



Real Estate Update

Non-Core Portfolio

September 24, 2014



North Carolina Department of State Treasurer
Investment Management

Learn. Invest. Grow. Prosper.

- I. Real Estate Investment Portfolio Overview
- II. 2013/2014 Real Estate Non-Core Performance Review
- III. Real Estate Market Review
- IV. Non-Core Initiatives

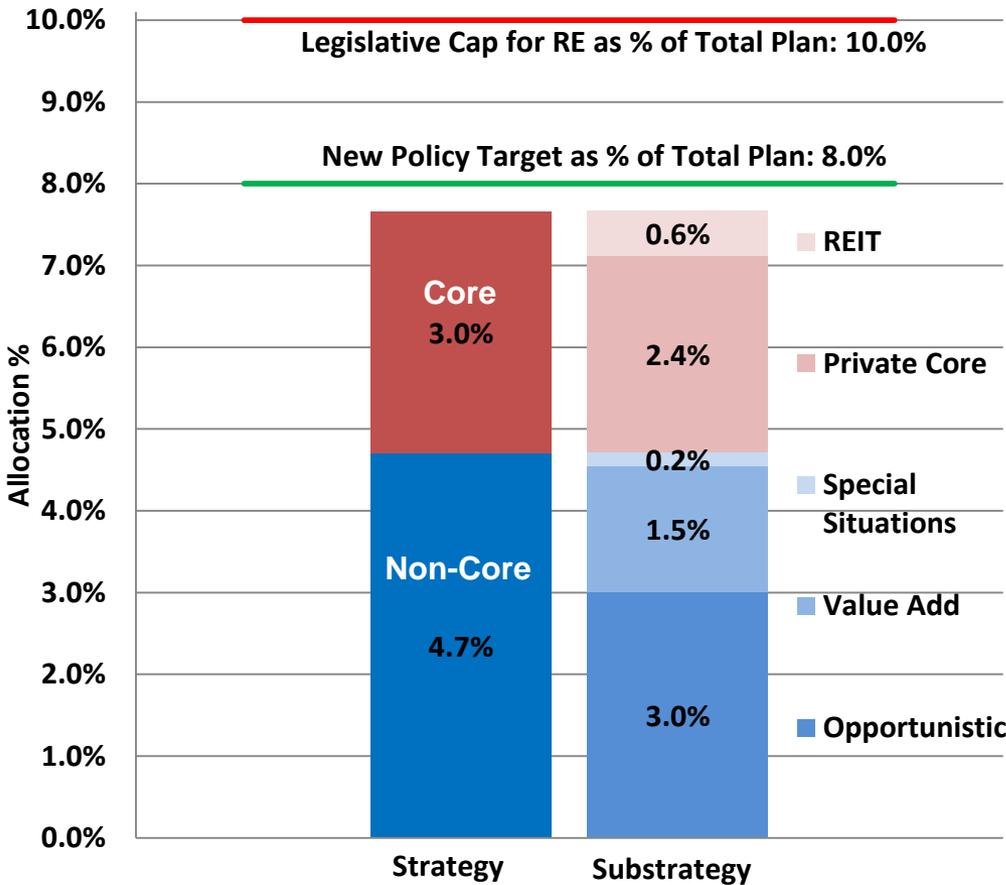


- Real Estate represents 7.7% of the total NCRS plan, (slide 4)
 - Core is 3.0%, Non-Core is 4.7%
 - We are transitioning towards 5.0% Core and 3.0% Non-Core, pursuant to our new policy
- Portfolio is well balanced both geographically and by sector, (slides 5 & 6)

Valuation as of 6/30/14; Timberland is excluded



Real Estate Allocation



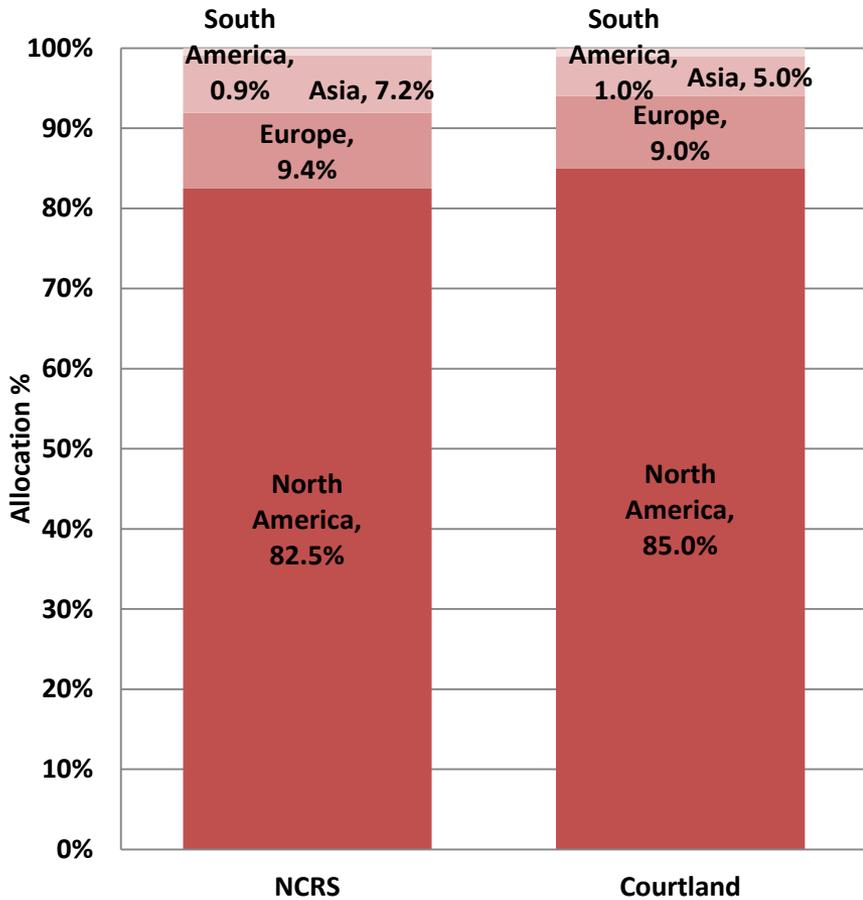
Valuation as of 6/30/14; Timberland is excluded

Strategy	MV 2Q14	Policy Range		
		Target	Min	Max
Core	3.0%	5.0%	2.0%	10.0%
Non-Core	4.7%	3.0%	0.0%	8.0%
Real Estate	7.7%	8.0%		
Sub-Strategy				
Value Add	1.5%	50.0%	30.0%	70.0%
Opportunistic	3.0%	50.0%	30.0%	70.0%
Special Situations	0.2%	0.0%	0.0%	30.0%
Non-Core	4.7%	100.0%		

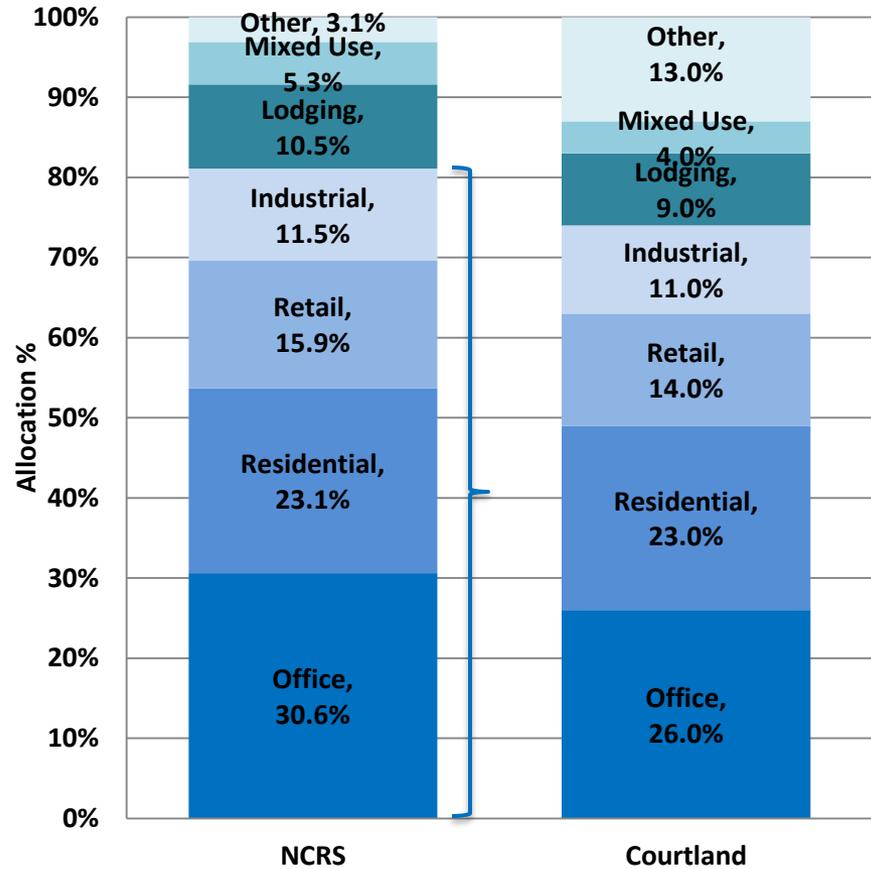
Real Estate represents 7.7% of the Total NCRS Plan, 30 bps below its Policy Target of 8.0%



NCRS Real Estate Diversification



NCRS as of 6/30/14; Courtland as of 3/31/14; Canada & Mexico make up less than 1%

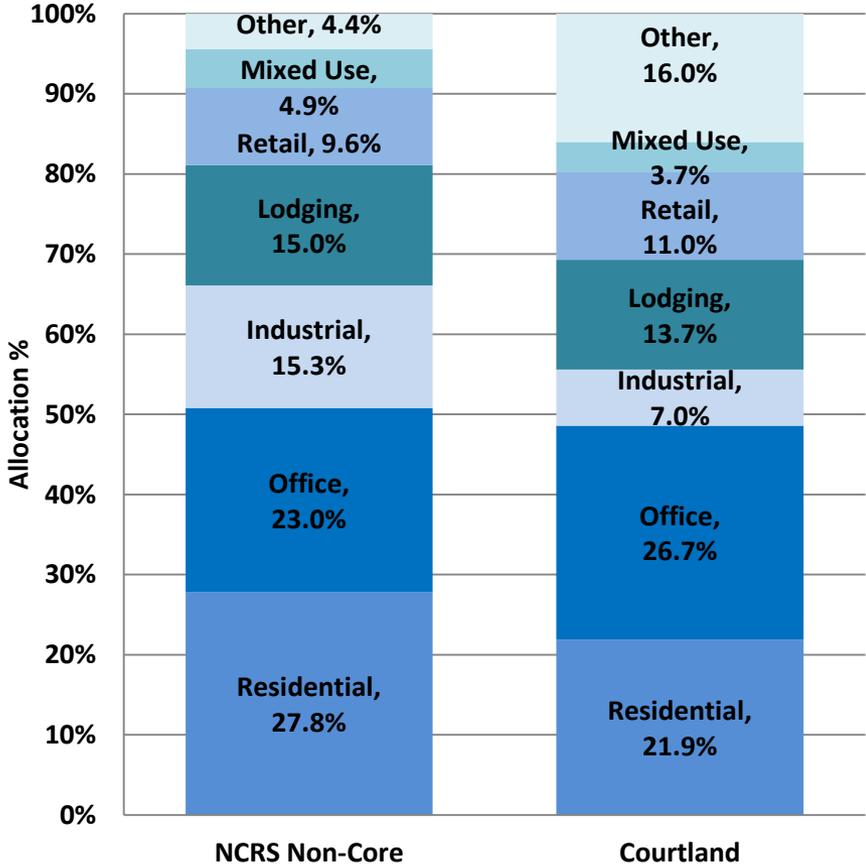


The four major sectors represent 81.1% of the Portfolio



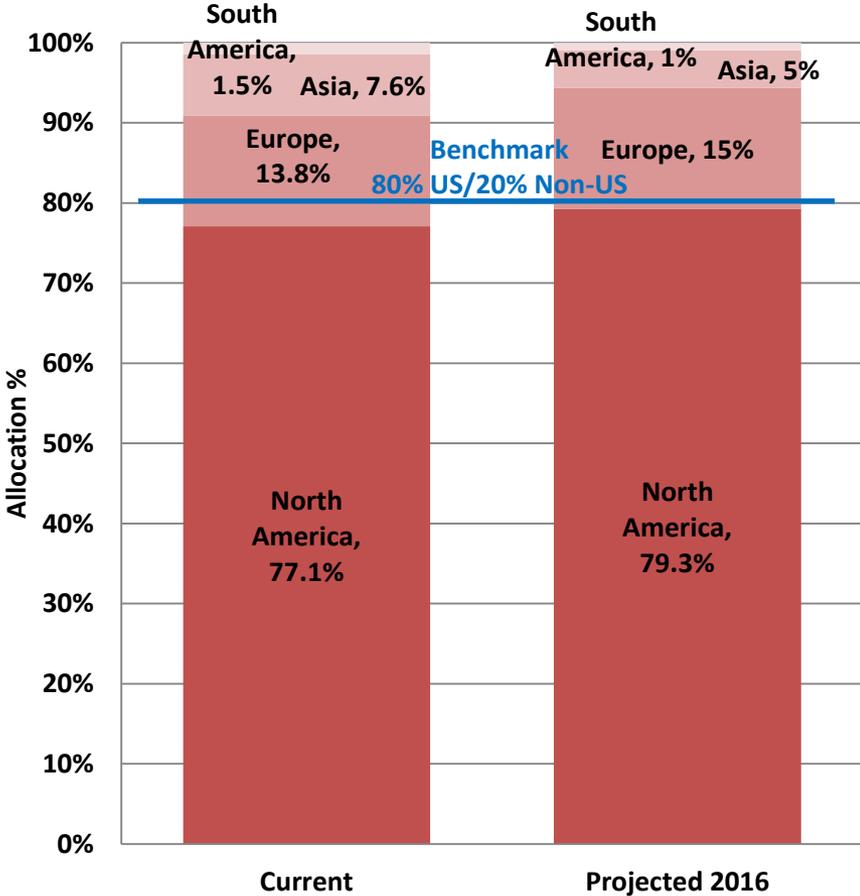
Non-Core Real Estate Diversification

Sector Diversification



NCRS as of 6/30/14; Courtland as of 3/31/14

Geographic Diversification



Canada & Mexico make up less than 1%

The current Non-Core geographic allocation to U.S. is underweight by ~290 bps



Strategy	1Q14	Leverage Monitoring Standard
Value Add	50.6%	60.0%
Opportunistic	41.1%	75.0%
Non-Core	44.7%	
Core	21.3%	40.0%
Real Estate	36.2%	

