



Commercial Real Estate and Market Cycles

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Professor — University of Denver

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Important Disclosure

Dr. Mueller is a 38-year industry professional who serves as a Real Estate Investment Strategist with Dividend Capital Group as well as a professor of real estate at the University of Denver and a visiting professor of real estate at Harvard University. He is also a registered representative with Dividend Capital Securities, a broker dealer offering REIT and other real estate related securities. In this role, he provides investment advice to certain affiliates of Dividend Capital Group regarding the real estate market and the various sectors within that market.

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Dr. Glenn Mueller

Real Estate Investment Strategist — Dividend Capital Group

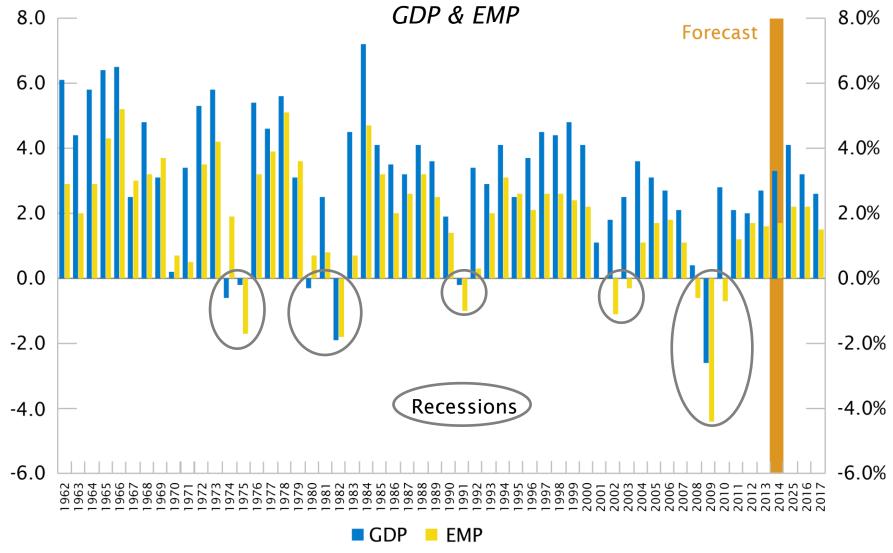
- Professor University of Denver Franklin L. Burns School of Real Estate and Construction Management
- Visiting Professor Harvard University, 2002-2014
- Guest Lecturer Wharton @ U Penn, Columbia, Yale, Berkeley, Ohio

Previous Experience

- Legg Mason Real Estate Investment Strategist
- PriceWaterhouseCoopers National Director of Real Estate Research
- Alex. Brown Kleinwort Benson Head of Real Estate Research
- Prudential Real Estate Investors Vice President of Real Estate Research
- B.S.B.A. Finance from University of Denver
- MBA Babson College
- *Ph.D.* Real Estate from **Georgia State University**

Positive GDP Leads Employment Recovery

Recessions last a year or less — recovery and growth cycles can be short or long



Source: U.S. Bureau of Labor Statistics, December 2013; U.S. Bureau of Economic Analysis, December 2013; Moody's, 2013.

World Growth Continues

■ Top 15 countries represent 77% of the World GDP of 214 countries covered

World GDP Share

U.S.	23%
China	12%
Japan	8%
Germany	5%
France	4%
U.K.	4%
Brazil	3%
Russia	3%
Italy	3%
India	3%
Canada	3%
Australia	2%
Spain	2%
Mexico	2%
Korea	2%

2012 GDP Growth

U.S.	5%
China	12%
Japan	1%
Germany	-5%
France	-6%
U.K.	0%
Brazil	-9%
Russia	6%
Italy	-8%
India	-2%
Canada	2%
Australia	10%
Spain	-9%
Mexico	2%
Korea	1%

Economic Outlook — Positives

- Private job growth very productive & mobile labor force
- Four million kids turn 18 years old, yearly for the next six years
- More jobs moving back to U.S. from overseas innovation & entrepreneurship
- End of government layoffs
- Two-year government budget agreement = less uncertainty
- Global monetary easing
- Low U.S. interest rates *Yellen Effect* lower interest rates for longer
- Housing improvement price recovery & sales improving
- Strong auto sales
- Energy independence for America gas prices decline less price volatility

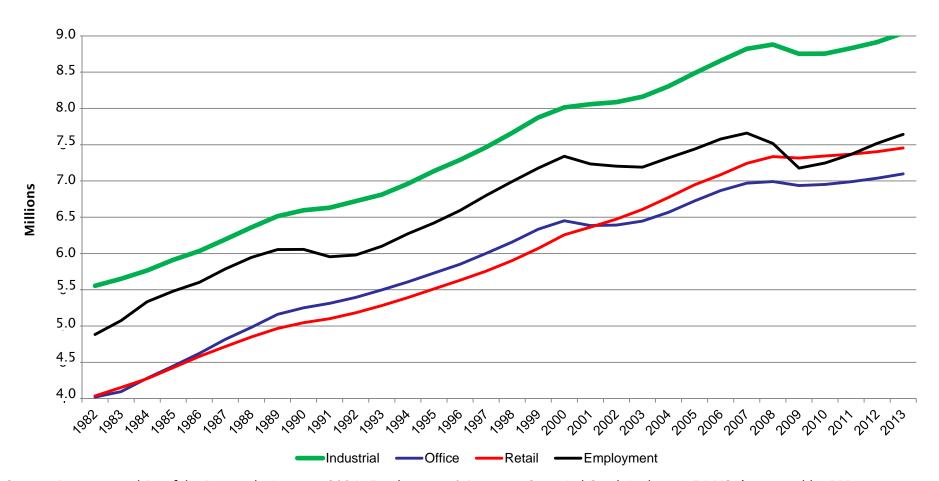
Economic Outlook — Risks

- Emerging market growth slows BRIC countries
- Geopolitical events Egypt, Iran, Syria, North Korea, Turkey
- Credit or asset bubble? higher asset but not consumer prices?
- Tax increases entitlement explosion that is not funded
 - Healthcare was 4% of GDP in 1940, now 18% in 2013
- U.S. political gridlock becomes a condition verses a problem
- Lowest labor participation rate since 1978
- Pre-2000 we had manufacturing recessions two years to recover lost jobs
- Post-2000 we have financial recessions
 - ◆ 2001 took four years 2007 now in seventh year and should be even mid-2014

Economic Outlook

Real estate occupancy is demand driven by employment growth.

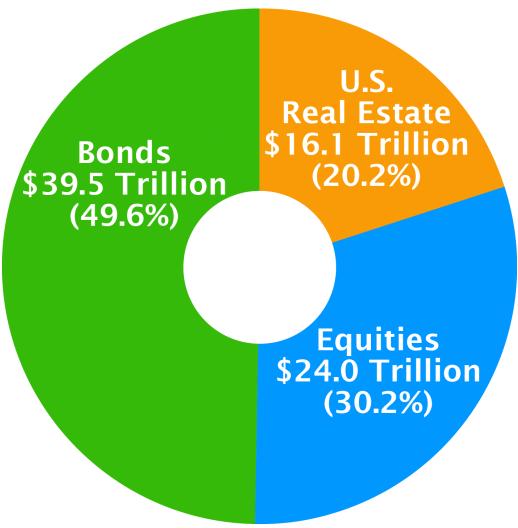
Real Estate — a Delayed Mirror of the Economy



Source: Property and Portfolio Research, January 2014. Employment & Property Occupied Stock is the top 54 MSA's covered by PPR.

