YEAR	RELATIONSHIP	FUND	COMMITMENT AMOUNT (\$ millions)	VINTAGE YEAR	RELATIONSHIP
BUYOUT				BUYOUT				BUYOUT			
Accel-KKR Capital Partners IV	10	2013	NEW	Avista Capital Partners III	150	2011	existing	Crestview Capital Partners III	150	2013	existing
Carousel Capital Partners IV	25	2012	existing	Apollo Investment Fund VIII	220	2013	existing	Pending - US Buyout Fund	100	2015	existing
Halifax Capital Partners III	30	2012	existing	Catterton Partners VII	100	2013	existing				
				CVC Capital Partners VI	97.5	2013	existing				
				HgCapital 7	98.2	2013	NEW				
				Levine Leichtman Capital Partners V	150	2013	NEW	VC / GROWTH			
				Milestone Partners IV	50	2011	NEW	ARCH Venture Fund VIII	80	2014	existing
				Warburg Pincus XI	150	2012	existing	Tenaya Capital Fund VII	90	2015	existing
				TOTAL BUYOUTS	1015.7						
VC / GROWTH				VC / GROWTH							
NEA 14	45	2012	NEW	Catterton Growth Partners II	75	2013	existing				
				TCV VIII	150	2013	existing				
SPECIAL SITUATION				SPECIAL SITUATION				SPECIAL SITUATION			
Mount Kellett Capital Partners II	75	2011	NEW	Marlin Equity IV	49	2013	NEW	Lexington Middle Market Investors III	150	2012	existing
				StepStone SYN	5	2006	existing	Pending - Four Special Situations Funds	800	various	new & existing
				GCM Grosvenor - NC Innovation Fund 2013	15	2013	existing				
TOTAL COMMITMENTS	185			TOTAL COMMITMENTS	1309.7			TOTAL COMMITMENTS	1370		

Vintage Year commitment translation:

Vintage	Commitments (\$s MM)	
	Existing	Commitment
2013	867.2	1117.2
2014	327.5	927.5
2015	90.0	190.0

Private Equity

Strategic Discussion Items

- Pacing / Vintage Year Diversification
- Portfolio Construction
- Number of Relationships / Size of Commitments
- Geographic Diversification

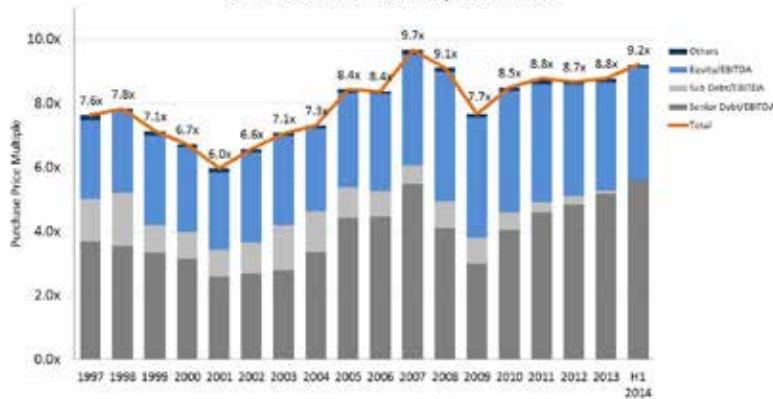


Pacing / Vintage Year Diversification

Backdrop:

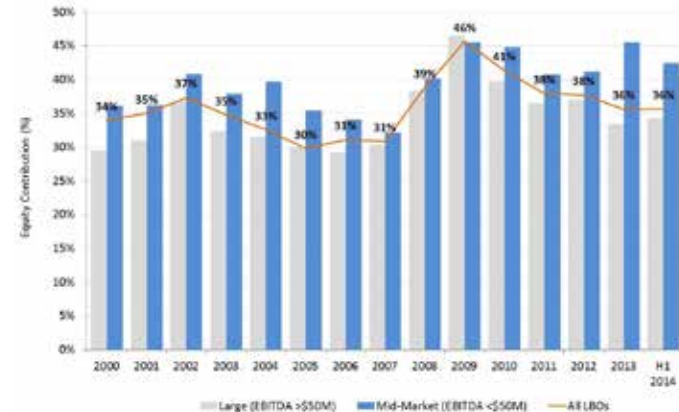
Higher Valuations

All LBOs: Purchase Price Multiple Contribution



Lower Equity Contributions

LBO Equity Contributions by Company Size



Target Allocation: 6% vs. current 4.47%

Discussion:

Continue to be Active
but Remain Underweight
reflecting Market Conditions



Disciplined
Vintage Year Diversification

Source: S&P Capital IQ LCD 's Leveraged Buyout Review



Portfolio Construction

Policy Relative to Actual Portfolio Weights*				
	Policy Range			Actual (11/1)
Strategy	MIN	TARGET	MAX	(FMV)
Buyout	35%	50%	65%	49.3%
Growth/Venture	10%	20%	30%	29.0%
Special Situations	15%	30%	45%	21.7%

Discussion: Portfolio Tilt **Away from Buyout** **Toward Special Situations**
Secondaries / Co-Invest / Distressed

Relatively Unattractive Environment
"TODAY" for Buyout

Special Sits can take advantage
of market dislocations / inefficiencies



Adherence to
Target Allocations



Number of Relationships / Size of Commitments

Backdrop: Number of Fund Managers = 60+
Number of Funds = 100+

Discussion: Tradeoffs between “Blue Chip” managers and Idiosyncratic Opportunities



Simplify the portfolio
of funds & relationships
Optimize commitment size
negotiate preferable TNC/Fees

VS

More reliance on leverage
More concentration risk

Idiosyncratic Opportunities

Target smaller EV companies
Lower entry valuations
Less reliance on leverage
More Levers to pull

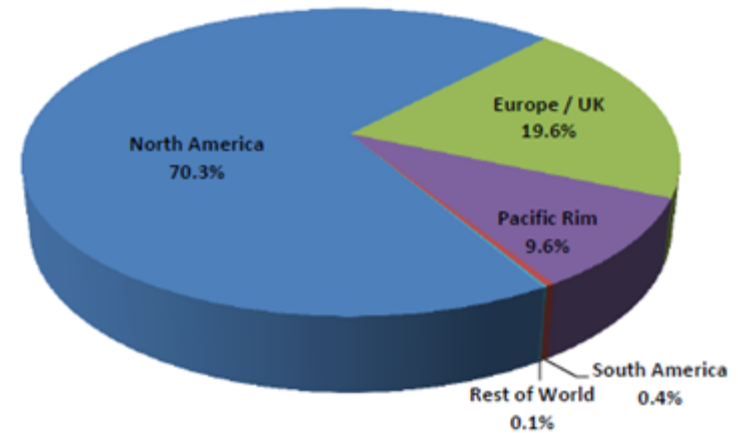
Greater number of relationships
Strong performers have less
favorable terms



Geographic Diversification



Geographic Allocation**



Discussion: Systematic Geographic target allocation or be Tactical / Opportunistic

**Data includes Fund of Funds' underlying exposure to industry or geography, based on latest available FMV.



Appendix



Private Equity: Overview / Key Takeaways

Robust Credit Supply

- Ø Low interest rate environment and search for yield have facilitated favorable lending terms
 - Covenant Light
 - 1H14 sponsored loan volume on pace to exceed full year 2013 (which exceeded 2007)
 - 2013 record high yield bond issuance → continued with 2Q14 experiencing a record quarter
 - Average debt multiples appear to have normalized at more conservative levels relative to pre-crisis period

Valuations have risen significantly

- Ø Purchase price multiples continued upward trend, close to pre-crisis levels

SEEING A SELLERS' MARKET

Fundraising - 2013 set a Post-Crisis Record Year, only eclipsed by 2007 and 2008

- Ø Significant capital being returned to LPs
- Ø Funds that withstood the recession are rewarded with abbreviated fundraising periods

