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COMMERCIAL REAL ESTATE
DEVELOPMENT ASSOCIATION

CHICAGO CHAPTER

2017 Real Estate Forecast

Guest Speaker:
Dr. Mark J. Eppli

*Robert B. Bell, Sr., Chair in Real Estate
and Professor of Finance
Marquette University*





Dr. Mark J. Eppli

*Robert B. Bell, Sr., Chair in Real Estate
& Professor of Finance*

Marquette University

- Served as Interim James H. Keyes Dean of Business Administration from 2012-2015
- Coauthor of the bestselling real estate development text in the nation
- Prior to obtaining doctorate, worked in commercial real estate for PM Realty Advisors and GE Capital
- Awards from Greater Washington Urban League and the Urban Land Institute for his efforts to attract minorities to the real estate profession
- Board member for the Federal Home Loan Bank of Chicago
- Ph.D. from the University of Wisconsin, in Real Estate and Urban Land Economics

Economic Summary and Forecast 2017

Presented to:



Presented by:

Mark J. Eppli

Bell Chair in Real Estate, Marquette University

January 12, 2017

Presentation Agenda

- I. Last Year's Predictions
- II. Economic Outlook
 - A. Election Economics
 - B. Macro Economics
- III. Back to the Classroom
- IV. Capital Flows and Rates
- V. Space Markets (briefly)



Summary (from last page of 2016 forecast presentation)

Demographics

- Think unmarried, minority, urban, renters

Employment and GDP

- Employment gains will soften across the year
(Softened by 49,000 jobs per month YOY)
- GDP will be driven by the almighty U.S. consumer
(Consumption was \$321 b of the \$353 b in GDP growth YOY)

Rates and Returns

- Long-term debt rates will increase by (0.25-0.50%) with solid liquidity
(10 USTs increased 0.26% YOY)
- Equity will remain abundant with cap rates stabilizing at current low rates
(Cap rates stabilized and compressed)

Space Markets

- Apartments and retail will be best in class; Industrial and office will lag
(Returns: Industrial and retail were tops at 12.47% and 10.98%, NCREIF)
(Volume: Apartments and office had 28% and 25% growth, RCA)



Election Economics



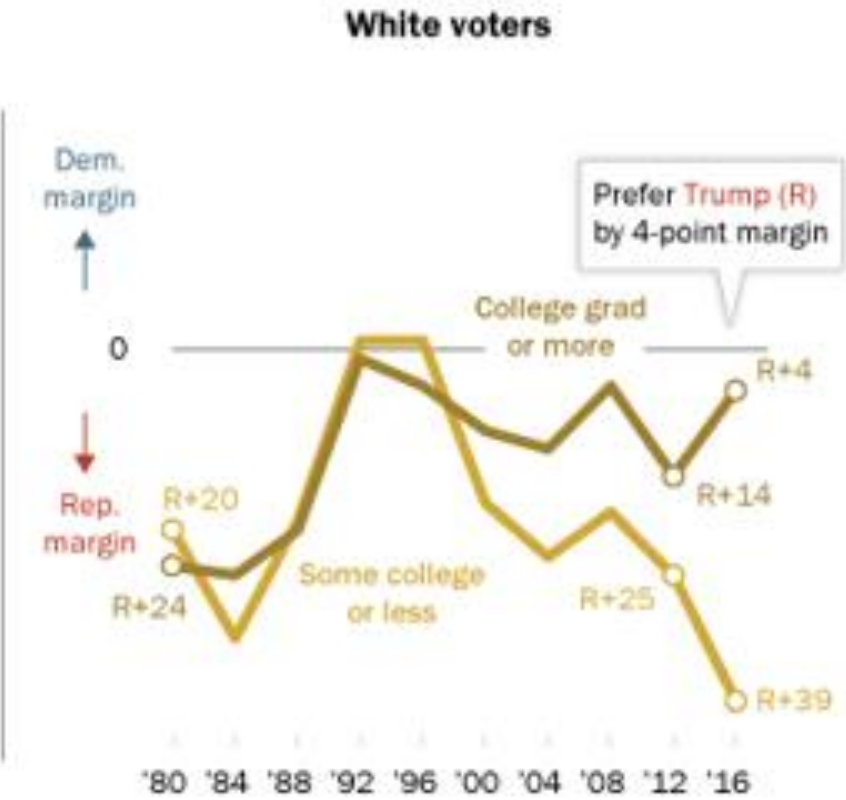
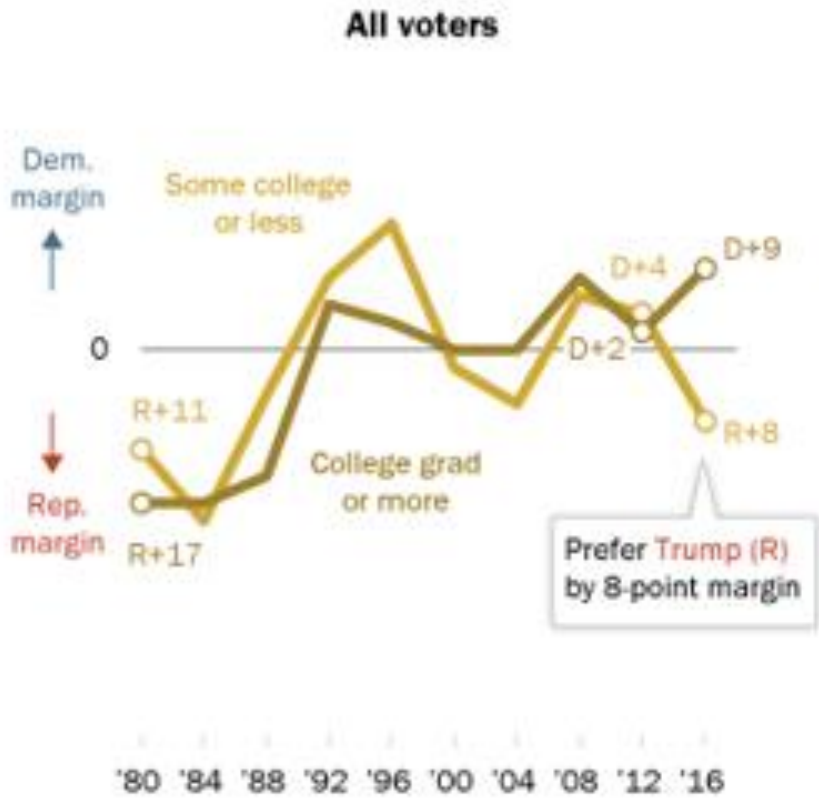
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Election: White, no-college voters preferred Trump over Clinton by 39 points, why

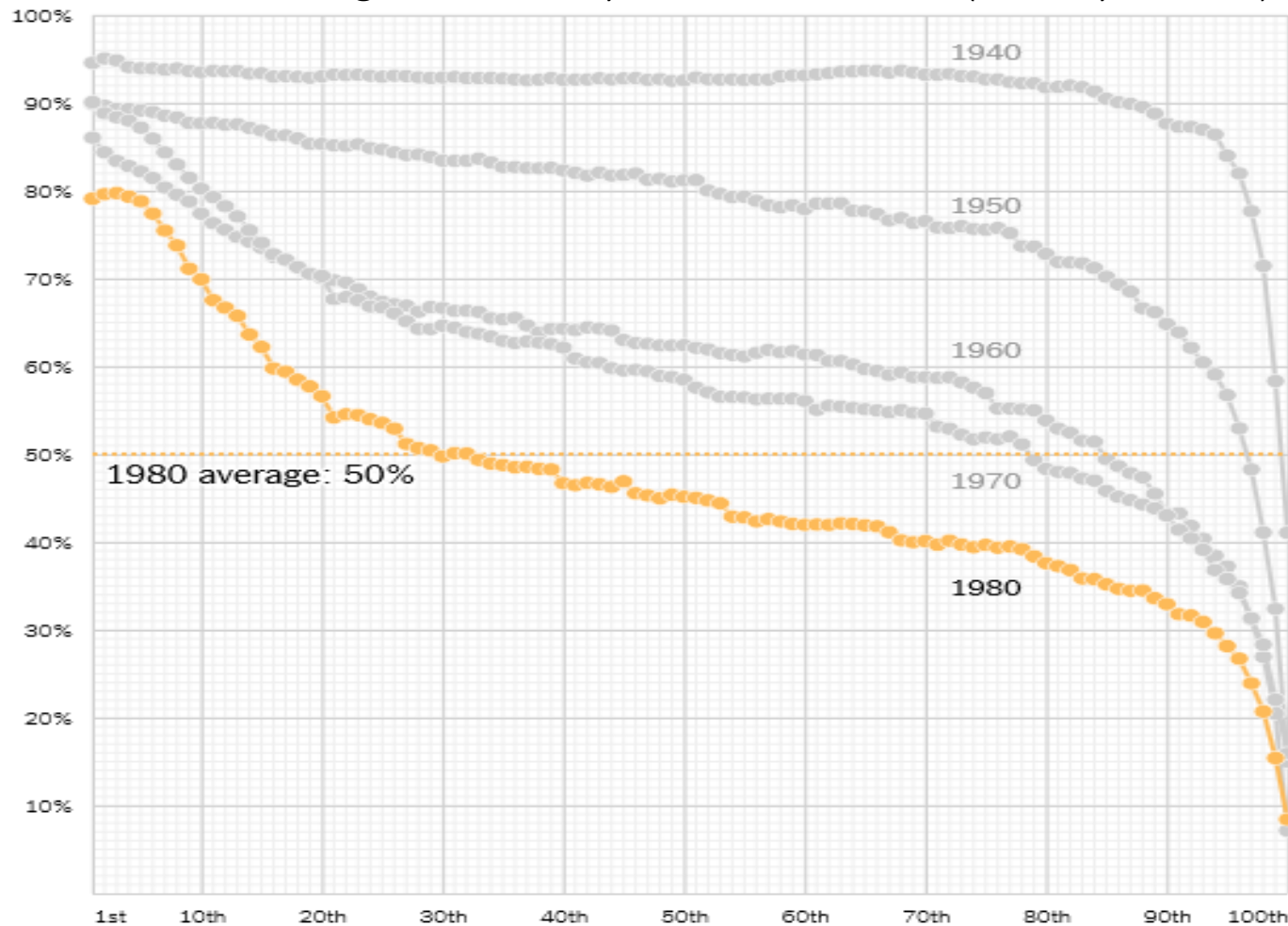
Wide education gaps in 2016 preferences, among all voters and among whites

Presidential candidate preference, by educational attainment



Election: the American dream that our children will make more than their parents is no longer alive, except for the lowest income deciles

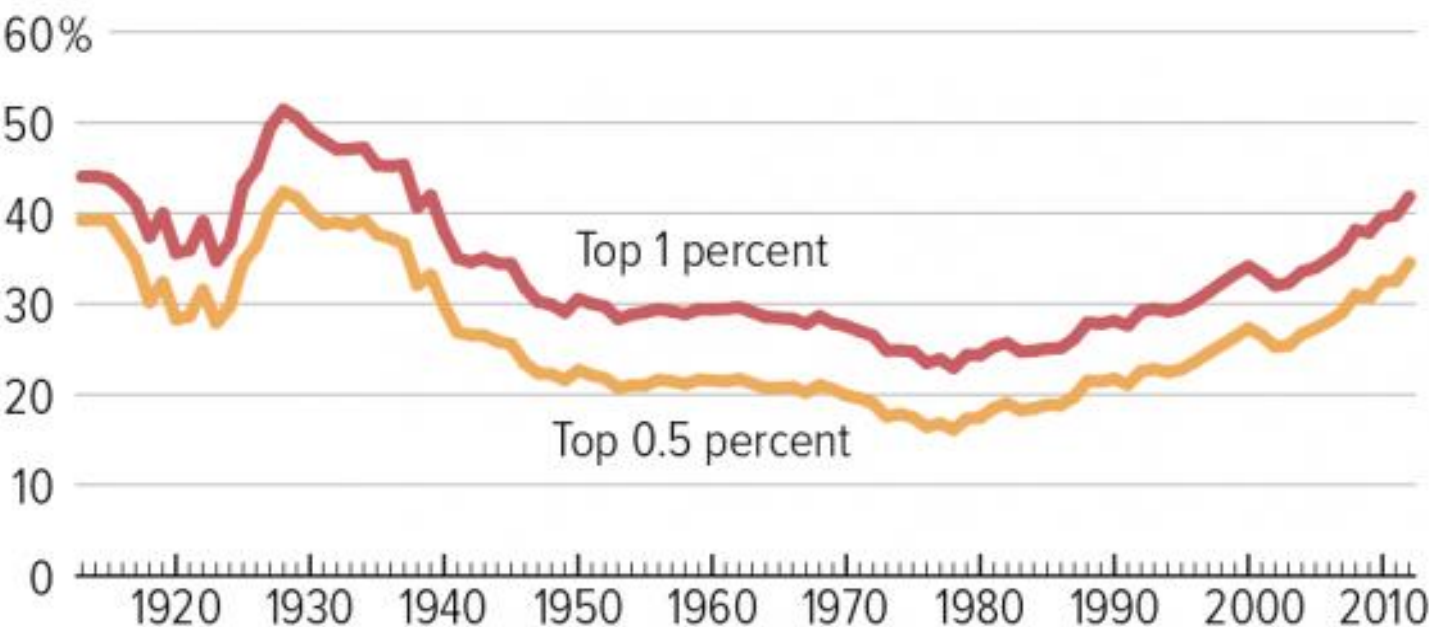
Chance of Making More Money than Your Parents (for 36 year olds)



Election: creating wealth concentration for the wealthiest

Wealth Concentration Has Been Rising Toward Early 20th Century Levels

Share of total wealth held by the wealthiest families, 1913-2012



Source: Saez and Zucman, May 2016

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG



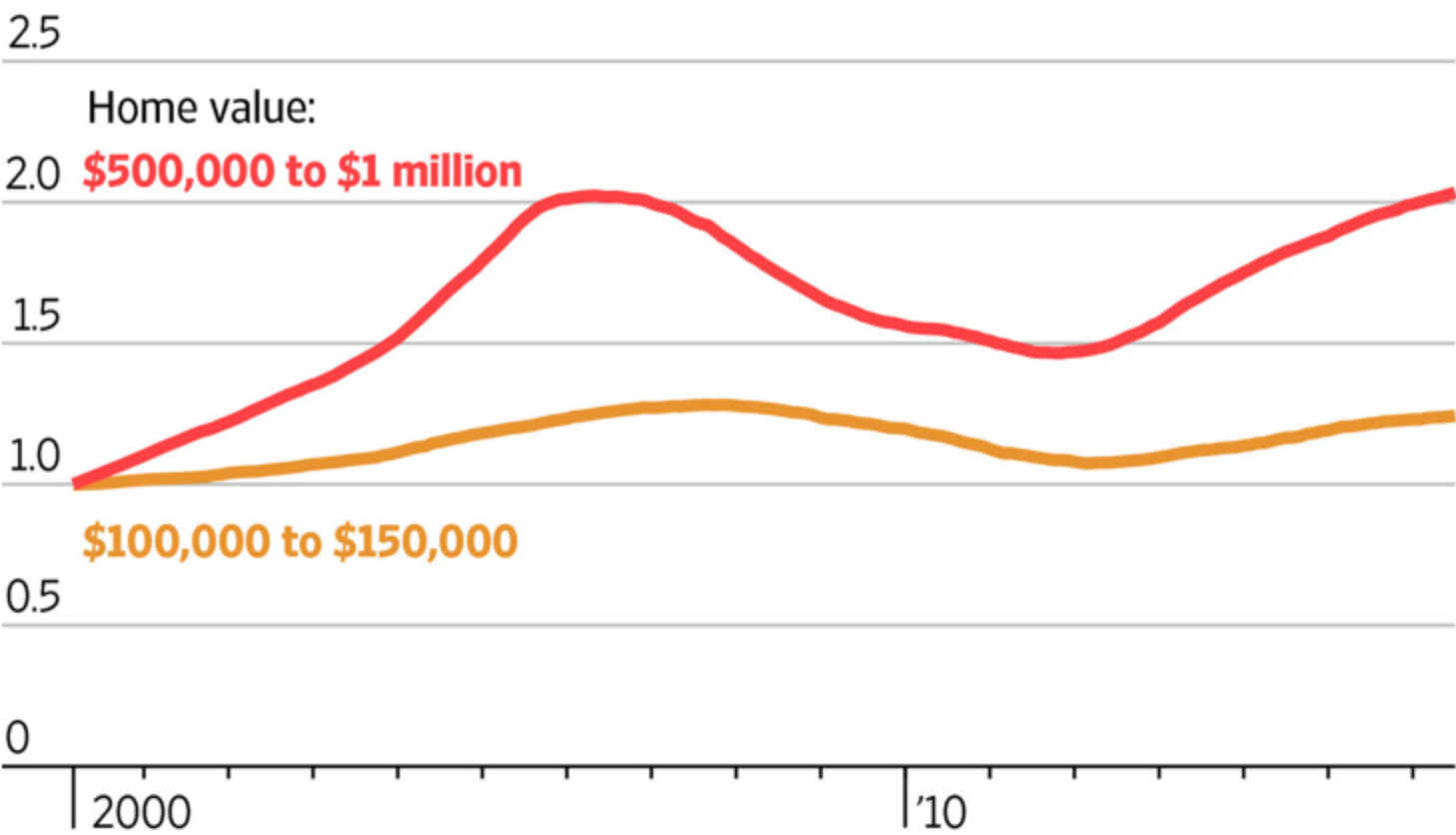
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Source: Center on Budget and Policy Priorities, A Guide to Statistics on Historical Trends in Income Inequality, November 7, 2016.

Election: and 2000-2016 median home prices in areas with \$100,000-150,000 home prices are up 27% and \$500,000-1,000,000 are up 103%

Weiss Analytics home value index for two sections of the market



Source: Weiss Analytics

THE WALL STREET JOURNAL.