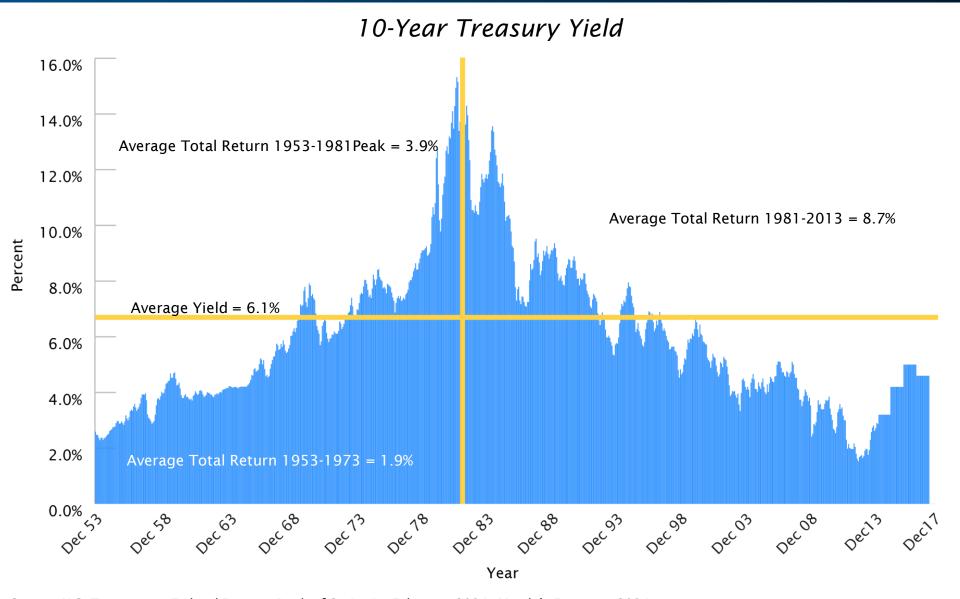
Why Real Estate Fits a Portfolio = SIZE

U.S. Real Estate vs. Other Asset Classes



Source: Bonds = SIFMA, January 2014; Equities = World Federation of Exchanges for Equities, January 2014; U.S. Real Estate = Moody's Real CPPI, January 2014. Commercial real estate are subject to real estate risks associated with operating and leasing properties. Additional risks include changes in economic conditions, interest rates, property values, and supply and demand, as well as possible environmental liabilities, zoning issues and natural disasters.

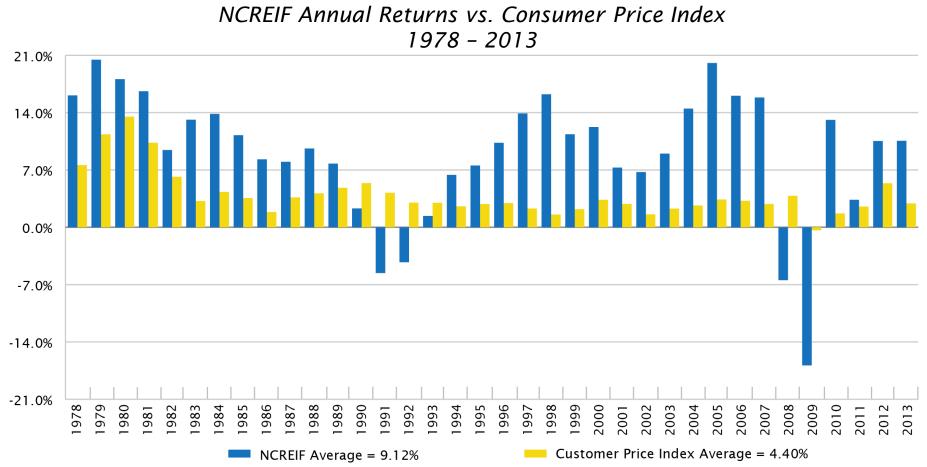
Bond Values DROP as Interest Rates Rise



Source: U.S. Treasury — Federal Reserve Bank of St. Louis, February 2014; Moody's Forecast, 2014.

Real Estate vs. Inflation

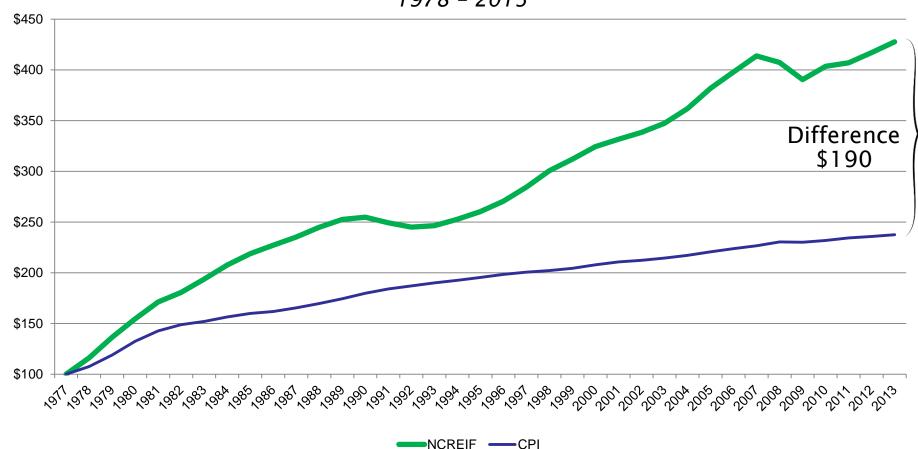
Real estate outpaced inflation by two and one half times over the last 35 years.



Source: NCREIF (National Council of Real Estate Investment Fiduciaries) and U.S. Bureau of Labor Statistics, January 2014. **Past performance is not a guarantee of future results.** The NCREIF Property Index (NPI) is an index of quarterly returns reported by institutional investors on investment grade commercial properties owned by those investors. The NPI is used as an industry benchmark to compare an investor's own returns against the industry average. The NPI is based on institutional investments and is presented without leverage or fees. The Consumer Price Index is an indicator of inflation that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food and transportation. Performance shown is not representative of any particular investment. It is not possible to invest directly in an index.

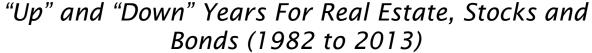
Real Estate vs. Inflation (continued)

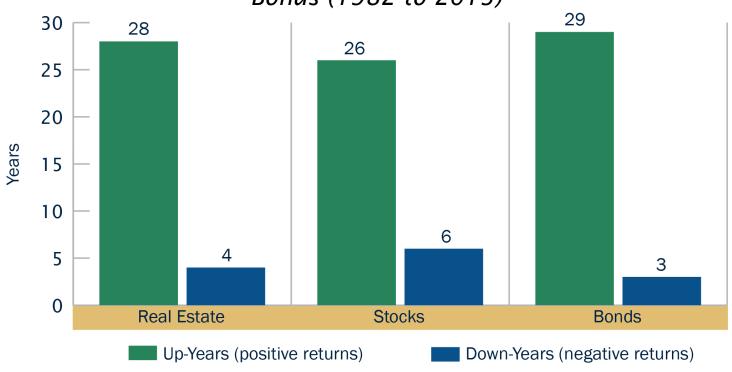
NCREIF Cumulative Return Since Inception vs. Consumer Price Index 1978 - 2013



Source: NCREIF (National Council of Real Estate Investment Fiduciaries) and U.S. Bureau of Labor Statistics, January 2104. **Past performance is not a guarantee of future results.** The NCREIF Property Index (NPI) is an index of quarterly returns reported by institutional investors on investment grade commercial properties owned by those investors. The NPI is used as an industry benchmark to compare an investor's own returns against the industry average. The NPI is based on institutional investments and is presented without leverage or fees. The Consumer Price Index is an indicator of inflation that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food and transportation. Performance shown is not representative of any particular investment. It is not possible to invest directly in an index.