NEW CAPITAL – WHAT WE WANT TO SEE

Buyout

Sector expertise
Operating Ability
Low Leverage

VC/Growth Equity

Maintain High Bar
Grow Relationships

Special Sits - Secondaries

Regulations Enhancing Supply
Structured Transactions
Separate Accounts

Opportunistic Strategies

Co-Investments

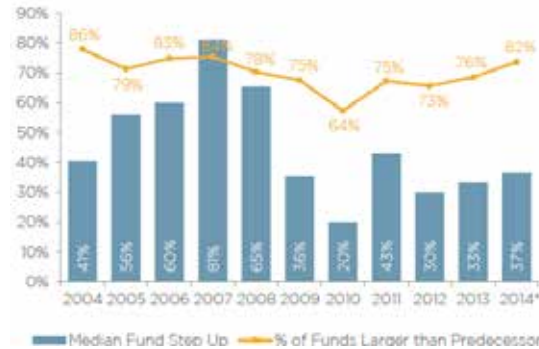


Private Equity Fundraising (excluding VC)

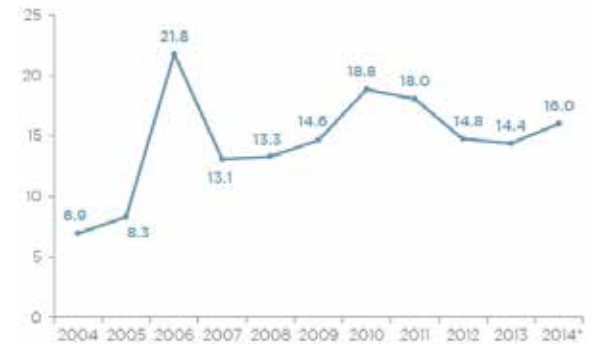
U.S. PE FUNDRAISING BY YEAR



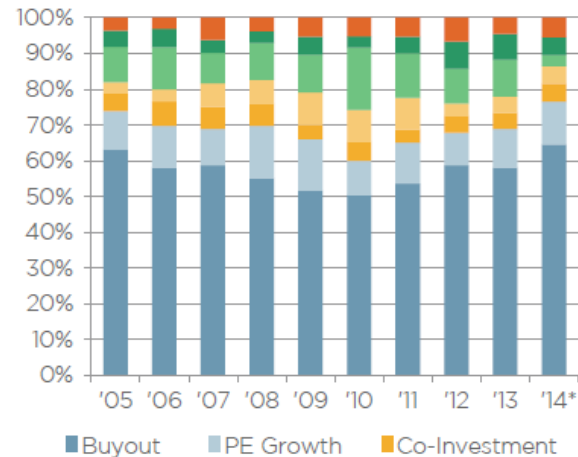
MEDIAN PE FUND STEP-UP



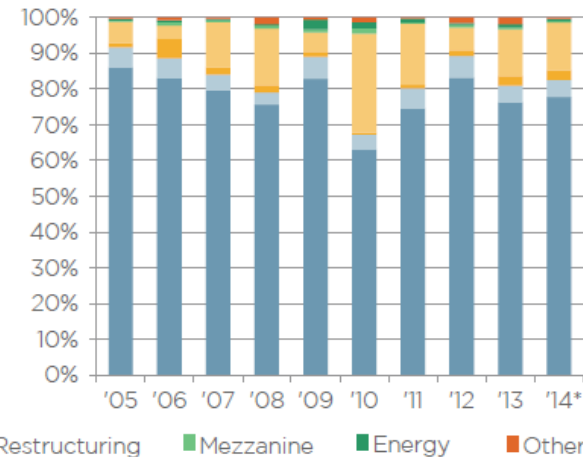
AVERAGE TIME TO CLOSE (MONTHS)



FUNDRAISING (#) BY FUND TYPE



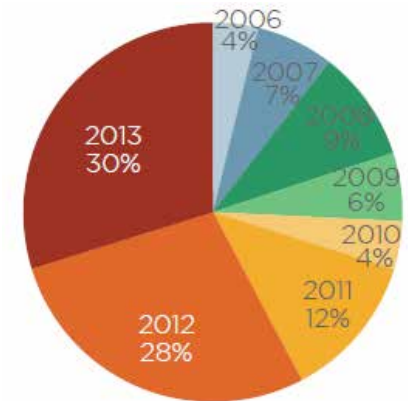
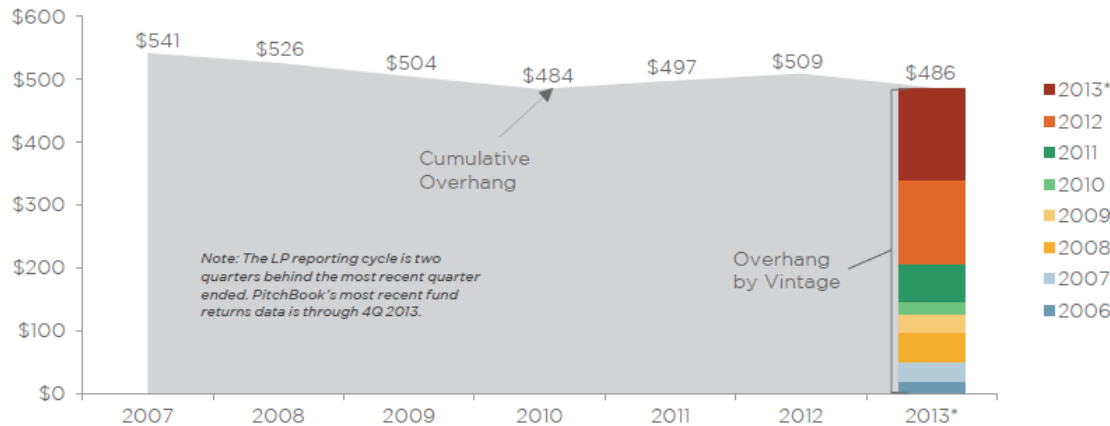
FUNDRAISING (\$) BY FUND TYPE



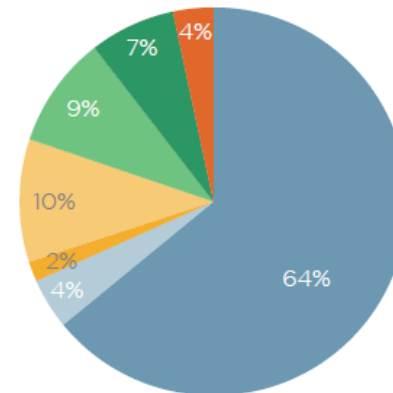
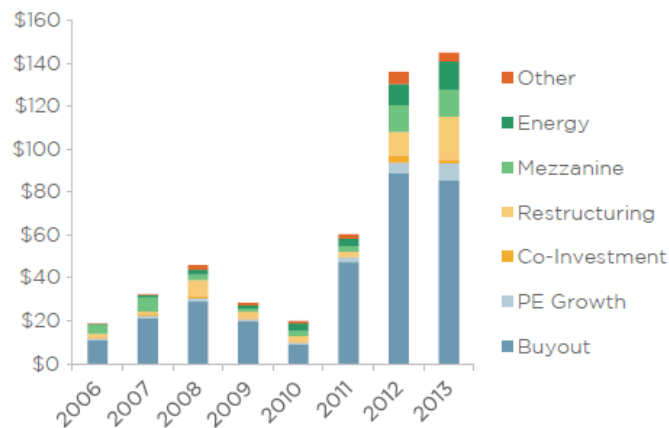
Source: PitchBook
*as of 6/30/14

Private Equity Overhang (excluding VC)

U.S. PE CAPITAL OVERHANG (\$B)



