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# Trends in Commercial Real Estate

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# Strong Tailwinds for Commercial Real Estate

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- ▶ Macroeconomic conditions
    - ▶ Low and stable inflation
    - ▶ Accommodative monetary policy
  - ▶ Foreign economic conditions – relative strength in the United States compared with the rest of the world
  - ▶ Demographics – trends toward greater urbanization and a preference among the large cohort of millennials to seek multifamily accommodations
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## What *Could* Cause a Reversal in Commercial Real Estate Prices?

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- ▶ Government-sponsored enterprises (GSEs)
    - ▶ GSEs and their securitized vehicles currently hold or guarantee 44 percent of multifamily loans
    - ▶ Any GSE reform proposal that caused them to alter their participation in this market could impact market
  - ▶ 2017 annual stress test includes a hypothetical scenario of a significant decline in CRE prices
  - ▶ A third potential concern could arise if inflation and interest rates moved much higher, and at a faster pace
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## Financial Stability and Commercial Real Estate

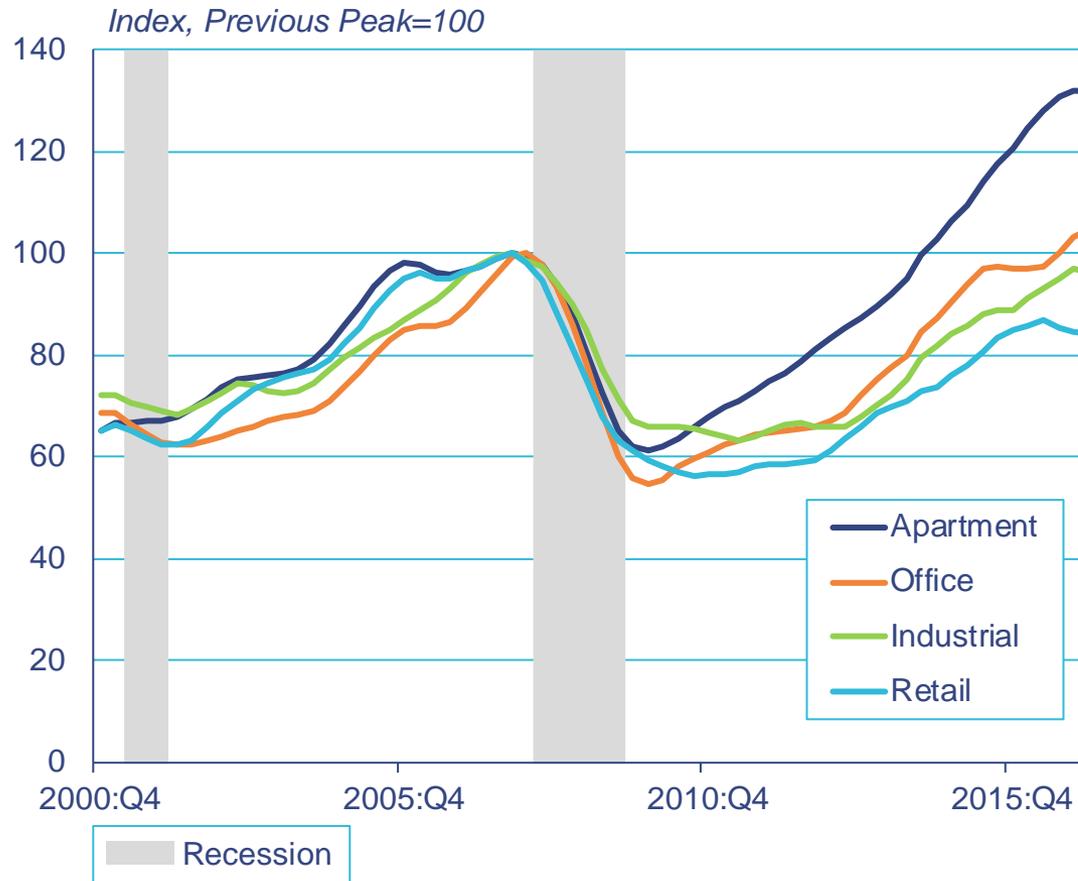
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- ▶ In some past recessions CRE downturn has propagated an initial adverse shock and by constraining financial intermediaries, worsened the subsequent economic downturn
  - ▶ Given low capitalization rates – what if tailwinds become headwinds?
  - ▶ Regulatory community must consider whether the system is resilient enough to withstand potential CRE downturn
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# Figure 1: Real Commercial Property Price Indices by Property Type

2000:Q4 - 2017:Q1



Note: Indices are adjusted for inflation using the GDP deflator. Indices are repeat-sales based and include properties of \$2.5 million or more.