Positive and Negative Return Comparison

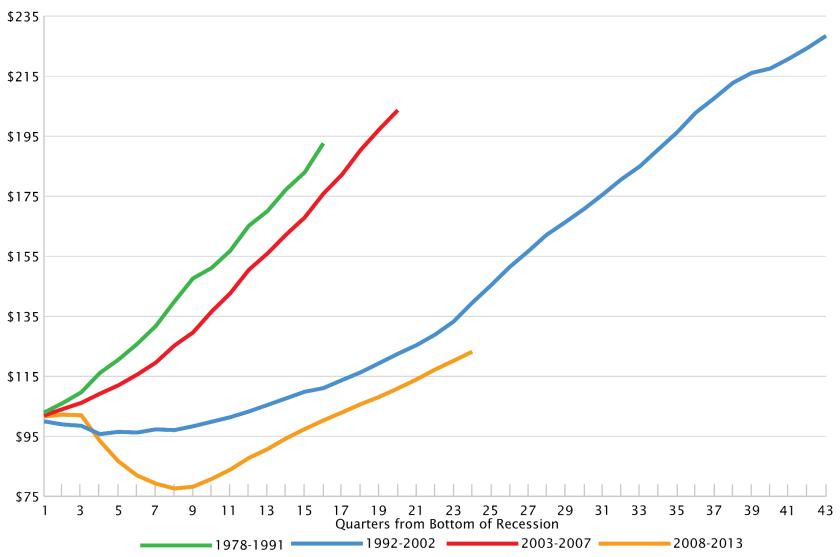




Sources: NCREIF (National Council of Real Estate Investment Fiduciaries) and Bloomberg. Past performance is not a guarantee of future results. Real estate is represented by the NCREIF Property Index (NPI), an index of quarterly returns reported by institutional investors on investment grade commercial properties owned by those investors. The NPI is used as an industry benchmark to compare an investor's own returns against the industry average. NCREIF data is based on institutional investments and is presented without leverage or fees. Institutional investors often invest on substantially different terms and conditions than individual investors, which may include lower fees, expenses or leverage. Stocks are represented by the S&P 500 Index, an unmanaged index of the 500 largest stocks (in terms of market value), weighted by market capitalization and considered representative of the broad stock market. Bonds are represented by the Barclays Capital Aggregate Bond Index, an index of securities that are SEC-registered, taxable and dollar-denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. The prices of securities represented by these indices may change in response to factors including: the historical and prospective earnings of the issuer, the value of its assets, general economic conditions, interest rates and investor perceptions. All indices are unmanaged and do not include the impact of fees and expenses. An investment cannot be made directly in any index.

Rebounds from Recessions

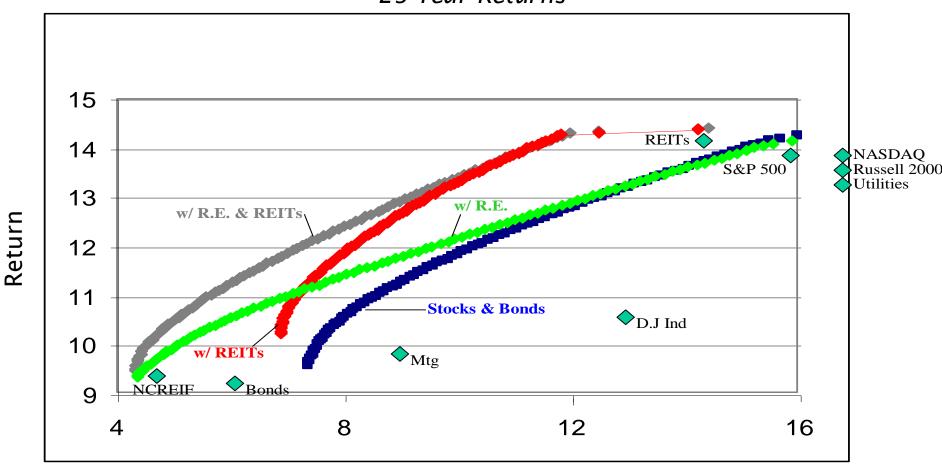
Cumulative Return of the NCREIF Property Index from Recession Bottoms



Source: NCREIF 4Q 2013 and Dividend Capital Research.

25-Year Risk Reward

Efficient Frontiers 25-Year Returns

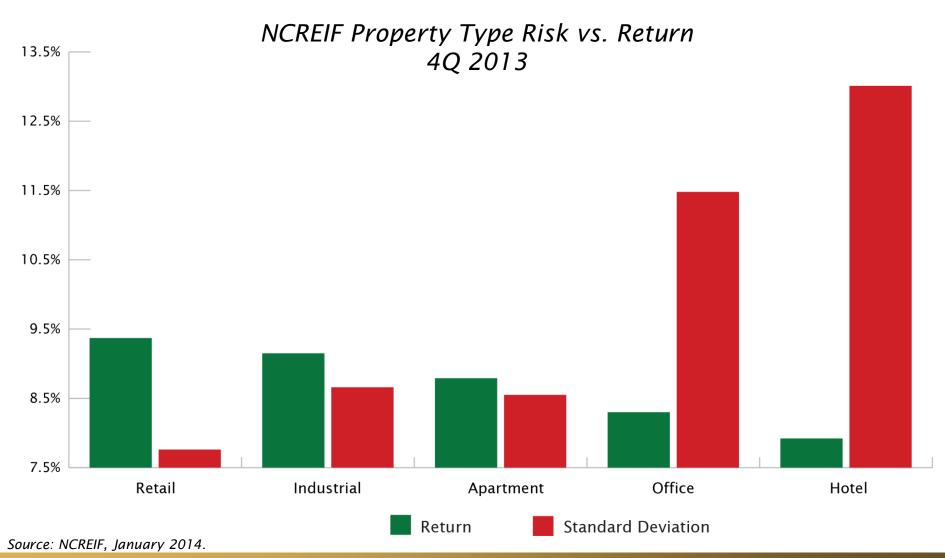


Standard Deviation

Source: A.G. Mueller & G.R. Mueller, Journal of Real Estate Portfolio Management, 2003.