PE CAPITAL OVERHANG (\$B) BY FUND TYPE

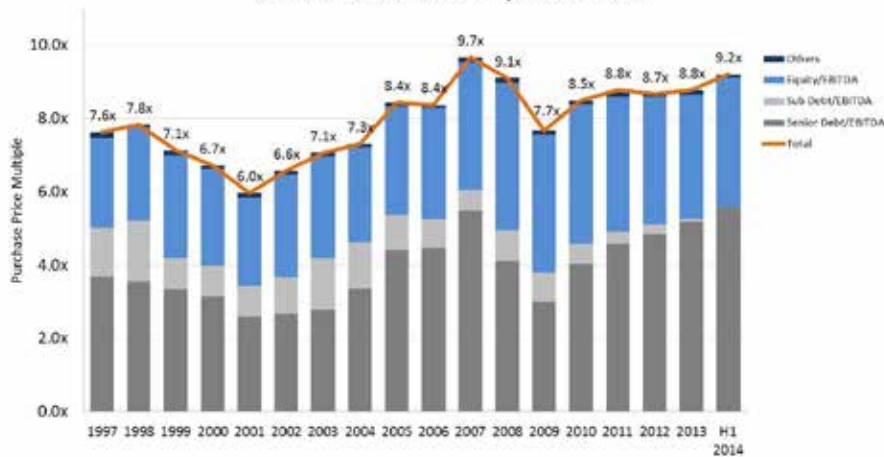


Source: PitchBook
*as of 12/31/13

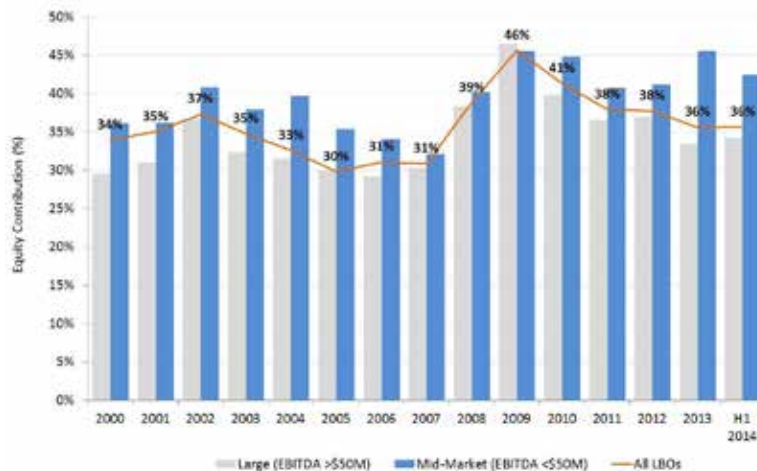


U.S. Buyout – Entry Valuations

All LBOs: Purchase Price Multiple Contribution



LBO Equity Contributions by Company Size



Purchase Multiples by Transaction Size
(Enterprise Value to Pro Forma Trailing EBITDA)

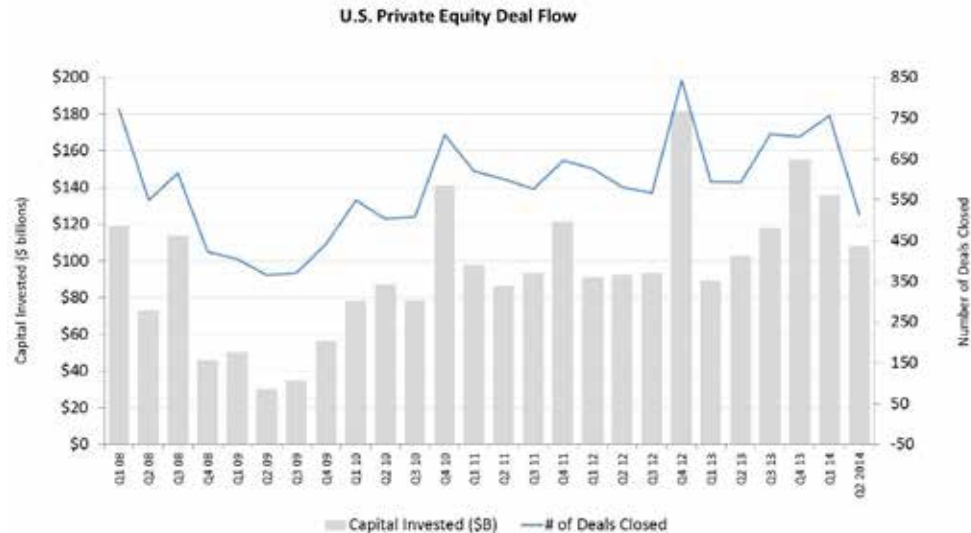


- At 36% for All LBOs in H1 2014, equity contributions remained above the pre-crisis levels.
- Mid-market transactions consistently show higher equity contributions, as credit is more readily available to finance transactions involving larger, more stable companies.
- Average debt multiples for 1H14 for issuers with EBITDA >\$50M were 5.6x (below 6.2x in 2007)
EBITDA <\$50M were 5.2x (below 5.6x in 2007)

Source: S&P Capital IQ LCD 's Leveraged Buyout Review



U.S. Buyout – Market Transaction Activity



\$244 billion was invested in 1,272 PE transactions in 1H14

- 2014 is ahead of pace relative to the prior 3 years

Witnessed slowdown from 1Q14 to 2Q14

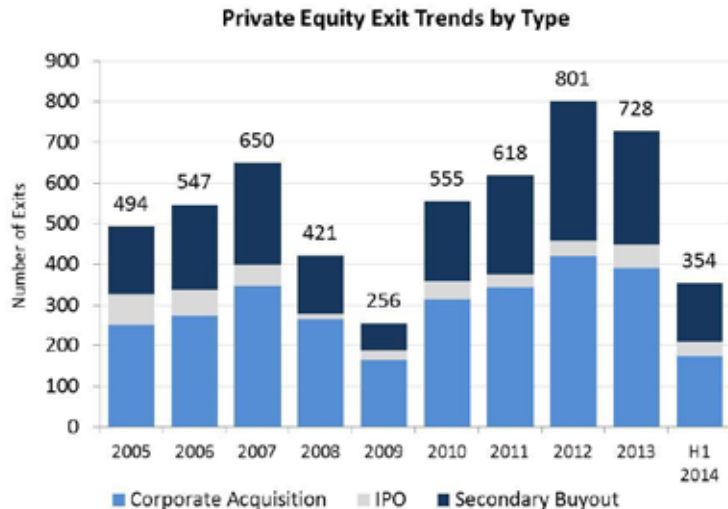
- possibly due to higher prices / market frothiness

Source: PitchBook

16



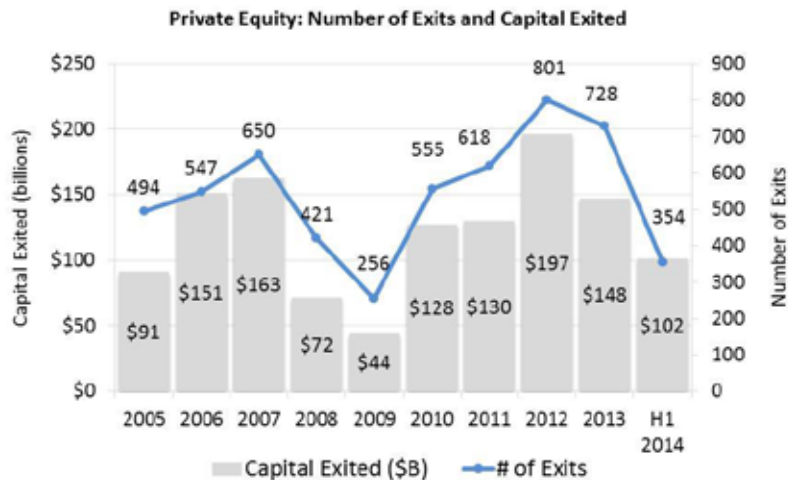
U.S. Private Equity – Exit Environment



Exits slowed slightly in 2Q14, though deal count and capital exited remain strong for 1H14

Corporate acquisition and secondary buyouts slowed by count 9% and 13%, respectively, in Q2 relative to Q1.