NCRS Leverage data per Courtland 1Q14 Performance Report

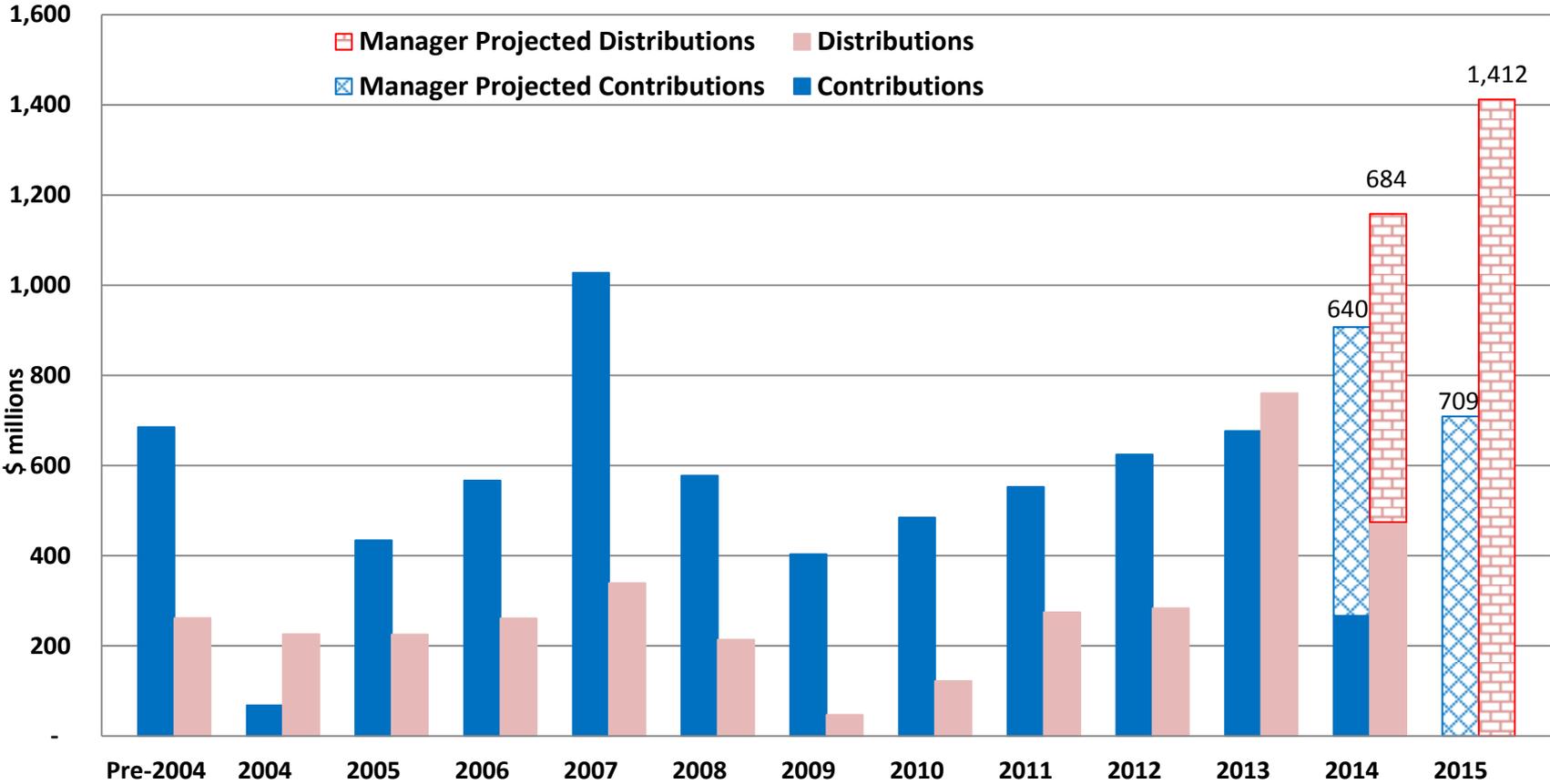
Leverage is well below the monitoring standard in all strategies



- Record-high distributions projected for 2014/2015, (slide 8)
- 2011 vintage experiencing accelerated realizations, (slide 9)
- NCRS returns performing better in the 1 & 3 Year periods, (slide 10)
- One year can make a significant difference, (slide 12)
- Managing across vintage years is important, (slide 13)
- Focus will be on current income and risk-adjusted return



Non-Core Cash Flow by Calendar Year

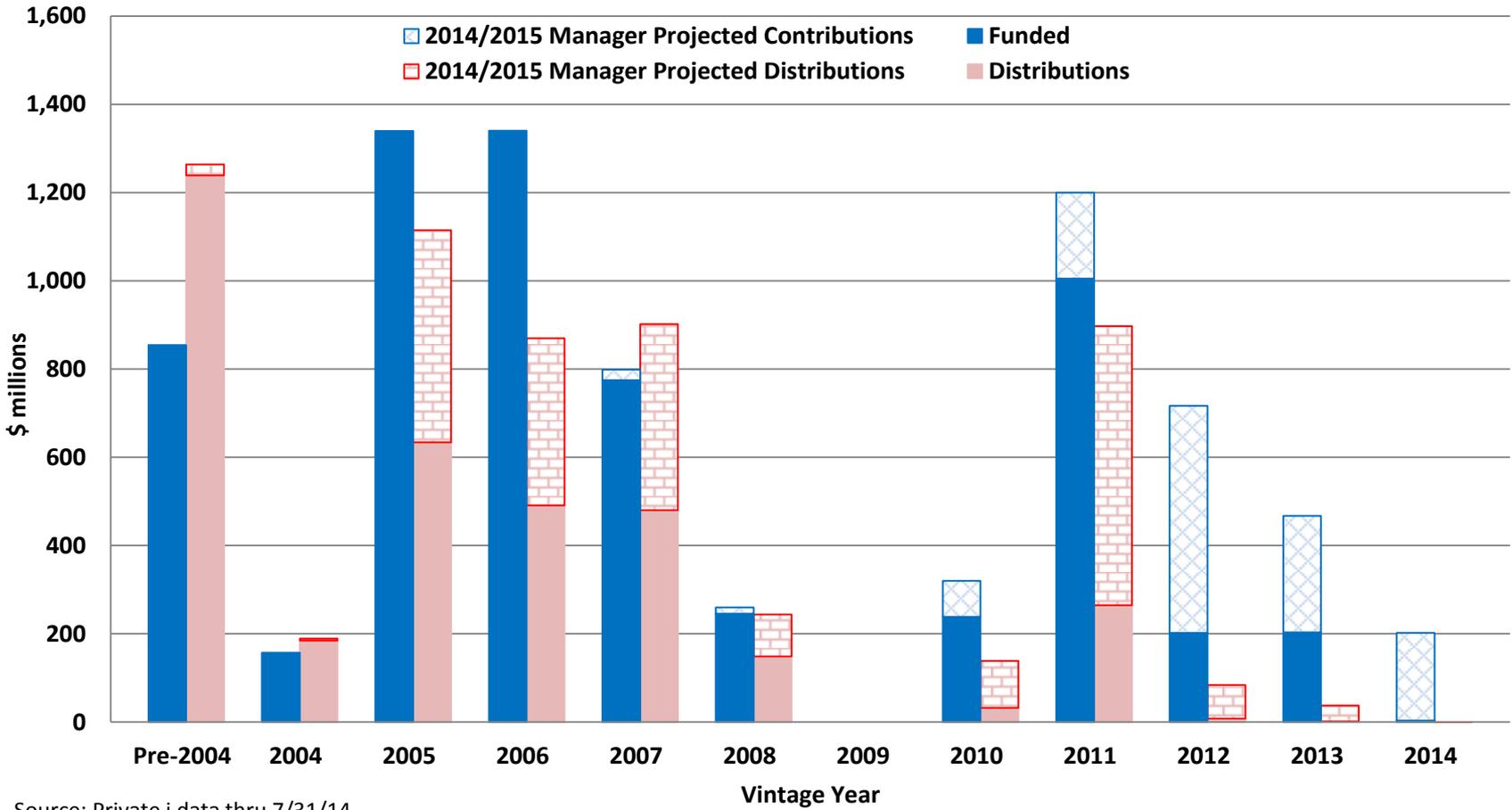


Source: Private i data thru 7/31/14

Forecast 2014 & 2015 distributions projected to exceed historical high



Non-Core Cash Flow by Vintage Year of Funds 10

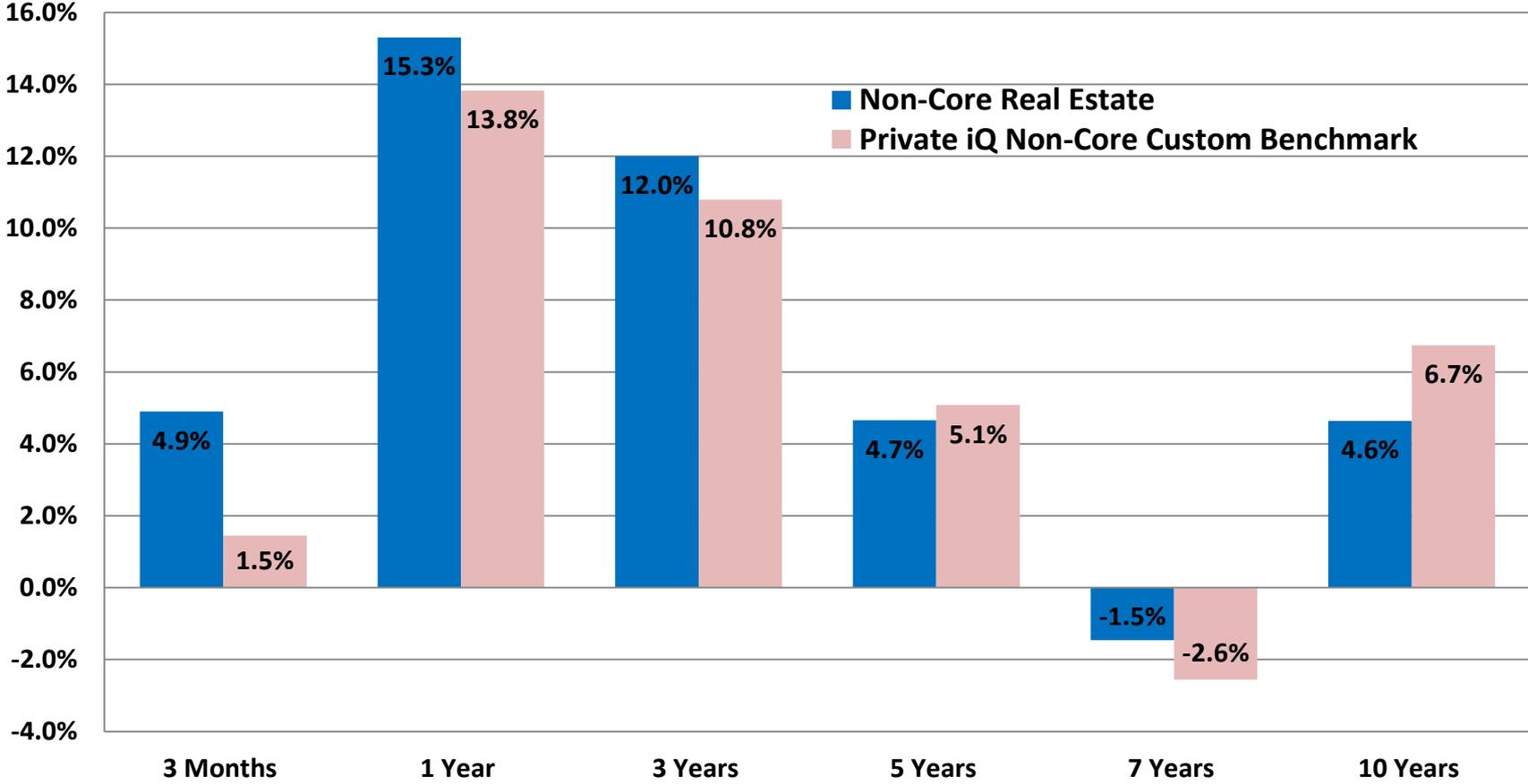


Source: Private i data thru 7/31/14

2011 is notable in how quickly we are seeing realizations



Non-Core Performance (net returns)