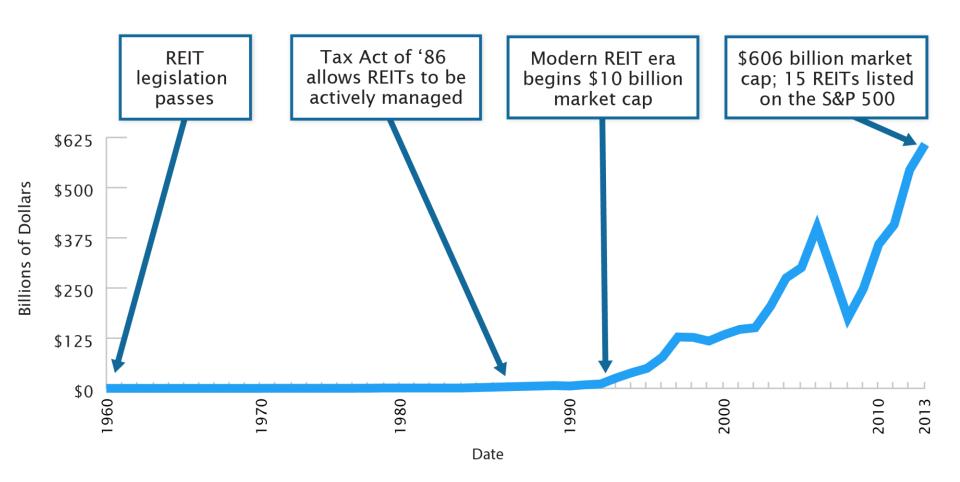
Stability

Property types have different returns and volatility.



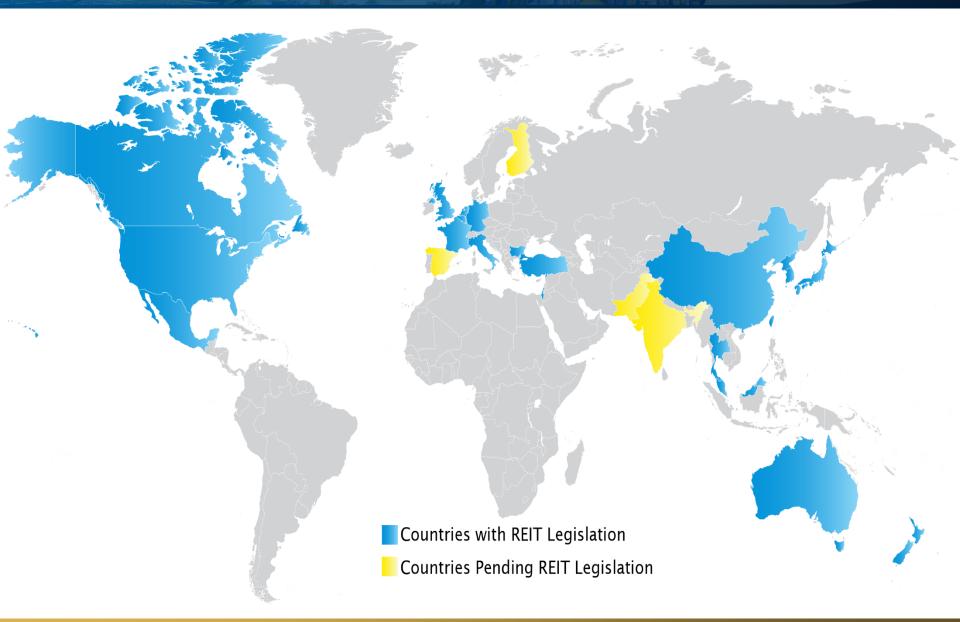
Growth of the REIT Market

Market Capitalization Growth of Public Equity REITs



Source: NAREIT data as of 12/31/2013. **Past performance is not a guarantee of future results.** This is for illustrative purposes only and is not indicative of any investment. The NAREIT data shown reflects market capitalization of the public U.S. real estate investment trust market. REITs included in this data are publicly traded.