- We expect this trend to reverse
 - Ø high levels of cash on corporate balance sheets
 - Ø PE dry powder
 - Ø credit availability



Source: PitchBook

17



Buyouts - NCRS Strategy

Ø Preference for middle market funds and a limited number of large funds

Ø Attractive investment strategies:

- q Sector focus
- q Deep value
- q Structured transactions or securities
- q Operational expertise
- q Less reliance on Leverage

Bloomberg

[Print](#) [Back to story](#)

Top LBO Fund Investors Pile on Leverage to Boost Returns

By Kiel Porter and Sabina Wilmer - Sep 9, 2014

Some of the world's biggest investors in leveraged-buyout funds are themselves using unprecedented levels of debt to boost returns.

"Leverage is a double-edged sword," said Oliver Gottschalg, a professor at French business school HEC Paris. "It can boost the performance on the upside and rapidly eat into capital on the downside. The more leverage you apply, the more extreme the outcome will be for the investor."

New issuance of sponsored and covenant-lite loans in 1H14 was on pace to exceed full year 2013 volume, which previously had peaked in 2007.

§ 2Q14 was a record quarter of \$105 billion in issuance

§ issuers continue to enjoy low coupons and issuer-friendly covenant packages

Ø Mix of re-ups with existing managers and select new relationships

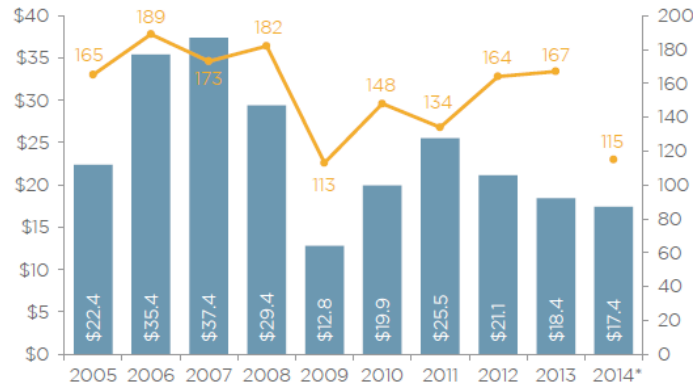
Ø Typical Buyout commitment size going forward = \$150-\$200 MM

- q Expect to concentrate on fewer number of high conviction managers/GPs

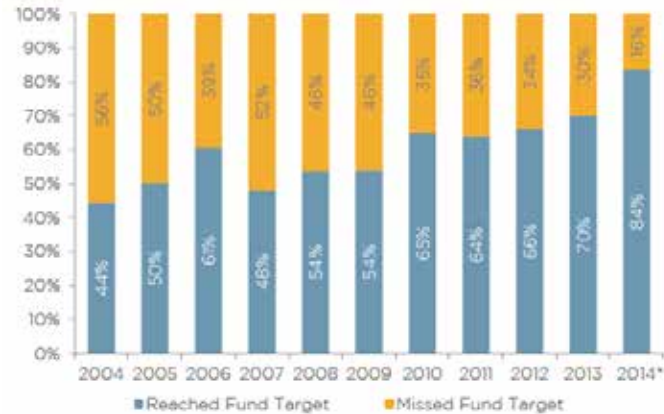


Venture Capital Fundraising

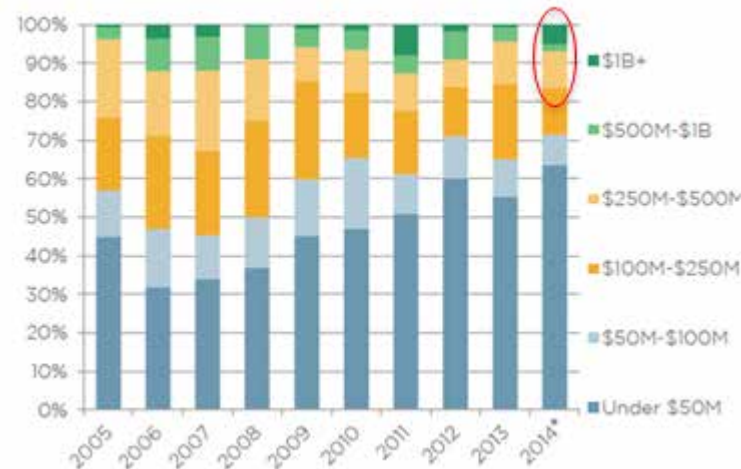
VC FUNDRAISING BY YEAR



% OF FUNDS THAT REACH FUND TARGET



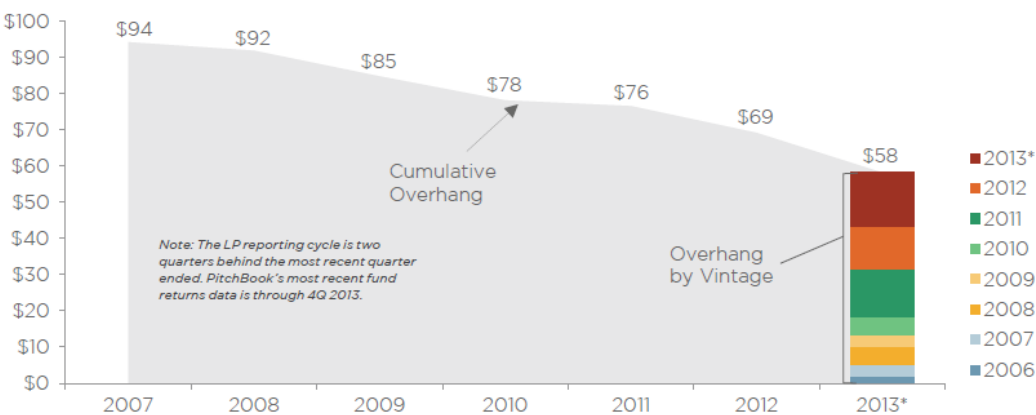
VC FUNDRAISING (#) BY FUND SIZE



Source: PitchBook
*as of 6/30/14

Venture Capital Overhang

U.S. VC CAPITAL OVERHANG (\$B)



VC CAPITAL INVESTED VS. CAPITAL RAISED (\$B)

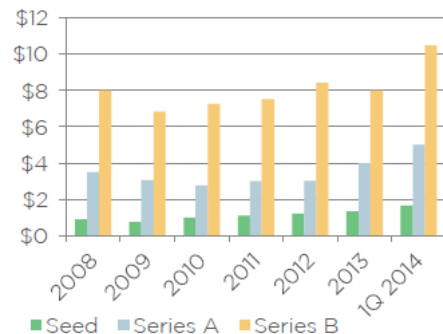


Source: PitchBook
*as of 12/31/13 unless otherwise noted

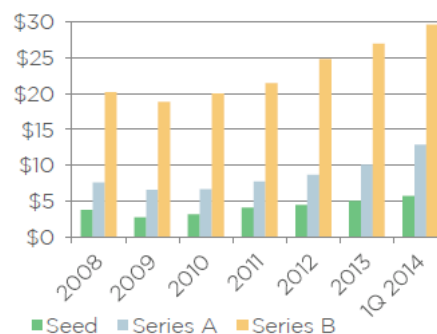


Venture Capital – Valuations

U.S. MEDIAN VC FINANCING SIZE (\$M)



U.S. MEDIAN VC PRE-MONEY VALUATION (\$M)

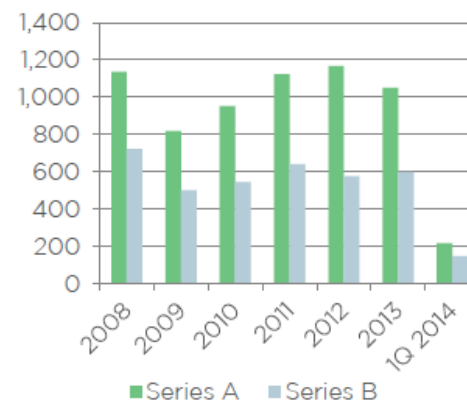


Valuations continue to climb

Series B crunch

- Are we seeing “more Series B-worthy companies going unfunded because of a diminishing number of financings and opportunities”?
 - PitchBook answer: NO
- “seeing a normal supply and demand issue play out that historically has resulted in about half of Series A companies becoming Series B companies”
- companies are getting better terms at the B stage, such as higher valuations and larger deal size