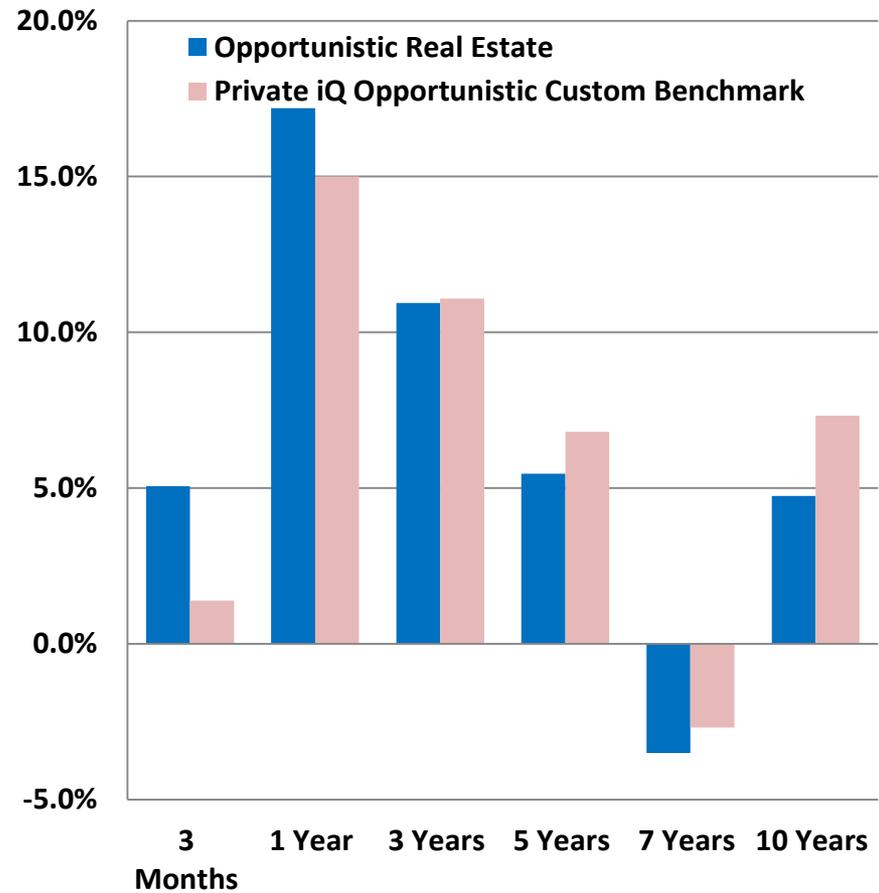
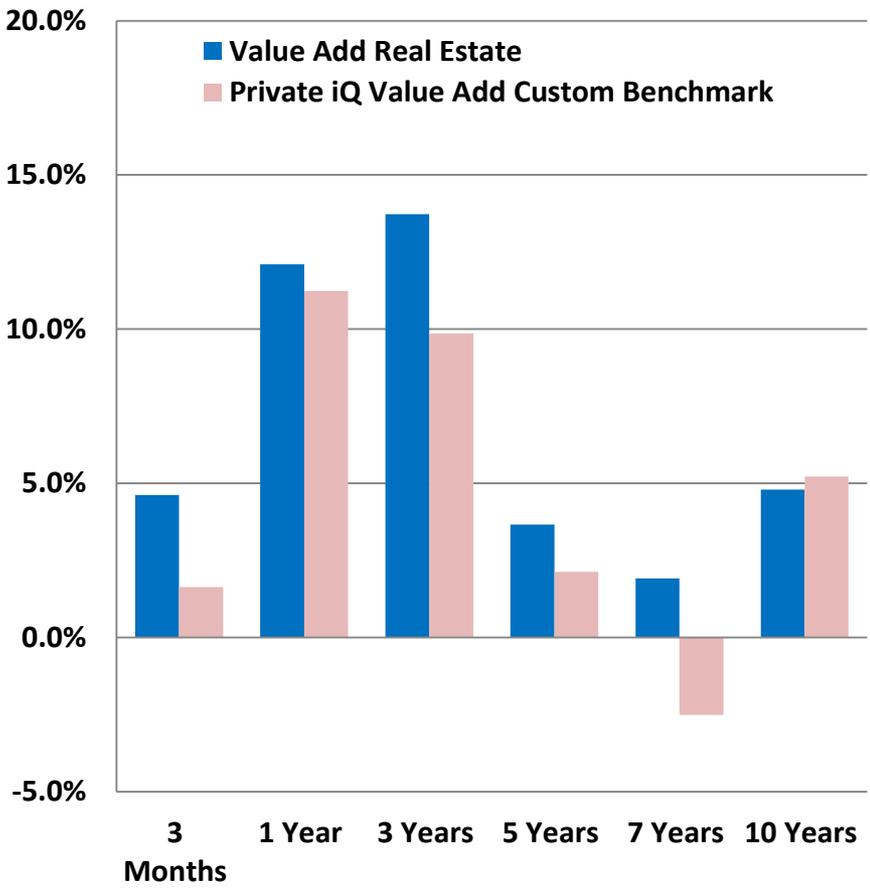


Source: NCRS data through 6/30/14; Private iQ Custom Benchmark weighted 80% U.S. & 20% Non-U.S.

Exceeded benchmark in 1 & 3 Years
Lagged in 7 & 10 Years



Value Add & Opportunistic Performance (net returns)¹²



Source: NCRS data through 6/30/14; Private iQ Custom Benchmark weighted 80% U.S. & 20% Non-U.S.

Focus going forward will be on current income & risk-adjusted return



Non-Core Vintage Year Performance

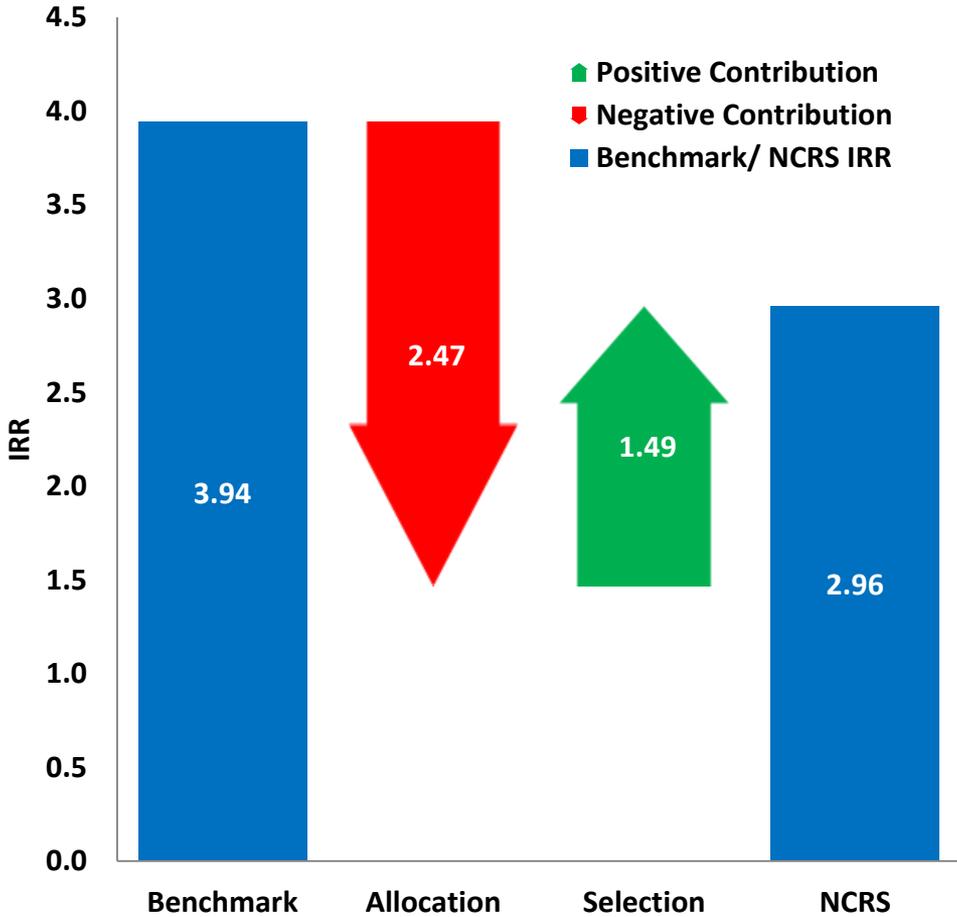
Vintage	Pre-2003	2003	2004	2005	2006	2007	2008	2010	2011	2012	2013	2014	Total
As of June 2014													
IRR	8.25	16.00	9.79	-2.48	-3.02	11.25	9.65	10.10	17.47	9.47	12.96	N/M	3.55
# of Funds	12	3	2	14	16	9	5	4	8	5	4	2	84
As of June 2013													
IRR	8.27	16.18	9.55	-3.28	-5.04	9.35	5.52	9.65	16.93	-26.50	N/M		1.80
# of Funds	12	3	2	14	16	9	5	4	8	5	4		82
As of June 2012													
IRR	8.18	16.34	9.88	-3.82	-7.88	6.41	7.62	-5.34	9.22	N/M			-0.10
# of Funds	12	3	2	14	16	9	5	4	8	5			78

N/M- Not meaningful due to J-curve effect
 Data as of 6/30/14

One year can make a significant difference
 Large variation across vintage years



Non-Core: Contribution to Active IRR (2000-2013)



Attribution by Vintage Year

Key Takeaways	
Allocation Effect	bps
Underweight to Benchmark 10 of 14 Years	-228
Overweight to Benchmark 4 of 14 Years	-19
Total Allocation Effect	-247
Selection Effect	bps
Manager Selection Added- 2007 Vintage	+132
Manager Selection Added- Other Years	+17
Total Selection Effect	+149
Total IRR Variance from Custom Benchmark	-98

80% U.S./20% Non-U.S. Weighted Custom Private iQ Benchmark

Managing across vintage years is very important



2013 / 2014 Commitments

- **Themes over Past Year**
 - Increased focus on core and current income
 - Larger commitments with high conviction managers
 - Reduced fees / better terms
 - Increased exposure to Europe at opportune time
- **FY 2013/14 Commitments**
 - Non-Core (\$582m)**
 - DRA VIII \$150m - High Conviction
 - Blackstone Europe IV \$150m – Europe / High Conviction
 - LaSalle RE Debt \$82m – Europe
 - AG Net Lease III \$100m - High Conviction
 - Meadow Re Fund III \$100m – 50% UK/50% US / High Conviction / Better Terms
 - Core (\$696.2m)**
 - Meadow Core Plus SMA \$170m – Europe / High Conviction / Better Terms
 - M & G RE Debt Fund III \$41.2m – Core / Europe
 - Blackstone/Edens Fund \$485m – Core / High Conviction
- **3Q 2014 Commitments – Closed (\$485m)**
 - Rockpoint Core Plus \$400m – Core / High Conviction / Better Terms
 - Frogmore RE Partners III \$85m – Europe

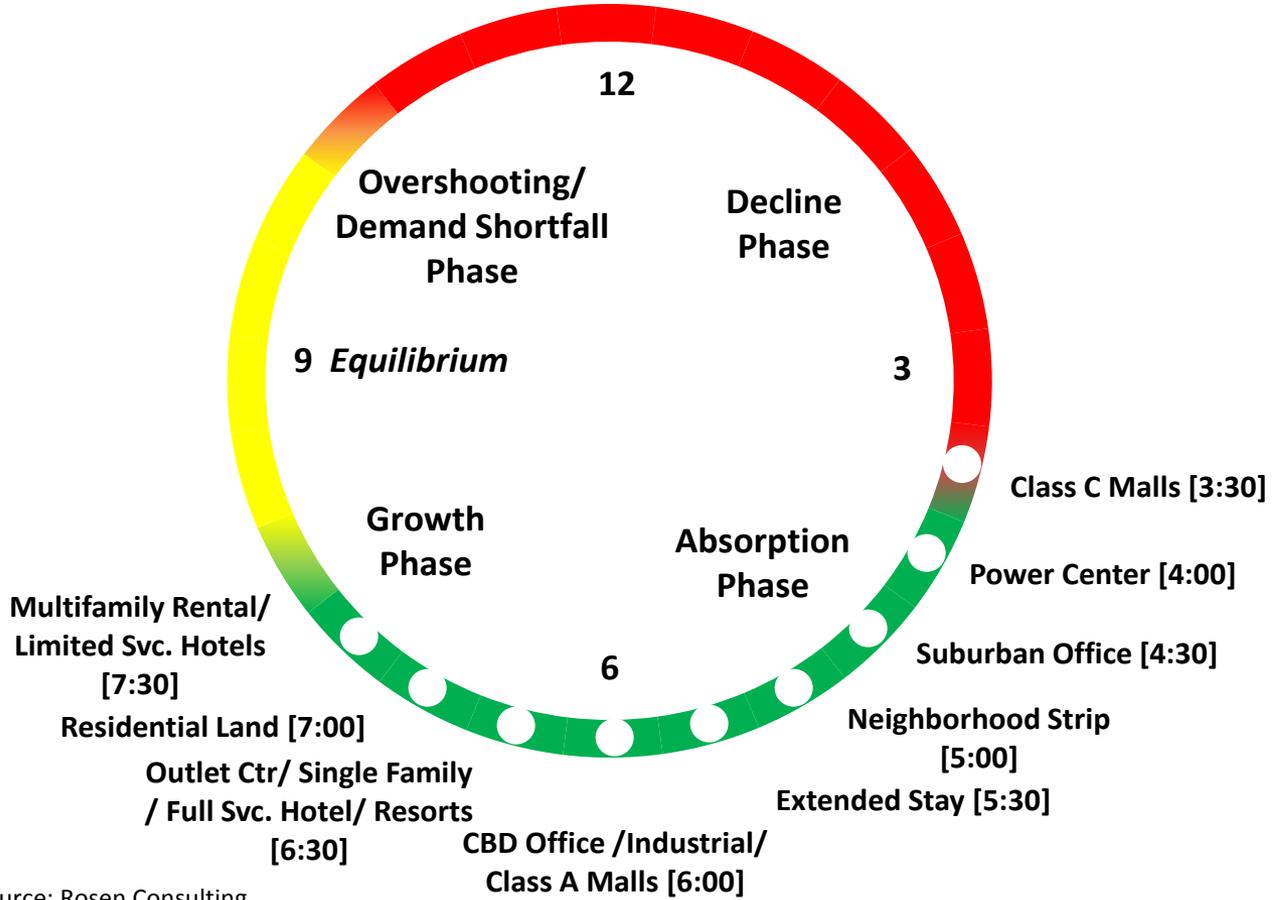


Real Estate is in the Middle Stages of a Fundamentally Driven Recovery

- **Demand drivers are fairly positive**
 - Job-growth outlook is not robust, but steady and improving; "good enough" to spur tenant demand
 - Positive wealth effect has helped consumer spending, particularly among the wealthy although the middle class has also joined the recovery
 - Apartment demand will continue to benefit from pent up pressure due to the reduced level of household formations over the past five years, combined with an improving jobs market and a generation of millennials that doesn't want to own, (slide 19)
- **Construction is at a multi-generational low**
 - Low supply growth is the defining positive attribute of this recovery, (slide 17)
 - Apartment supply has been an outlier, but is getting easily absorbed in most markets
- **Fundamentals suggest a continued recovery ahead**
 - Occupancy and rent growth are proceeding at a steady pace, (slide 20)
 - Market fundamentals should outpace inflation for the next several years; Occupancy costs are still cheap on a historical basis, (slide 21)
 - Better quality real estate continues to be important, particularly for retail