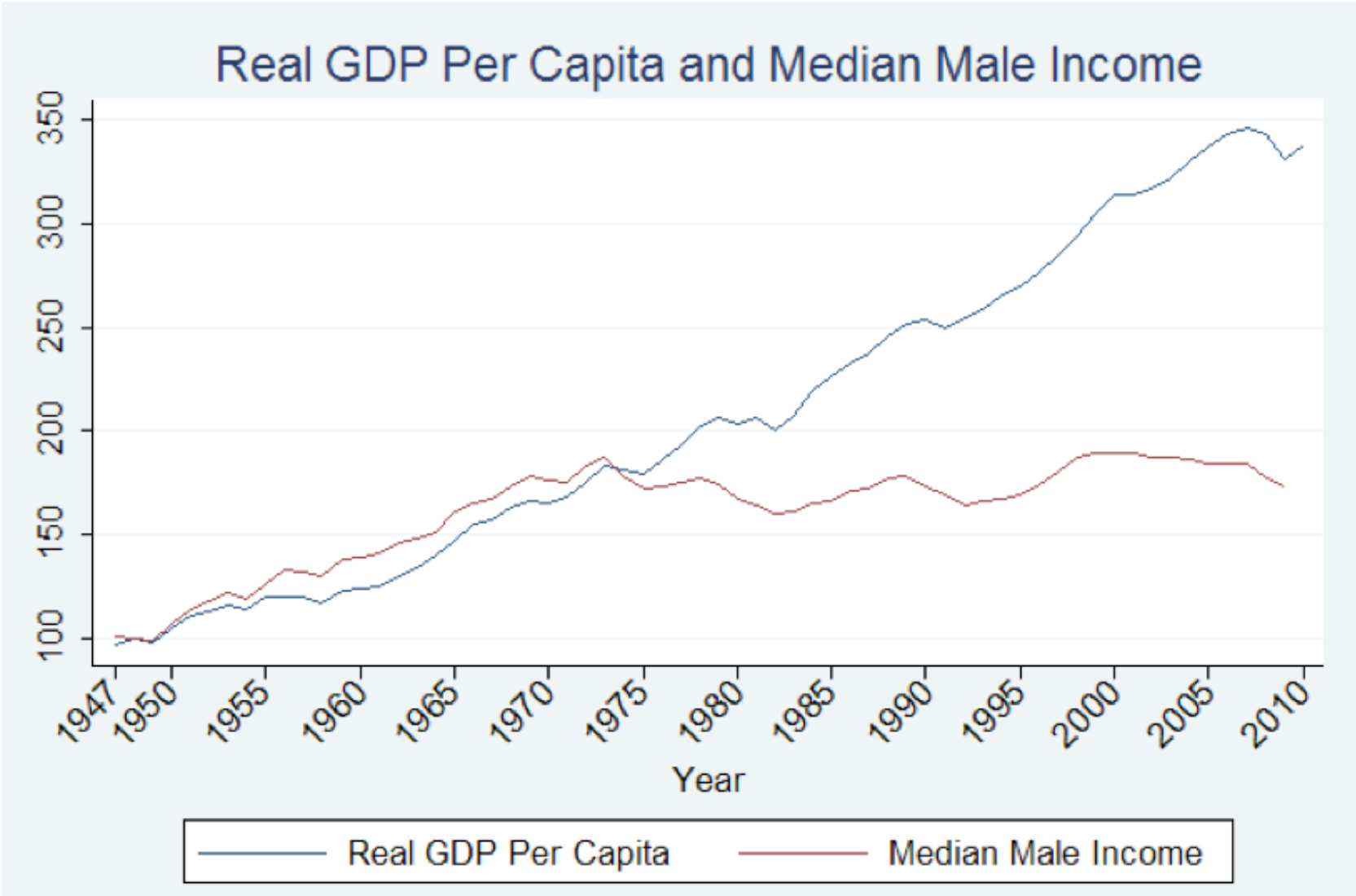


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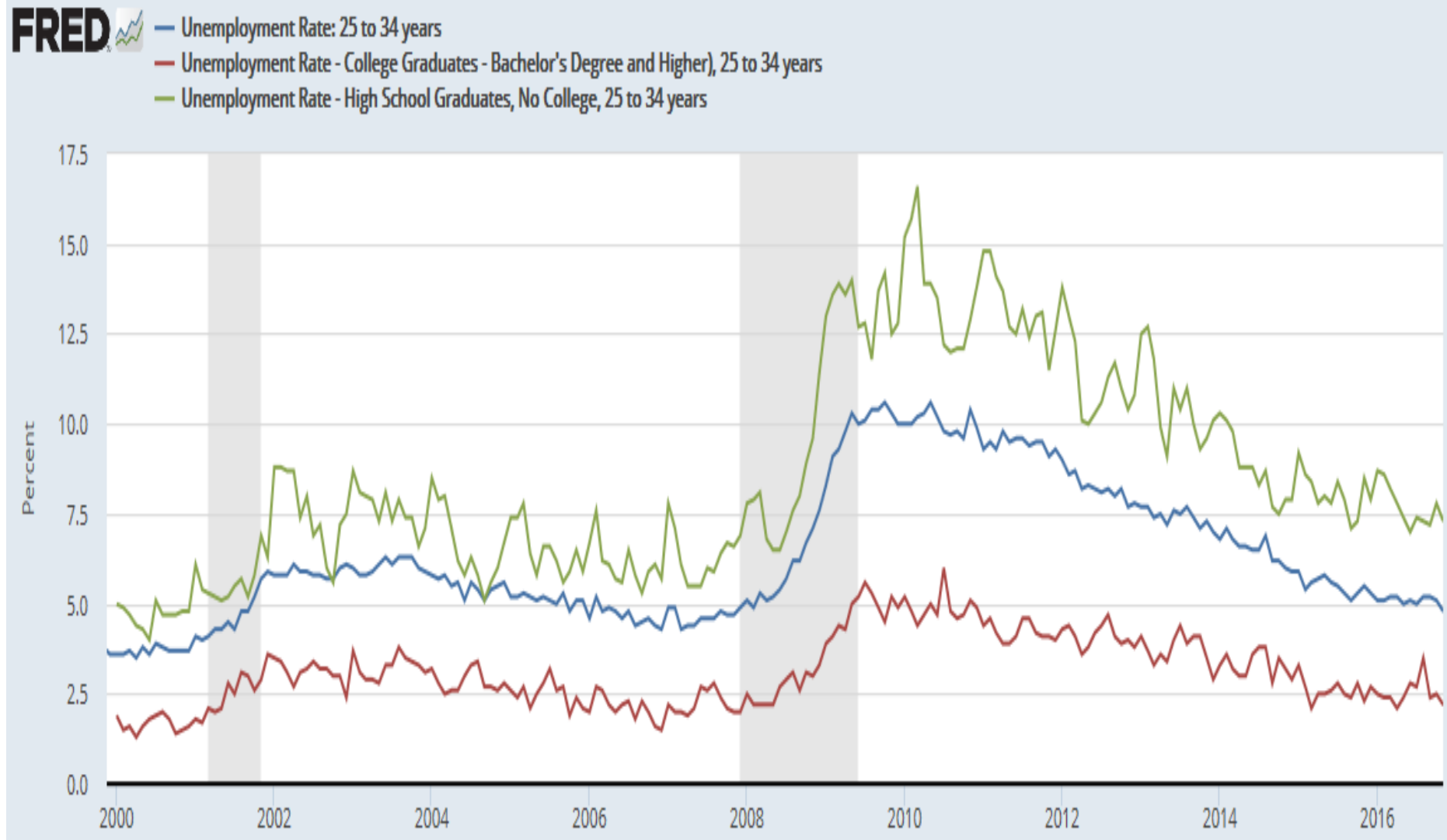
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Source: WSJ, Housing Gains Highlight Economic Divide, December 27, 2016 .

Election: and median real income for men stagnated since 1973



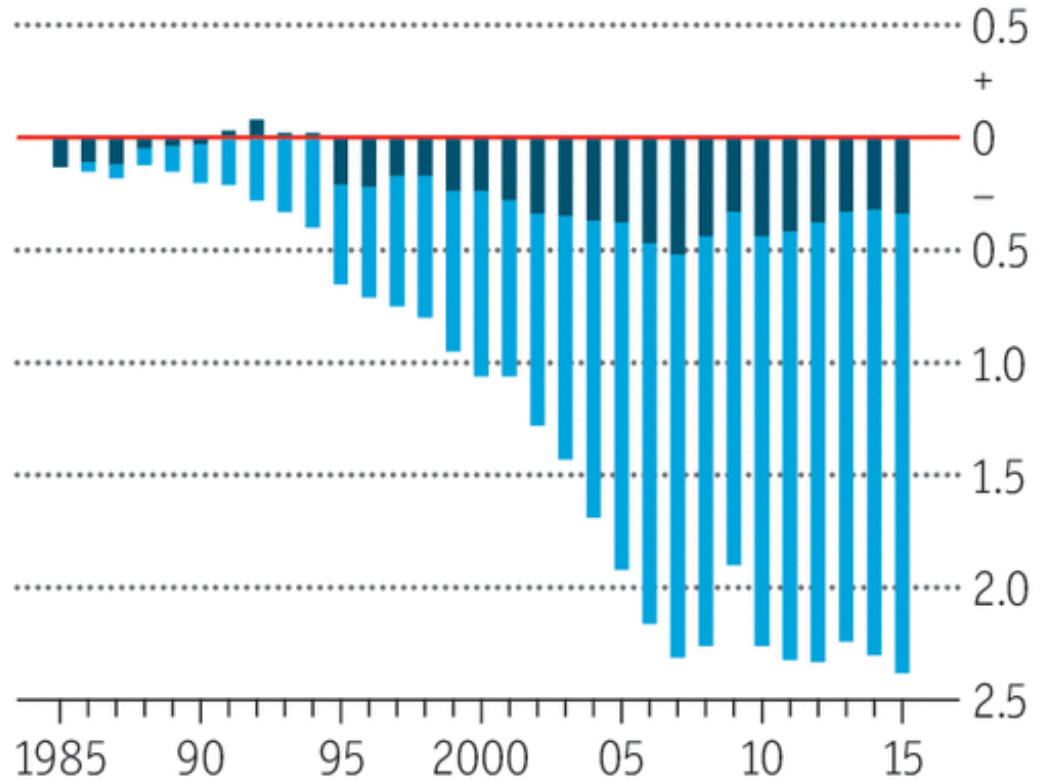
Election: young adult employment prospects are dim for high school graduates



Election:
as the U.S.
trade deficit
with China
and Mexico
remains large.

Going south

US trade balance with: ■ Mexico ■ China
% of GDP



Sources: US Census Bureau; US Bureau of Economic Analysis

Economist.com



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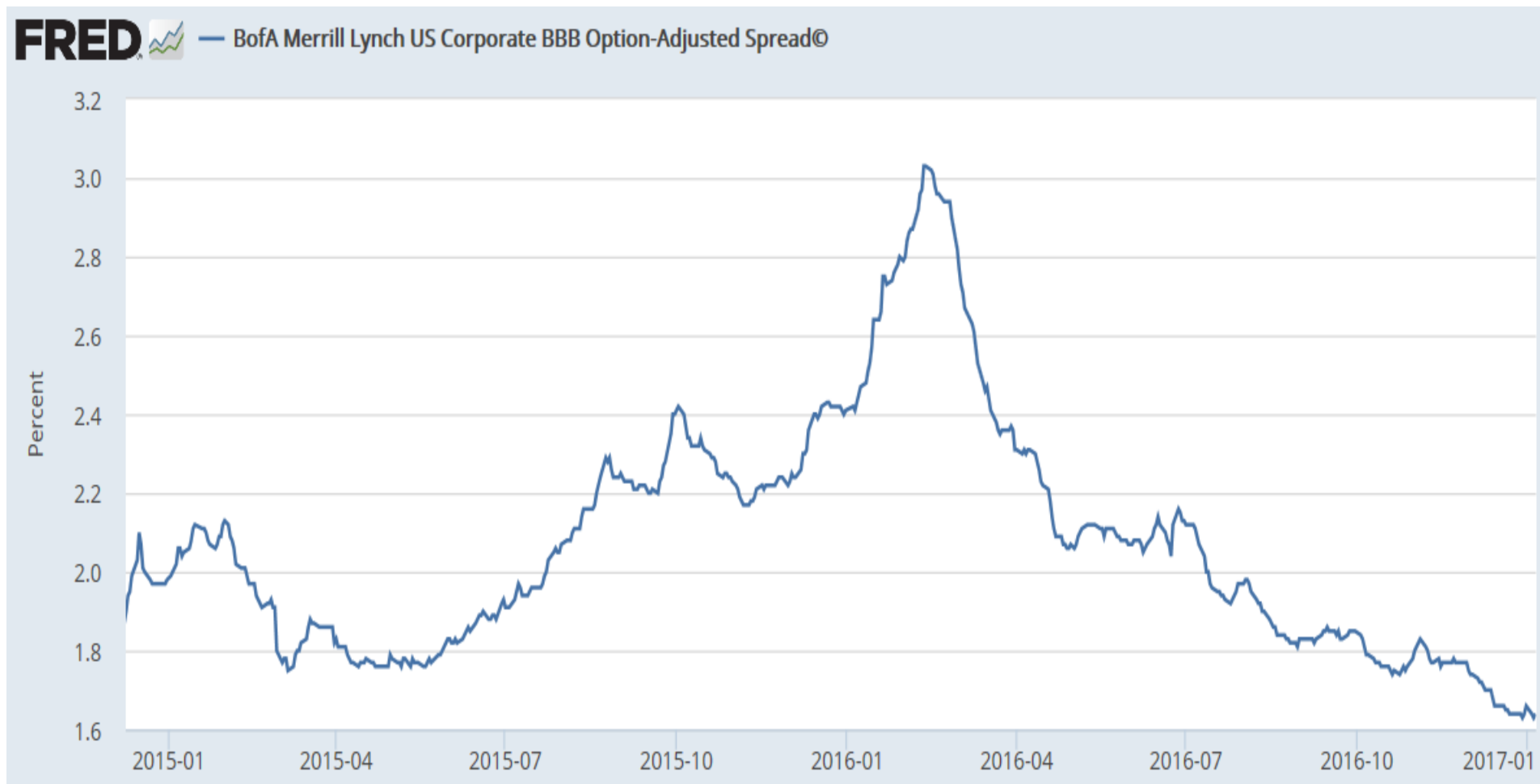
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Source: Economist, October 1, 2016, p.5.

Election: Since the election, 10-Year UST are up 53 bps since the election through 1/6/17



Election: however, risk spreads for BBB bonds down 15-17 bps since the election



Election: stocks are up, especially bank stocks (deregulation)

Bank Stock Price Appreciation (November 7, 2016--January 6, 2017)

	Stock Price on 11/7/2016	Stock Price on 1/6/2017	Price Change
Associated Bank	\$20.25	\$25.00	23.5%
BMO	\$63.52	\$73.78	16.2%
Northern Trust	\$74.00	\$89.80	21.4%
MB Financial	\$37.35	\$47.27	26.6%
Chase	\$69.88	\$86.12	23.2%
S&P 500	2131.52	2276.98	6.8%

Domestic economic implications of a Trump Presidency

Positive

- Growth from reduction/clarification of taxes
- Growth from regulatory reduction
- Solid consumer confidence
- Unfiltered tweets, bullying business and governments

Negative

- Uncertain/unclear policy platform
- Unproven non-governmental cabinet appointments
- Unfiltered tweets, unintended consequences
- Possibility of unexpectedly high inflation
- Over-promised growth

International Political Economy risks of a Trump Presidency

Russian Risk:

- Two sizeable egos what could possibly go wrong?