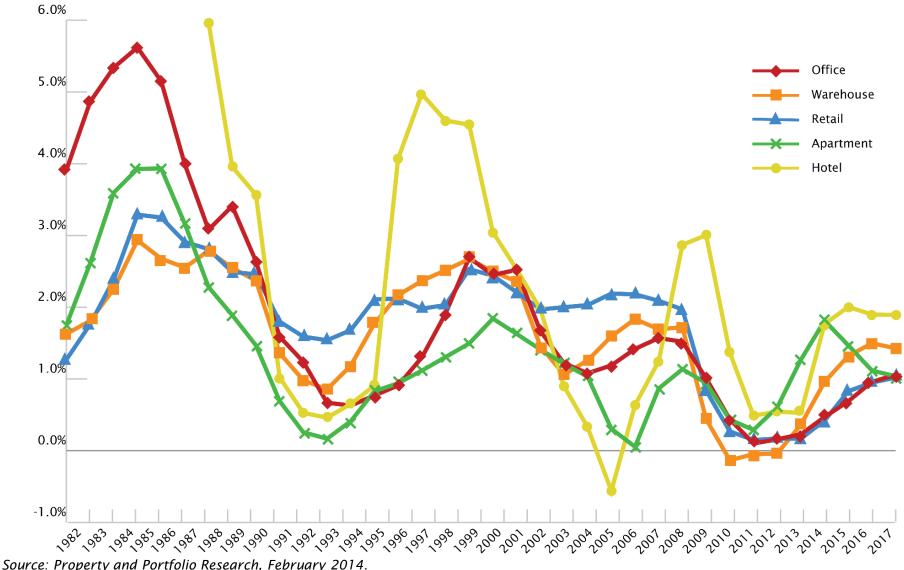
Countries with REIT Legislation





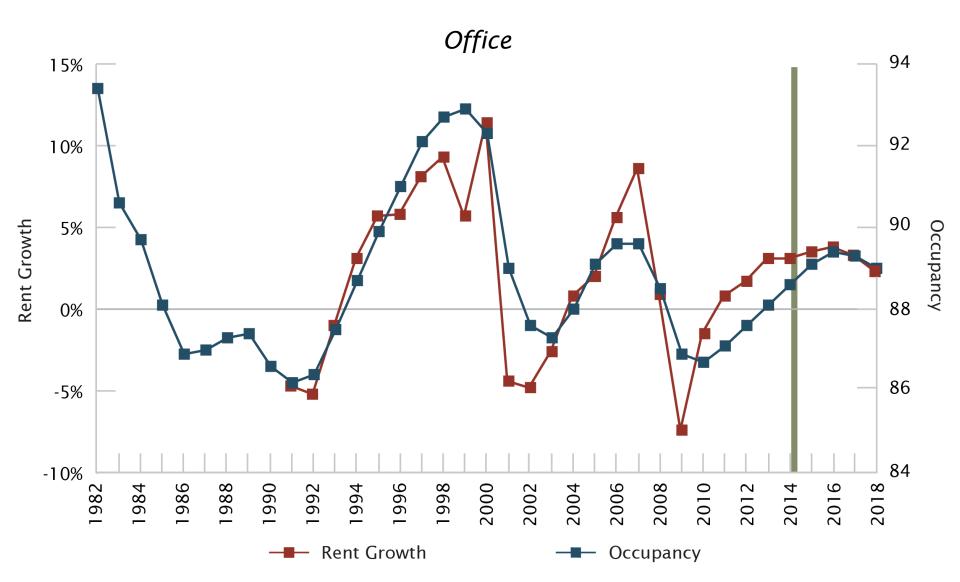
Stock Growth Starts to Increase

Stock growth starts to increase in 2013 from a 42-year low



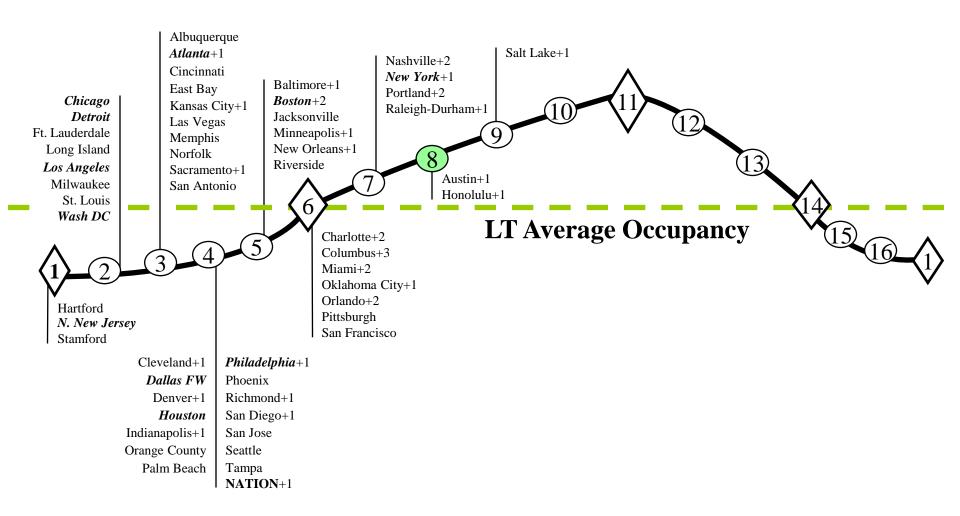
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Occupancy Cycle and Rent Growth

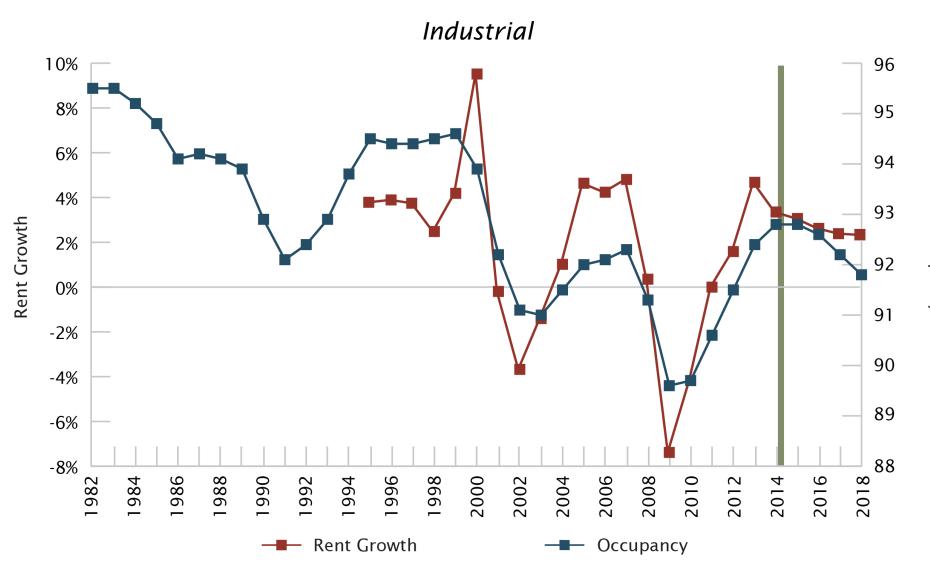


Source: Property and Portfolio Research, Grubb & Ellis, Mueller — February 2014.

Office Market Cycle FORECAST 4th Quarter, 2014 Estimates

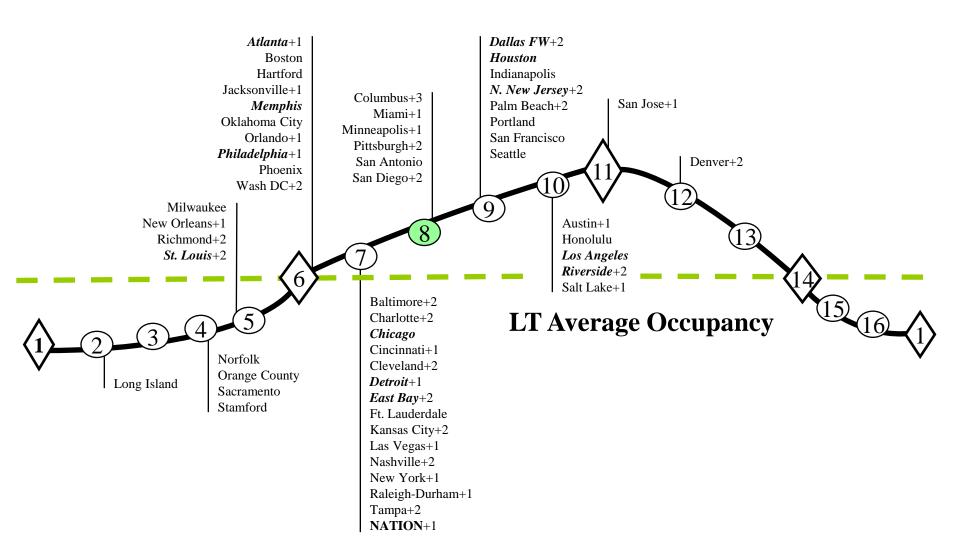


Source: Mueller, 2014.

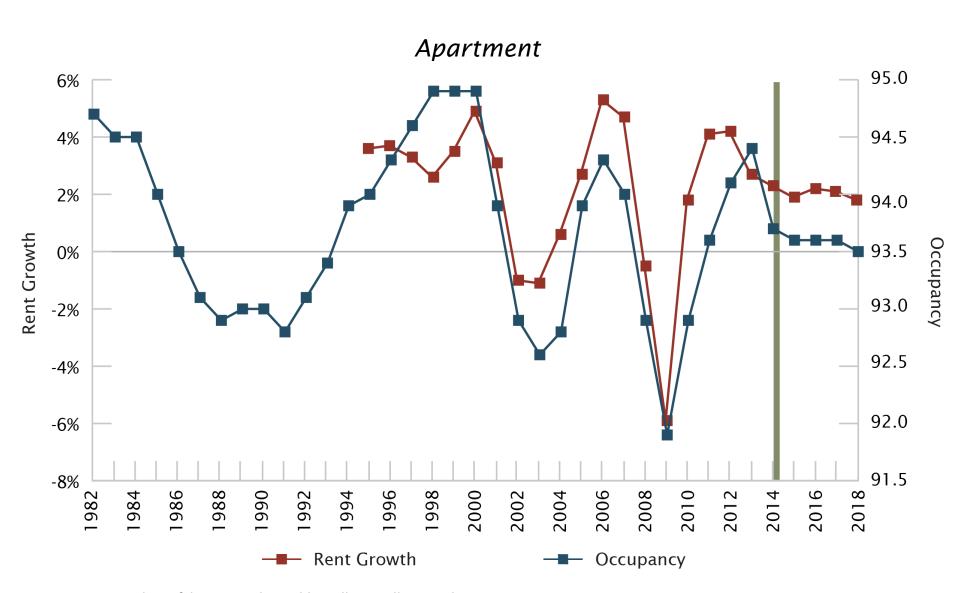


Source: Property and Portfolio Research, Grubb & Ellis, Mueller — February 2014.