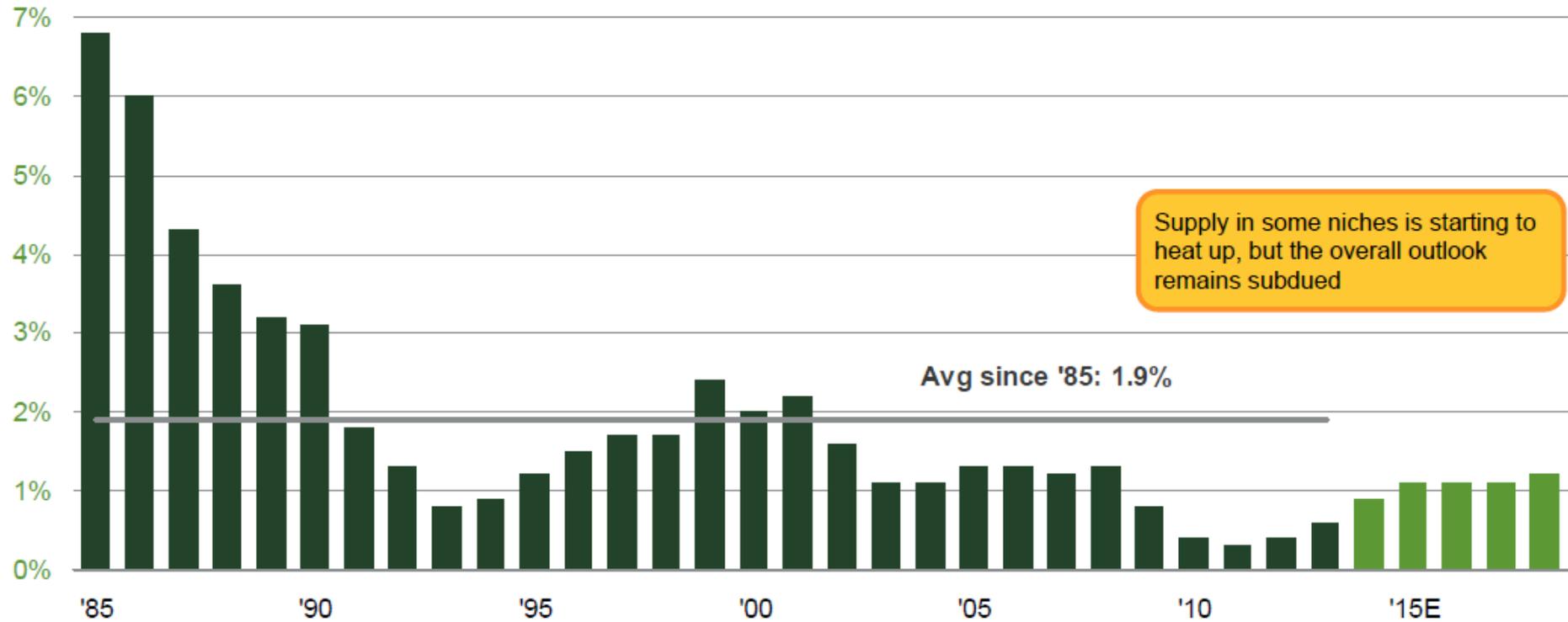
U.S. Real Estate Cycle Clock



Source: Rosen Consulting



New Completions as a % of Existing Stock



Supply in some niches is starting to heat up, but the overall outlook remains subdued

Avg since '85: 1.9%

Supply growth is an equal weighted average of the five major property sectors: apartment, industrial, mall, office and strip center

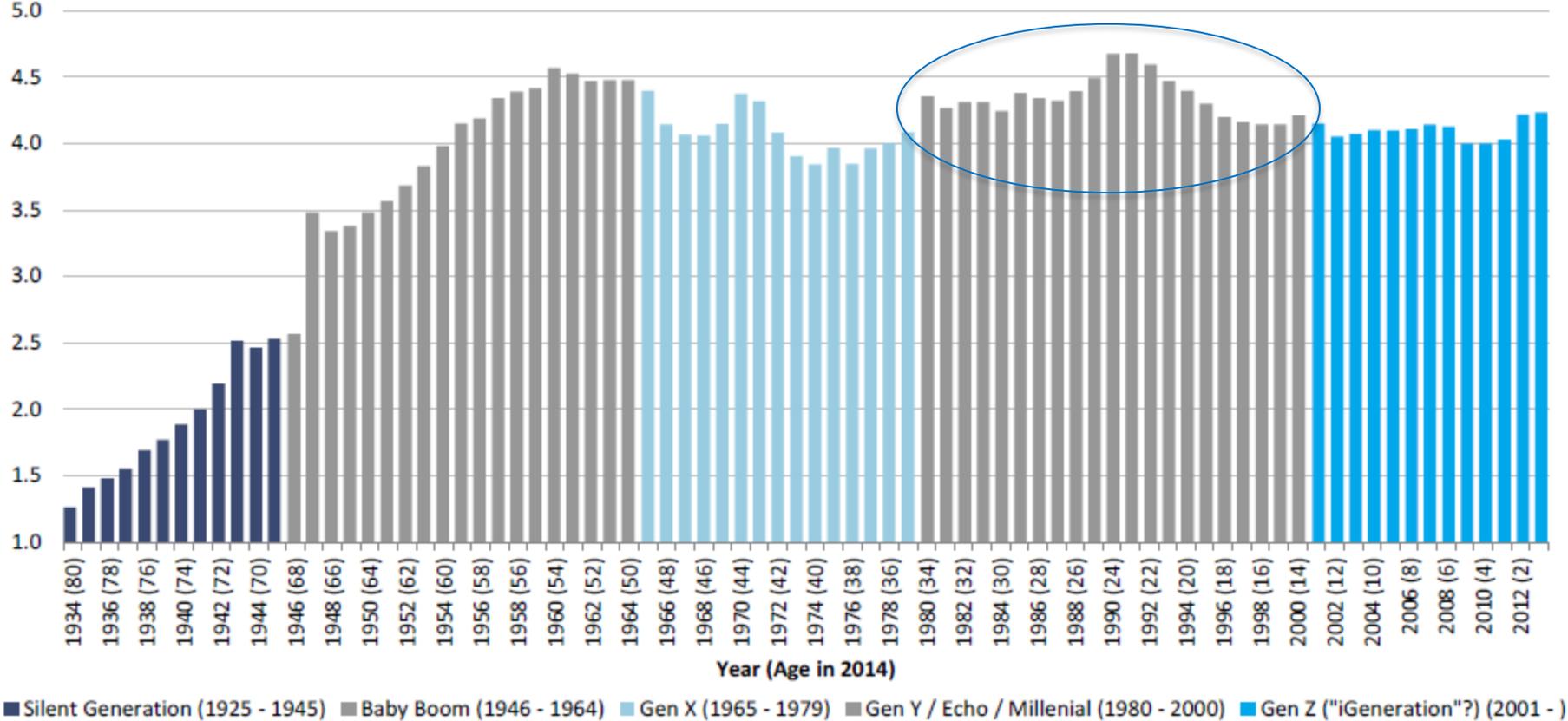
Source: Green Street Advisors, August 2014 Commercial Property Outlook

Development is at a Multi-Generational Low: Low supply set the backdrop for a recovery in market fundamentals (i.e. rents and occupancies) that has been more impressive than the weaker than normal recovery in demand would otherwise support.



Current U.S. Population by Generation

Current U.S. Population (in millions)



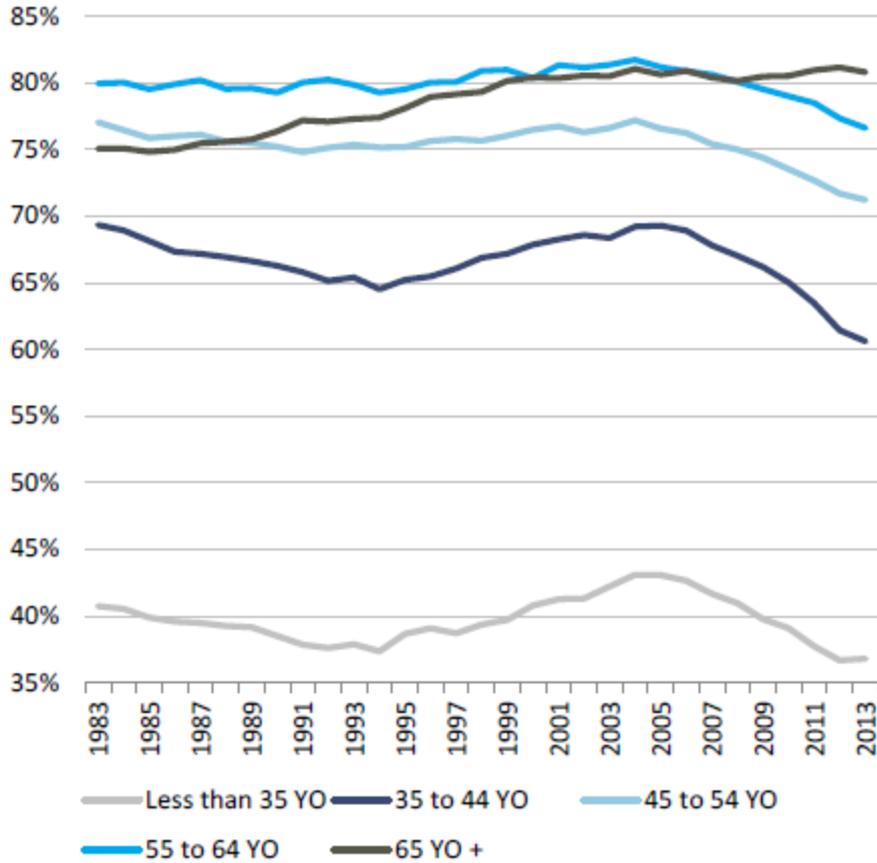
Source: Census Department National Population Projections (constant migration series). All generational dates and names are approximate and indicative, as demographers disagree on exact definitions and names.

The Millennials are a driving force



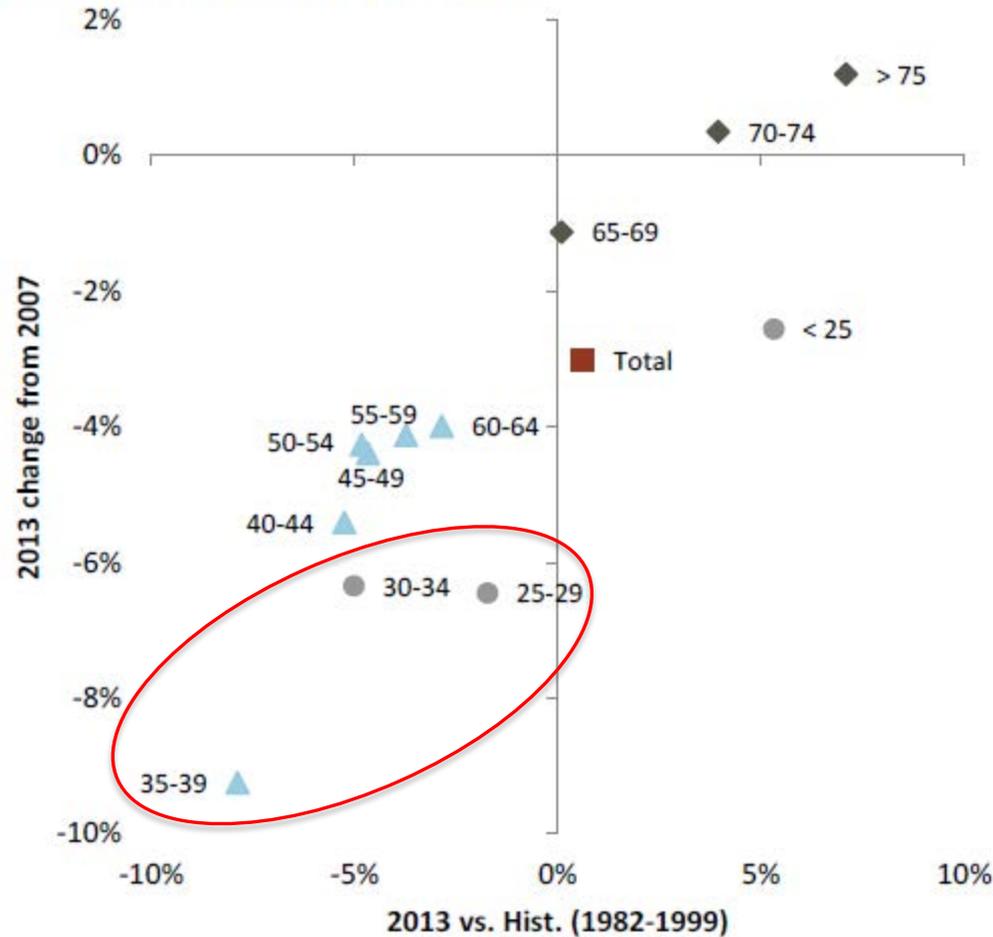
Homeownership by Age

Homeownership Rate by Age Cohort



Source: U.S. Census Bureau - Housing Vacancies and Homeownership (CPS/HVS)

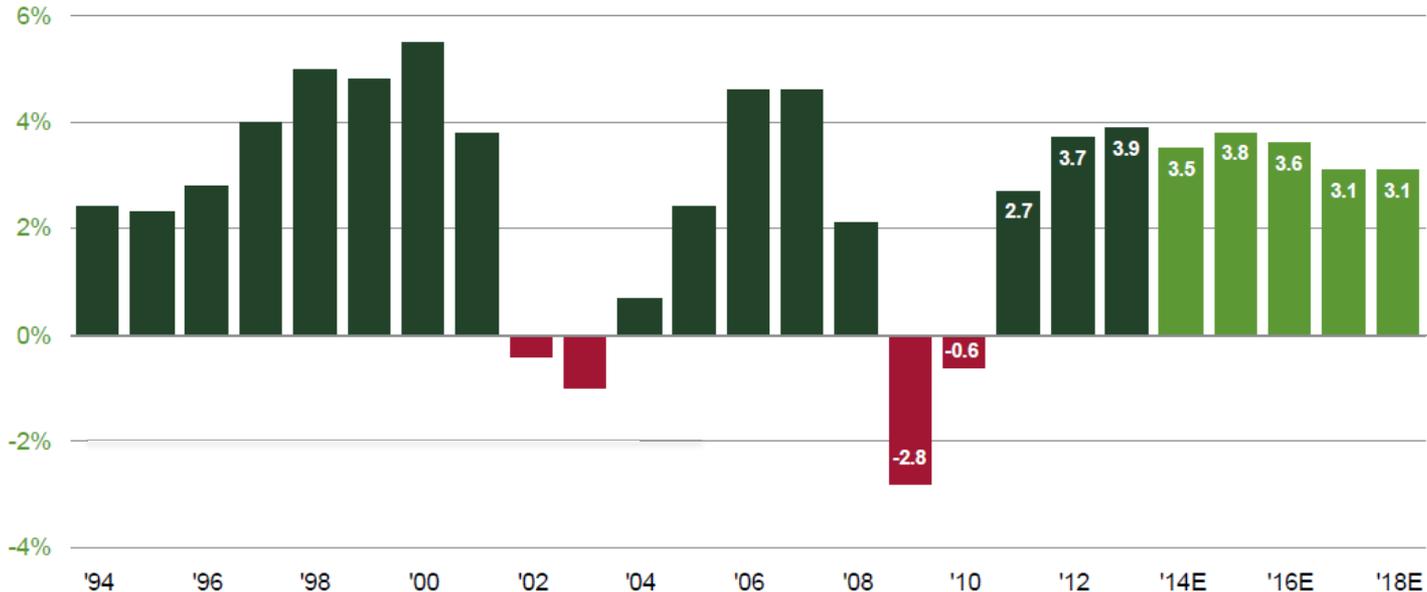
2013 vs. Historical Average Rates



25-40 year old age groups have seen the greatest drop



Same-Property NOI Growth: Major Sector Average



NOI growth shown in the chart above is an average of the five major property sectors: apartment, industrial, mall, office, and strip center. Each sector is given 20% weight.