China Risk:

- President Xi Jinping is consolidating his grip on power (anti-corruption campaign morphing into loyalty campaign)
- After three straight quarters of 6.7% growth, economists are converging around – you guessed it, 6.7% for the fourth quarter
- China's credit is growing three times faster than nominal GDP
- Between 2000-2014 McKinsey estimates that China added \$26.1 trillion in debt, a figure greater than the GDP of the US, Japan, and Germany combined
- Trade/currency war

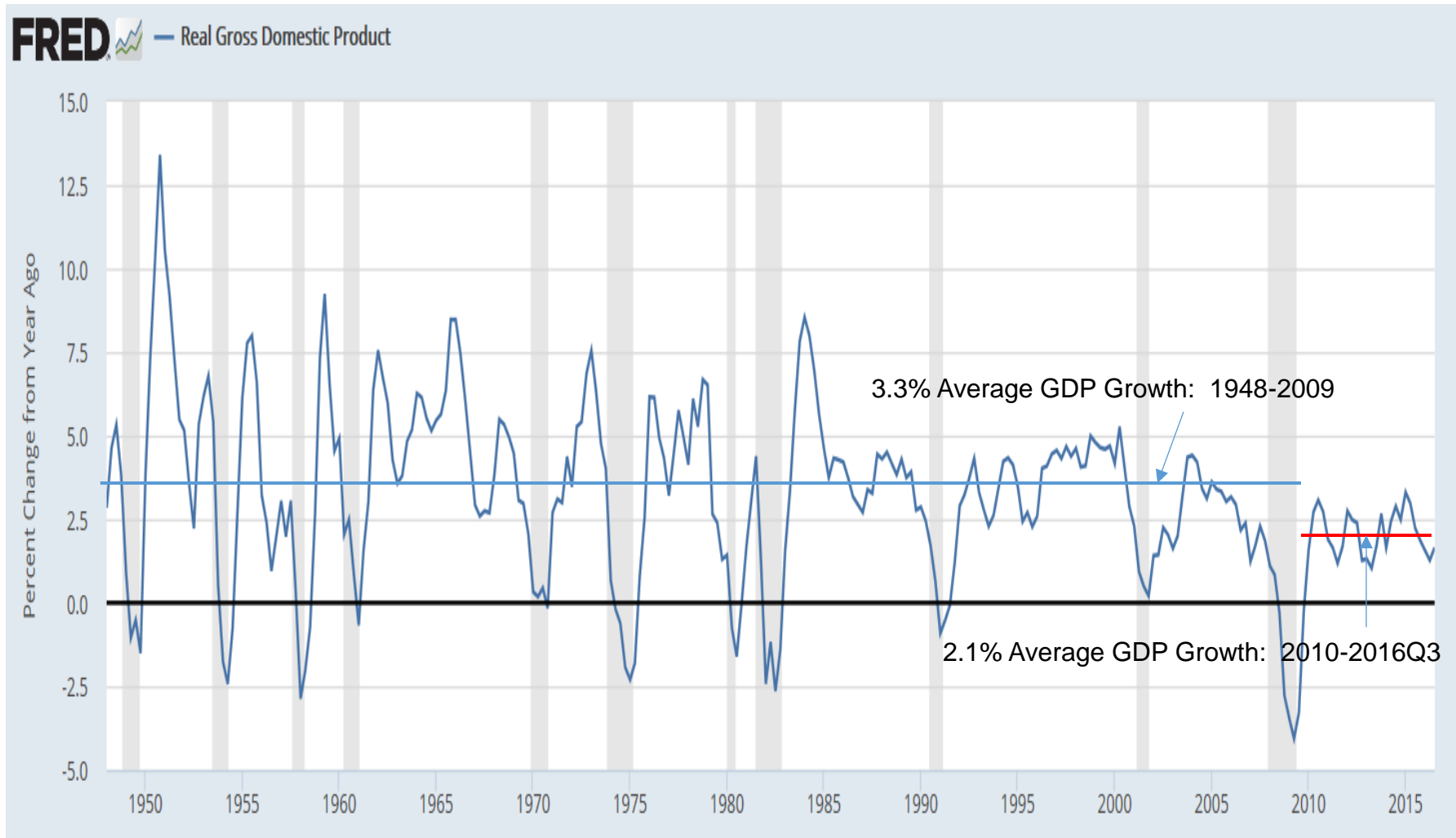
The Macro Economy



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Economy: GDP growth has slowed since the Great Recession

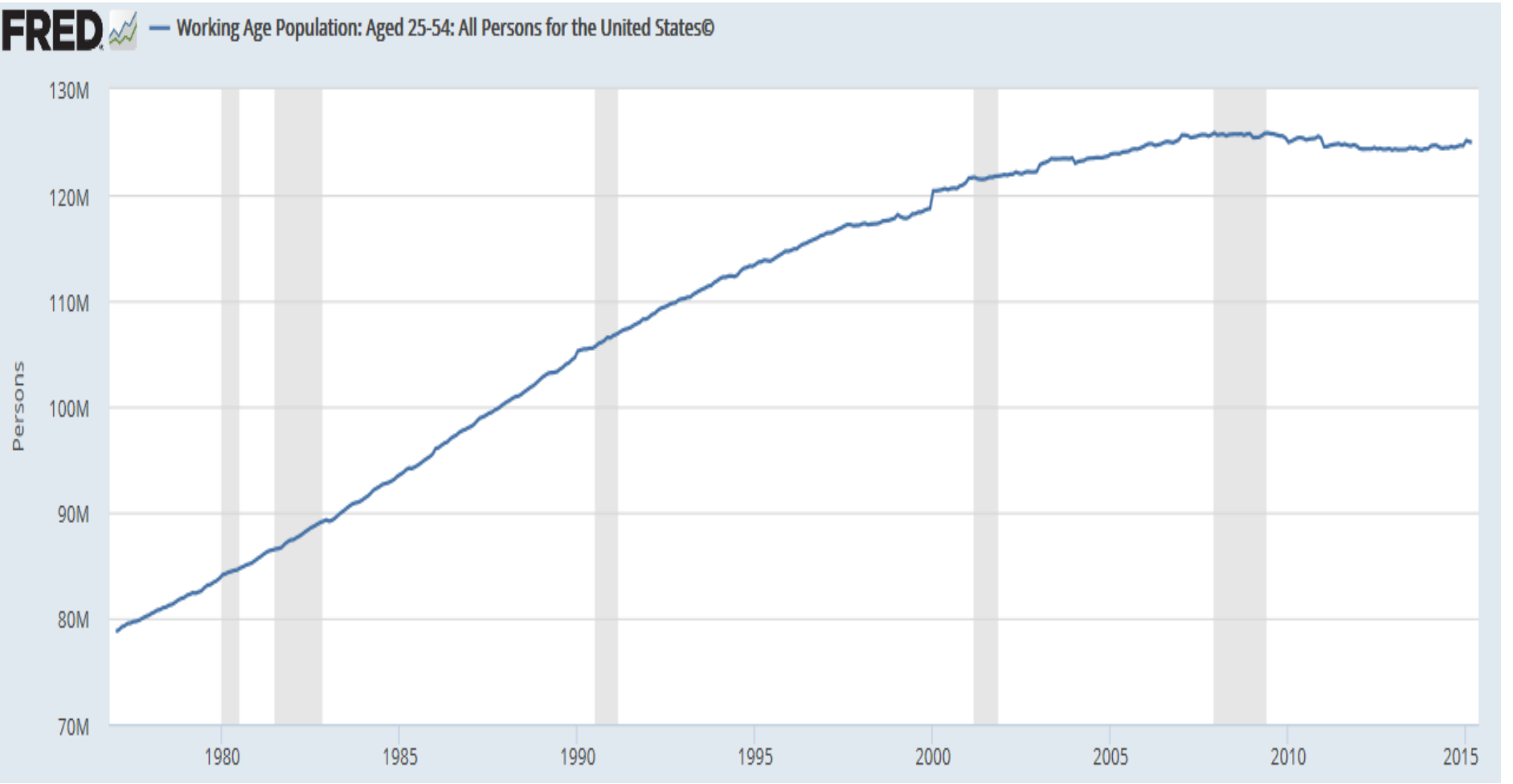


Economy: GDP can only grow as fast as productivity growth and workforce growth. U.S. productivity has fallen from 2.2% 1970 -2009 to 0.7% from 2010-2016Q3 (think deregulation benefits). . . .

Average annual per-capita G.D.P. growth over the preceding 10 years



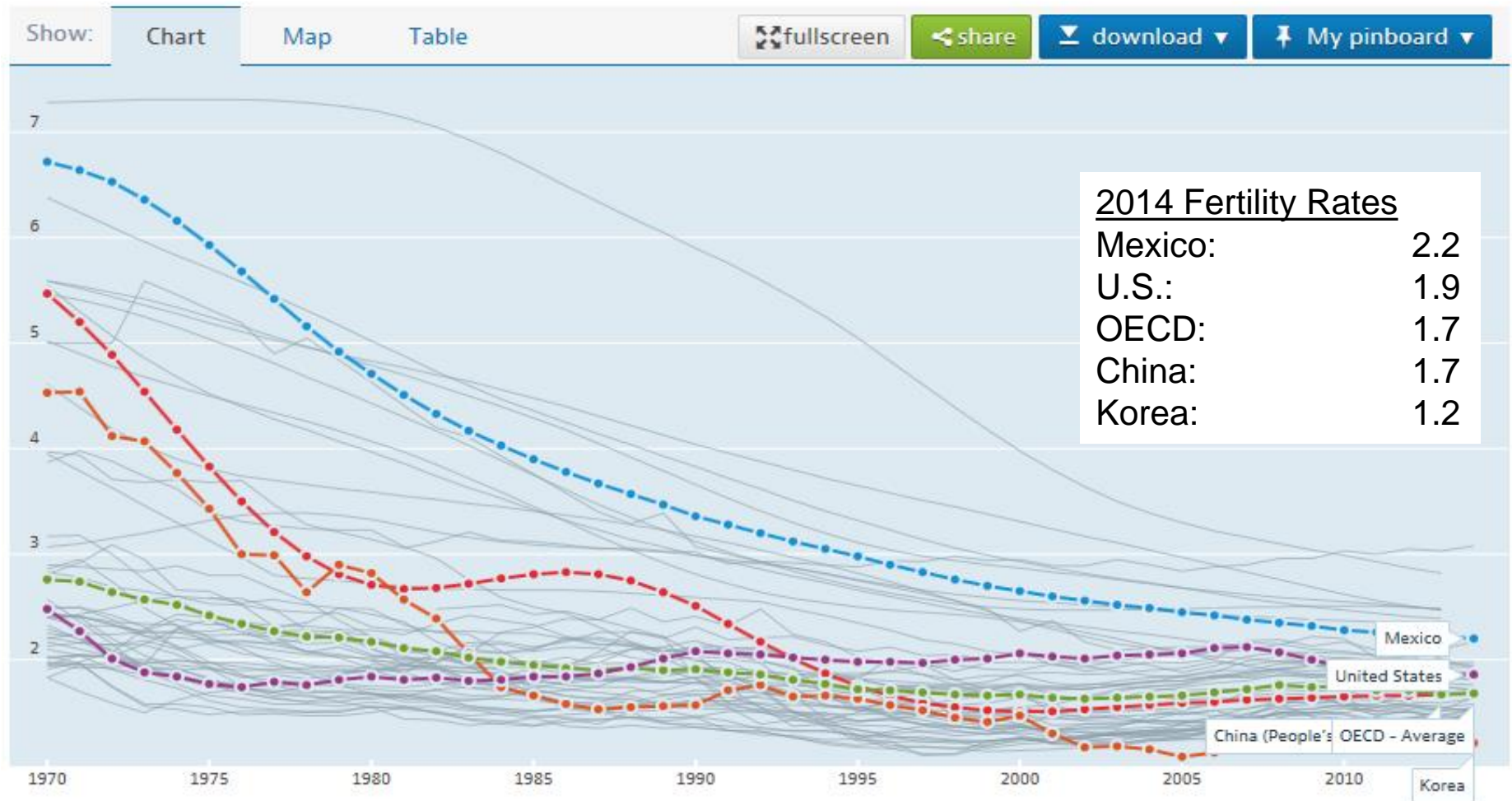
Economy: working aged population has been stagnant since 2006



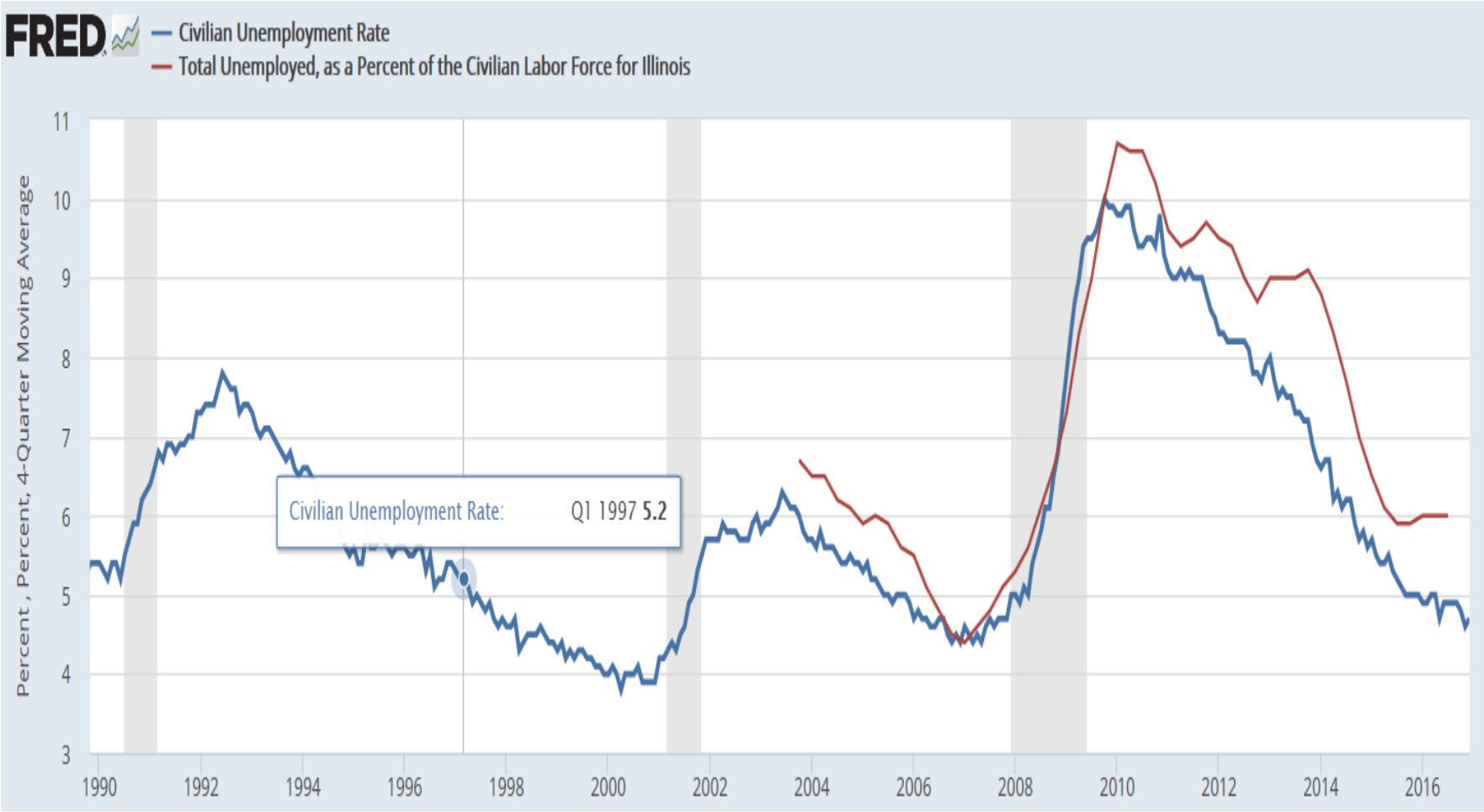
Economy: and fertility rates, children per woman, are below replacement in the 35 OECD Countries

Fertility rates Total, Children/woman, 1970 – 2014

Source: Demographic references



Economy: unemployment is at pre-Great Recession lows



Is the current expansion sustainable?



The Economy: is the economic expansion coming to an end?

Past and Current Expansions

Economic Expansion	Average Length	Cumulative Growth	Annual Growth
Pre – 1990	6.3 years	38%	5.00%
1991-2007	5.6 years	19%	2.80%
Current	7.0 years	16%	2.10%

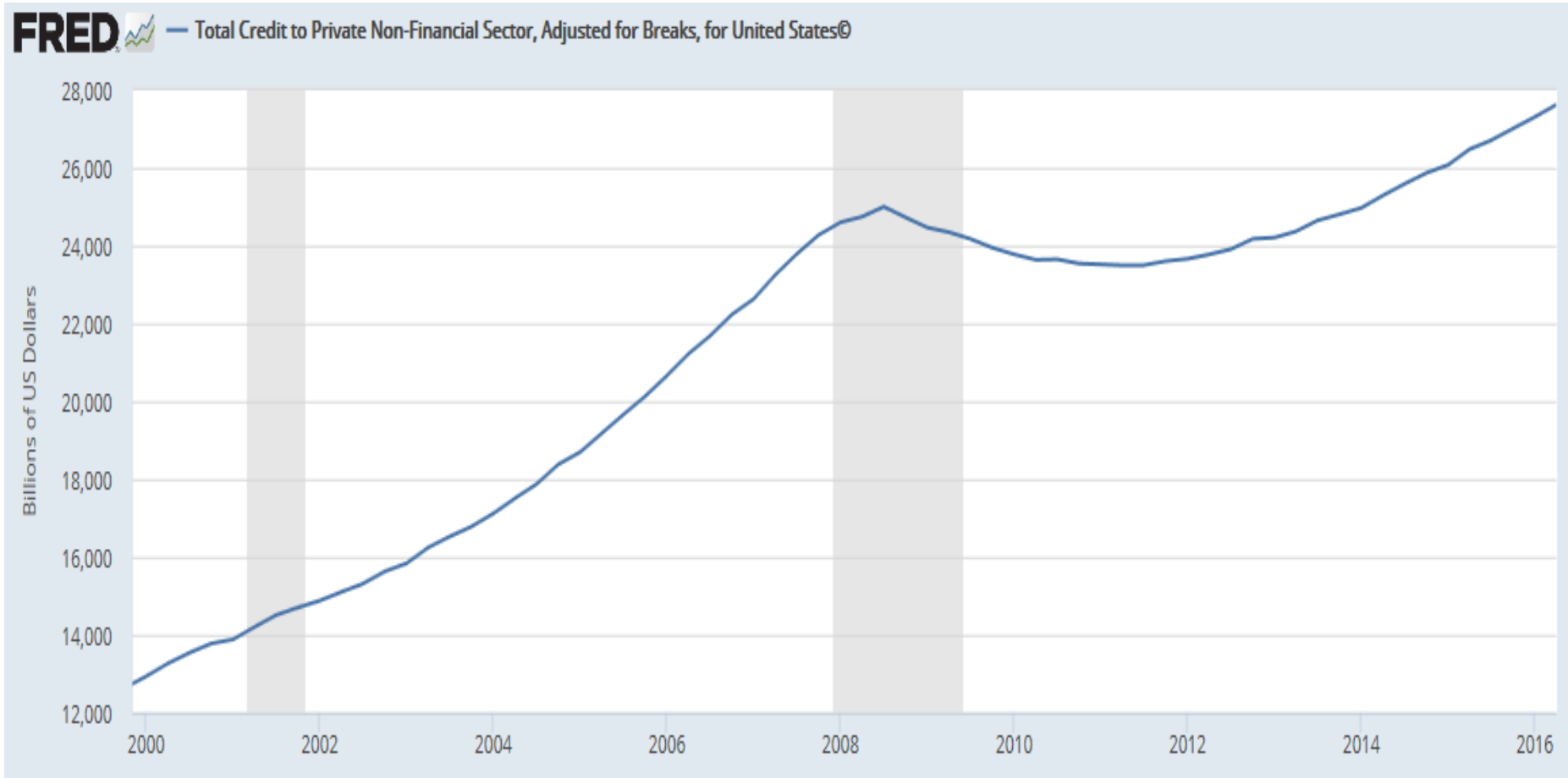
Source: Bureau of Economic Analysis and Marquette University.