U.S. VC FINANCINGS (#) BY SERIES

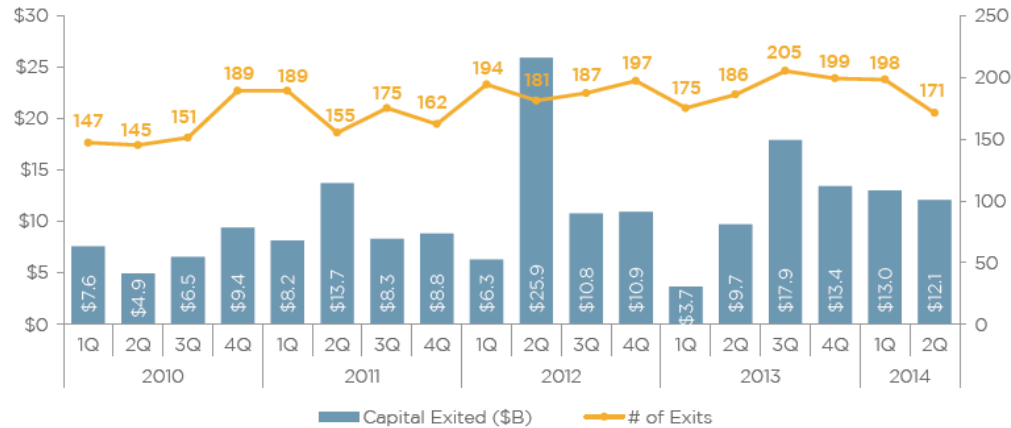


Source: PitchBook

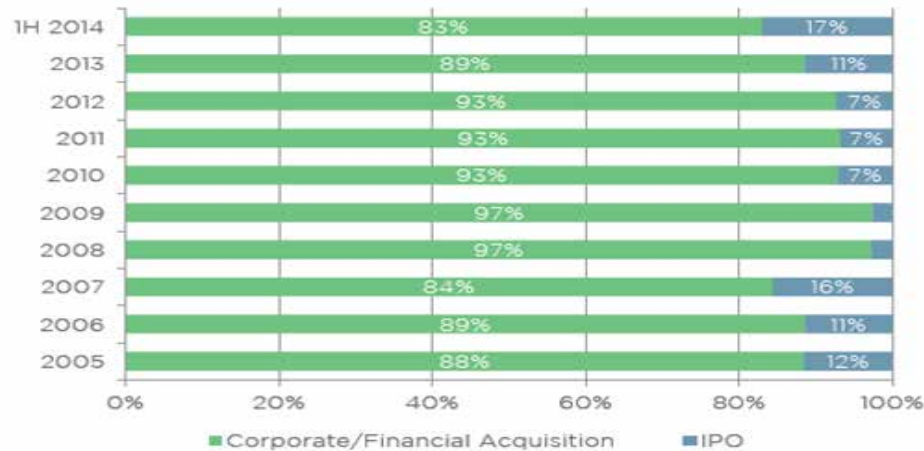
21

Venture Capital – Exit Environment

VC EXITS BY QUARTER



VC EXITS (#) BY TYPE



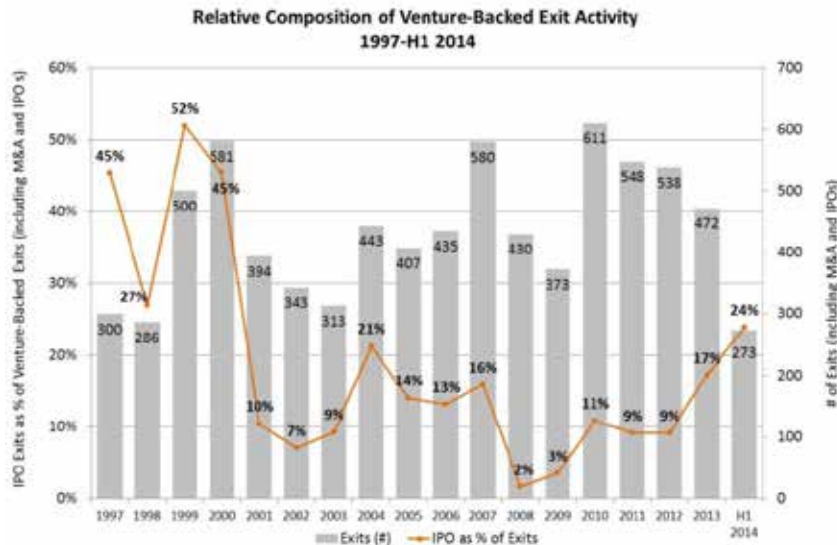
Source: PitchBook



Venture Capital – IPO Exit Environment



The U.S. IPO Market hit a 14 year record high in 2Q14 with 83 IPO priced, which raised \$21 billion.



Venture-backed IPO activity extended its streak of 20+ offerings for the 5th consecutive quarter

IPO exits as a percentage of venture-backed exit activity have tracked economic cycles.

- 1999 = 52%
- Increased since recession, but not 90's peak



Venture Capital / Growth Equity – NCRS Strategy

Ø Allocation as of 6/30/14 above policy range

- Expect this to be short term
- Committing more to other strategies

VC + Growth Equity Portfolio Weight				
	Policy Range			Actual
Strategy	MIN	TARGET	MAX	(FMV)
Growth/Venture	10%	20%	30%	32.01%

Ø Do not force VC

- Access to best managers is critical
- Maintain relationships as warranted with consistent participation
- Commitments will be lumpy by vintage year due to a small number of expected relationships

Ø Growth Equity allocation 7.5% as of 6/30/14

- Similar strategy as VC
- Allocation expected to grow over time at the expense of VC



Special Situations - Secondary Market

NCRS Strategy:

- Separate Account – preferred economics
- Manager utilizing structured transactions – risk mitigation

Benefits:

- J-Curve mitigant
- Less “blind pool” risk
- Accelerated Investment Exposure (cash flow)

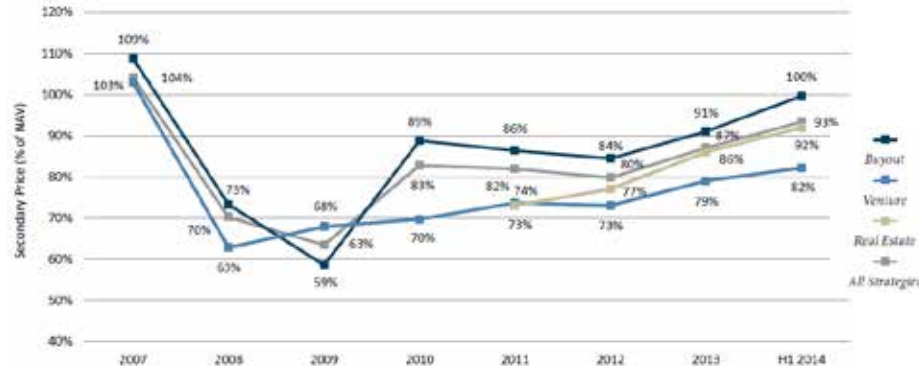
Pricing across all strategies continues to rise

Secondary volume is on track to surpass 2013 record

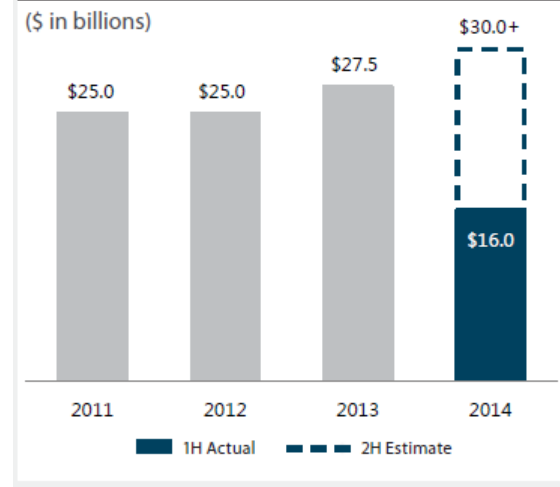
LP reasons for sale:

- opportunistic sellers
- focus on high conviction managers
- Regulations – Volcker Rule, Basel III, Solvency II

Pricing Trends

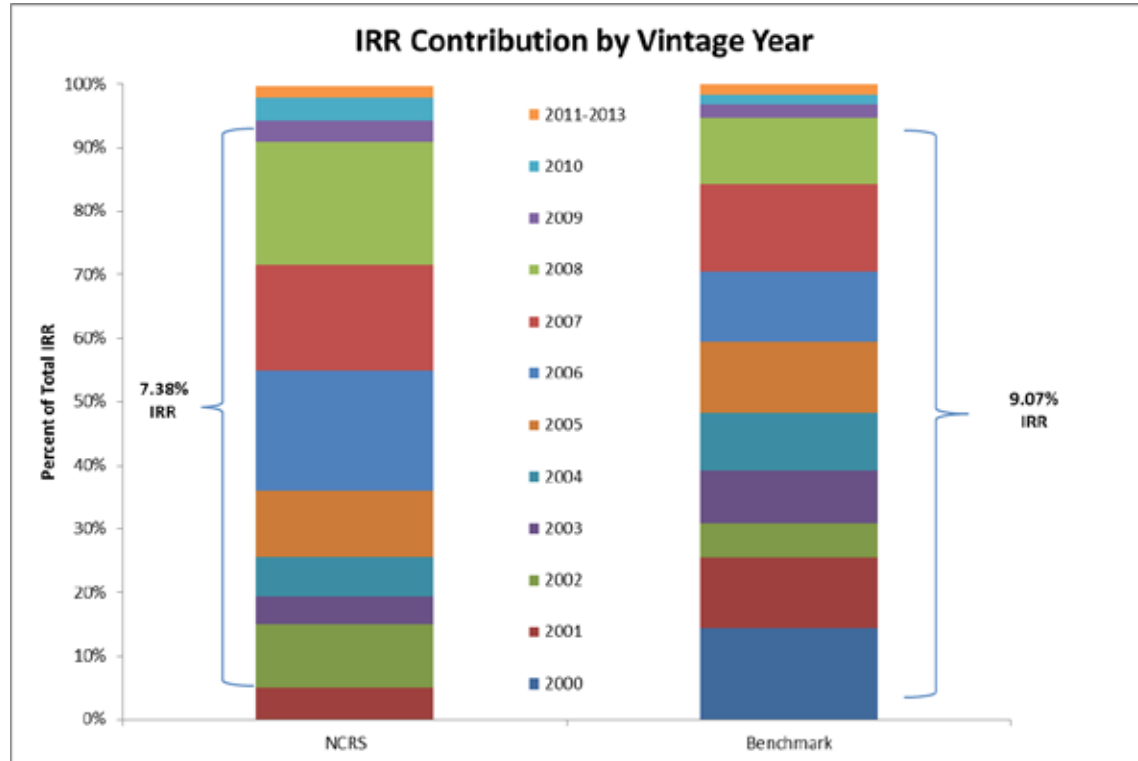


Historical Secondary Market Volume



Source: Cogent Partners

Performance Attribution by Vintage Year



- Ø Thus far, vintage years 2011-2013 have had limited impact on returns for both NCRS and the benchmark
- Ø Vintage years 2005-2008 account for approximately 65% of NCRS returns, which is meaningfully greater than the Benchmark
- Ø Vintage year 2000 has a dramatic impact on the Benchmark
 - Essentially no impact act on NCRS returns

Note: For the purpose of this analysis, vintage years prior to 2000 are excluded, thus the above IRR of 7.38% does not include the impact of returns generated from these earlier vintage years.

*as of 3/31/14

26



Private Equity Performance (2000-3/31/14)

Private Equity Attribution Analysis						
Strategy	NC IRR	NC IRR absent Fund-of-Funds	Contribution to NC IRR (A)	Benchmark IRR	Contribution to Benchmark IRR (B)	Contribution to Active IRR (A – B)
VC / Growth Equity	8.02	8.02	1.52	6.57	0.55	0.97
Buyout	6.90	6.90	2.92	12.15	8.43	-5.51
Special Situations	8.55	8.55	1.15	5.63	0.10	1.05
Fund-of-Funds	7.11	N/A	1.79	N/A	N/A	1.79
Total	7.38	7.47	7.38	9.08	9.08	-1.70

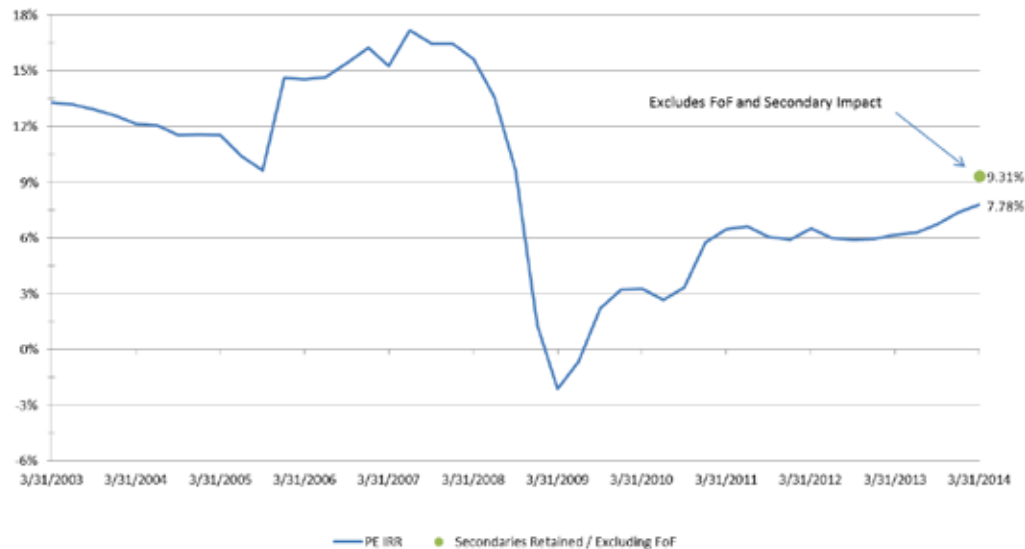
Ø The NCRS Buyout performance was impacted by the secondary sale. Rebuilding the portfolio with these commitments results in a Buyout IRR of 9.35% including commitments from 2000 through 3/31/14.