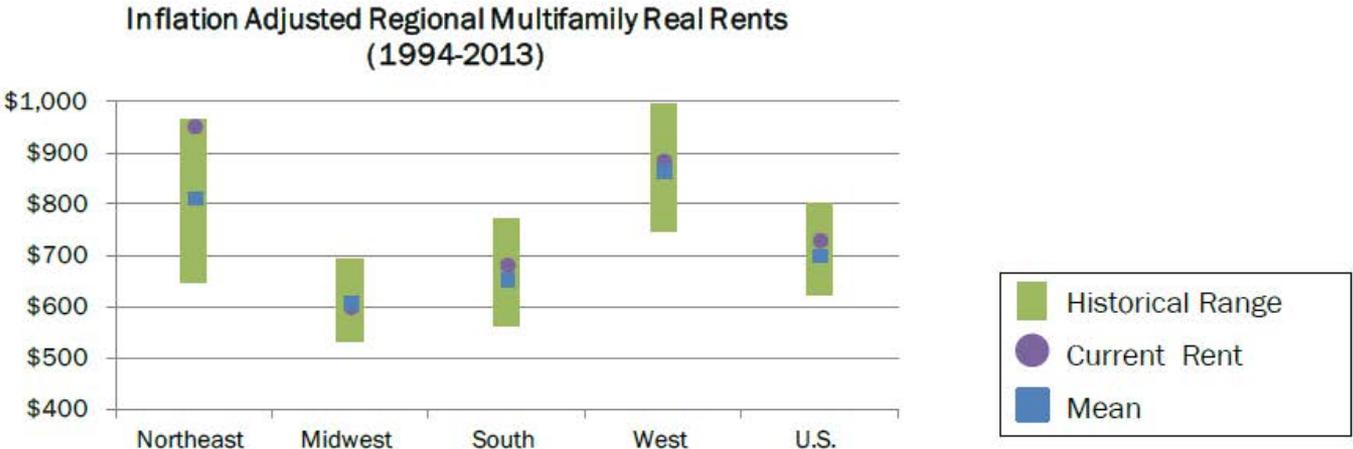
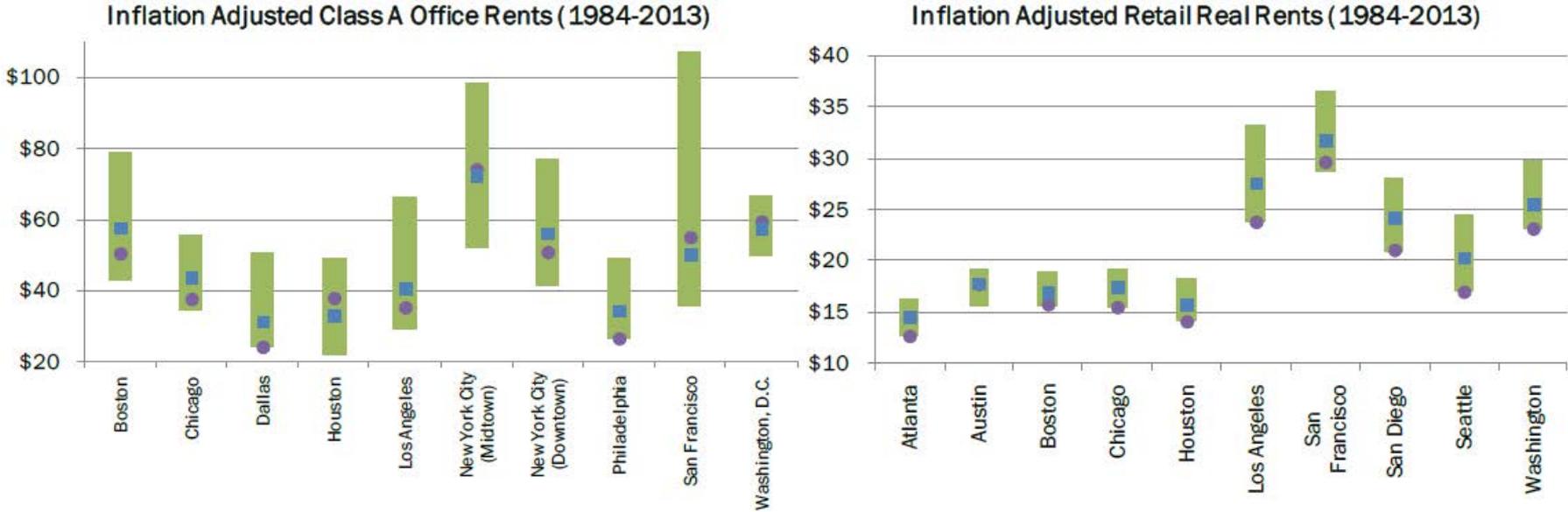
NOI Growth														
	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14E	'15E	'16E	'17E	'18E
Apartment	3.7%	7.7%	5.8%	3.1%	-4.8%	-1.6%	6.9%	7.7%	5.3%	4.8%	4.0%	2.7%	1.8%	1.6%
Industrial	1.1%	3.0%	4.9%	2.1%	-4.7%	-3.6%	1.0%	2.3%	2.3%	3.0%	3.2%	3.5%	3.2%	3.4%
Mall	4.2%	4.6%	4.2%	0.8%	-1.8%	1.1%	3.0%	4.2%	4.8%	4.0%	4.3%	4.3%	3.8%	3.4%
Office	-0.3%	4.1%	4.9%	3.2%	0.8%	-0.2%	1.4%	1.1%	3.2%	2.7%	3.9%	4.0%	3.5%	4.1%
Strip Center	3.5%	3.5%	3.1%	1.5%	-3.5%	1.1%	1.1%	3.4%	3.9%	3.2%	3.6%	3.3%	3.2%	2.9%
Lodging	17.4%	18.1%	8.0%	-7.2%	-33.7%	5.5%	10.9%	13.8%	11.9%	11.1%	10.9%	6.2%	3.4%	2.4%
Senior Housing	NA	3.6%	2.8%	-0.1%	0.6%	5.6%	4.0%	6.6%	4.8%	3.8%	2.0%	1.5%	1.1%	0.9%
Storage	7.2%	5.1%	3.2%	3.3%	-4.4%	1.1%	6.6%	8.4%	8.6%	7.2%	5.0%	3.9%	3.2%	3.0%
Major Sector Avg	2.4%	4.6%	4.6%	2.1%	-2.8%	-0.6%	2.7%	3.7%	3.9%	3.5%	3.8%	3.6%	3.1%	3.1%

Source: Green Street Advisors, August 2014 Commercial Property Outlook

NOI Growth has been strong. A continuation of that trend is likely despite a sleepy macro-economic outlook.



Occupancy and Rent Growth



Source: Cushman and Wakefield, Linneman Associates (top graphs) and Census/Housing Vacancy and Homeownership Survey, Linneman Associates (bottom graph) (Jan'14).



Valuation

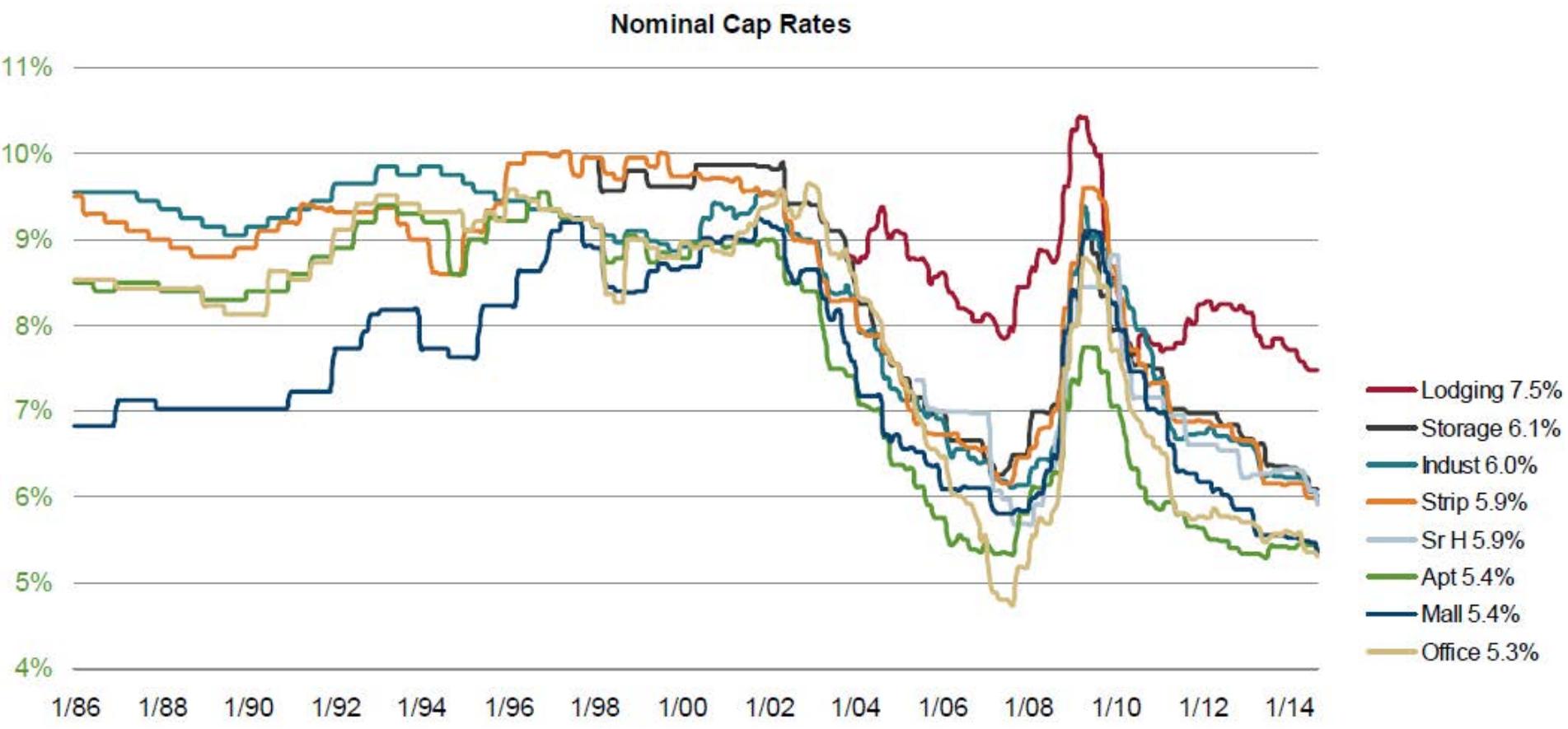
- Cap rates are at or near all-time lows in each sector, however they are reasonable relative to intrinsic cap rates, (slides 23 & 24)
- Real estate is still a good buy relative to other asset classes

Risks

- **Interest rate rise** that impacts cap rates/values
 - Industry consensus: Cap rates will absorb 80% of the first 100BP increase and 40-60% of the increase for the next 200-300BP increase in rates
 - Capital flows are more impactful on cap rates than bond rates
- **Black swan event**, however global turbulence drives capital into Core U.S. real estate as a safe haven
 - Non-Core with current income and/or Core attributes would fare better than “riskier” strategies
 - U.S. real estate values and occupancy costs are relatively less expensive than other developed nations, (slides 25 & 26)



Cap Rates (Core and Non-Core)

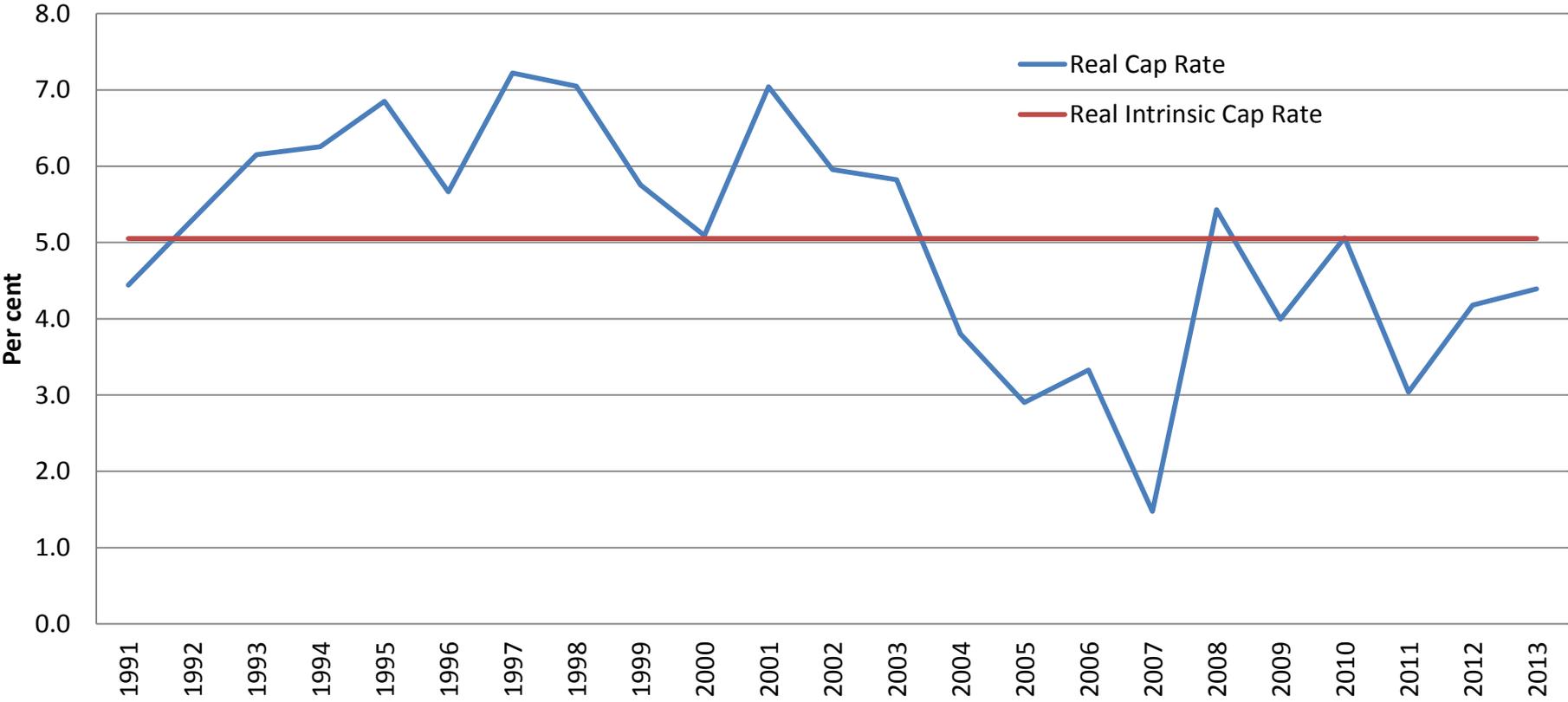


Source: Green Street Advisors, August 2014 Commercial Property Outlook

Cap rates in all major sectors have fallen to levels that were unprecedented prior to the 06-07 valuation peak, and in many cases, they are now at all time lows.