Source: Real Capital Analytics, BEA, NBER, Haver Analytics



Figure 2: Federal Funds Effective Rate  
January 2000 - April 2017

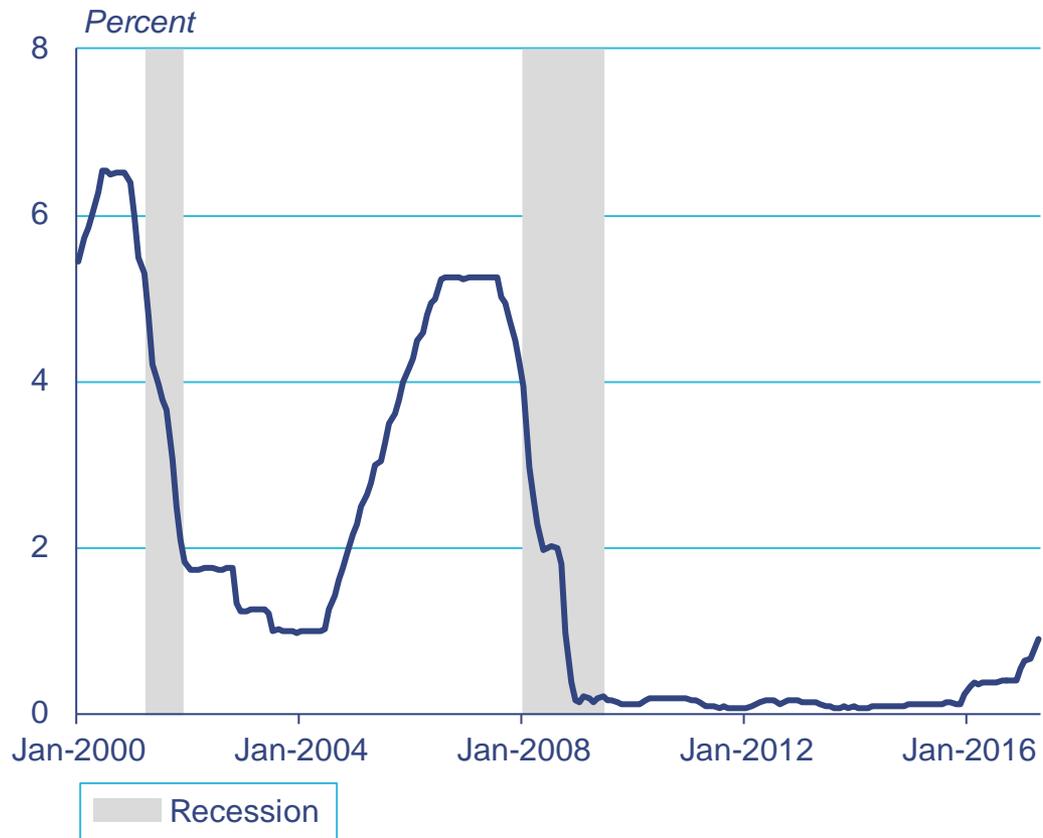
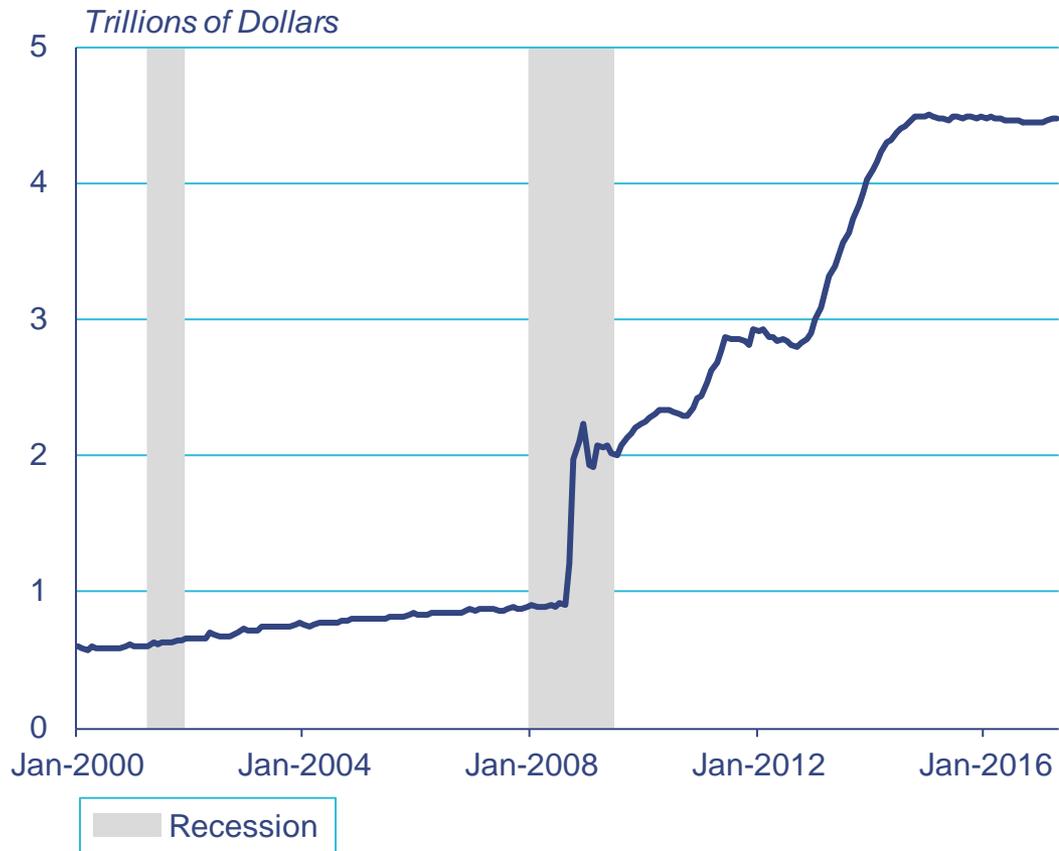