Note: Performance excludes pre-2000 vintage funds, through 3/31/14



Private Equity Performance

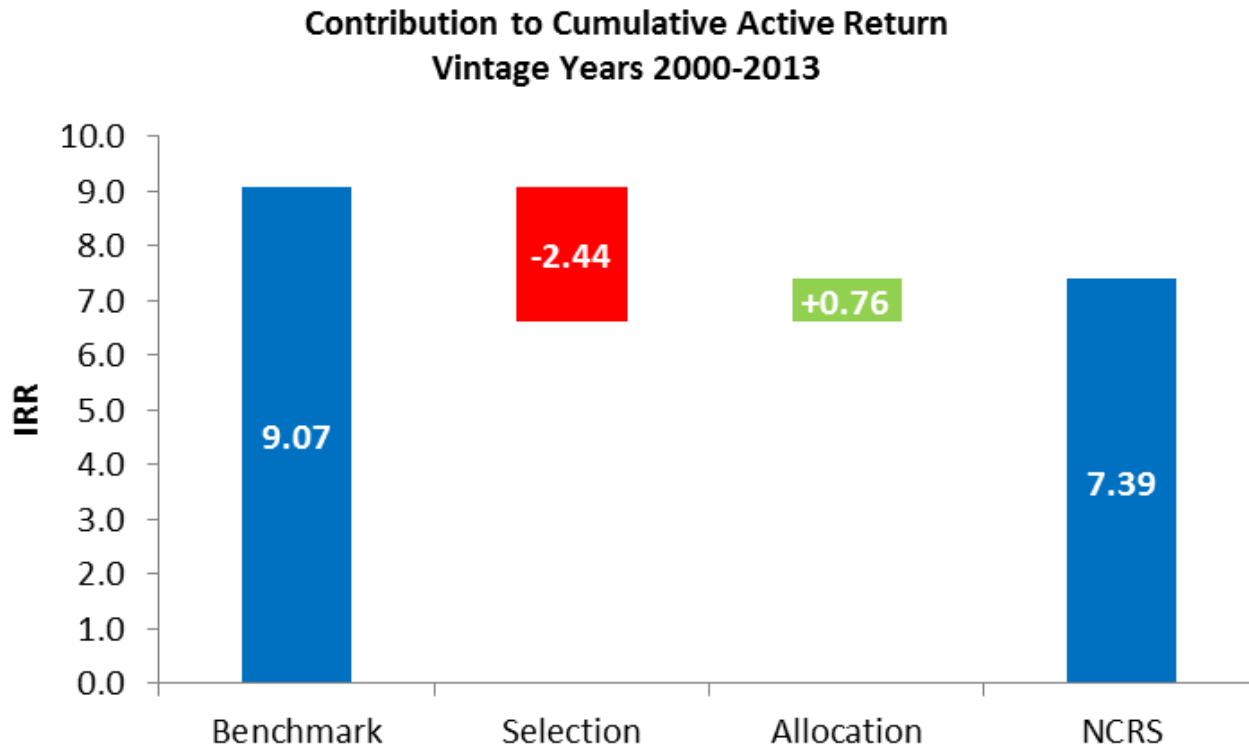
PE IRR inception through 3/31/14



Ø IRR from inception impacted by 153 basis points on secondary sale and Fund-of-Fund commitments.



Performance Attribution by Vintage Year (Cumulative)

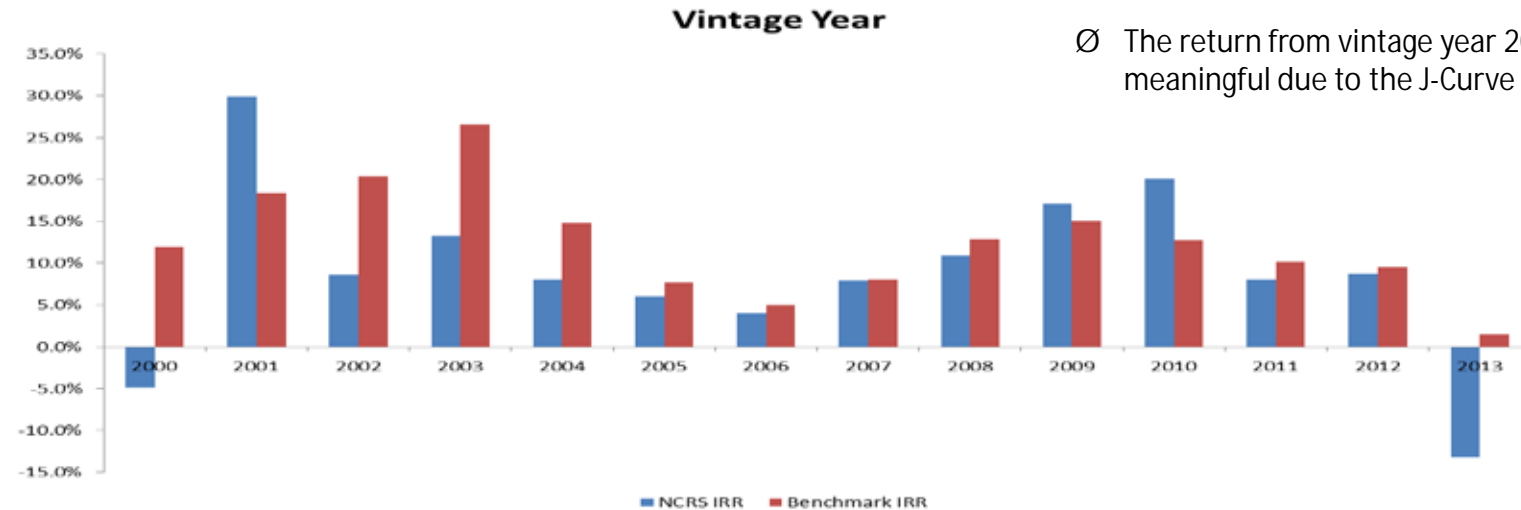


- Ø Selection variance has been the primary discrepancy between the Benchmark returns and the portfolio returns
- Ø 79% of the cumulative difference between the Benchmark and the portfolio return is attributable to Vintage Year 2000 investments

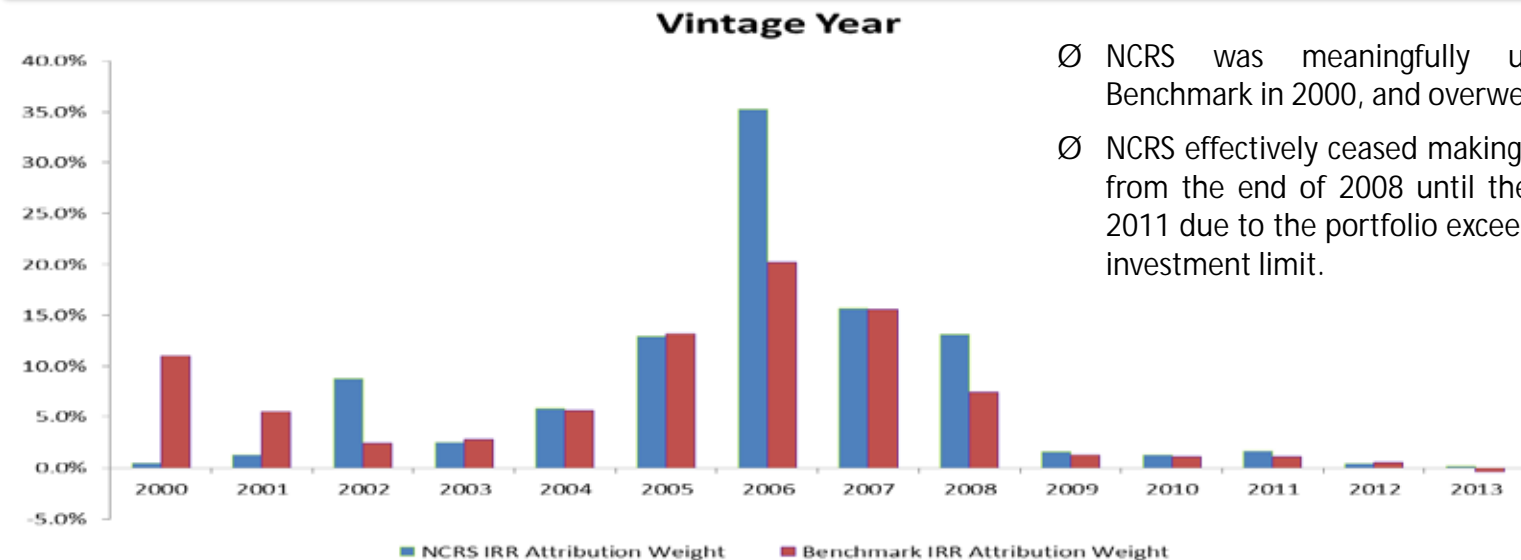
Note: For the purpose of this analysis, Pre-2000 are excluded, thus the cumulative IRR of 7.39% does not include the impact of returns generated from these earlier vintage years.



Attribution Weight and IRR



Ø The return from vintage year 2013 is not yet meaningful due to the J-Curve effect.