Real Cap Rate vs. Avg.



Cap Rates	7.5	8.2	8.9	8.9	9.4	9.0	8.9	8.7	8.4	8.5	8.6	8.3	7.7	7.1	6.3	5.9	5.6	5.5	6.7	6.6	6.0	5.9	5.8
CPI	3.1	2.9	2.8	2.7	2.6	3.3	1.7	1.6	2.7	3.4	1.6	2.4	1.9	3.3	3.4	2.5	4.1	0.1	2.7	1.5	3.0	1.7	1.4

When you account for inflation, current pricing does not look as inflated compared to the 06-07 Peak



REDACTED: SUBJECT TO COPYRIGHT PROTECTION
BY THIRD PARTY



REDACTED: SUBJECT TO COPYRIGHT PROTECTION
BY A THIRD PARTY



New non-core commitments of \$500- \$750 million over 2014 /2015

• Investments themes

- Europe: continue to take advantage of distress in Europe
- Focus on managers that emphasize current income
- Larger commitments to our highest conviction managers
 - Negotiate better terms
- Reduction of manager count
 - Explore secondary sales
- Focus on managers who apply a rifle shot approach
- Appetite for some Build-to-Core development in either Multi-Family or Industrial

Internal Real Estate Team Priorities

• Enhance internal team capabilities

- Build out team
 - From: 2 PM's and 1 Analyst
 - To: 1 Director, 3 PM's and 2 Analysts
- Continue to train & develop team members
- Continue to refine cash flow model and other analytical tools
- Bifurcate Courtland's quarterly reporting package into Core and Non-Core reports



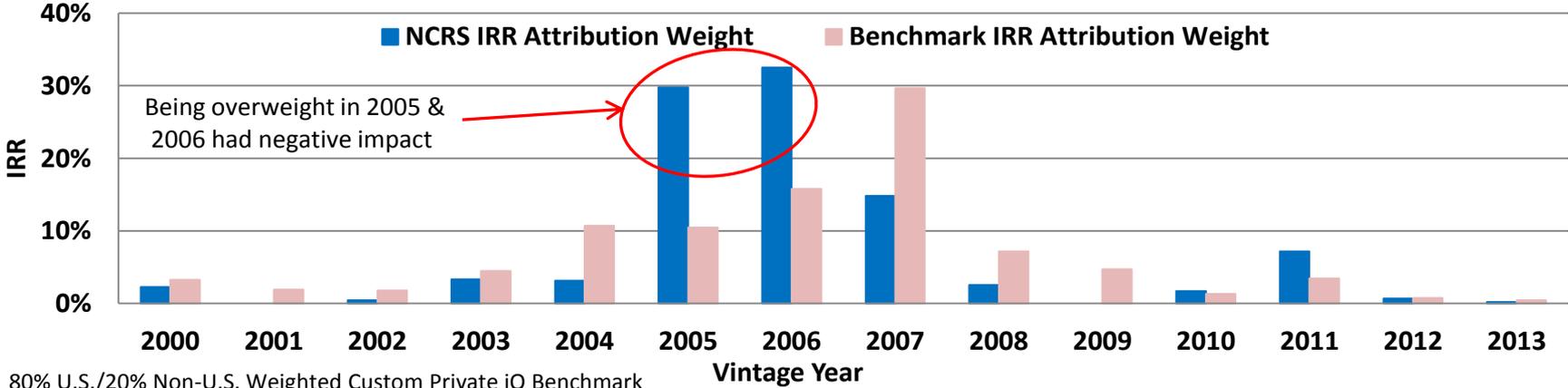
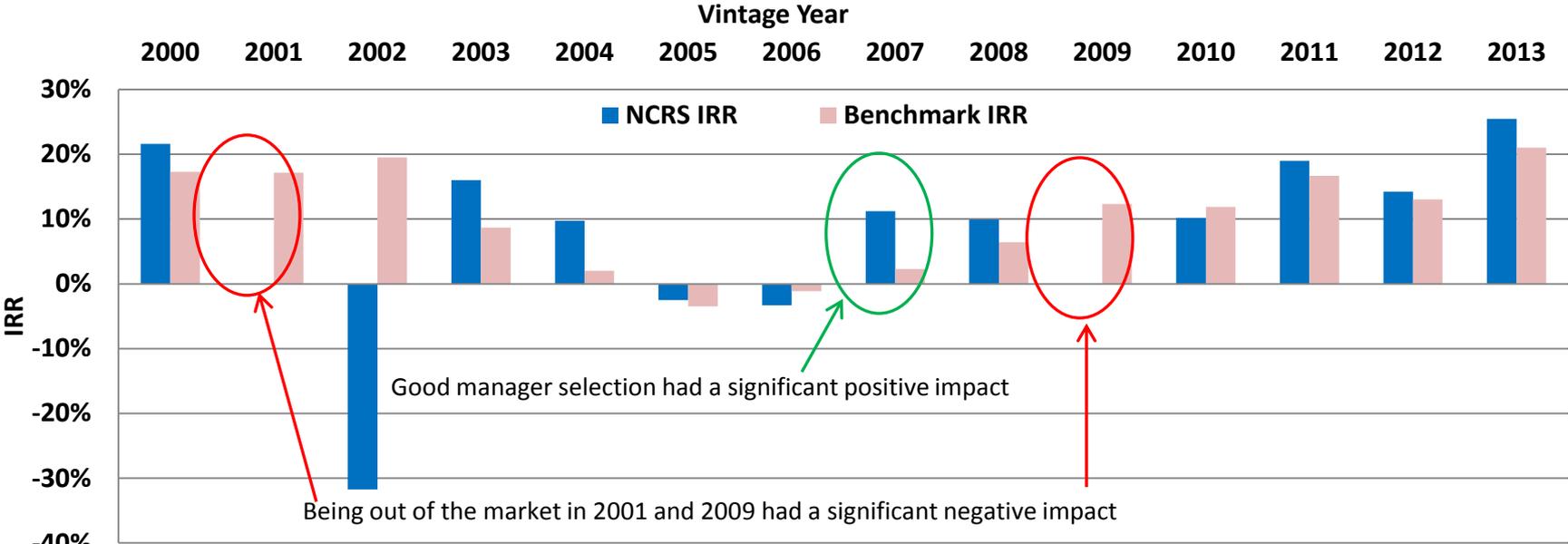
Appendix



Real Estate Update



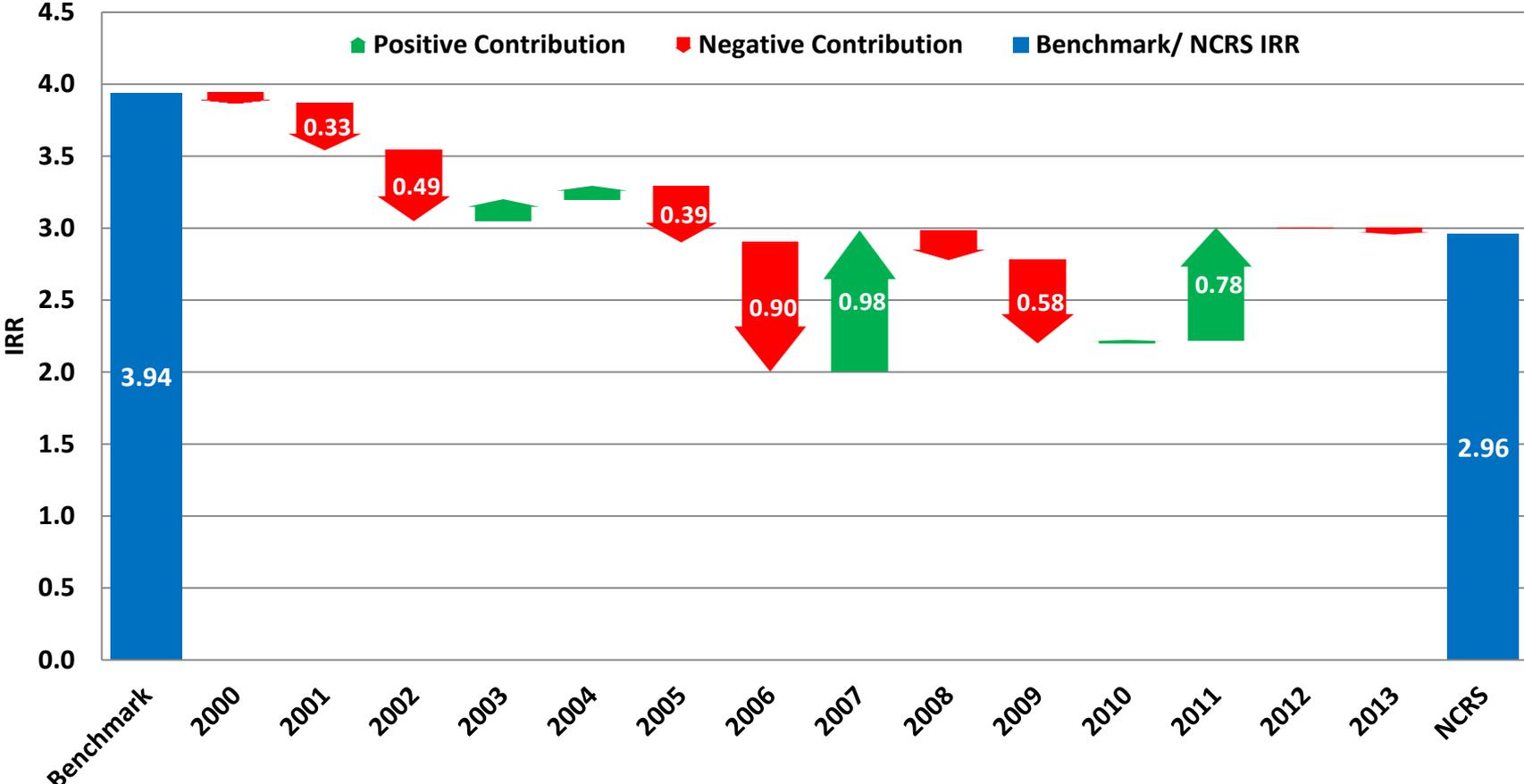
Non-Core Performance Attribution by Vintage Year



80% U.S./20% Non-U.S. Weighted Custom Private iQ Benchmark



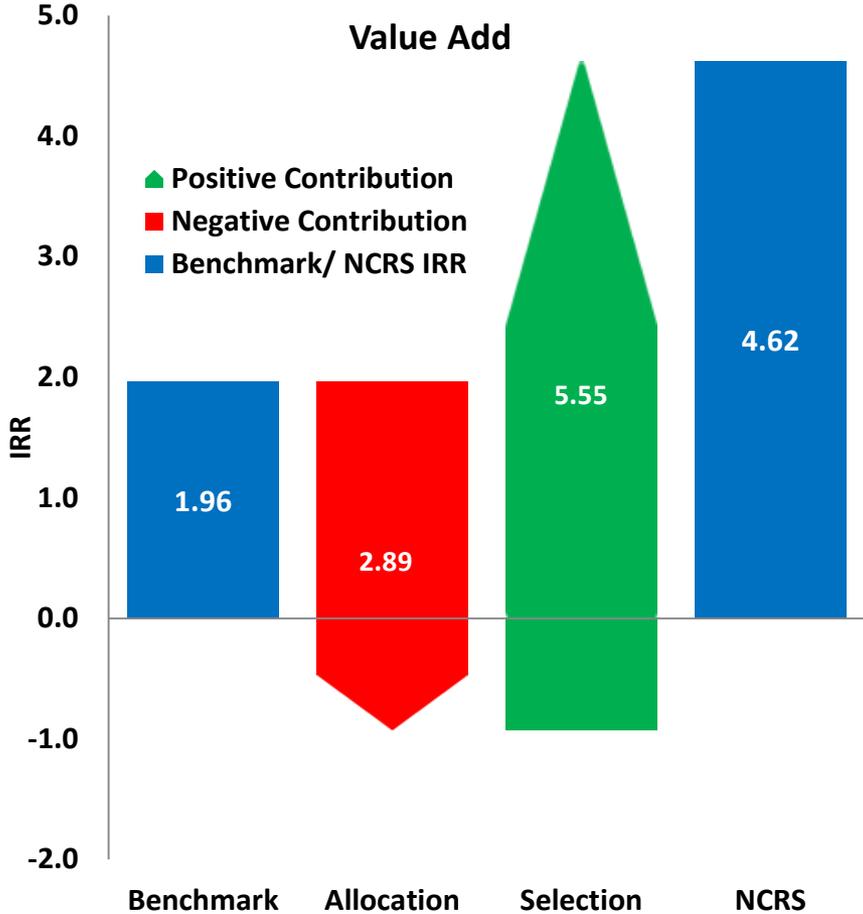
Non-Core: Contribution to Active IRR by VY