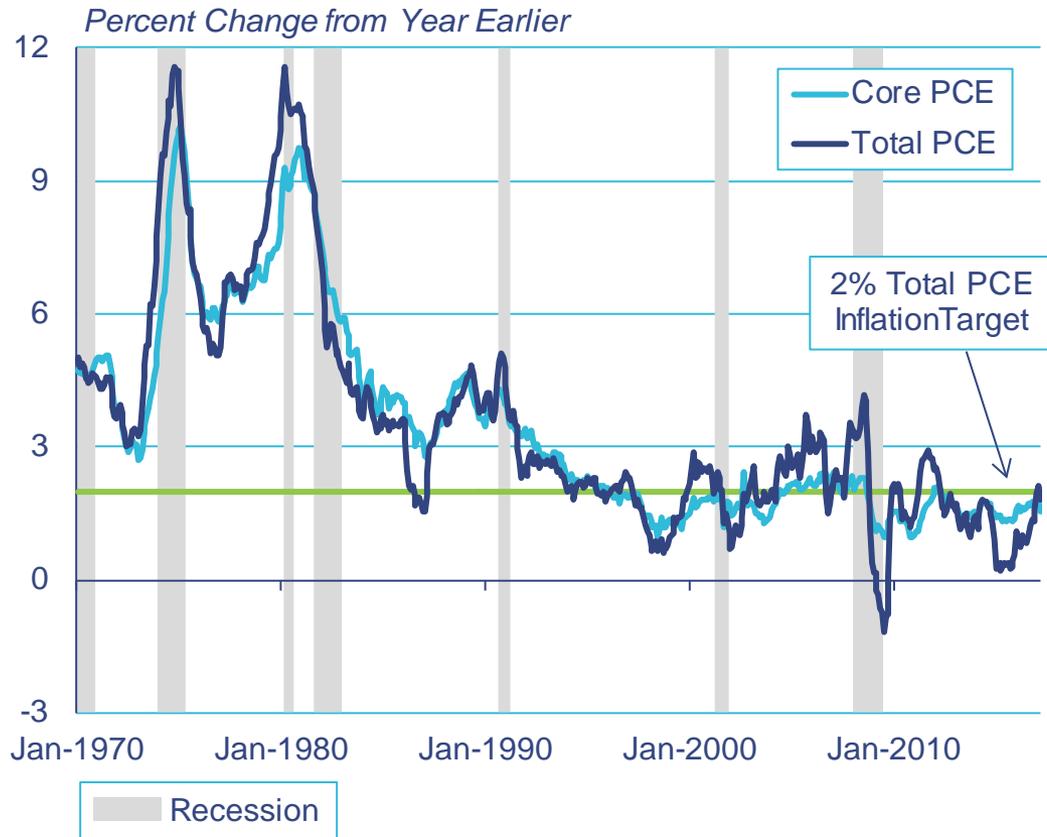


Figure 3: Federal Reserve System Assets  
January 2000 - April 2017





# Figure 4: Inflation Rate: Change in Personal Consumption Expenditures (PCE) Price Indices January 1970 - March 2017



Note: Core PCE excludes food and energy.

Source: BEA, NBER, Haver Analytics



## Figure 5: Unemployment Rates in the United States and the Euro Area

January 2000 - April 2017



*Note: The unemployment rates for the U.S. and Euro Area are defined somewhat differently. One difference is based on age; the U.S. civilian unemployment rate tallies the unemployed share of the labor force age 16 years and older, whereas the Euro Area harmonized unemployment rate calculates the unemployed share of the labor force age 15 to 74. For both definitions, unemployed persons must be actively seeking work. The April 2017 rate for the Euro Area is not yet available.*