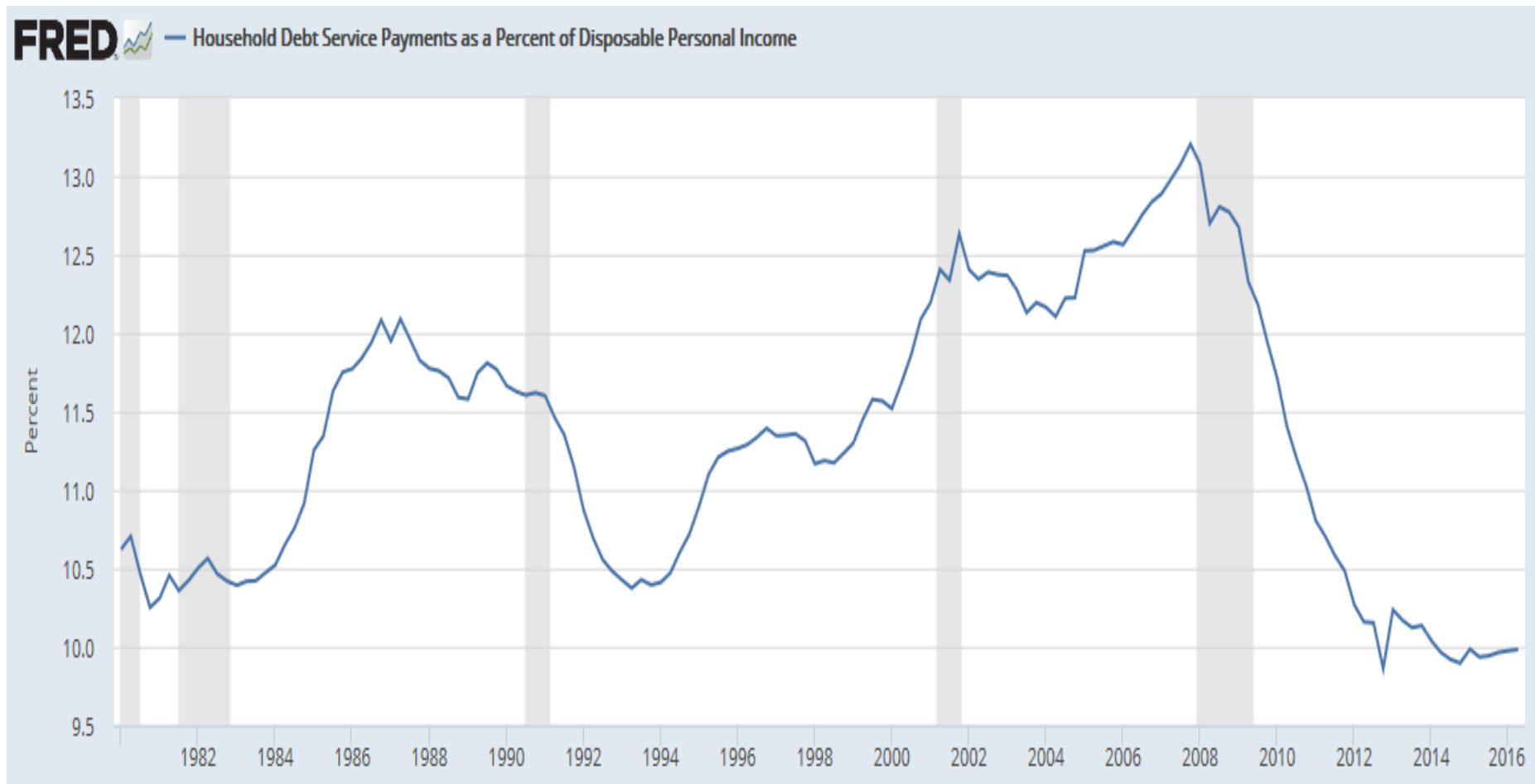
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The Economy: excessive credit led to most past recessions, after almost doubling from 2000-2008, total private credit has grown 10% from 2009-2016



The Economy: households have “dry spending power”



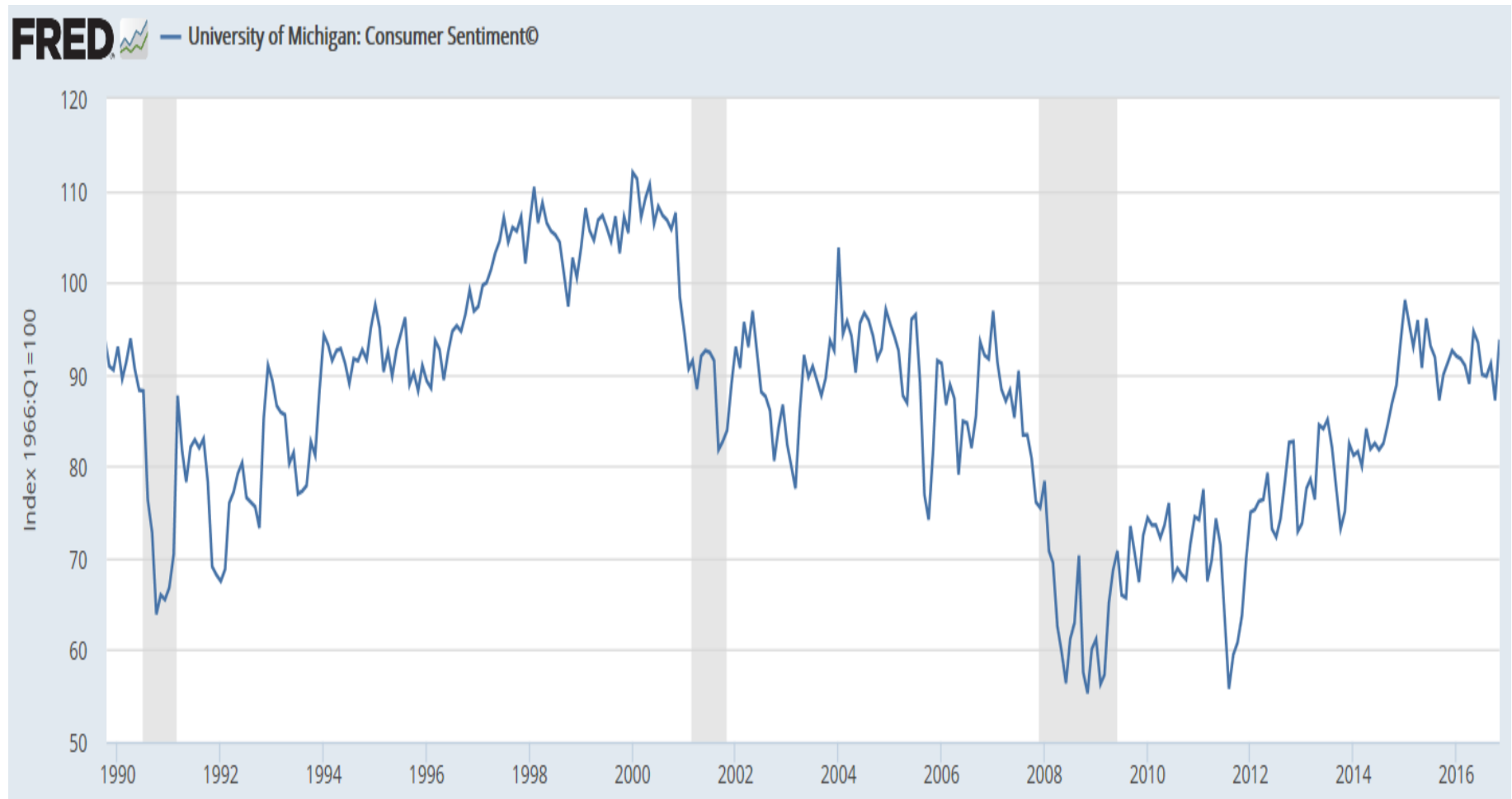
Source: Federal Reserve Economic Data.



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The Economy: and consumers and are feeling positive about their prospects.



Economic summary,

- Prospective Trump deregulation and tax cuts create a “net” bullish business environment
- Have realized a long run of economic growth, but with modest total growth
- Economy does not have the trappings of excess debt, which leads most recessions
- No domestic-caused recession in the coming years, exception external cause. (i.e. Russia, China, terrorist)



Back to the Classroom



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Back to the classroom

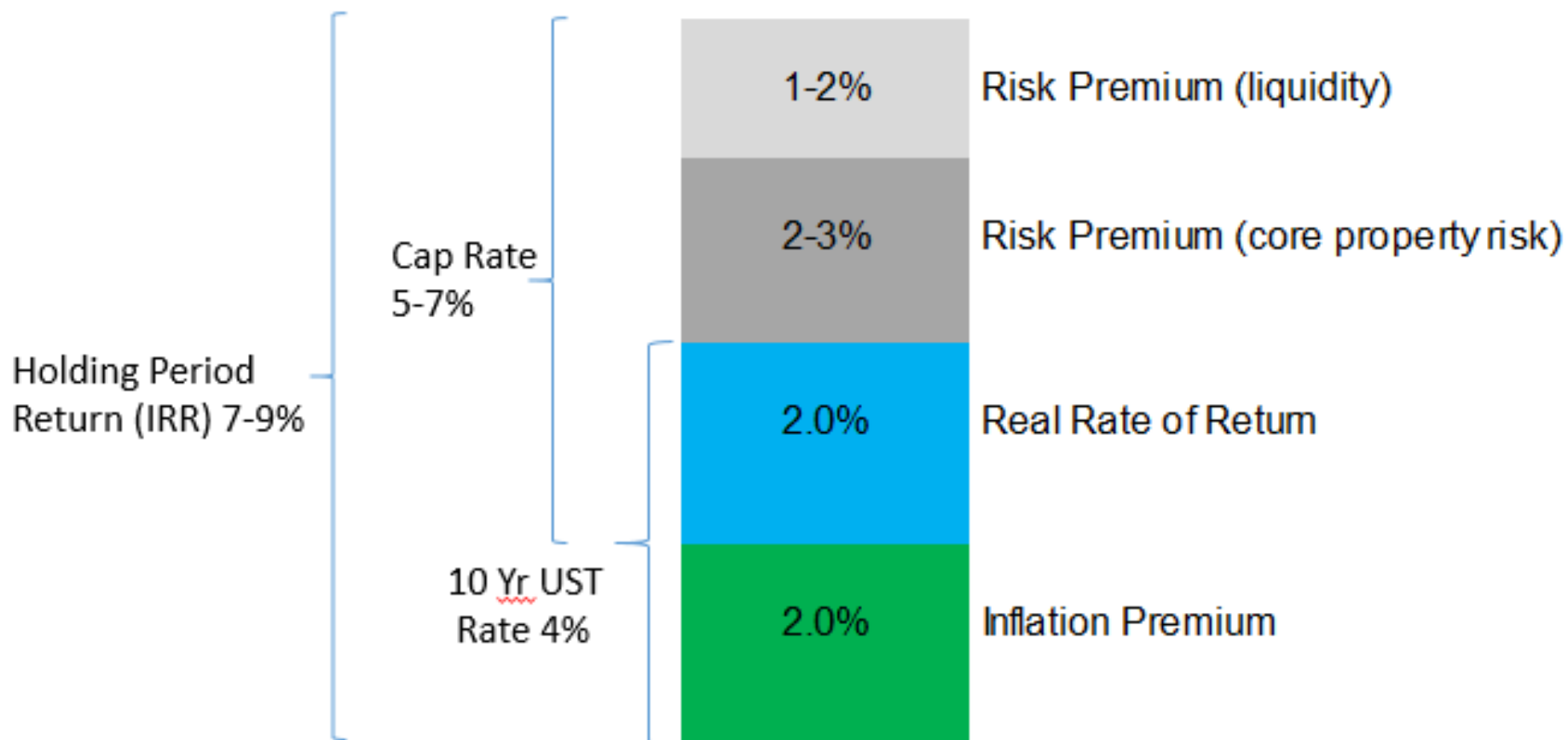
The Cap Rate to 10-Year UST Spread (1982-2016Q2)

- Average: 2.3%
- 2016Q2: 3.5%
- Current (est): 2.9%

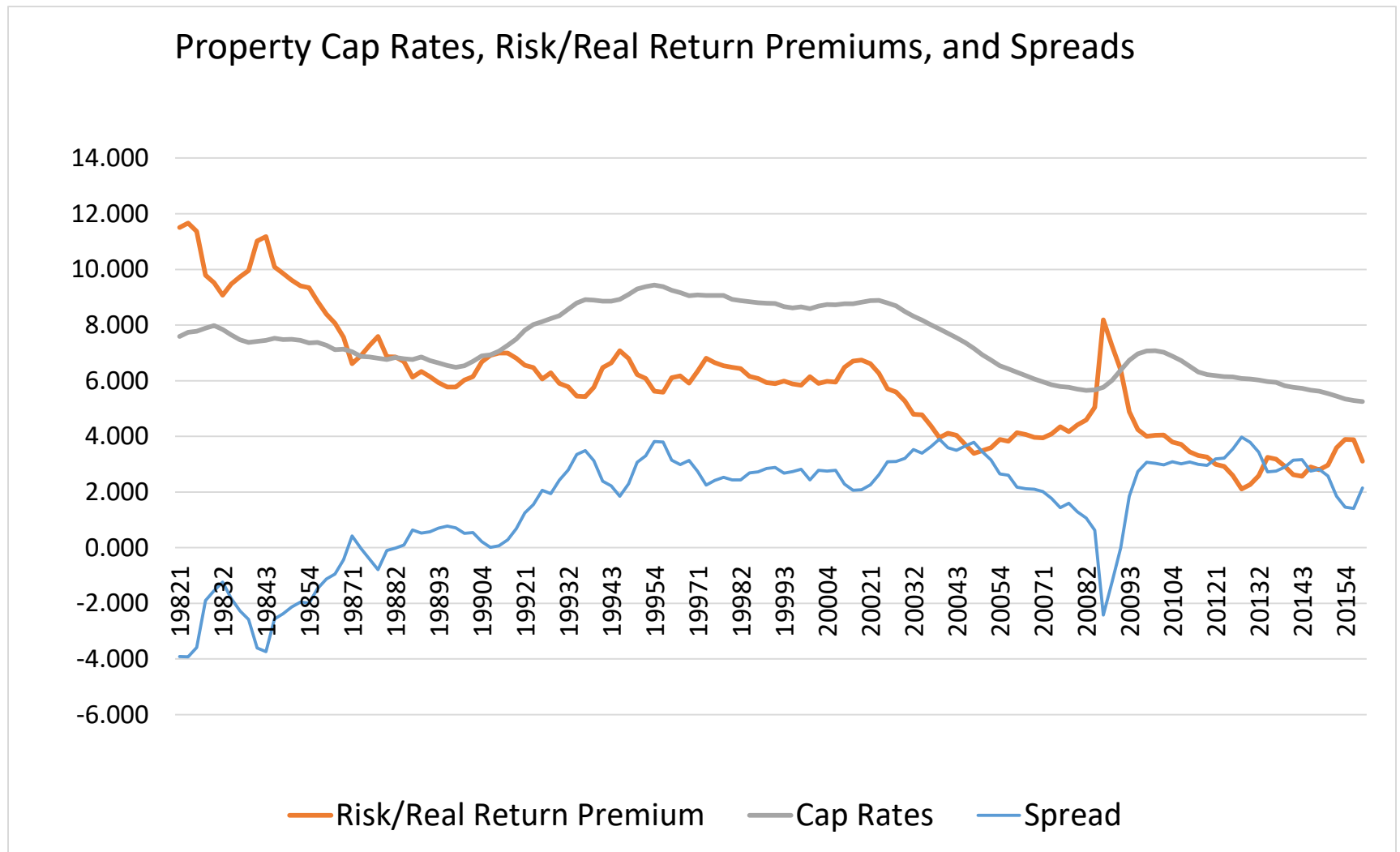


Back the classroom $IRR = \text{Cap Rate} + \text{Growth Rate}$

Investment Return Components



Back to the classroom:



Back to the classroom

Inflation-Adjusted Holding Period Returns (IRR) for NCREIF Investments

Investment Acquisition Year	Investment Holding Period		
	8 Years	10 Years	12 Years
1982-1988 (negative spread)	1.0%	2.3%	3.3%
1989-1992 (no spread)	3.2%	4.8%	5.1%
1993-2006 (positive spread)*	7.0%	7.7%	7.7%
2007-2008 (no spread)	4.9%	Not available	Not available
Correlation between Cap Rate-to-Risk/Real Premium and Holding Period Returns	69.2%	80.5%	87.0%



Back to the classroom

So why does it matter? The potential impact of UST and BBB bond movement on cap rates