Industrial Market Cycle FORECAST 4th Quarter, 2014 Estimates

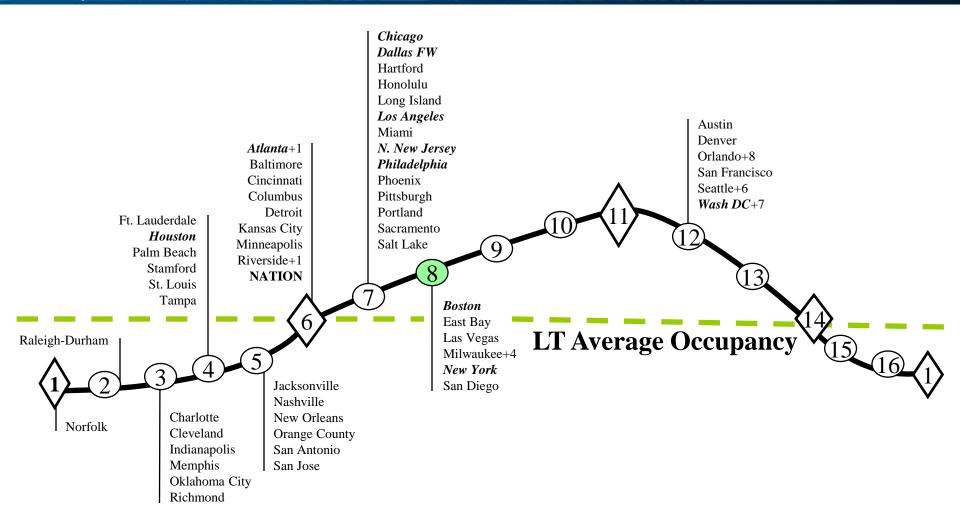


Occupancy Cycle and Rent Growth

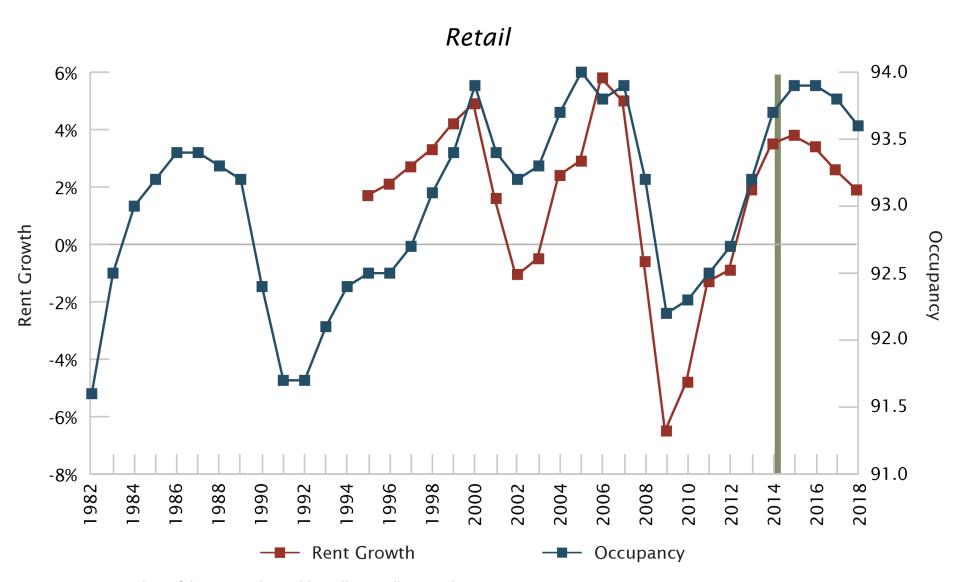


Source: Property and Portfolio Research, Grubb & Ellis, Mueller — February 2014.

Apartment Market Cycle FORECAST 4th Quarter, 2014 Estimates



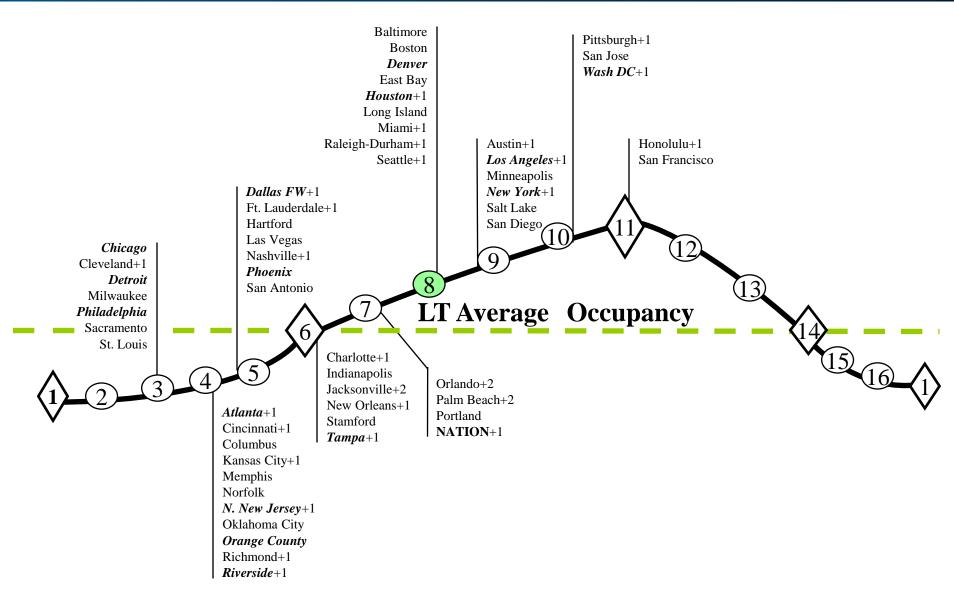
Occupancy Cycle and Rent Growth



Source: Property and Portfolio Research, Grubb & Ellis, Mueller — February 2014.