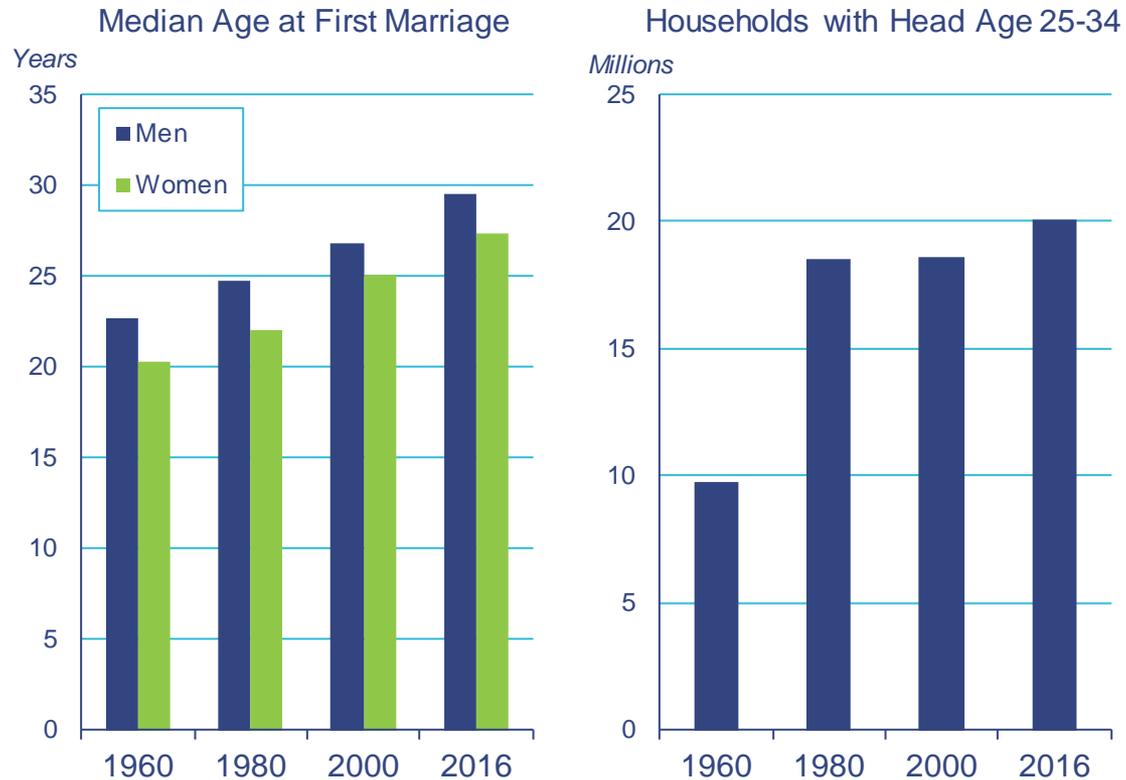
Source: BLS, Eurostat, Haver Analytics

Figure 6: Ten-Year Government Bond Yields  
January 2000 - April 2017





## Figure 7: Demographic Trends 1960, 1980, 2000, and 2016





## Trends Have Supported Commercial Real Estate Prices

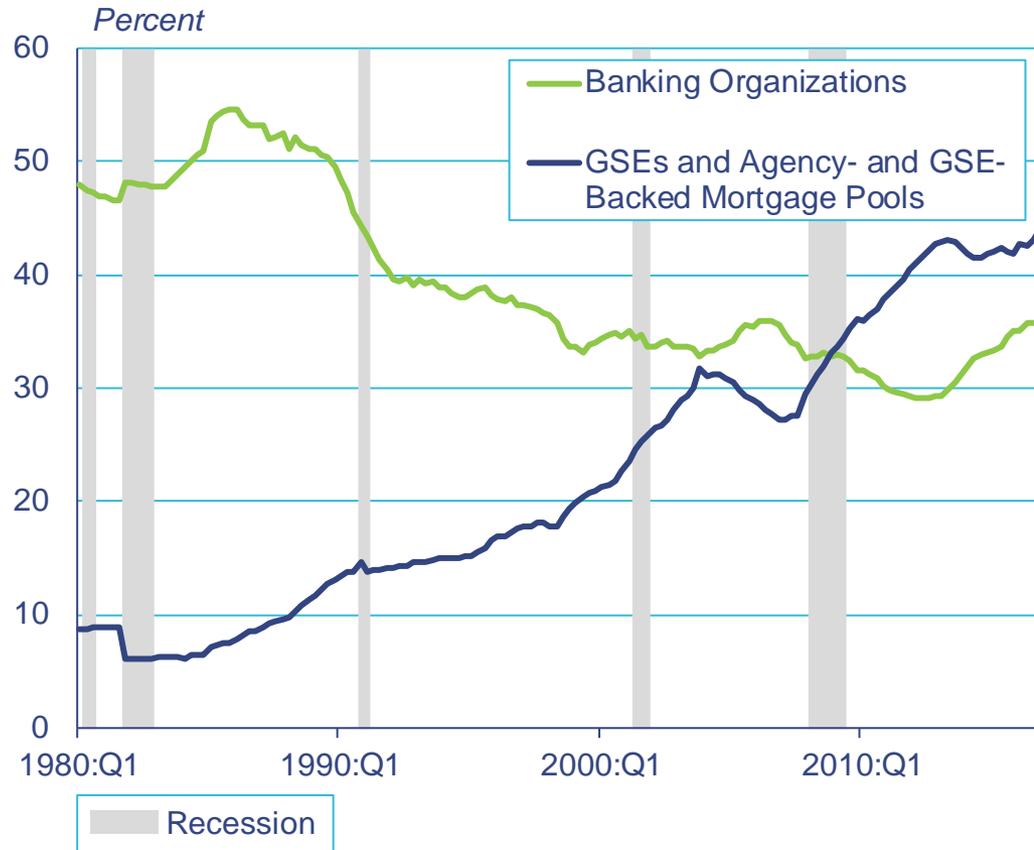
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- ▶ Macroeconomic and demographic trends are qualitatively consistent with the strong commercial real estate markets we see in many parts of the country
  - ▶ It is harder to know if these conditions warrant the *extent* of price increase we have seen to date
  - ▶ Very hard to distinguish how much of the price gain is the result of the favorable fundamentals, and how much reflects an abundance of optimism by investors
  - ▶ Next – consider the possibility that low capitalization rates could experience a significant reversal
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# Figure 8: Multifamily Residential Mortgages by Holder