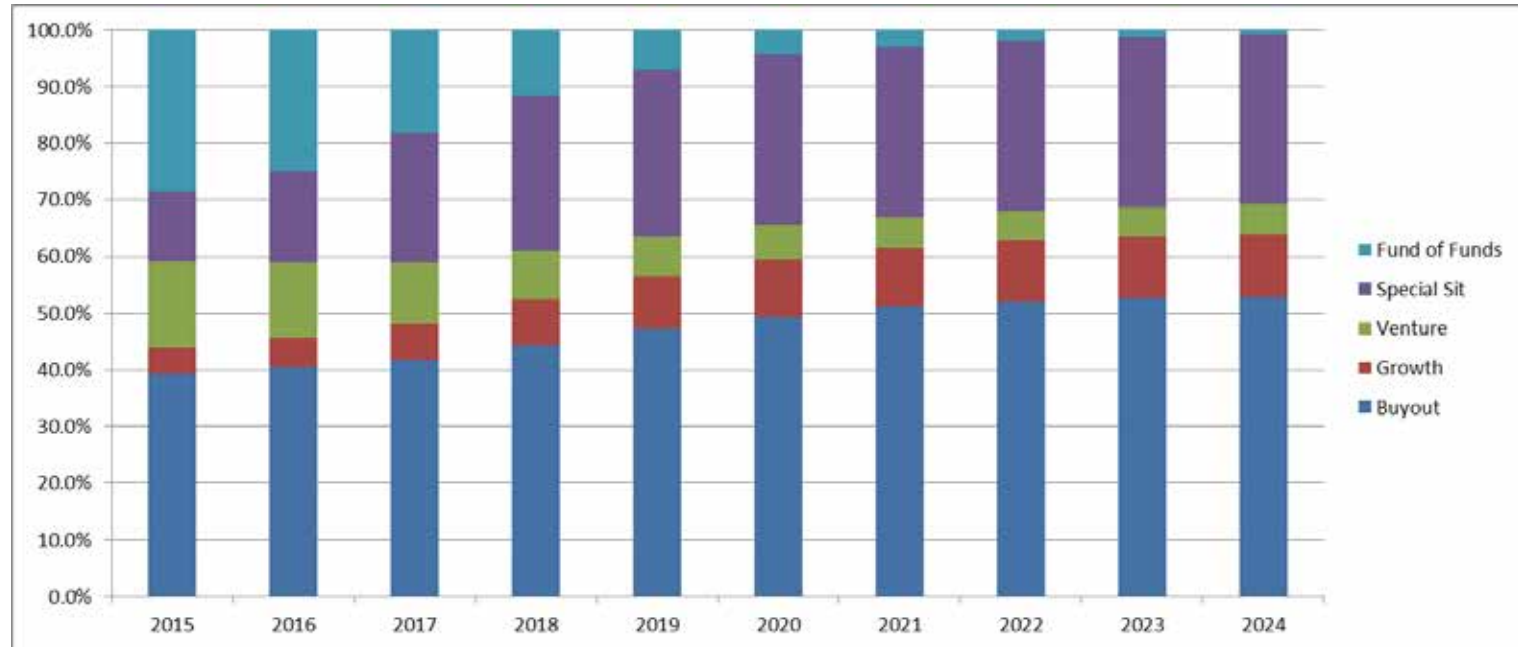
Ø NCRS was meaningfully underweight the Benchmark in 2000, and overweight in 2006

Ø NCRS effectively ceased making new investments from the end of 2008 until the third quarter of 2011 due to the portfolio exceeding the statutory investment limit.



Future Portfolio Weighting

Strategy Allocation including Fund-of-Funds



Commitment Pace = \$1.2 billion / year

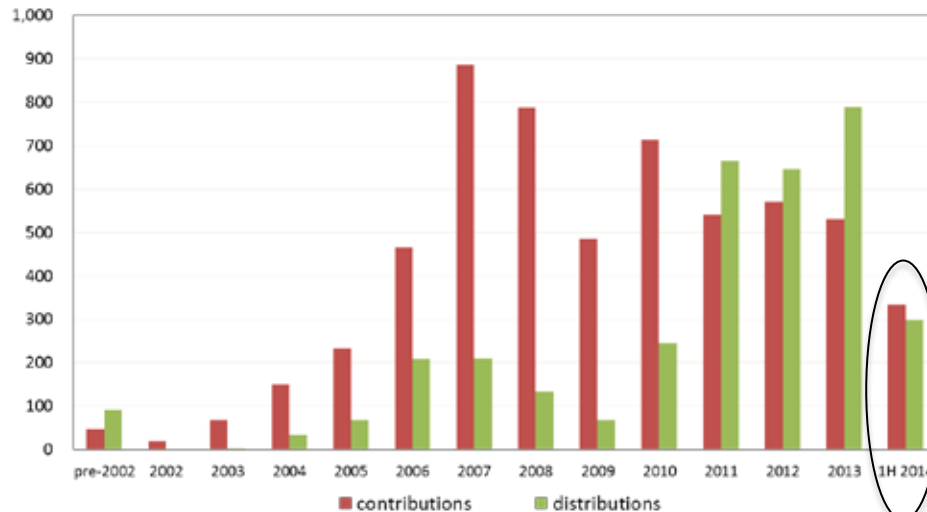
<u>Declining</u>	<u>Increasing</u>
Fund-of-Funds	Special Situations
VC / Growth Equity	Buyout



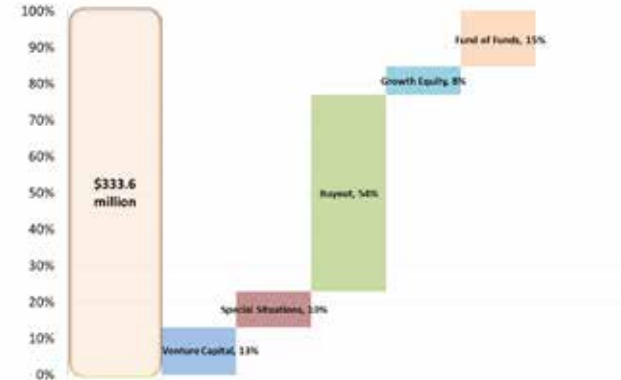
Private Equity Cash Flow Detail

In 2011, 2012, and 2013, Distributions have exceeded Contributions.
1H 2014 – Contributions outweighed Distributions.

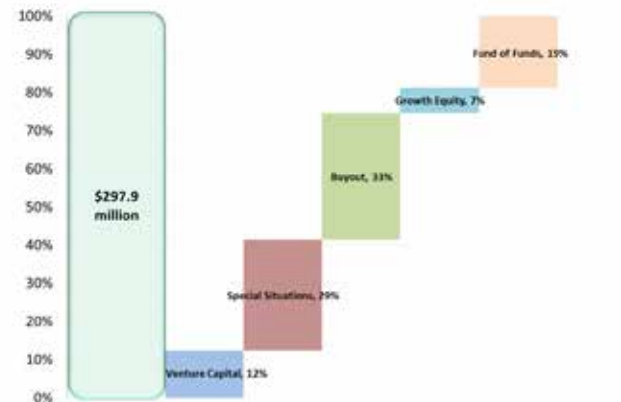
Private Equity Cashflows
by Calendar Year



1H 2014 Contributions
by Strategy



1H 2014 Distributions
by Strategy



Current Initiatives

- Ø Staff Expansion / Onboarding
 - Portfolio Manager & Analyst
 - New Positions

- Ø Capital Deployment – new commitments of approximately \$1.2 billion per year
 - Target 6.0% allocation over multi-year period
 - Expect to be underweight in coming years as exercise vintage year commitment discipline and cognizant of valuations

- Ø Non-Core Residual Funds / Portfolio Construction
 - Fund “Tail” Analysis
 - Fund-of-Funds – restructure / decrease fees

- Ø Fee Monitoring and Review

- Ø Risk Analytics Platform

- Ø Special Programs
 - In-State Program – success of the NC Innovation Fund I / Fund II in diligence
 - Small / Emerging Manager Program – access to smaller funds efficiently, incorporating co-investment
 - Co-Investment Program – cross collaboration with other asset classes
 - Secondary Program – cross collaboration with other asset classes





Thank You!

Together we can build and maintain a fiscally strong and prosperous North Carolina.

www.NCTreasurer.com



North Carolina Department of State Treasurer
Investment Management

Learn. Invest. Grow. Prosper.