- 10-year U.S.T.s are up 50 bps
- BBB bond risk spreads are down 15 bps



Capital Flows and Rates

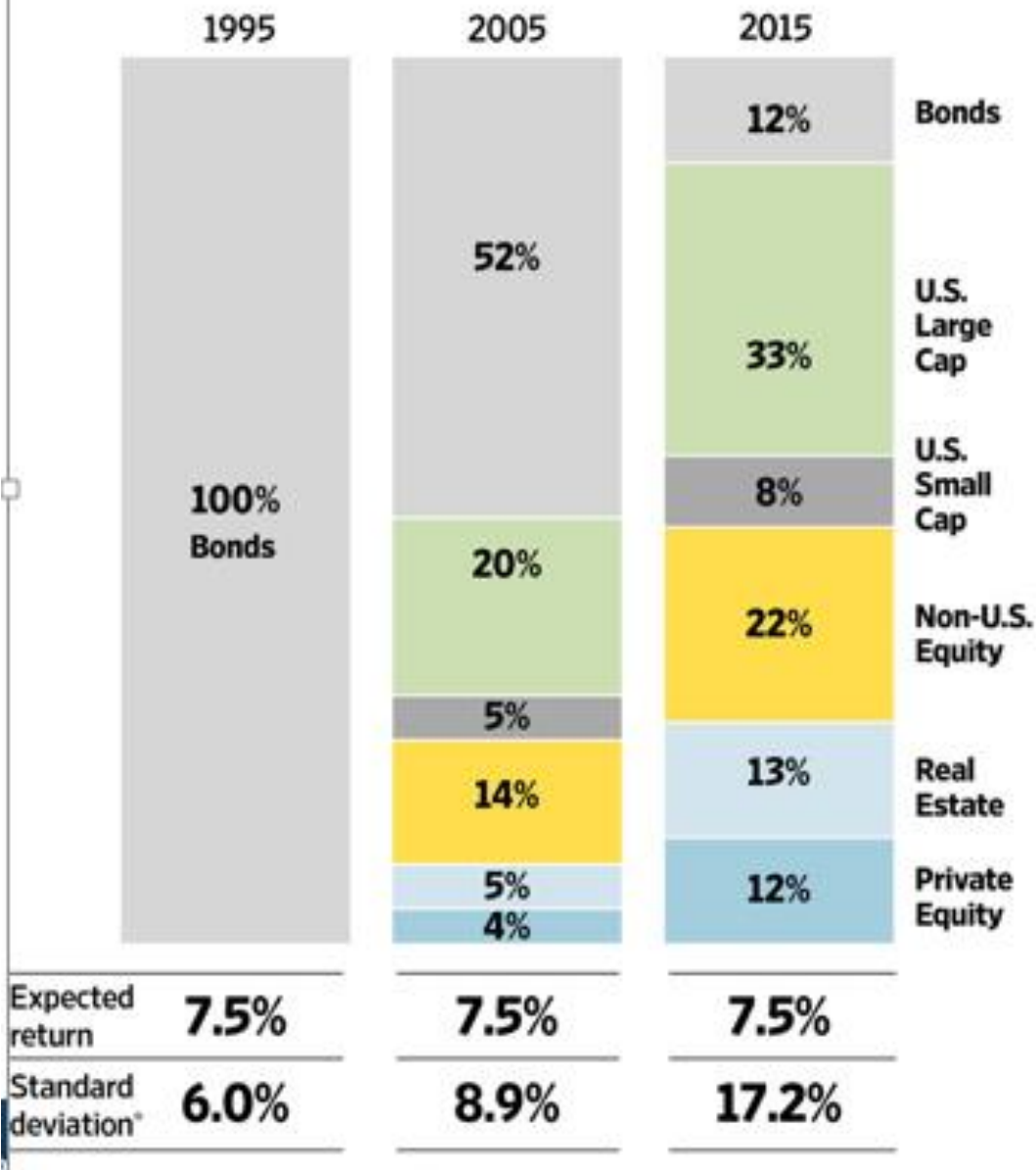


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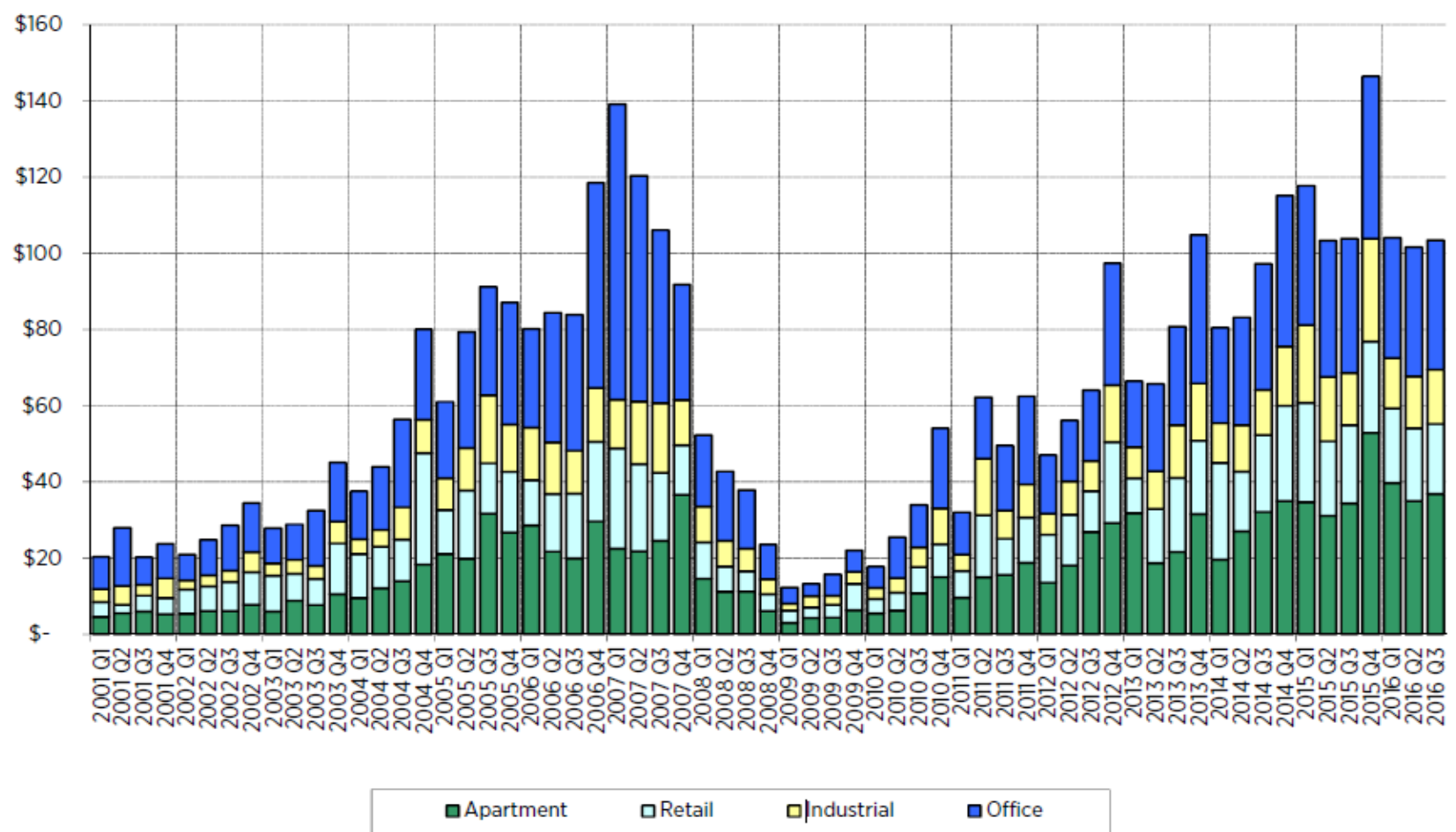
Capital
Flows:
The current
and coming
push for
yield

Estimates of what investors needed to earn 7.5%

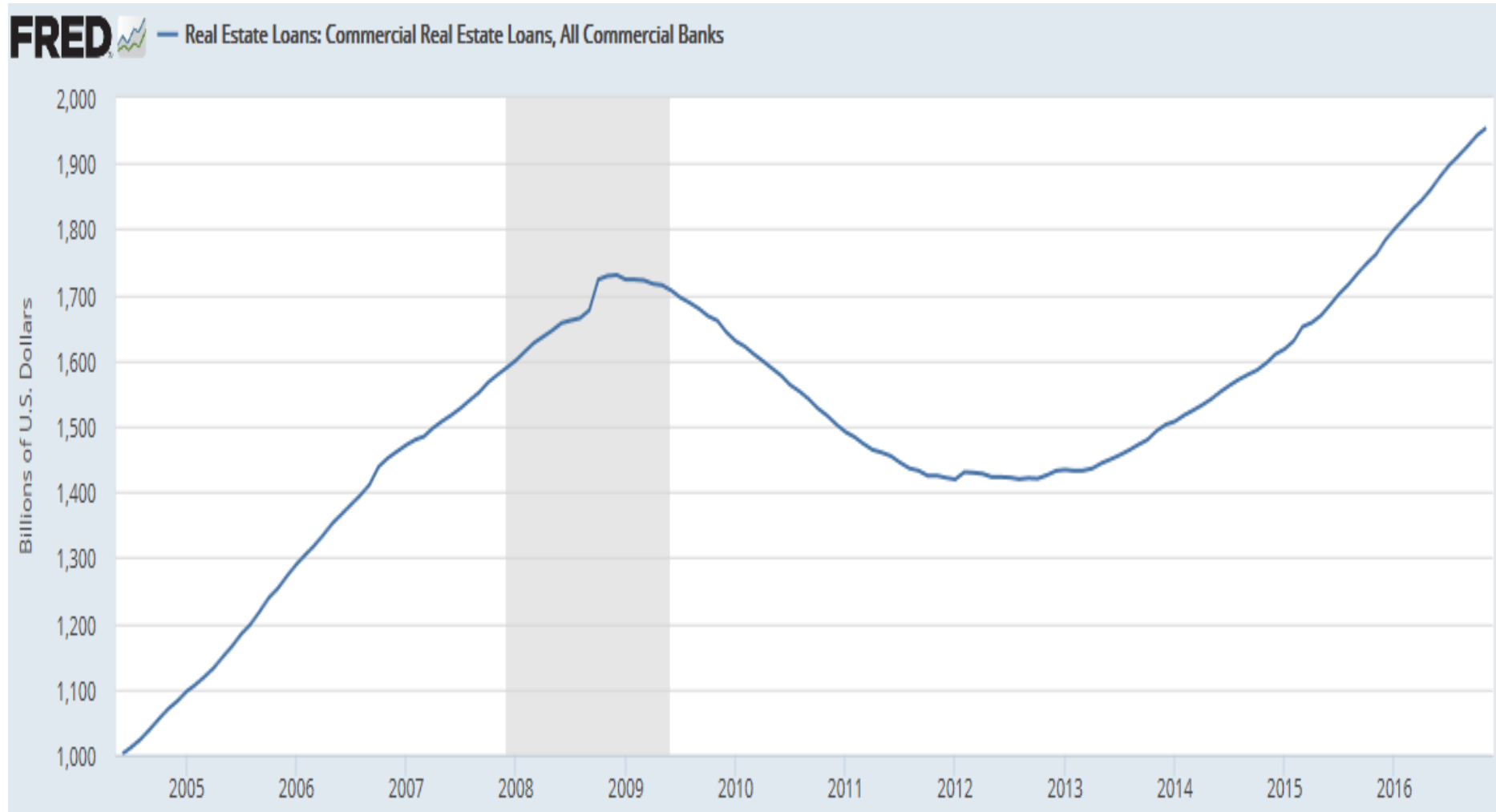


Capital Flows: Commercial real estate transaction volume remains high

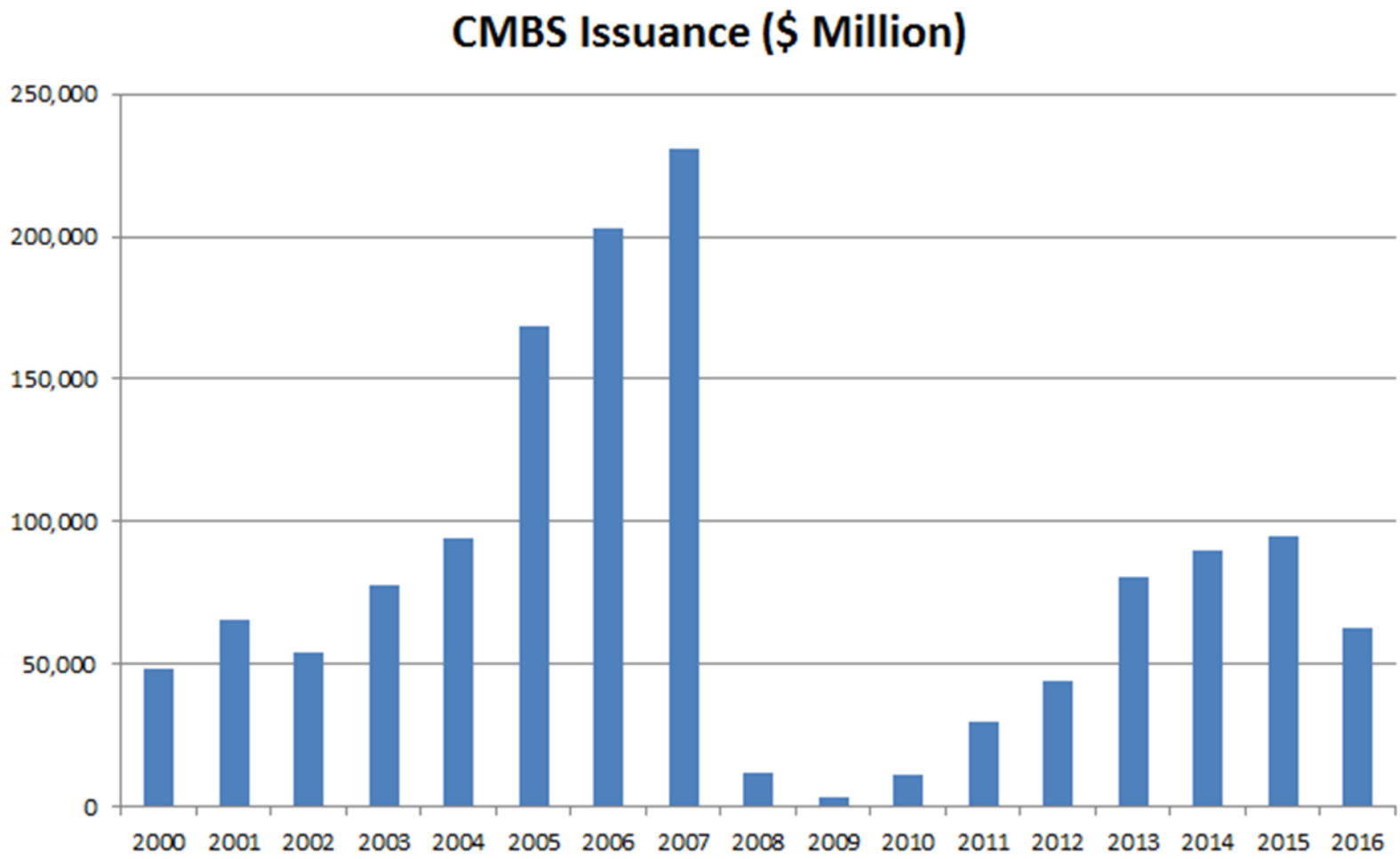
QUARTERLY SALES OF LARGER (\$2.5 MILLION+) COMMERCIAL/MULTIFAMILY PROPERTIES



Capital Flows: commercial real estate bank lending has grown by a 1.8% annual rate since 2009 (6.8% since the bottom of the cycle), however

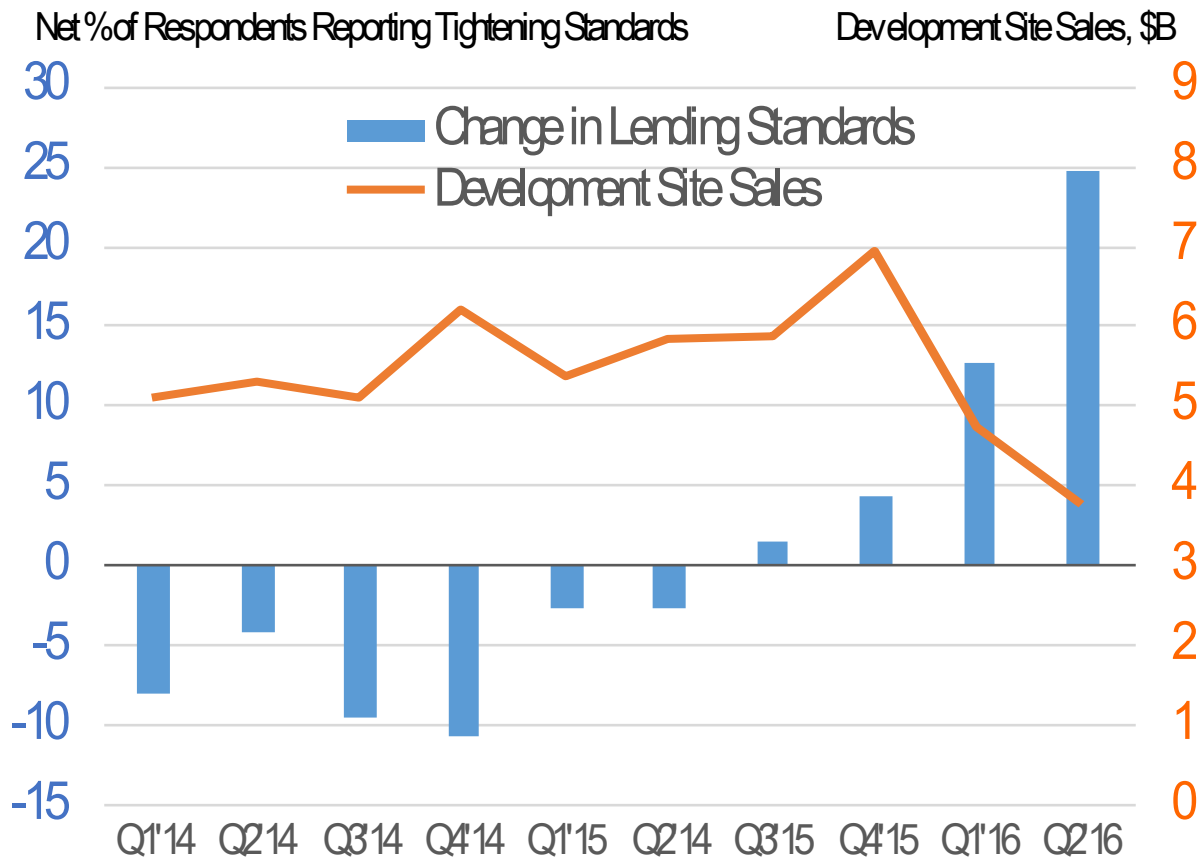


Capital Flows: New Loan Volume for CMBS and Insurance Companies



Capital Flows: lenders are tightening standards and development land sales are down