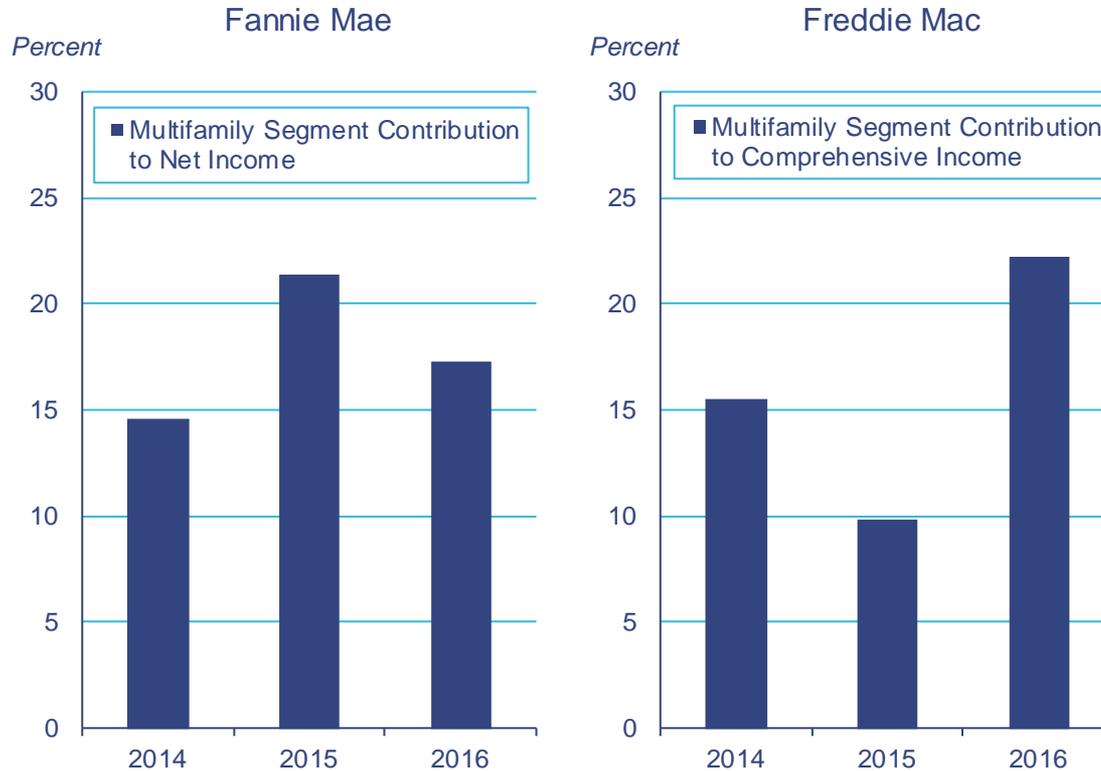
1980:Q1 - 2016:Q4





## Figure 9: Share of GSE Income Derived from Multifamily Segment

2014 - 2016





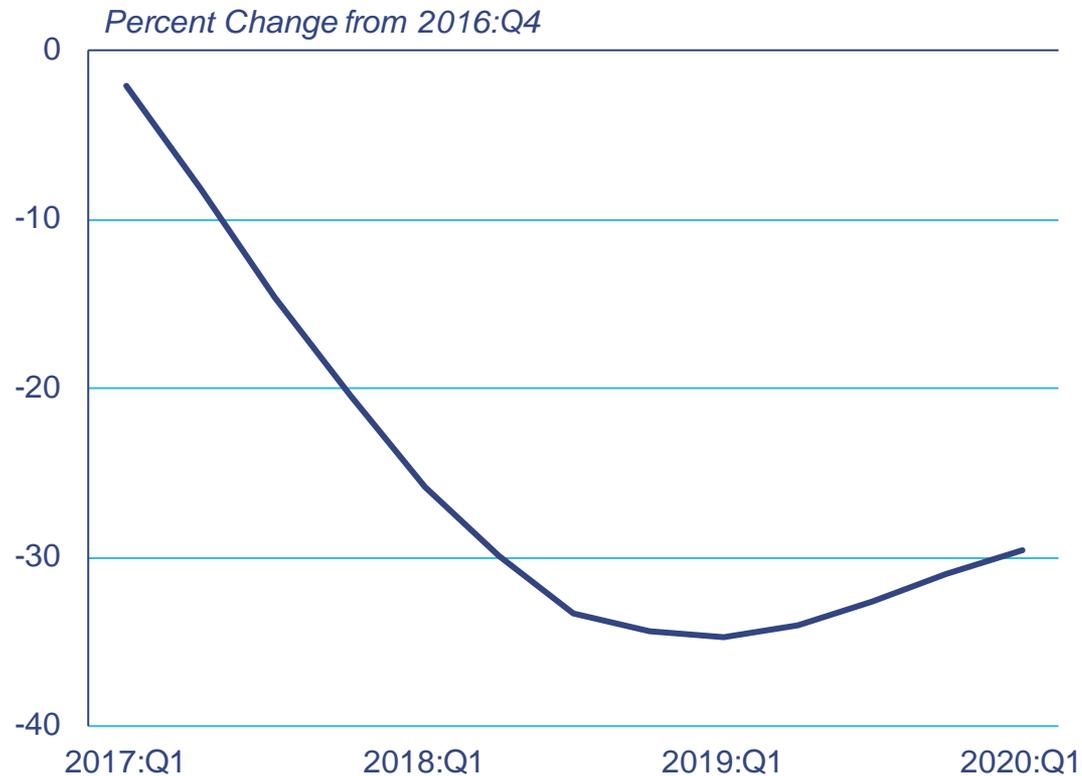
## Potential of GSE Reform

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- ▶ GSEs' large and growing footprint in multifamily commercial real estate
    - ▶ Is this level of government-sponsored exposure safe?
    - ▶ Is this level of government support appropriate?
  - ▶ Whether, or how, future reform proposals will impact commercial real estate is unclear
  - ▶ Potential problem if reform proposals require the GSEs to reduce their holdings of multifamily loans
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## Figure 10: Commercial Real Estate Price Index in Severely Adverse Supervisory Scenario for Annual Stress Test