80% U.S./20% Non-U.S. Weighted Custom Private iQ Benchmark



Sub-strategy Contribution to Active IRR (2000-2013) ³²



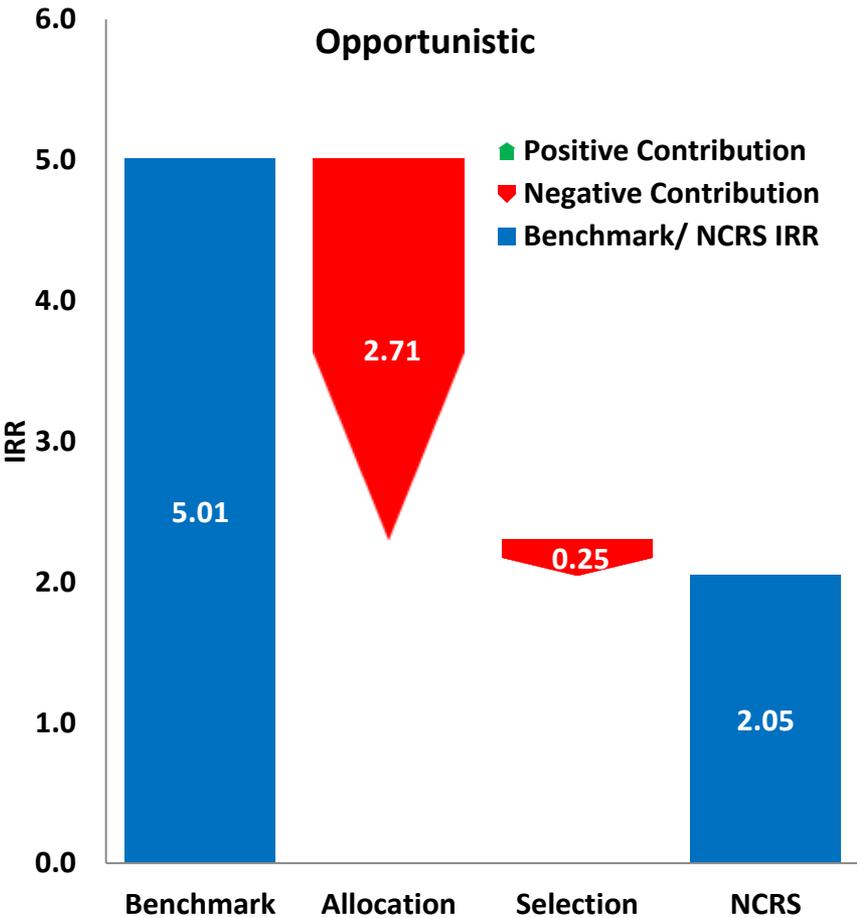
Attribution by Vintage Year

Key Takeaways	
Allocation Effect bps	
Overweight to Benchmark- '05 & '06 Vintages	-236
Net impact- All other years	-53
Total Allocation Effect	-289
Selection Effect bps	
Manager Selection- '06 & '07 Vintages	+395
Manager Selection- All other Years	+160
Total Selection Effect	+555
Total IRR Variance from Custom Benchmark	+266

80% U.S./20% Non-U.S. Weighted Custom Private iQ Benchmark



Sub-strategy Contribution to Active IRR (2000-2013) ³³



Attribution by Vintage Year

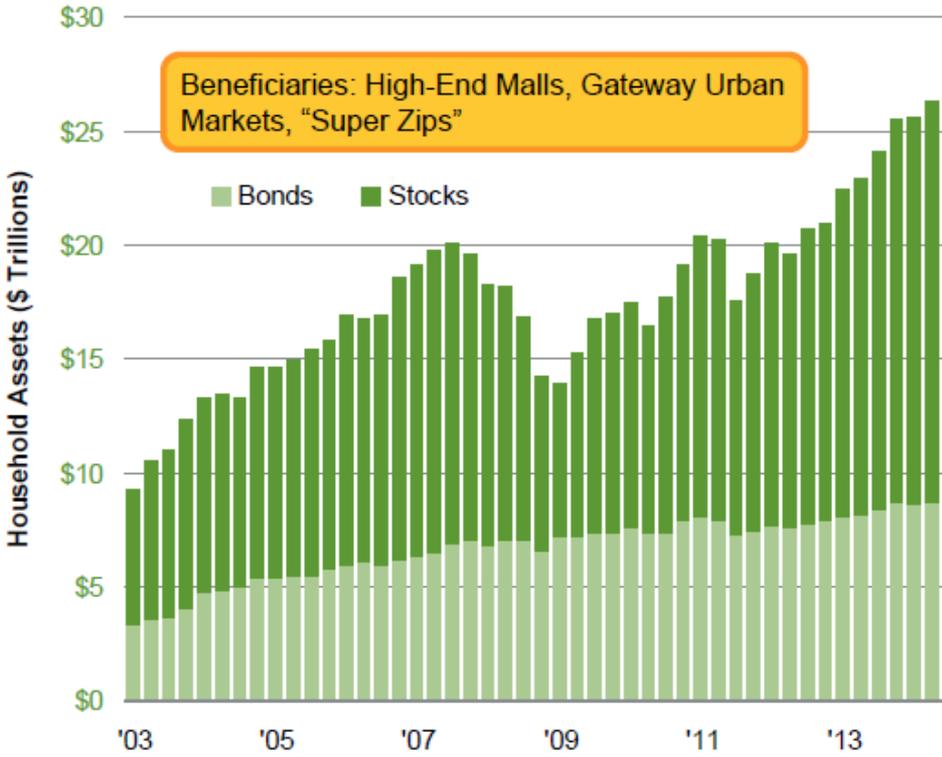
Key Takeaways	
Allocation Effect bps	
Overweight to Benchmark 4 of 14 Years	+5
Underweight to Benchmark 10 of 14 Years	-276
Total Allocation Effect	-271
Selection Effect bps	
Net impact of Manager Selection	-25
Total Selection Effect	-25
Total IRR Variance from Custom Benchmark	-296

80% U.S./20% Non-U.S. Weighted Custom Private iQ Benchmark

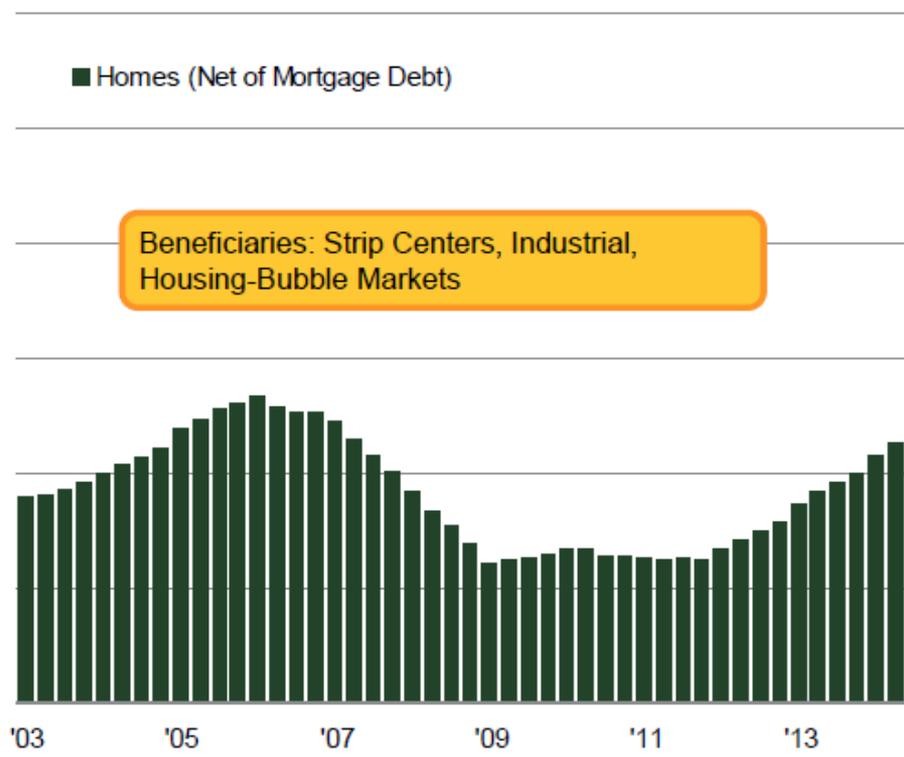


Demand Drivers at the High End vs. Low End

The Rich Get Richer



The Middle Class is Joining the Recovering



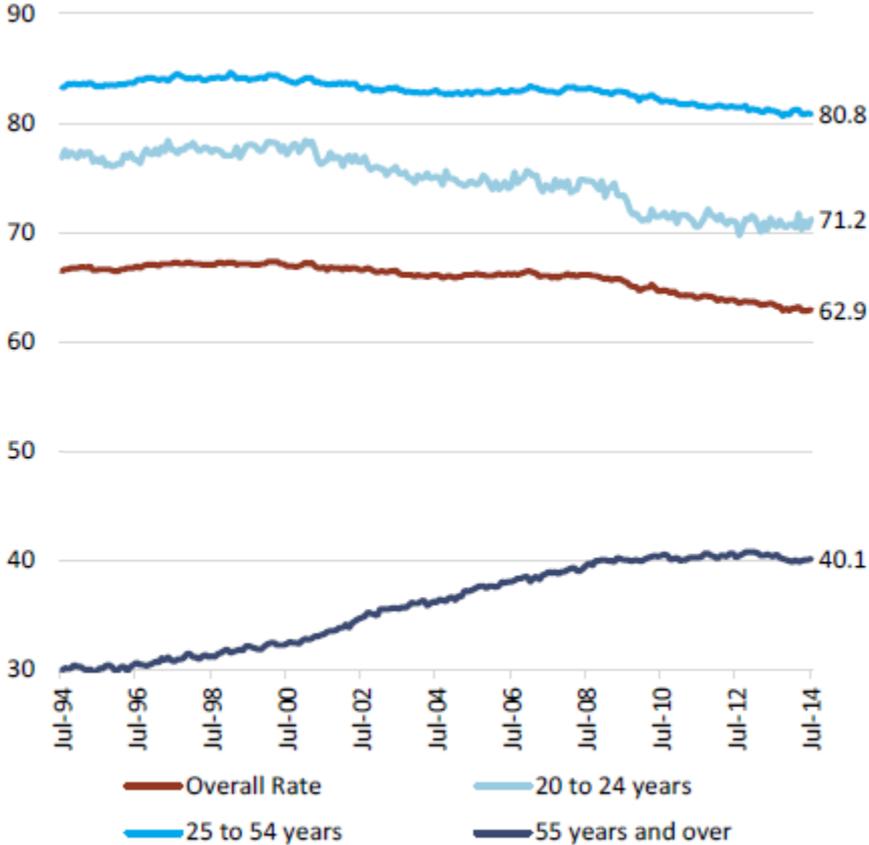
Source: Green Street Advisors, August 2014 Commercial Property Outlook

Wealth Effects: With Income growth anemic, wealth effects have become a key differentiator of incremental demand. Wealthy households have been faring well, and investment gains have been strong enough to neutralize the negative impact from tax increases. Higher home prices will ultimately fuel demand in certain niche/locales that are sensitive to housing wealth, but the housing recovery has been uneven and decelerating of late.



