Late Cycle (or Not)?
Outlook for CRE Performance in 2018
<table>
<thead>
<tr>
<th>2018 – Economic Perspective</th>
<th>10-Year Lookback to 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 3.9% Unemployment Rate, Down from 6.5%</td>
<td></td>
</tr>
<tr>
<td>• 2.2% Inflation Rate (PCE), Down from 2.8%</td>
<td></td>
</tr>
<tr>
<td>• 3.1% 10-Year Treasury Yield, Down from 3.8%</td>
<td></td>
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<tr>
<td>• 9.6 Million More Households Than 2008</td>
<td></td>
</tr>
<tr>
<td>• 13.0 Million More Jobs Than 2008</td>
<td></td>
</tr>
<tr>
<td>• $1.9 Trillion Increase in Retail Sales, Up 47% since 2008</td>
<td></td>
</tr>
<tr>
<td>• $27.16 Avg. Hourly Earnings, Up 25% from 2008</td>
<td></td>
</tr>
<tr>
<td>• $5.9 Trillion GDP Growth Since 2008</td>
<td></td>
</tr>
</tbody>
</table>

Comparison period: October 2008 for monthly data series and 4Q 2018 for quarterly data series
Sources: Marcus & Millichap Research Services, BEA, BLS, U.S. Census Bureau, Federal Reserve
Current Expansion Cycle Longer Than Average But Still Not Record-Setting

**Expansion Cycle Duration**

- 1991 to 2001: 10.25 years
- 2009 to 2018*: 9.00 years
- 1961 to 1969: 8.75 years
- 1982 to 1990: 8.50 years
- 2001 to 2007: 6.25 years
- 1975 to 1980: 5.00 years
- 1970 to 1973: 3.75 years
- 1950 to 1953: 3.50 years
- 1954 to 1957: 3.50 years
- 1958 to 1960: 2.00 years
- **Average**: 3.50 years

**Percent GDP Growth**

- 1961 to 1969: 54%
- 1991 to 2001: 44%
- 1982 to 1990: 38%
- 1950 to 1953: 29%
- 1975 to 1980: 23%
- 2001 to 2007: 19%
- 1970 to 1973: 16%
- 1954 to 1957: 14%
- 1958 to 1960: 13%
- **Average**: 19%

* Through 2Q

Sources: Marcus & Millichap Research Services, BEA
Employment Growth Durable and Remarkably Stable

Quarterly Job Growth (Millions)

2017 Total: 2,188,000
2018 Forecast: 2,300,000

95 Months of Continuous Gains**
Monthly Average: 199,000 Jobs

* Through 2Q
** Through August 2018
Sources: Marcus & Millichap Research Services, BLS
10-Year Treasury vs. 2-Year Treasury

* Through September 26
Sources: Marcus & Millichap Research Services, Federal Reserve
Commercial Real Estate an Attractive Investment Alternative Due to Competitive Yields

As of September 28, 2018
Treasury rates for 10-year treasuries
Commercial real estate yield (cap rate) includes apartment, retail, office, and industrial sales $1 million and greater
Sources: Marcus & Millichap Research Services, Real Capital Analytics, Federal Reserve
High-Yield Corporate Bond Yield Trends

*Through September 30
Sources: Marcus & Millichap Research Services, Federal Reserve
$30+ Trillion Wealth Transfer Over the Next 3 Decades

Sources: Marcus & Millichap Research Services, U.S. Census Bureau
U.S. Construction Trends

Completions in square feet; completions in units for apartments.

Sources: Marcus & Millichap Research Services, MPF Research, CoStar Group, Inc.

* Forecast
U.S. Vacancy Rate by Property Type

**Vacancy Rate**
- 0%
- 5%
- 10%
- 15%
- 20%

**Property Types**
- Apartment
- Retail
- Office
- Industrial

**Years**
- 2006-2014
- 2015
- 2016
- 2017
- 2018*

*Forecast

Sources: Marcus & Millichap Research Services, RealPage, Inc., CoStar Group, Inc., STR, Inc., Union Realtime LLC
U.S. Average Price Trends

* Through 2Q
Includes sales $1 million and greater
Sources: Marcus & Millichap Research Services, CoStar Group, Inc., Real Capital Analytics
Commercial Real Estate Avg. Yield vs. 10-Yr. Treasury – Spread Indicates “Buy” Window

* Through September 28
Includes apartment, retail, office, and industrial sales $1 million and greater
Sources: Marcus & Millichap Research Services, CoStar Group, Inc., Real Capital Analytics

Graph showing the average rates of commercial real estate and 10-year Treasury rates from 1990 to 2018. The graph indicates that a spread indicates a “buy” window for real estate investments.
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