Trends in Commercial Real Estate

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Figure 1: Real Commercial Property Price Indices by Property Type

2000:Q4 - 2017:Q1

Index, Previous Peak=100

- Apartment
- Office
- Industrial
- Retail

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

Source: Federal Reserve Board, NBER, Haver Analytics
Figure 3: Federal Reserve System Assets
January 2000 - April 2017

Source: Federal Reserve Board, NBER, Haver Analytics
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

Source: Banque de France; Deutsche Bundesbank; Federal Reserve Board; Ministry of Finance, Japan; Haver Analytics
Figure 7: Demographic Trends

Source: Census Bureau, Haver Analytics
Figure 8: Multifamily Residential Mortgages by Holder
1980:Q1 - 2016:Q4

Source: Federal Reserve Board, Financial Accounts of the United States; Haver Analytics
Figure 9: Share of GSE Income Derived from Multifamily Segment
2014 - 2016

Source: Fannie Mae and Freddie Mac 2016 Form 10-K
Figure 10: Commercial Real Estate Price Index in Severely Adverse Supervisory Scenario for Annual Stress Test

Source: Federal Reserve Board
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

<table>
<thead>
<tr>
<th>Holder</th>
<th>Commercial Mortgages</th>
<th>Multifamily Residential Mortgages</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Billion Dollars</td>
<td>Share (%)</td>
<td>Billion Dollars</td>
</tr>
<tr>
<td>Banking Institutions¹</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banks with over $50 Billion in Assets²</td>
<td>1,595.1</td>
<td>61</td>
<td>424.7</td>
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<tr>
<td>Banks with under $50 Billion in Assets²</td>
<td>587.0</td>
<td>22</td>
<td>180.8</td>
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<tr>
<td>Life Insurers and Other Long-Term Investors³</td>
<td>942.8</td>
<td>36</td>
<td>239.8</td>
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<tr>
<td>GSEs &amp; Agency MBS/CMBS</td>
<td>0.0</td>
<td>0</td>
<td>521.0</td>
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<tr>
<td>Non-Agency MBS/CMBS⁴</td>
<td>390.8</td>
<td>15</td>
<td>69.6</td>
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<tr>
<td>Finance Companies</td>
<td>52.2</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>Nonfinancial (Other)⁵</td>
<td>23.6</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>2,614.8</td>
<td>100</td>
<td>1,186.7</td>
</tr>
</tbody>
</table>

1Includes U.S.-chartered depository institutions, foreign banking offices in the U.S., banks in U.S.-affiliated areas and credit unions.
2Includes commercial and savings banks and thrifts. Author’s estimates using call report data.
3Includes life and property-casualty insurance companies, private pension funds, and state and local government retirement funds.
4Includes REITs.
5Includes households, nonfinancial corporate and noncorporate businesses and federal and state and local governments.

Source: Federal Reserve Board, Financial Accounts of the United States; Quarterly Call Reports; Haver Analytics