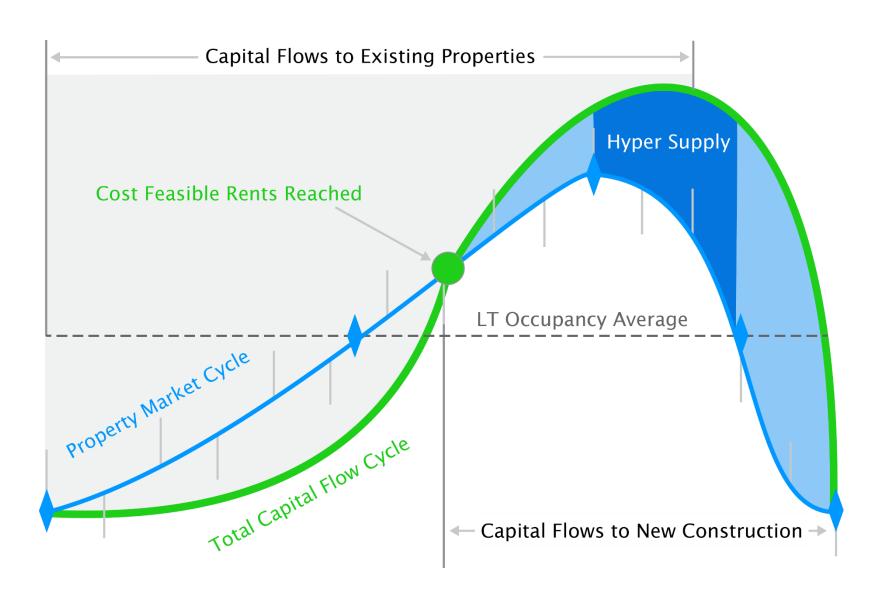
Retail Market Cycle FORECAST

4th Quarter, 2014 Estimates



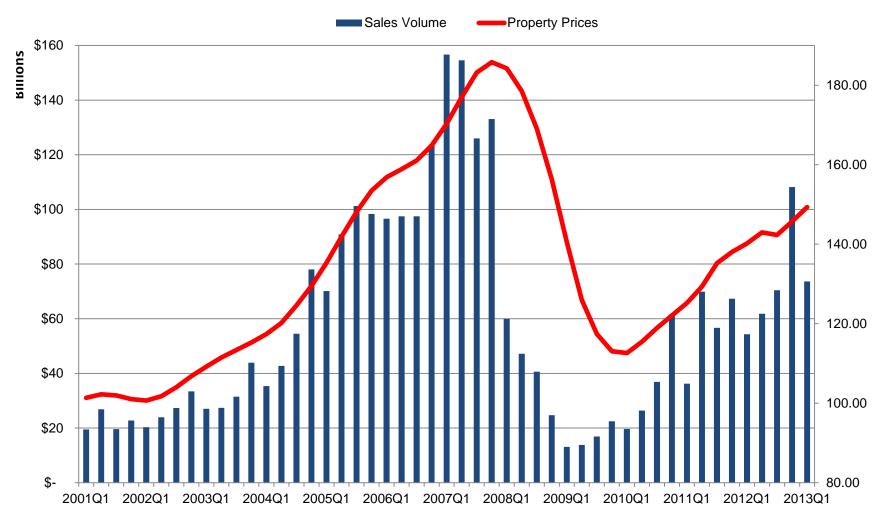
Source: Mueller, 2014.

Market Cycle Capital Flow Impact



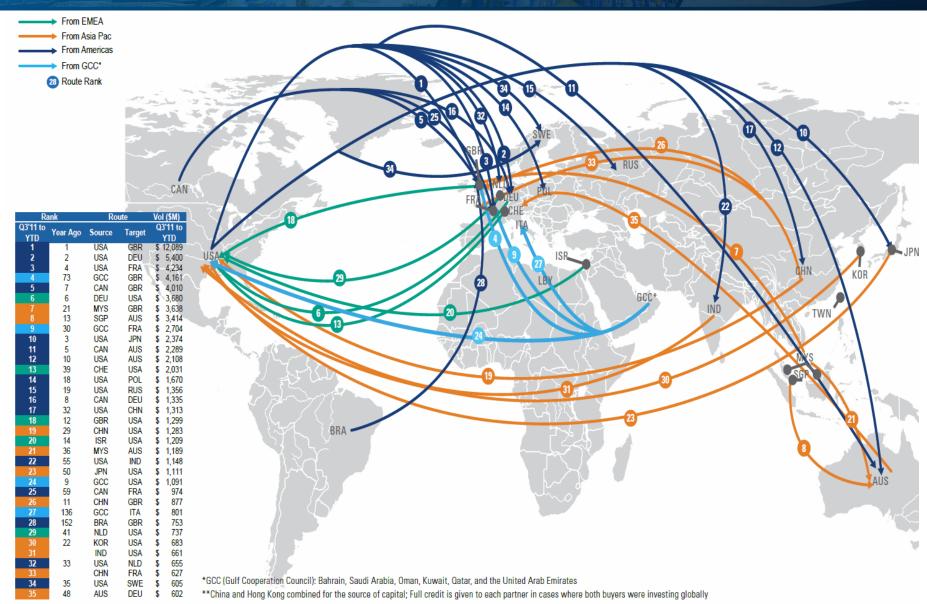
U.S. Commercial Property Prices

U.S. Transaction Volume



Source: Real Capital Analytics, Inc., 2013. For more current deals, cap rates and property details visit http://rcanalytics.com.

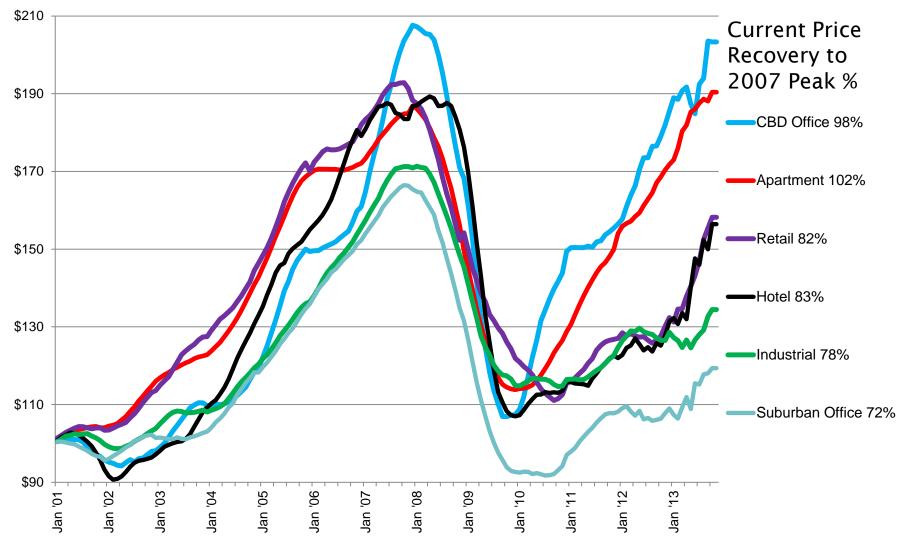
Capital Flows Coming from Around the World



Source: Real Capital Analytics, December 2013.

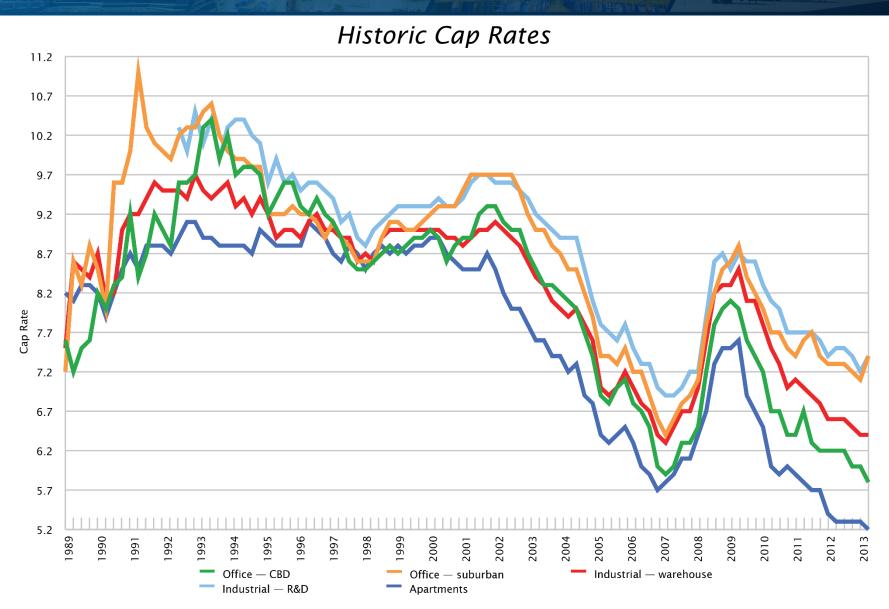
Property Price Cycle — Recovering *(continued)*

Real Capital Analytics — Real Commercial Property Price Index



Source: Real Capital Analytics, Inc., December 2013. For more current deals, cap rates and property details visit http://rcanalytics.com.