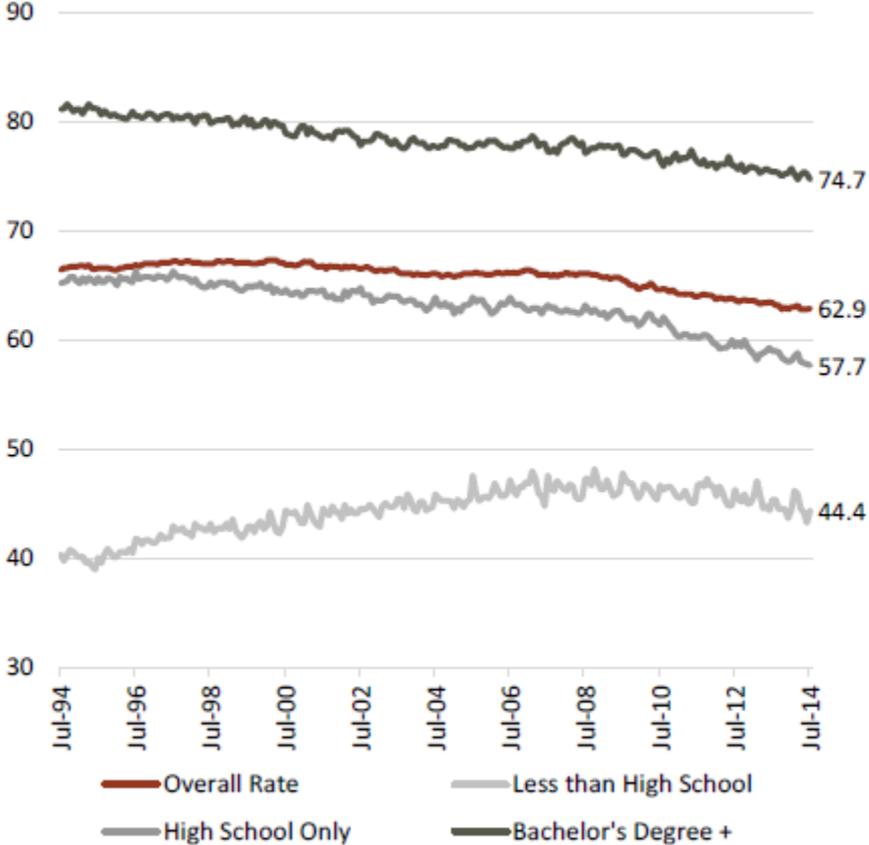
Labor Force Participation

Participation Rates by Age



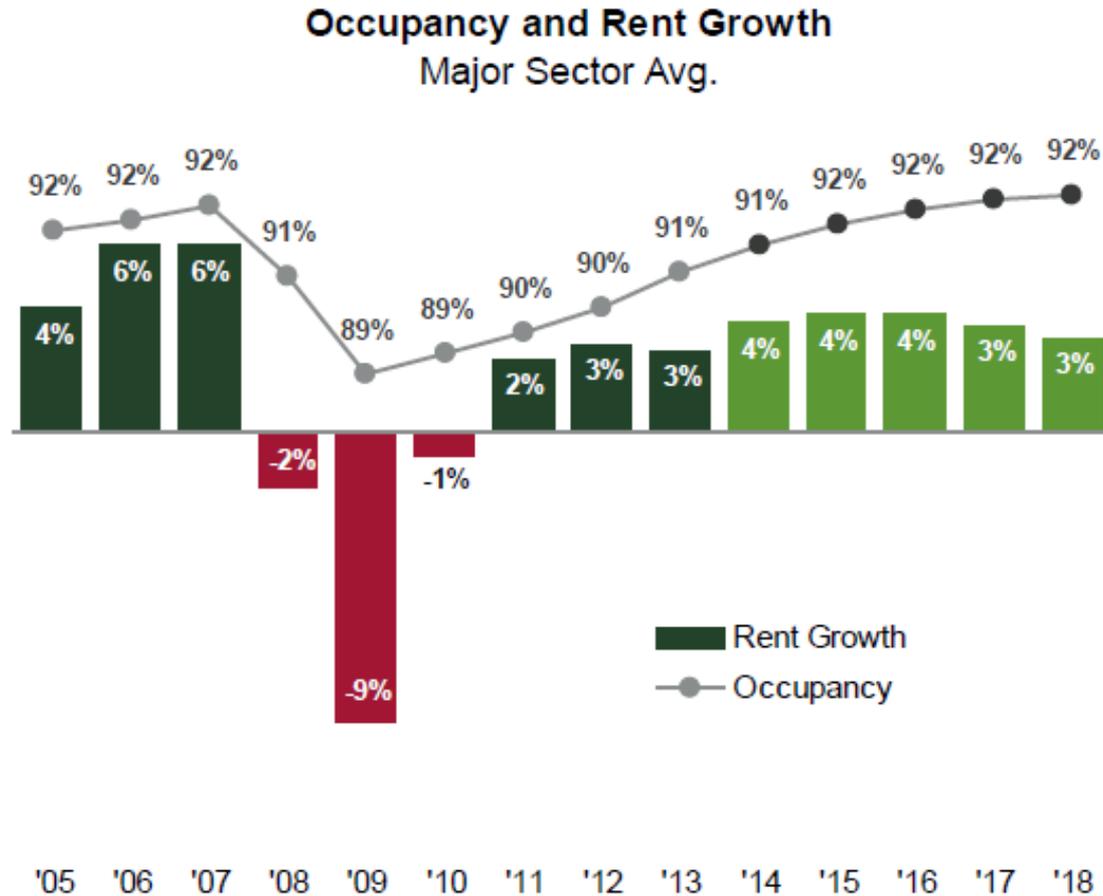
Source: Bureau of Labor Statistics

Participation Rates by Education



Significant increase in participation for those 55+ and significant decline for those with higher education





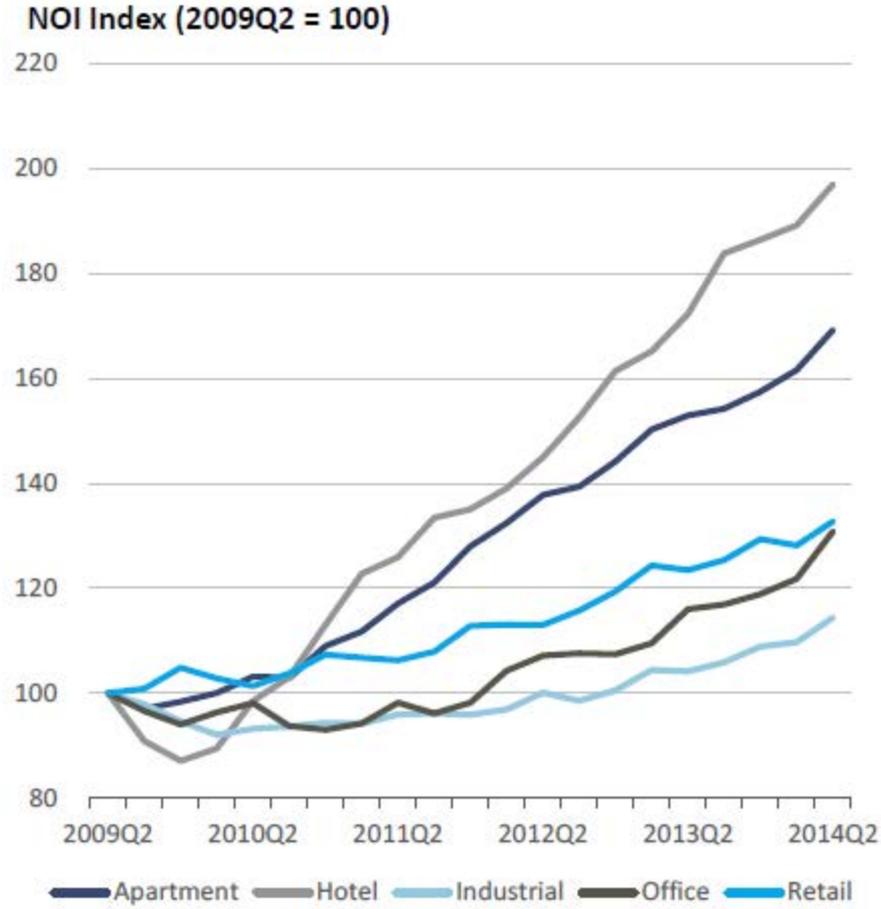
Occupancy and rent growth are equal weighted average of the five major property sectors: apartment, industrial, mall, office and strip center

Source: Green Street Advisors, August 2014 Commercial Property Outlook

The demand/supply outlook is favorable enough to result in healthy occupancy gains and rent growth over the next few years

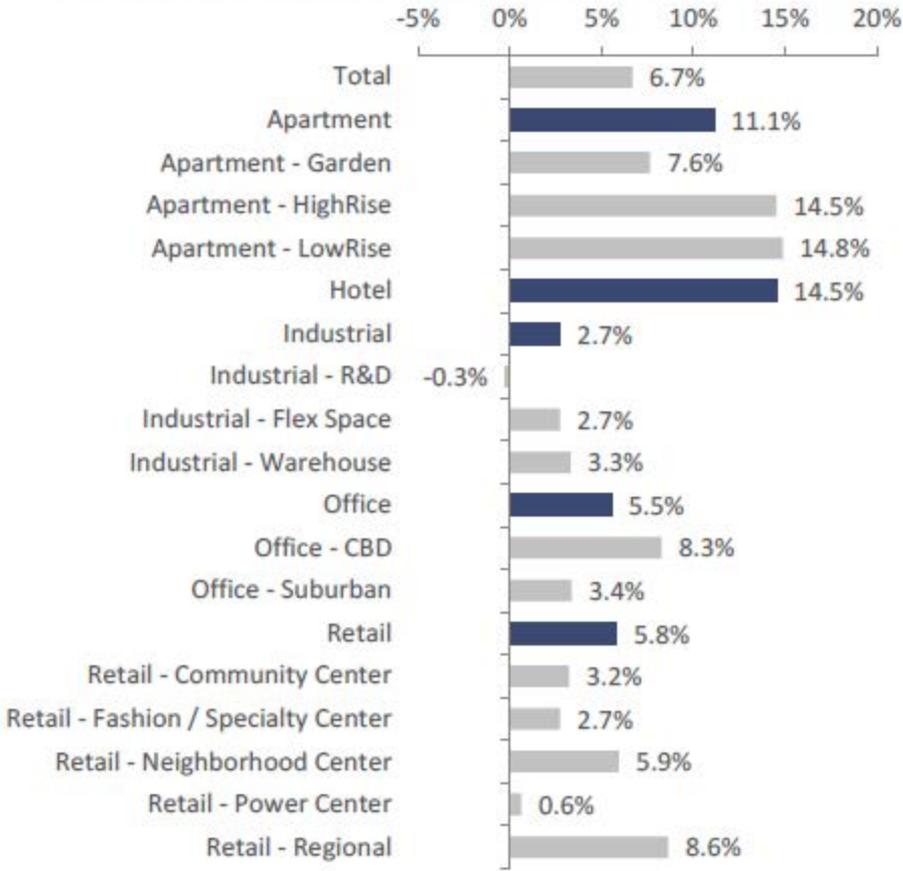


Comparing NOI Recoveries



Source: NCREIF as of 2014Q2

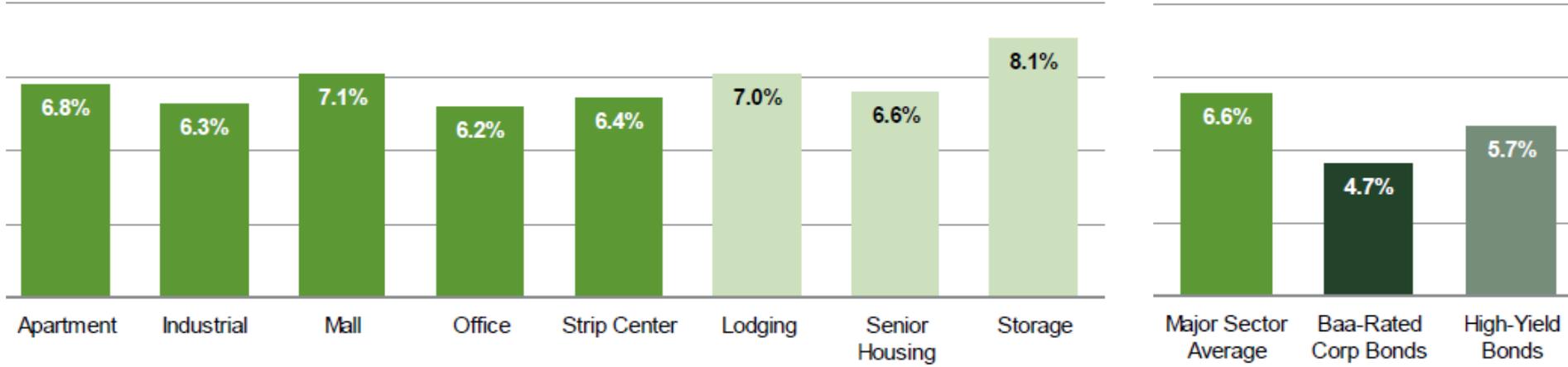
Average Annual NOI Growth (2009Q2 - present)



Apartment and hotel early winners, office and industrial lagging



Return Expectations



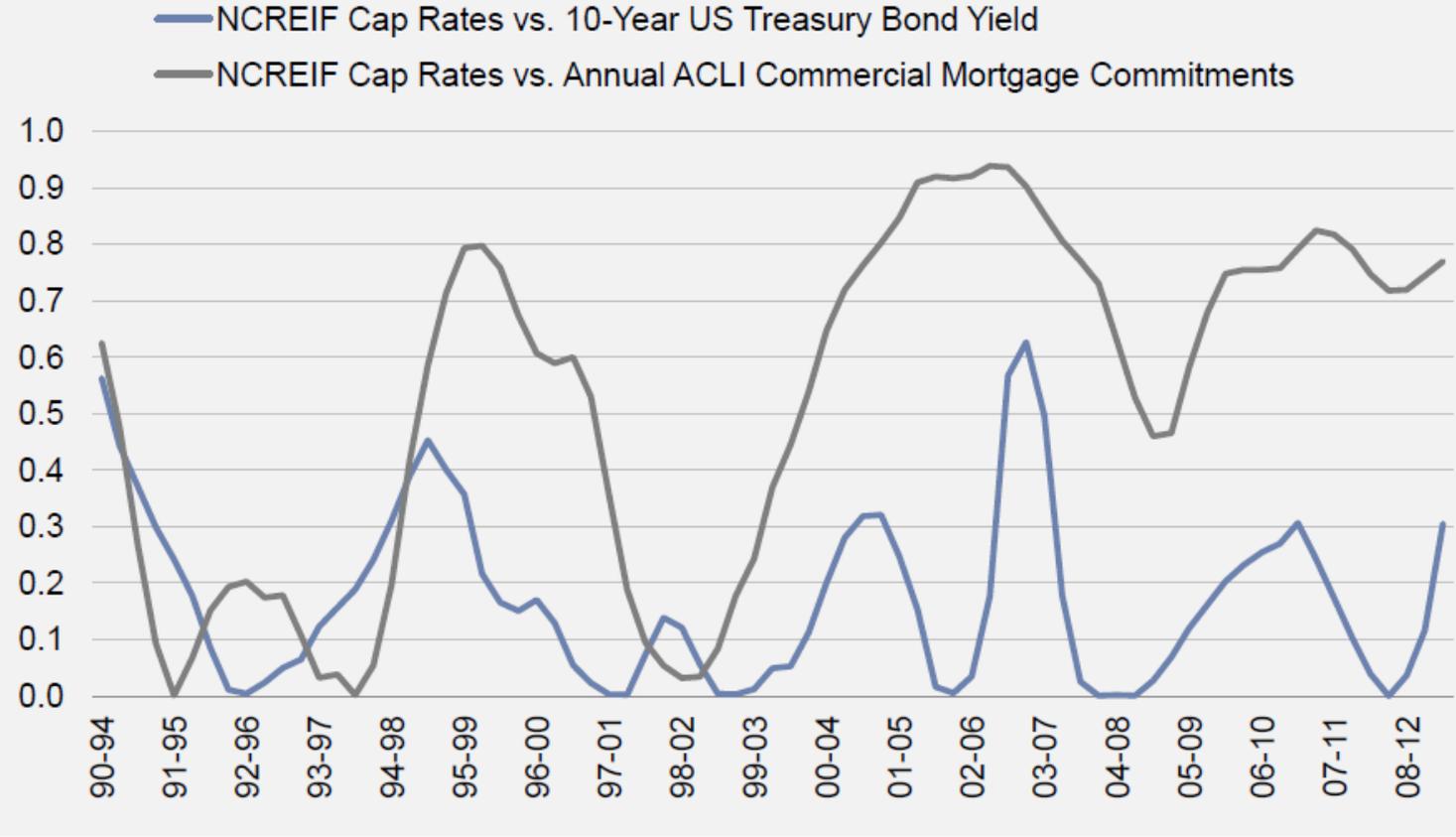
Source: Green Street Advisors, August 2014 Commercial Property Outlook

Commercial real estate is priced to deliver unlevered total returns in the mid “6’s” to a buy and hold investor. While low relative to historic norms, the same can be said about expectations for every major asset class.



R-Squared for 5-Year Rolling Periods

Relationship between:



Source: Invesco Real Estate using underlying data from Moody's Analytics and NCREIF, Q1 1994 through Q2 2013.

Cap rates appear to have a higher correlation to CRE capital flows than bond rates





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.