## Only a Hypothetical Scenario

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- ▶ Both the 1990 and the 2007 recessions exhibited very significant declines in commercial real estate prices that aggravated significant negative shocks to the economy
  - ▶ One reason that many regulators have increased their focus on commercial real estate as valuations have risen substantially
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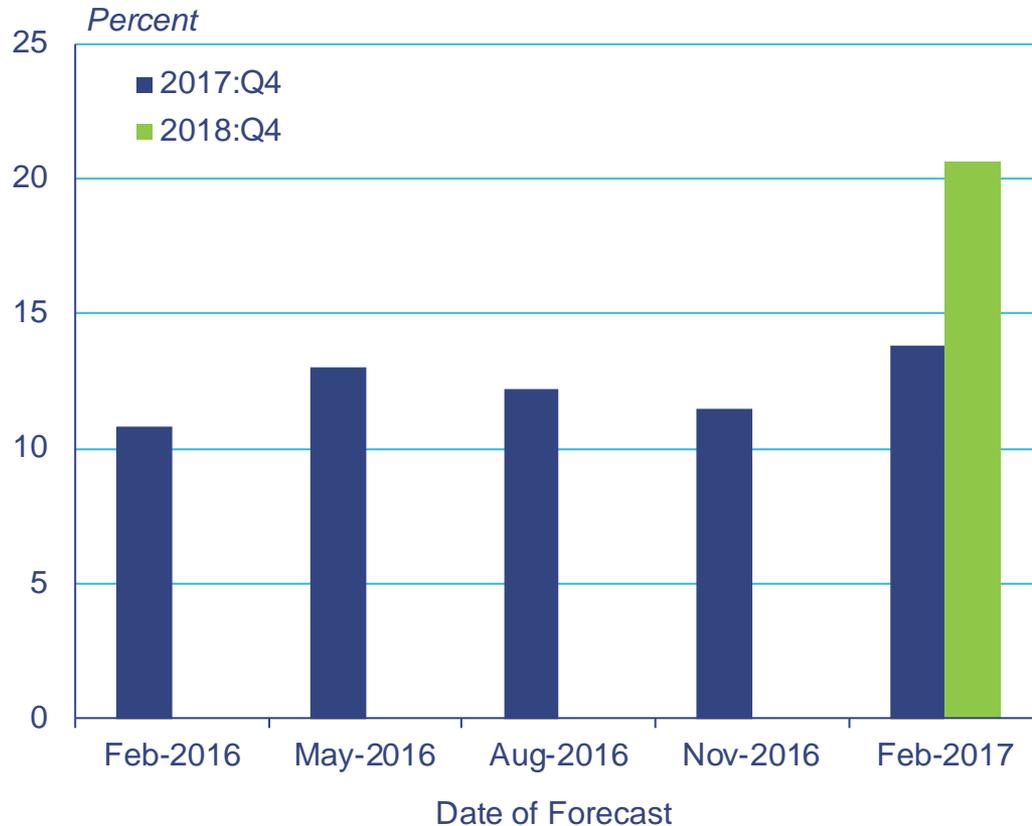
## How Likely is this Scenario?

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- ▶ What are the conditions that might lead to a large shock to commercial real estate?
  - ▶ It is worth considering what type of economic conditions might lead to an eventual negative shock of the sort that is being modeled in the stress test
  - ▶ While the severely adverse stress-test scenario does not have a probability attached, it is possible to look at private sector forecasts that provide probability assessments of “tail events,” as well as their most likely outcome
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# Figure 11: Survey of Professional Forecasters: Mean Probability of Core PCE Inflation Rate of 2.5% or More