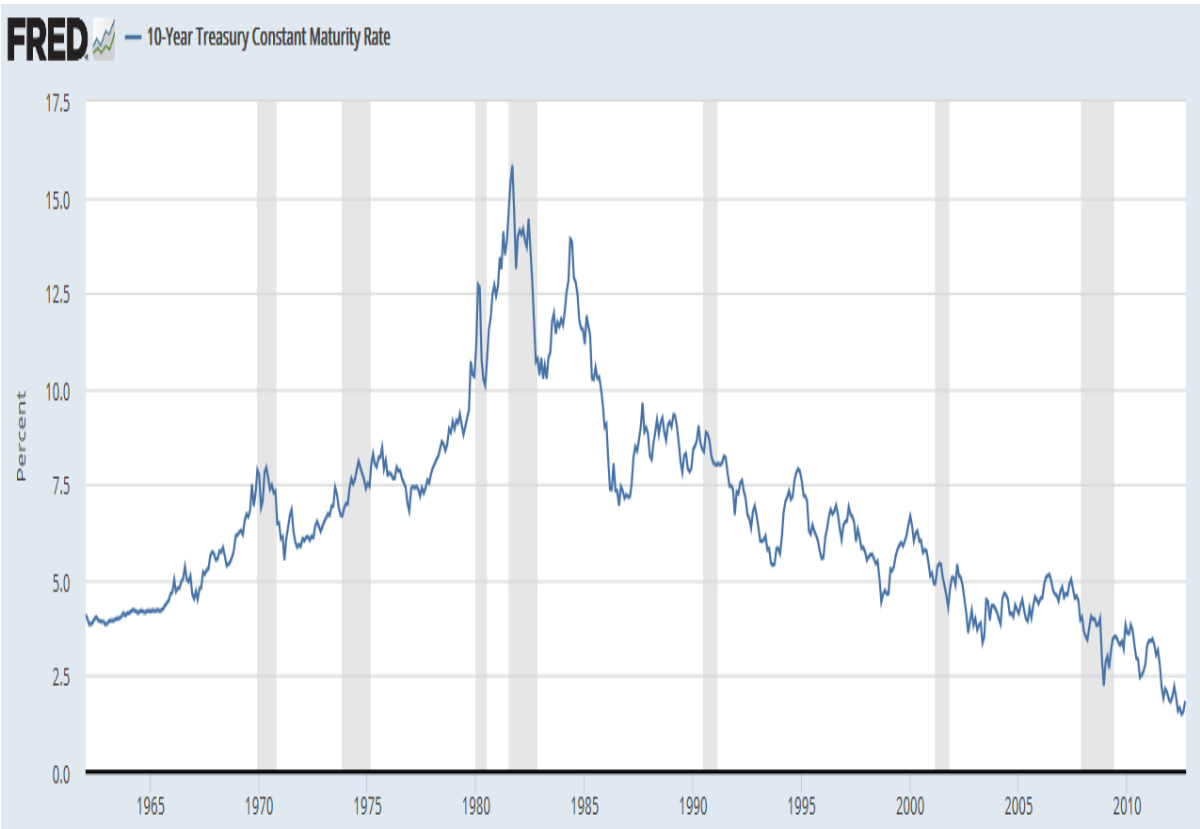
**Development Site Sales Slows Construction
Lending Standards Tighten**



Source: Federal Reserve Bank, Senior Loan Officer Survey



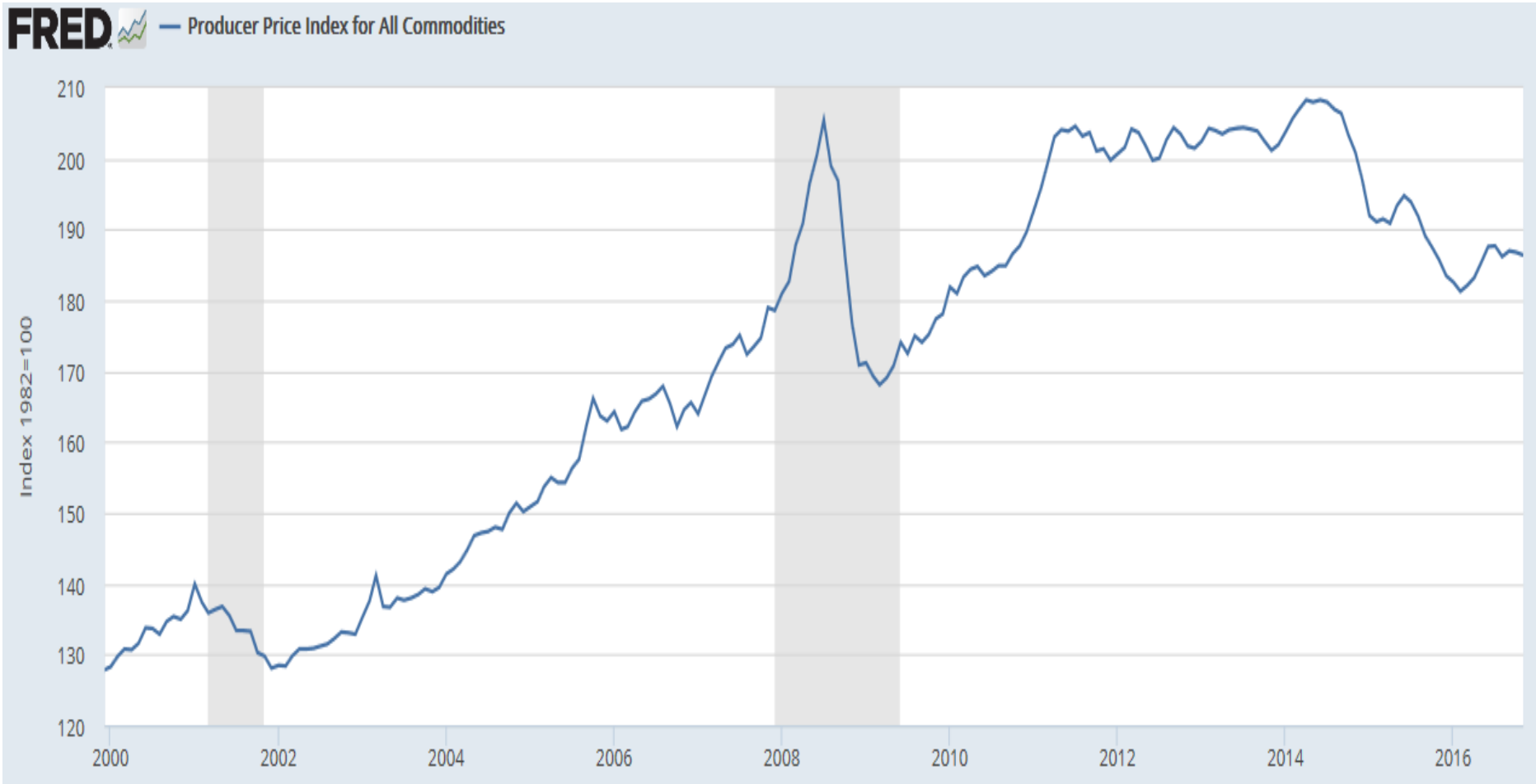
Rates: The base rate 10 Year U.S. Treasury



Rates: wage inflation is upon us



Rates: commodity prices inflation remain stable, growing at a 2.2% rate since 2000



Capital Markets and Rates Summary

- Investor capital, of all stripes, will yield seek as bond returns wither
- Real estate transaction volume will therefore stays strong
- Bank lending will be more of a development and investment governor
- Rates are difficult to predict, wage inflation will be broadly seen



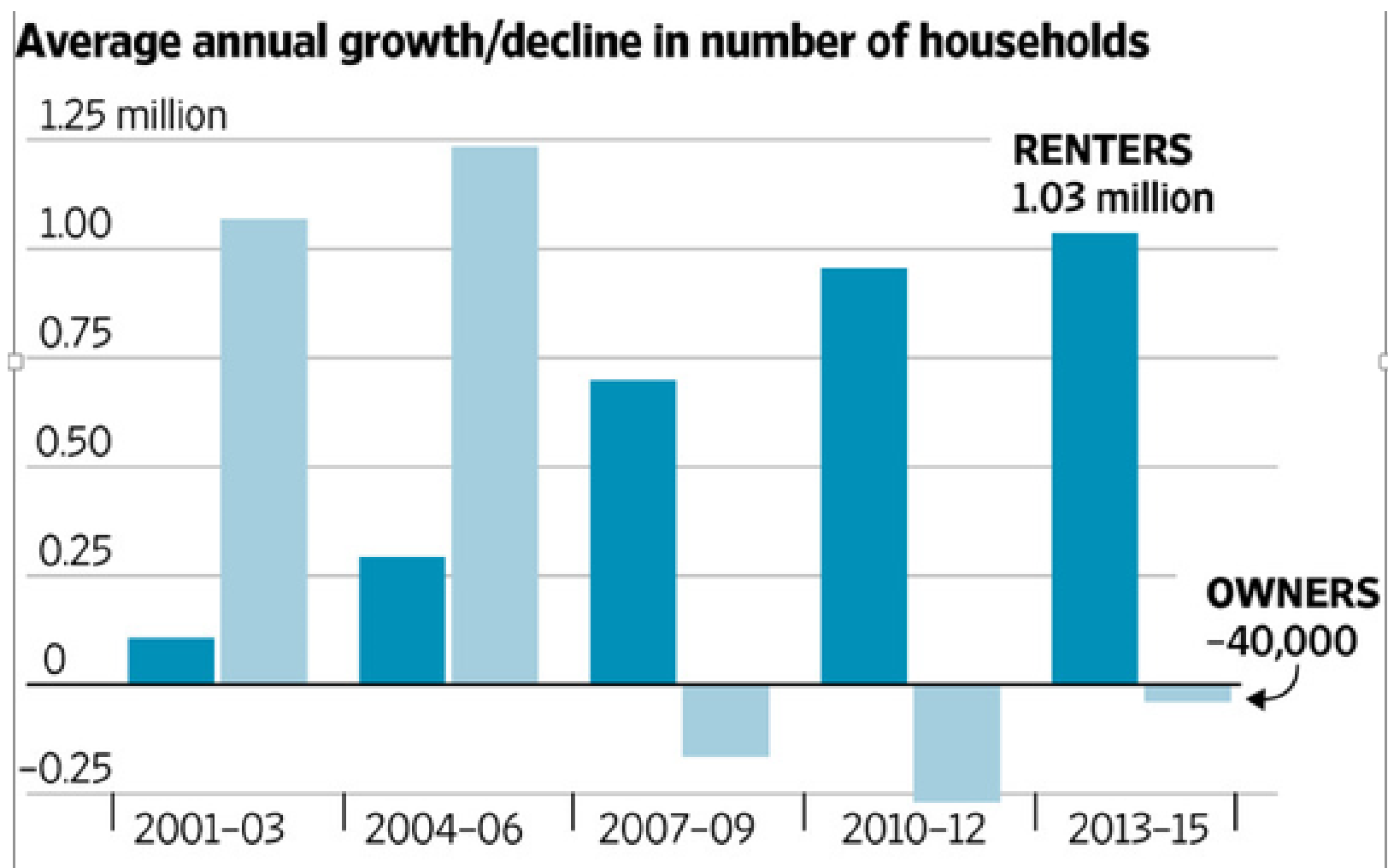
The Space Markets (in brief)



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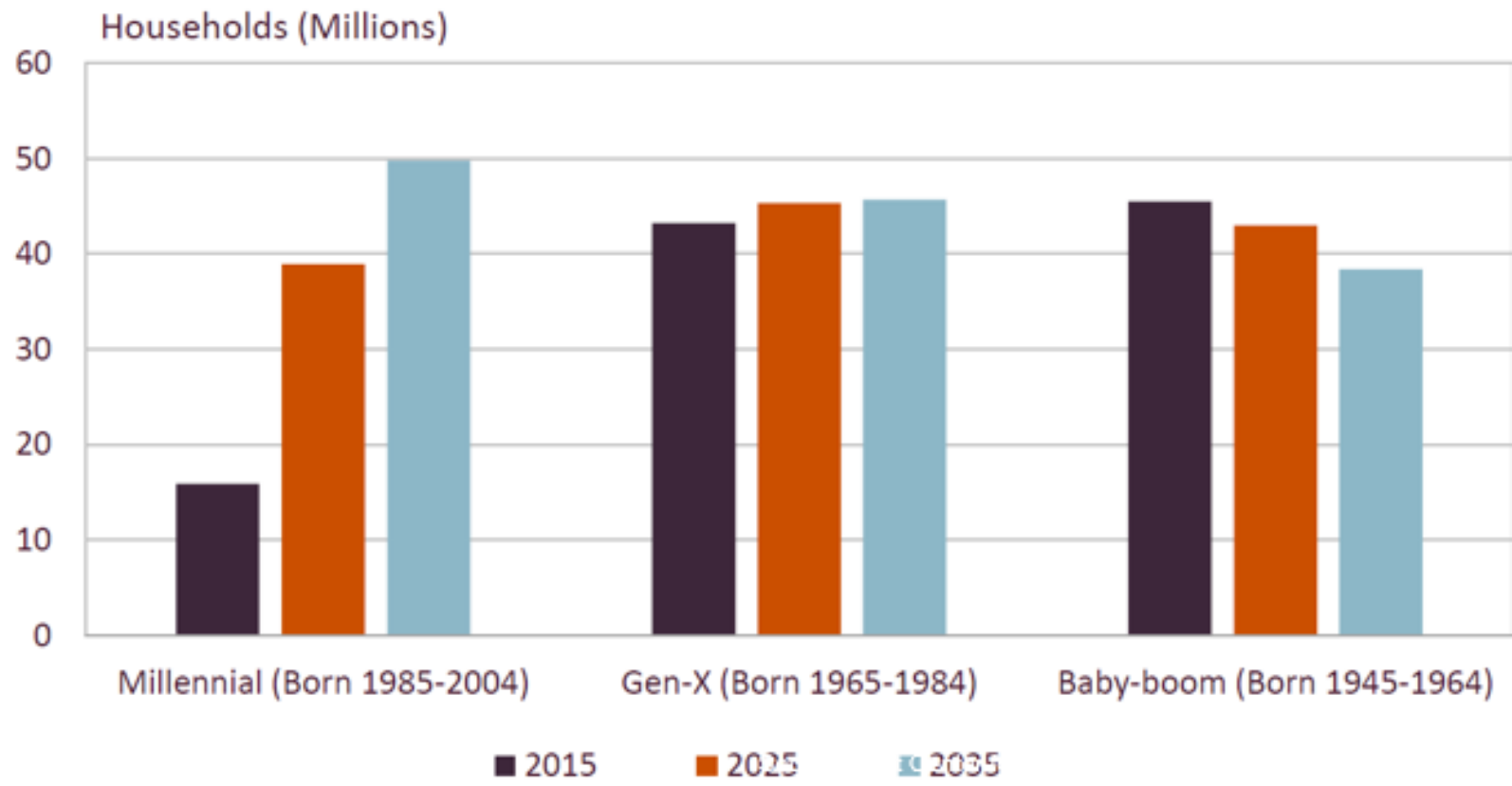
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Space Markets: Owner-occupied and renter housing



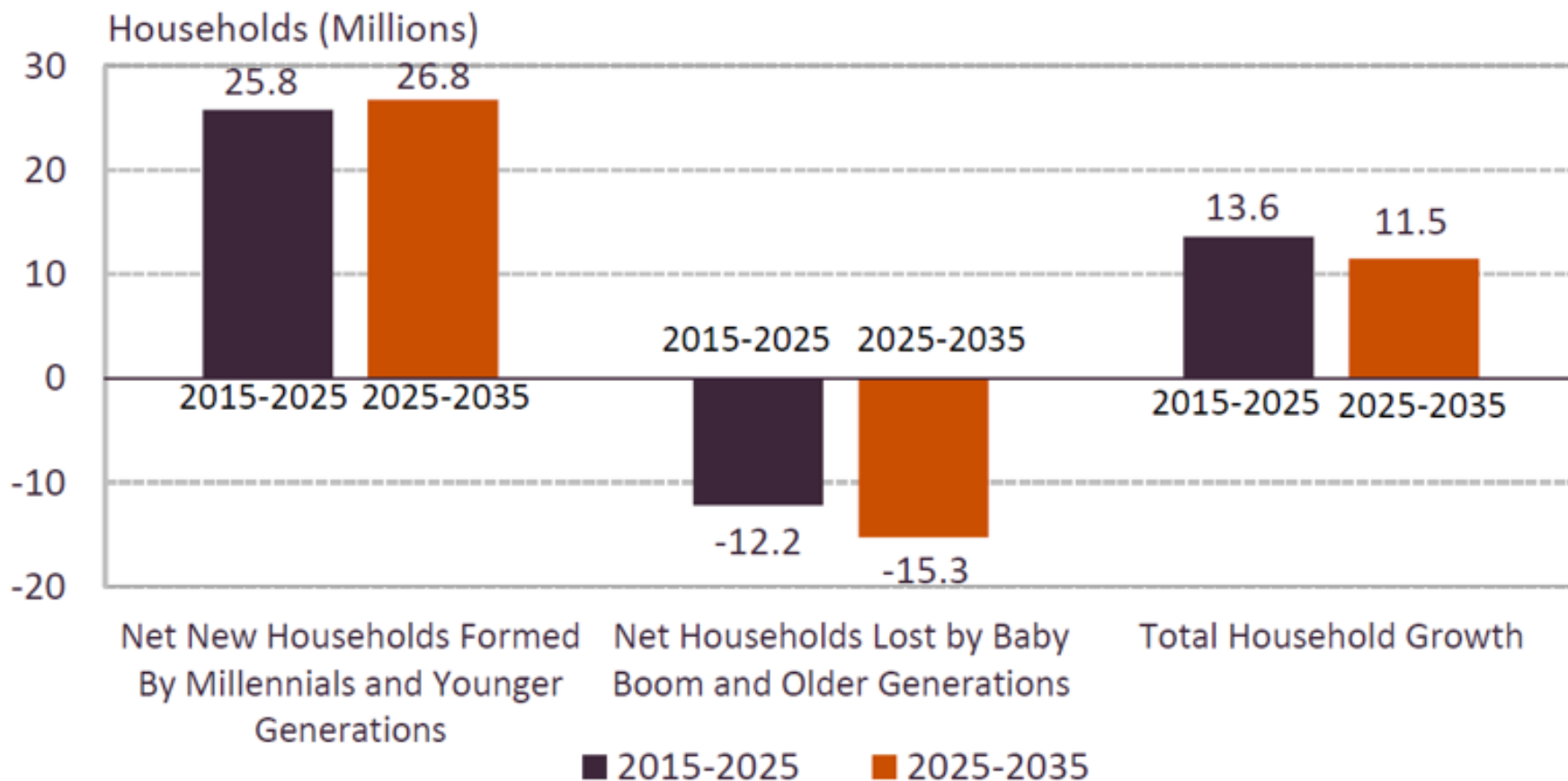
Space Markets: Millennials will form 23 million new households, while household Silent Generation dissolutions will be small