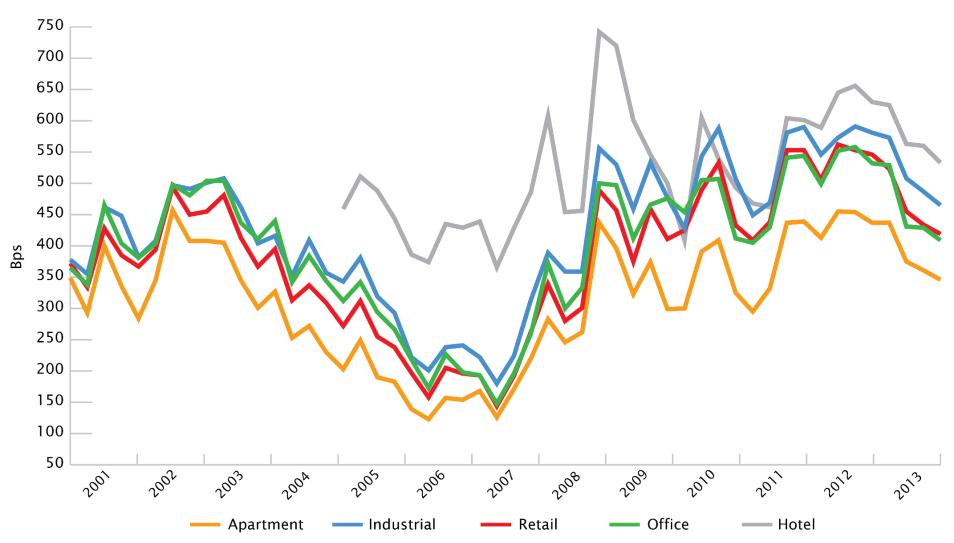
Property Price Cycle — Recovering



Source: Real Estate Research Corporation — Chicago, December 2013.

Wide Yields Attracting Capital

Spread Between Cap Rates and 10-Year Treasury by Sector



Source: Real Capital Analytics, 4Q 2013.



Industrial Sector Growth

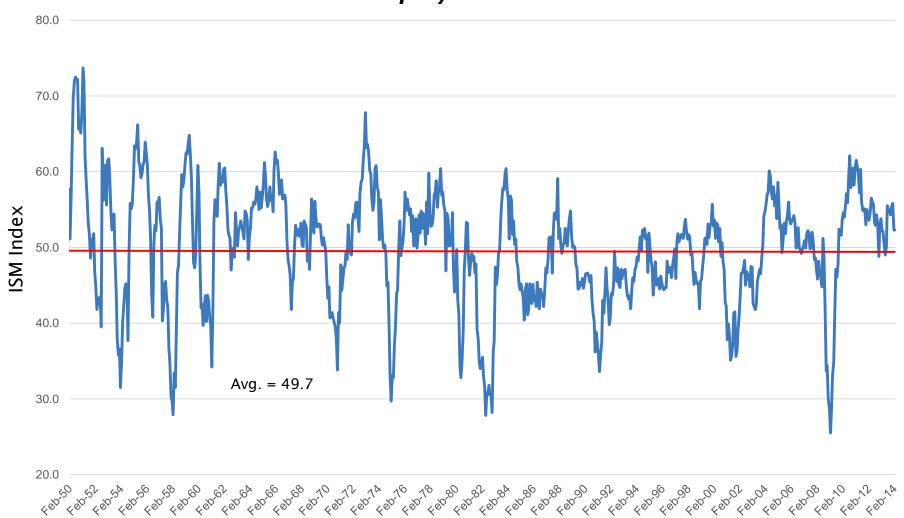
Nation's Industrial Sector has Grown Steadily throughout History



Source: Federal Reserve Bank of St. Louis, March 2014.

Industrial Rebound (continued)



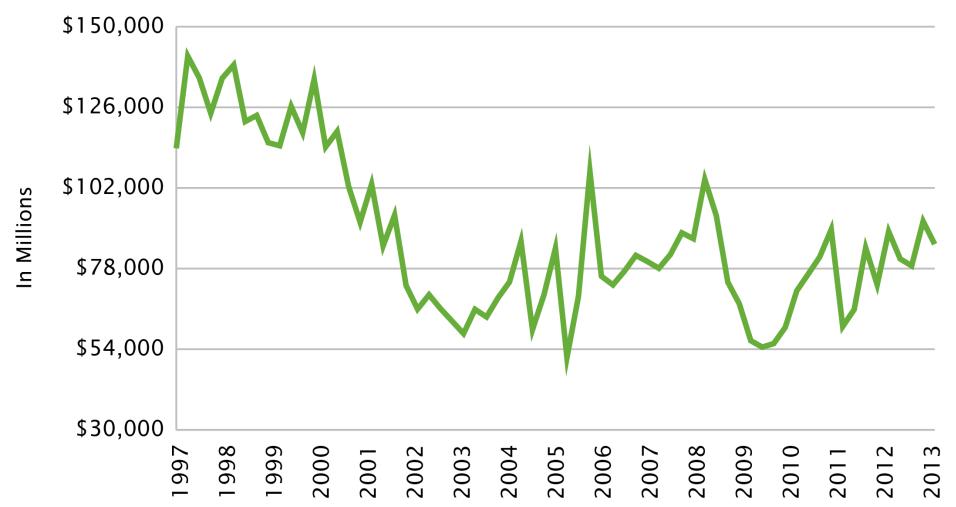


Source: Department of Commerce, St. Louis Federal Reserve Bank, Institute for Supply Management, February 2014.

Total Value Commercial & Industrial Business Loans

Total Value Commercial & Industrial Business Loans

All Commercial Banks, Not Seasonally Adjusted



Source: Federal Reserve Bank of St. Louis, September 2013.

2014 Physical & Financial Cycle

2014 Physical Cycle

- Demand and supply affect occupancies → drives rental growth
- GDP growth resumed Employment growth followed 2Q 2010
- Real estate demand growth resumed 2Q 2010
- Supply growth slowest in 42+ years bottomed in 2013
- Growth phase starting 2014, 2015 (depending on market/property type)

2014 Financial Cycle

- Capital flows affect prices stock market rebound 2013, volatile 2014?
- Real estate was safest investment alternative 2000-2007, pushing prices up
- Real estate prices dropped 2008, 2009 = buying opportunities 2010-2014!
- Debt financing hard in 2014 = buying opportunity for Cash Buyers
- Differentiate residential <u>versus</u> commercial real estate to your investors!

Conclusions

The Real Estate Asset Class

- Grows with the economy / employment
- Good inflation hedge at 2x inflation historically
- Good portfolio <u>Diversifier</u> to stocks & bonds
- Income *improvement* since 2Q 2010
- Price recovery headed toward 2007 peak prices
- Professional investment important
- Property types performing differently
- Heading into expansion phase of the cycle

Important Disclosure

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Market Cycle Report

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