2017:Q4 and 2018:Q4

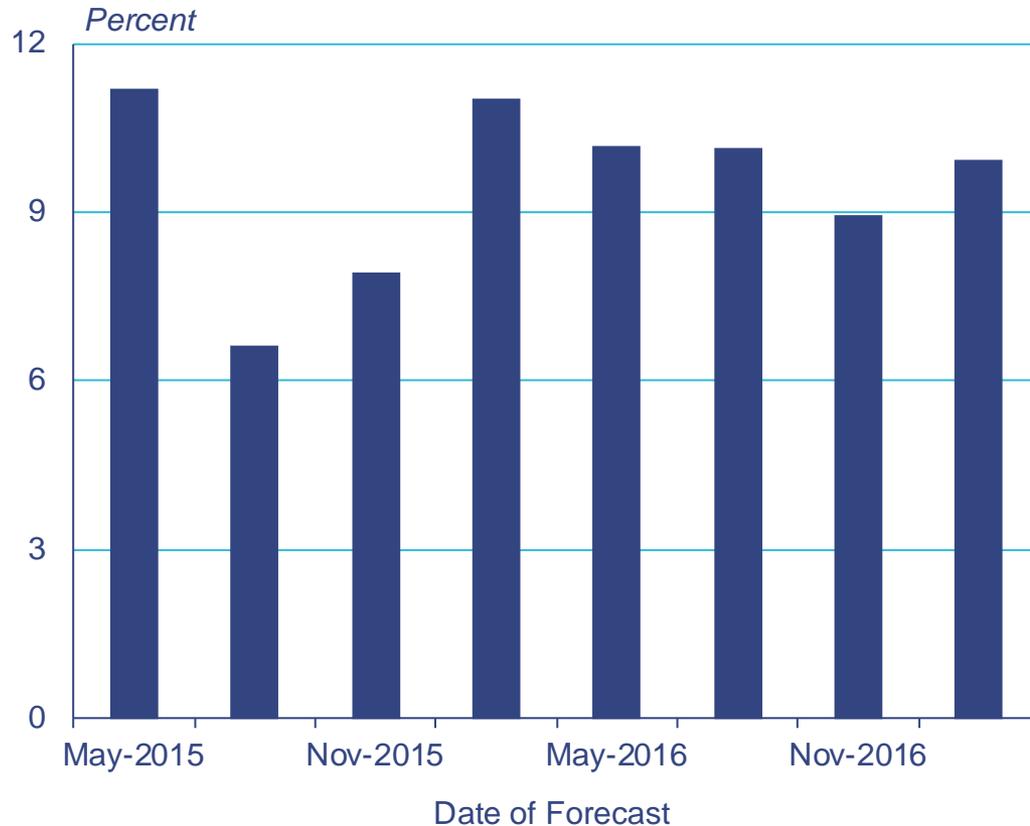


Note: Core PCE inflation rate as measured by the percent change from 2016:Q4 - 2017:Q4 and 2017:Q4 - 2018:Q4.

Source: Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters; Haver Analytics



Figure 12: Survey of Professional Forecasters:  
Mean Probability of Civilian Unemployment Rate  
Less than 4% in 2018



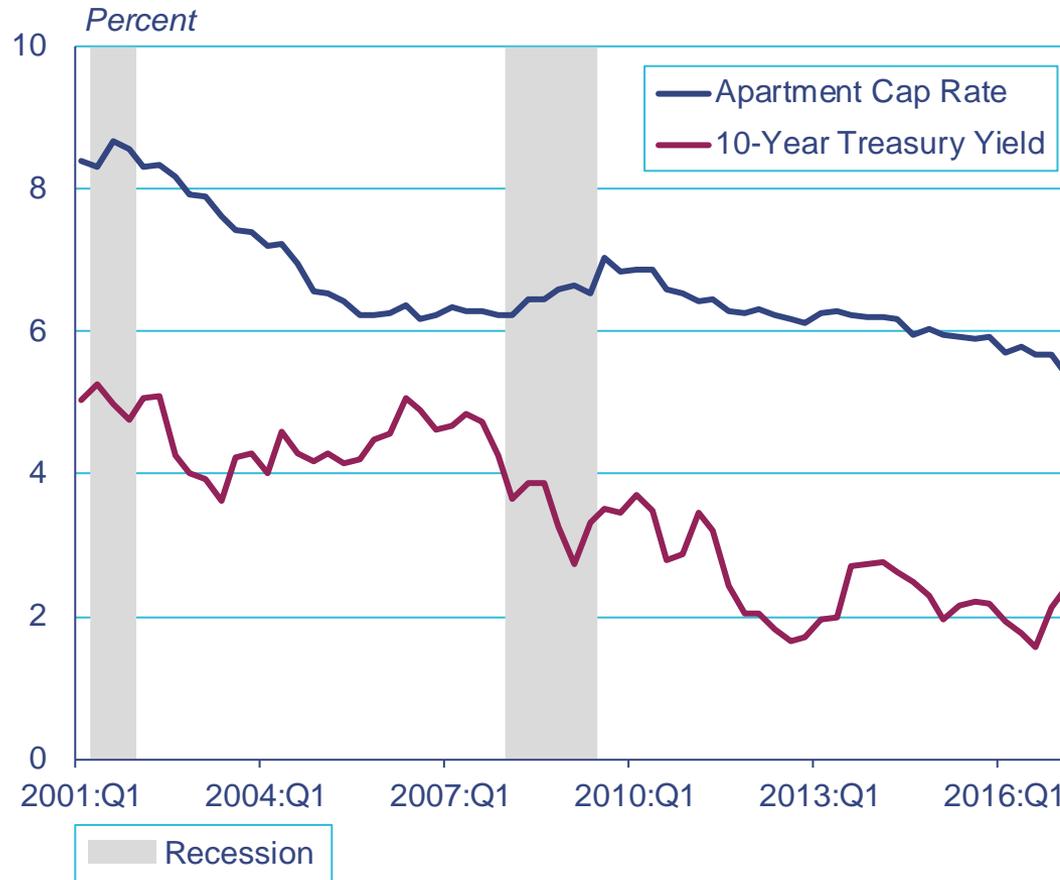
Note: Civilian unemployment rate is annual average.

Source: Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters; Haver Analytics