Projected Change in Households by Cohort 2015-2035



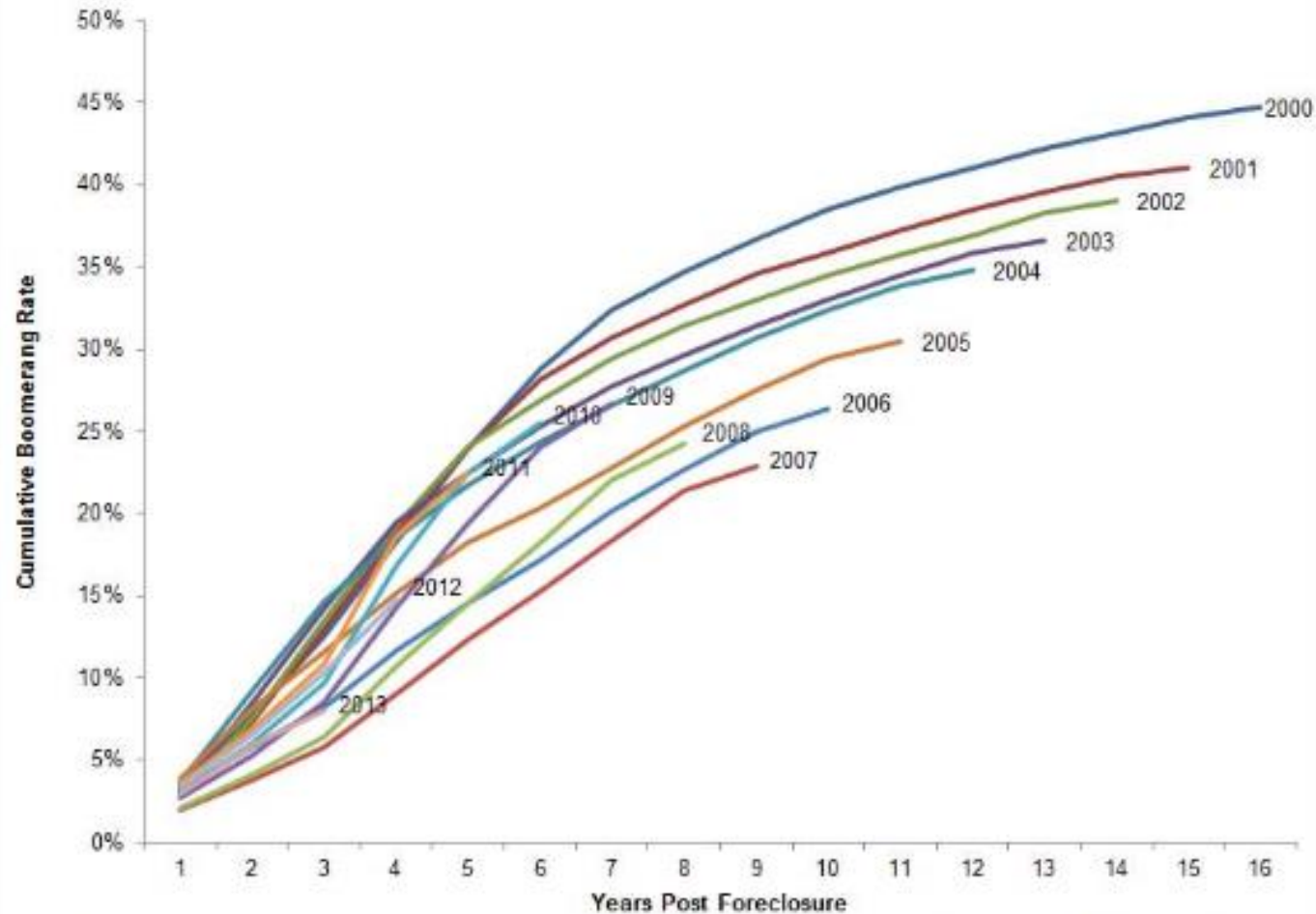
Space Markets: 1.36 million new households per annum are projected for the coming decade, a 75% increase over the previous decade

Projected Household Growth 2015-2035



Source: 2016 JCHS Household Projections.

Figure 1: Less than Half of Boomerang Buyers Return, Lower More Recently
Cumulative Boomerang Buyer Rates by Foreclosure Vintage



Source: CoreLogic

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Housing:
approximately
35% of
foreclosed
homeowners
purchase again
10 years later.
Corelogic
estimates 9.6
million
foreclosures
2005Q2-2015Q1
. . . .

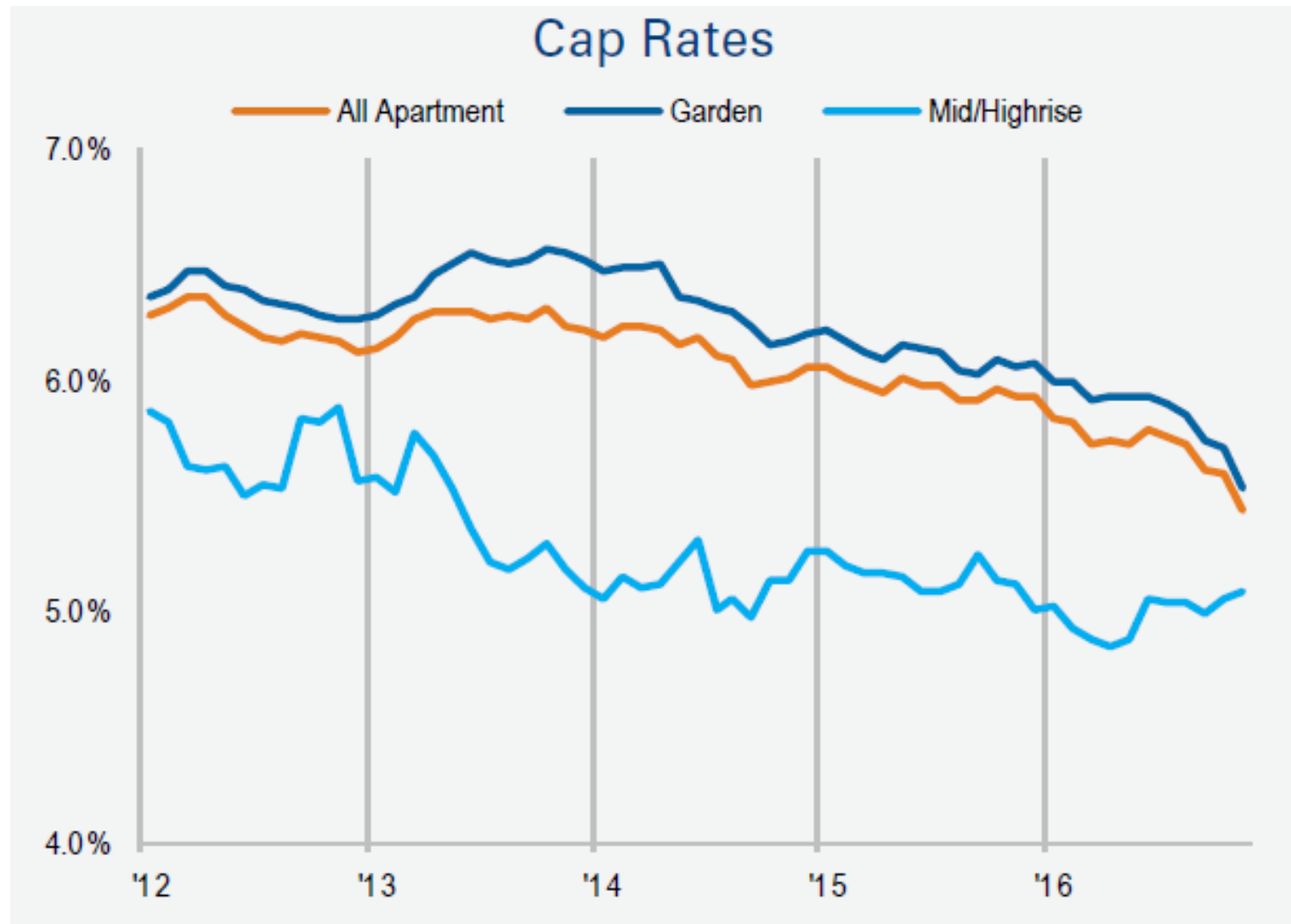
Source: CoreLogic, Homeowner Mobility and Migration Trends Mobility Down By a Third Over Last Three Decades and State-to-State Migration at 15-Year Lows, [Kristine Yao](#), November 10, 2016.



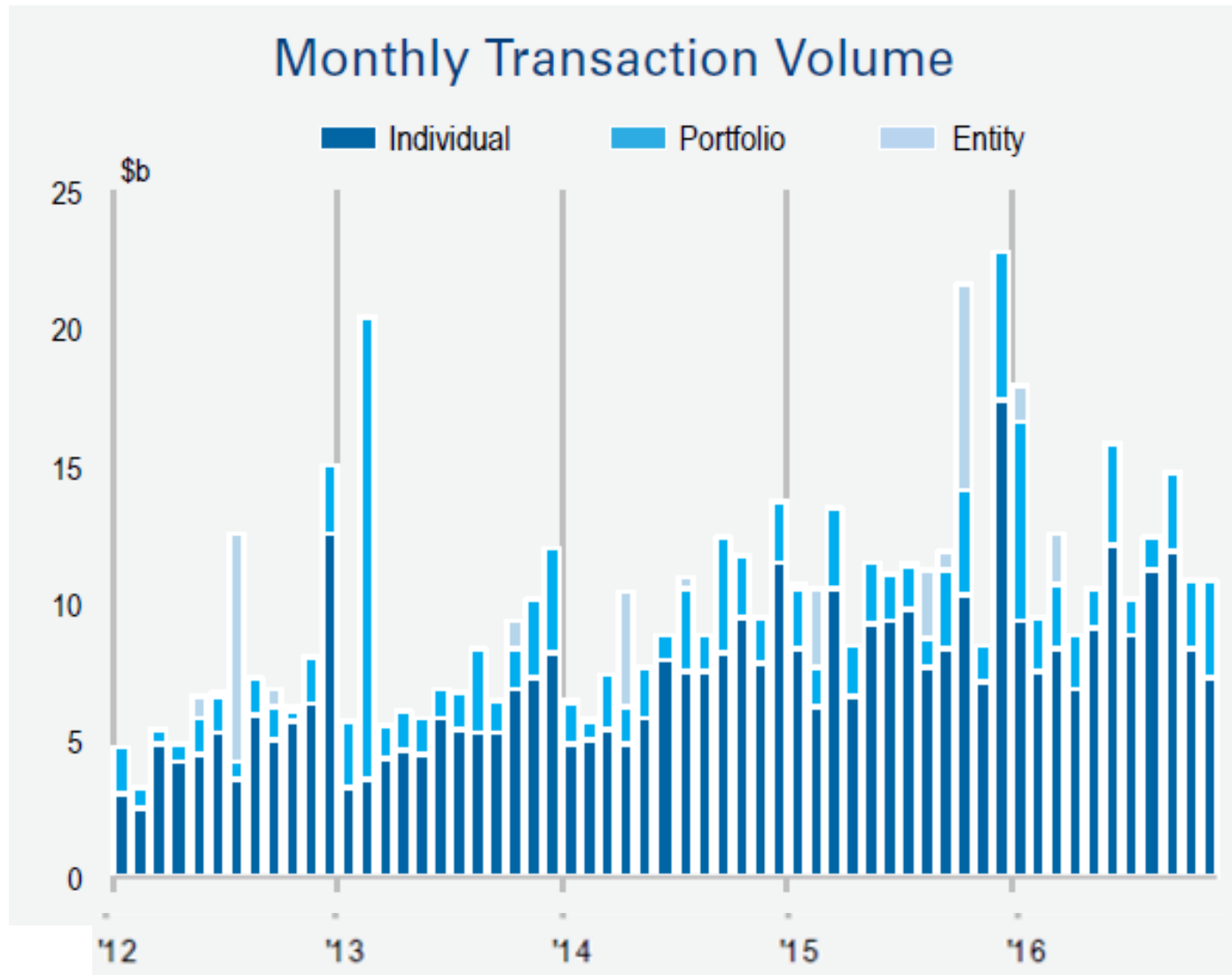
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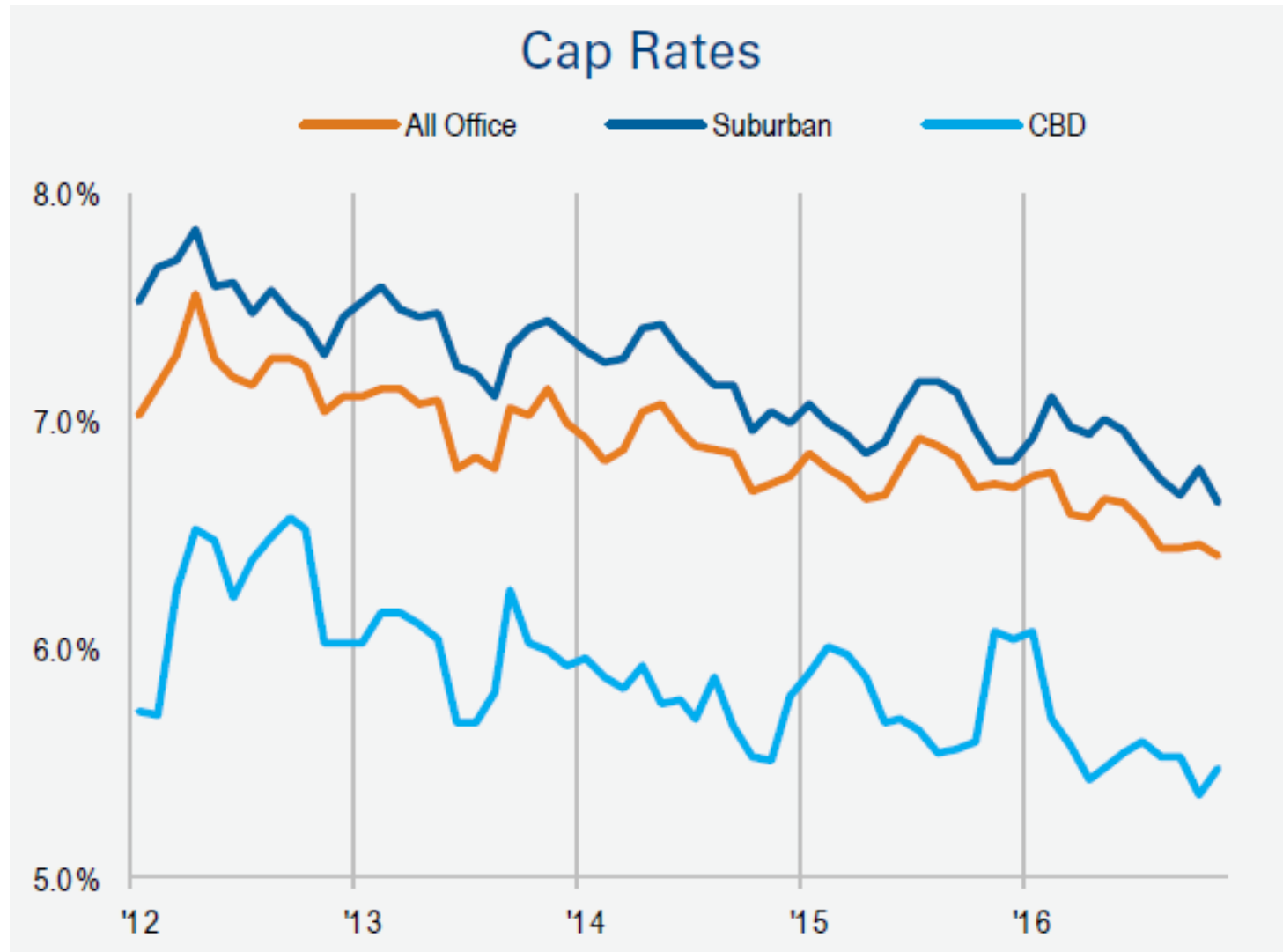
Space Markets: Apartment cap rates continue to show strength



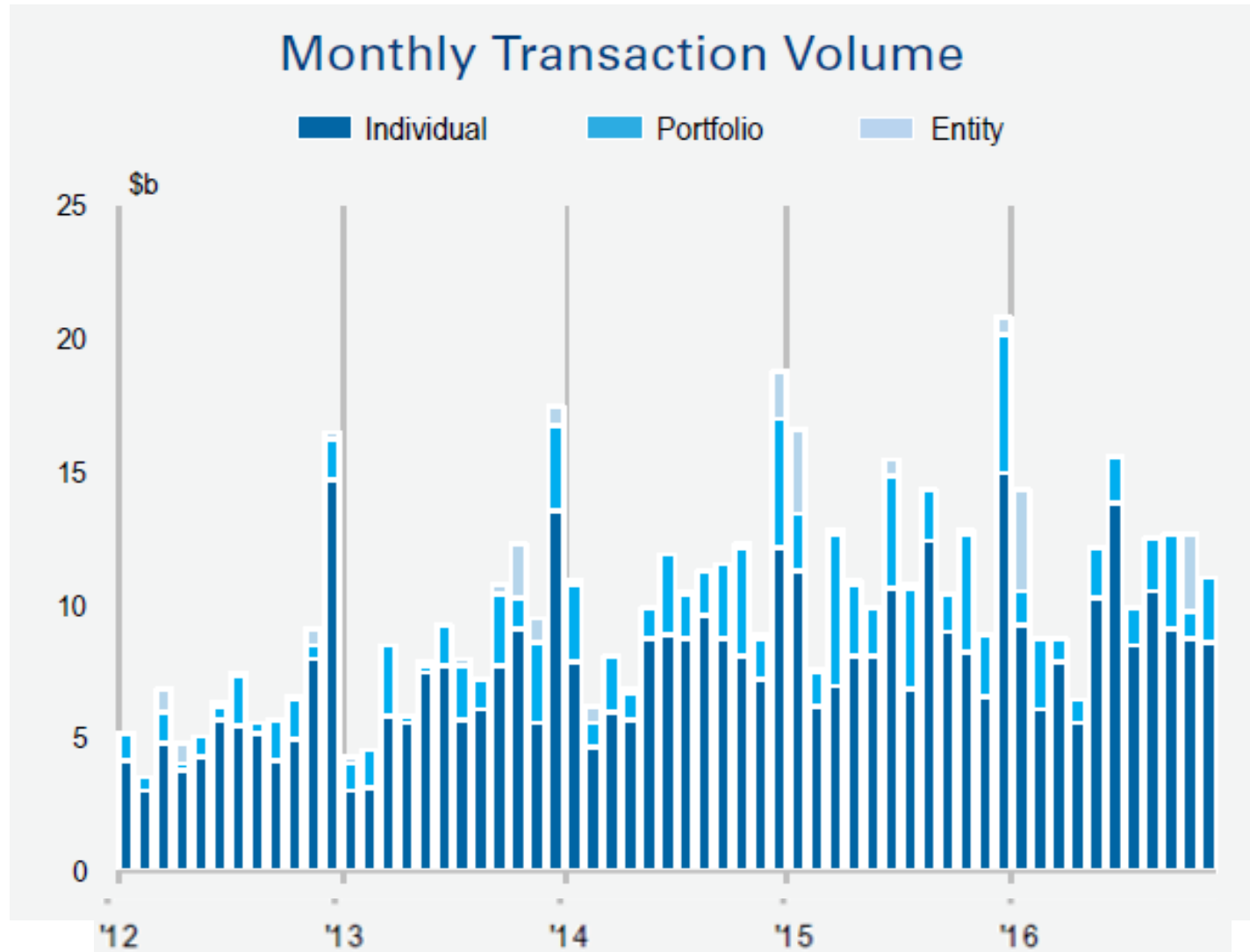
Space Markets: Year-over-year apartment transaction volume is up 28% in November



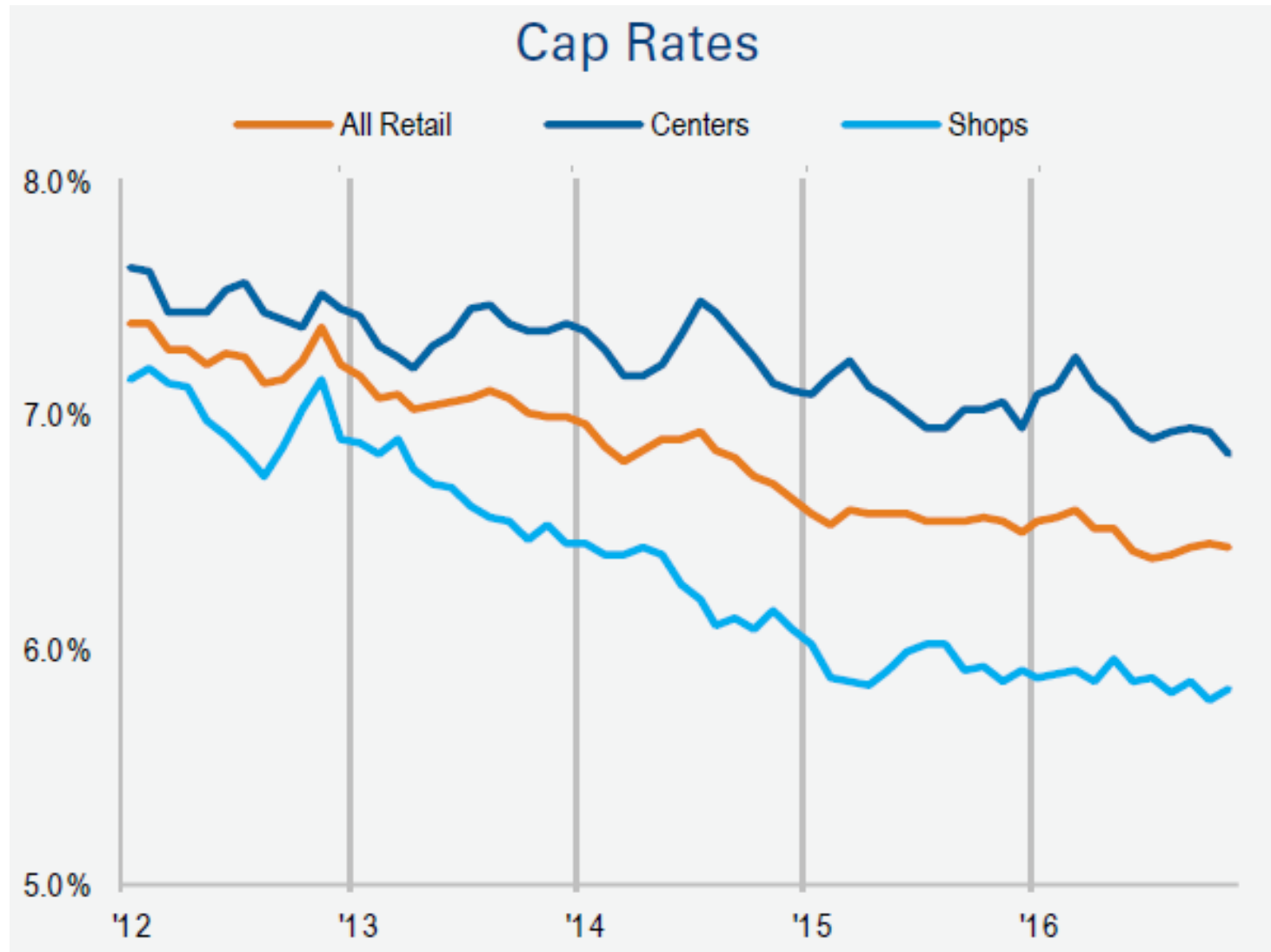
Space Markets: Office cap rates march lower



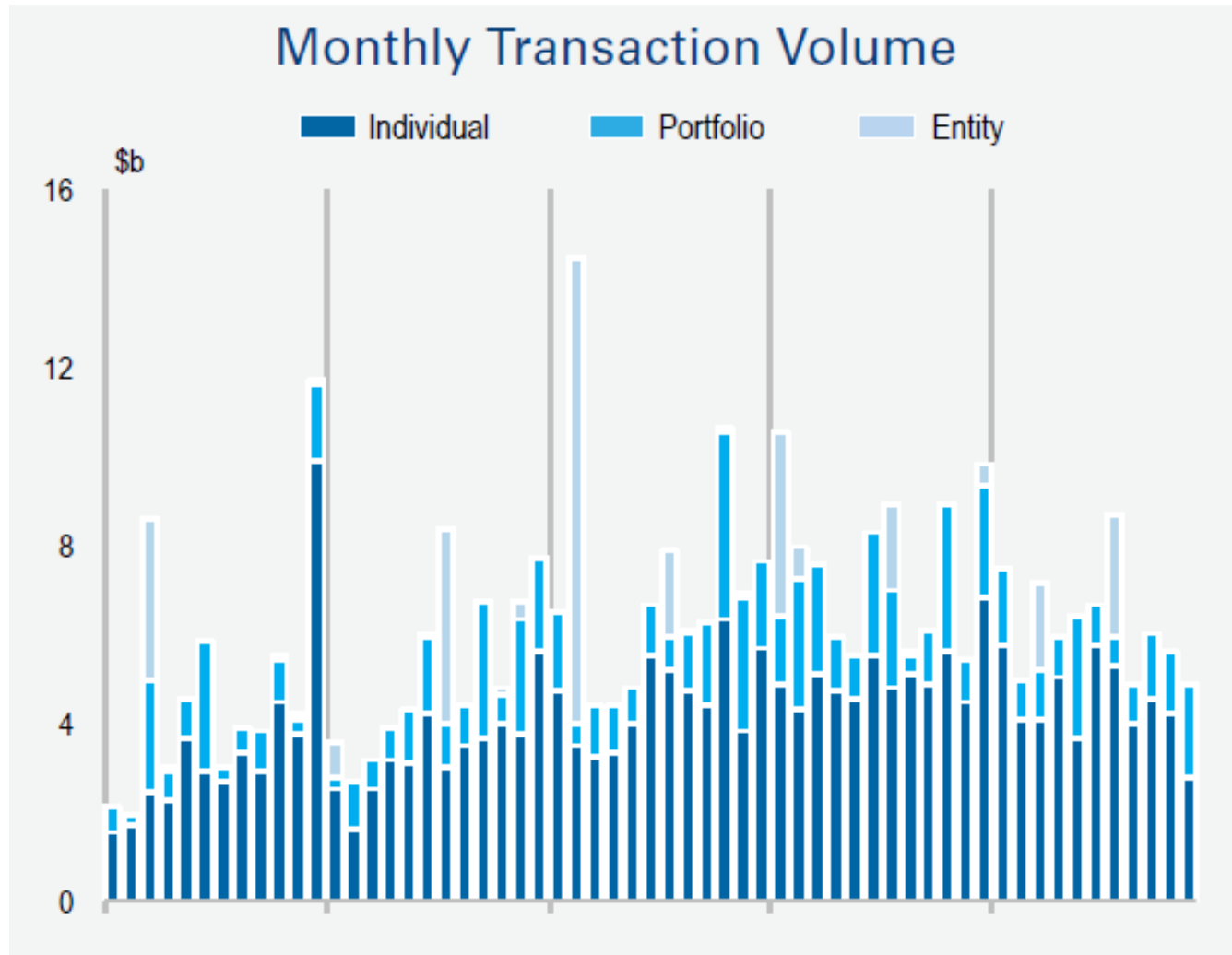
Space Markets: Year-over-year office transaction volume is up 25% in November



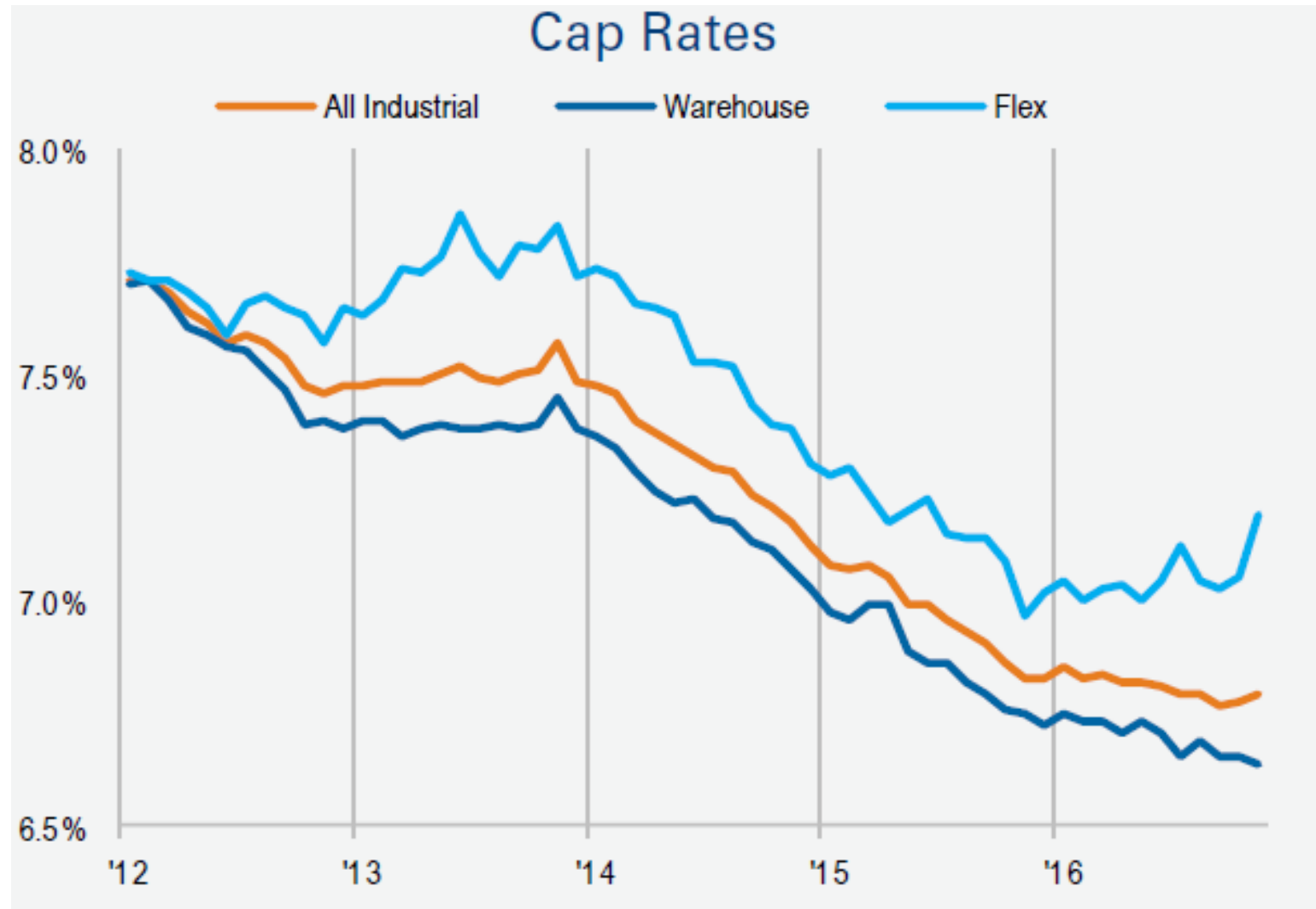
Space Markets: Retail cap rates appear to be stabilizing



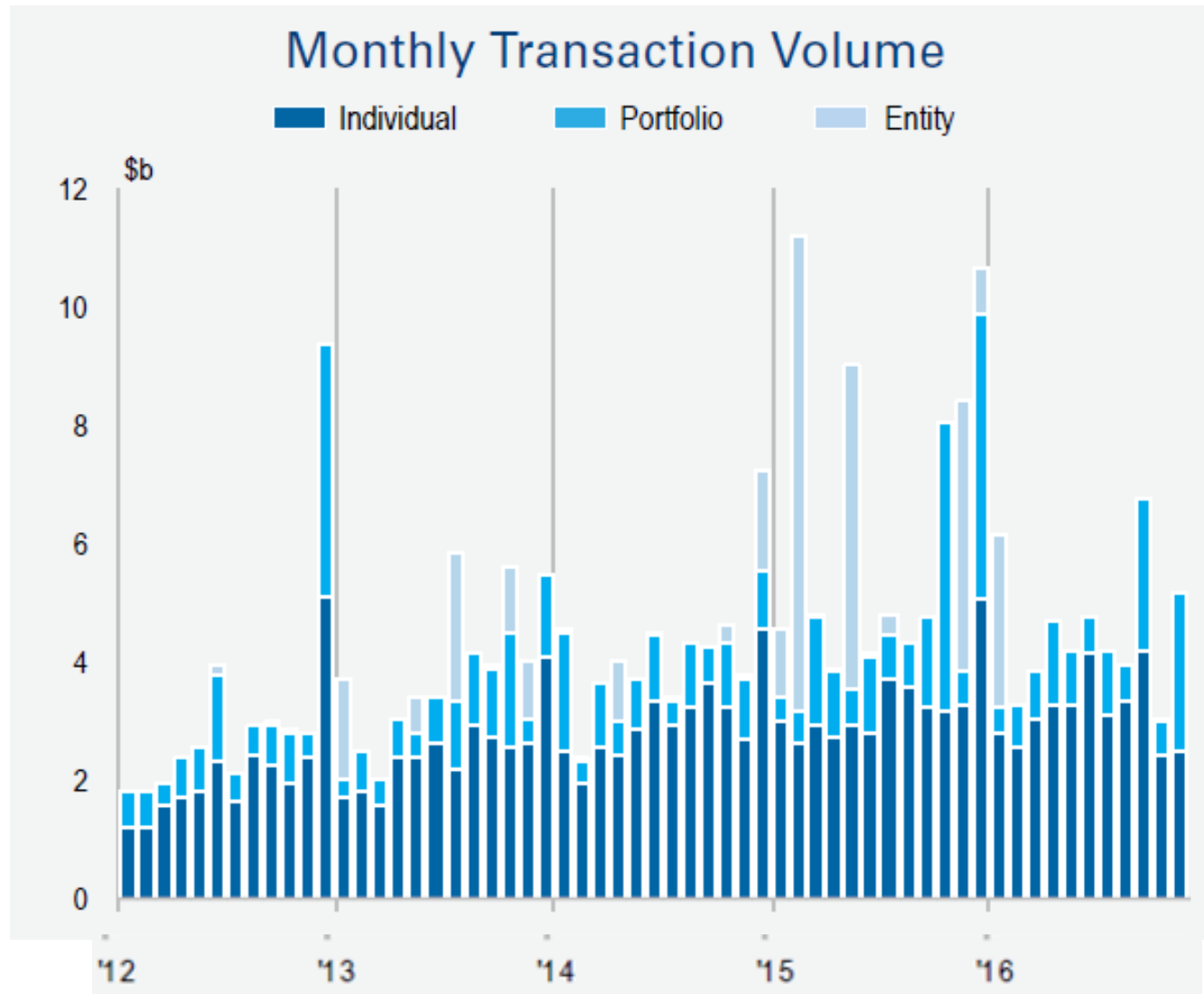
Space Markets: Year-over-year retail transaction volume is off 10% in November



Space Markets: Industrial/warehouse cap rates plumb new lows



Space Markets: Year-over-year industrial transaction volume is off 38% in November



Summary

- GDP growth will remain solid but unremarkable with some Trump-effect growth likely (2.25-2.50%)
- Job growth will edge up from 2016 to 180,000-200,000 new jobs per month
- Debt and equity capital will flow into real estate with banks maintaining more conservative standards
- Long-term UST rates will rise about 50 bps and approach 3.0%
- Cap rates will edge higher, say 25 bps
- Industrial will continue to outperform in 2017 while office and retail market perform and apartments underperform for 1-2 years (and then roar back)



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