# Figure 13: Apartment Capitalization Rate and Ten-Year Treasury Yield

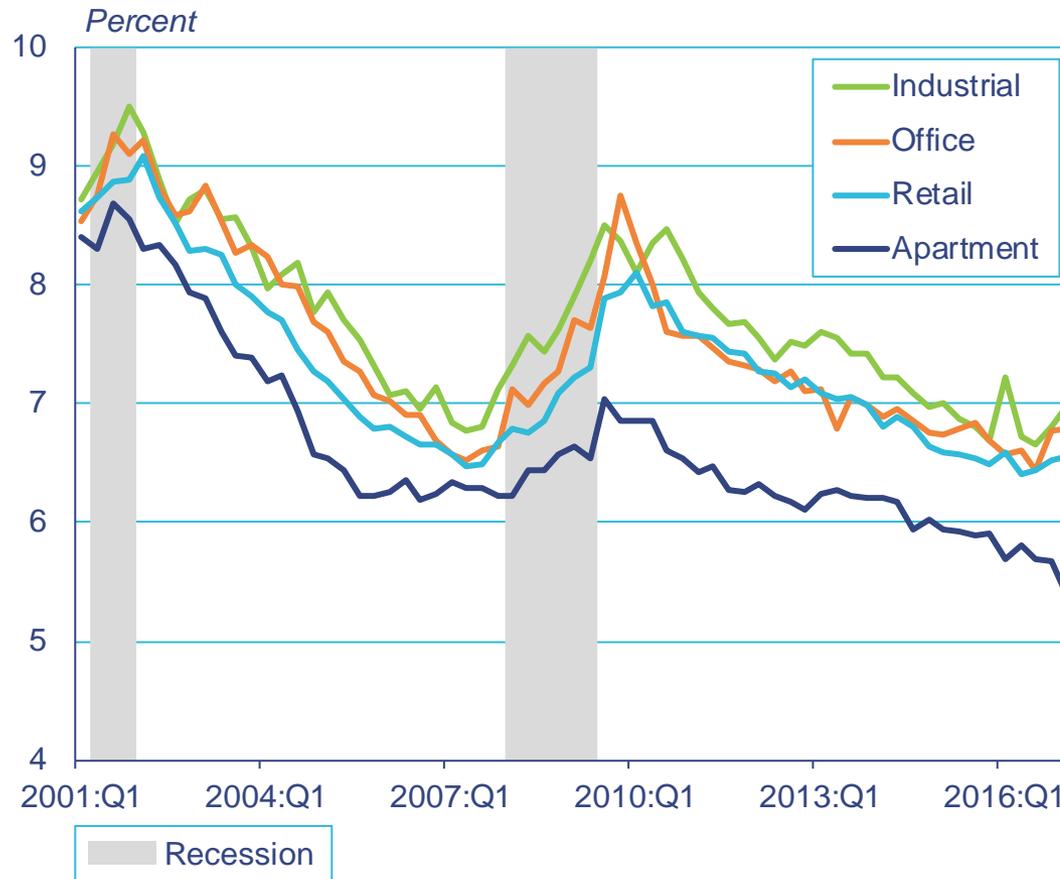
2001:Q1 - 2017:Q1



Note: The capitalization or “cap” rate is the ratio of net operating income produced by a property to the price paid for the property, calculated at the time of a transaction. Based on properties of \$2.5 million or more.

Source: Real Capital Analytics, Federal Reserve Board, NBER, Haver Analytics

Figure 14: Capitalization Rates by Property Type  
2001:Q1 - 2017:Q1



Note: The capitalization or “cap” rate is the ratio of net operating income produced by a property to the price paid, calculated at the time of a transaction. Based on properties of \$2.5 million or more.

Source: Real Capital Analytics, NBER, Haver Analytics

Figure 15: Commercial Real Estate Loans by Holder  
2016:Q4

Outstanding as of December 31, 2016	Commercial Real Estate Loans								
	Commercial Mortgages			Multifamily Residential Mortgages			Total		
Holder	Billion Dollars	Share (%)	Change from Year Earlier (%)	Billion Dollars	Share (%)	Change from Year Earlier (%)	Billion Dollars	Share (%)	Change from Year Earlier (%)
Banking Institutions <sup>1</sup>	1,595.1	61	8.9	424.7	36	12.0	2,019.8	53	9.6
Banks with over \$50 Billion in Assets <sup>2</sup>	587.0	22	5.7	180.8	15	8.9	767.8	20	6.4
Banks with under \$50 Billion in Assets <sup>2</sup>	942.8	36	10.0	239.8	20	13.4	1,182.6	31	10.7
Life Insurers and Other Long-Term Investors <sup>3</sup>	390.8	15	6.7	69.6	6	6.4	460.4	12	6.6
GSEs & Agency MBS/CMBS	0.0	0	0.0	521.0	44	14.9	521.0	14	14.9
Non-Agency MBS/CMBS <sup>4</sup>	491.8	19	-5.1	52.2	4	-21.8	544.0	14	-7.0
Finance Companies	23.6	1	-17.2	1.2	0	0.2	24.9	1	-16.4
Nonfinancial (Other) <sup>5</sup>	113.5	4	3.1	117.9	10	3.1	231.4	6	3.1
Total	2,614.8	100	5.1	1,186.7	100	9.8	3,801.5	100	6.5

<sup>1</sup>Includes U.S.-chartered depository institutions, foreign banking offices in the U.S., banks in U.S.-affiliated areas and credit unions.

<sup>2</sup>Includes commercial and savings banks and thrifts. Author's estimates using call report data.

<sup>3</sup>Includes life and property-casualty insurance companies, private pension funds, and state and local government retirement funds.

<sup>4</sup>Includes REITS.

<sup>5</sup>Includes households, nonfinancial corporate and noncorporate businesses and federal and state and local governments.



## Conclusion

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- ▶ While an overheated economy followed by a recession is only one possible scenario, and certainly not my prediction, it helps to illustrate one way in which low cap rates might be of concern in the event of such a reversal
  - ▶ Leveraged institutions and government-sponsored entities have significant exposures to commercial real estate
  - ▶ While not expecting such a scenario, central bankers are charged with thinking about adverse risks to the economy, and current valuations in real estate are one such risk that I will continue to watch carefully
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