Update on Economic and Housing Market Trends

Apartment Strategies Update and Executive Discussion

September 24, 2019
Webinar Information

- To ensure good sound quality, all attendees will be muted during the webinar.

- To ask a question: type your question in to the **Question** or **Chat Box** on your control panel. The moderator will review and present questions to the speakers at the end of the presentation as time allows.

- Today’s webinar is being recorded and will also be made available on the NMHC website.
Webinar Agenda

- Economic and Housing Market Update
- Panel Discussion
Economic and Housing Market Update - Speakers

Mark Obrinsky  
Senior Vice President, Research and Chief Economist  
NMHC

John Chang  
Senior Vice President, National Director Research Services  
Marcus & Millichap
Nonfarm Payrolls: Not So Solid?
(3-month average, 000s)

Source: Bureau of Labor Statistics
Average Weekly Hours Worked – Manufacturing
Trending Lower but Not Recessionary (Yet)

* Through August
Sources: Marcus & Millichap Research Services, The Conference Board

* Marcus & Millichap
Biggest Risk: Disruption in Global Trade
Exports a Major Force in the U.S. Economy

Exports Contribution to GDP
Imports Contribution to GDP

Contribution to GDP

* Through 2Q
Sources: Marcus & Millichap Research Services, BEA
Policy Conflict Sparks Yield Curve Inversion

Current Spread*
10-Year vs. 3-Month: -17 bps

* Through September 20
Sources: Marcus & Millichap Research Services, Federal Reserve
Yield Curve Inversion – Is a Recession On the Horizon?

7 of Last 9 Inversions had Recession within 16 Months

Yield Curve Inversion Lead Time

- No Inversion
- False Positive
- Recessions
- False Positive

Treasury Yield*
- 30-Year: 2.17%
- 10-Year: 1.74%
- 2-Year: 1.69%
- 3-Month: 1.91%

* Through September 20
Sources: Marcus & Millichap Research Services, Federal Reserve
Investors Anticipate Next Recession on Horizon

“Do you think an inverted yield curve means we will have a recession?”

- Yes: 29%
- No: 23%
- Unsure: 48%

“Do you expect the U.S. to have a recession in the next 5 years? If so, when?”

<table>
<thead>
<tr>
<th>Year</th>
<th>1H 2019</th>
<th>2H 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>2019</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>2020</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>2021</td>
<td>27%</td>
<td>28%</td>
</tr>
<tr>
<td>2022</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>2023+</td>
<td>7%</td>
<td>9%</td>
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</tbody>
</table>

As of 2H 2019
Base: All respondents; (n=541 for chart on the left and n=540 for chart on the right)
Sources: Marcus & Millichap Research Services, M&M/NREI Investor Survey
Record Growth Cycle?
Risks Beginning to Emerge

<table>
<thead>
<tr>
<th>Expansion Cycle Periods</th>
<th>Expansion Cycle Duration</th>
<th>Percent GDP Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 to 2019*</td>
<td>10.25</td>
<td>54%</td>
</tr>
<tr>
<td>1991 to 2001</td>
<td>10.25</td>
<td>43%</td>
</tr>
<tr>
<td>1961 to 1970</td>
<td>8.75</td>
<td>38%</td>
</tr>
<tr>
<td>1983 to 1990</td>
<td>8.50</td>
<td>29%</td>
</tr>
<tr>
<td>2003 to 2008</td>
<td>6.25</td>
<td>26%</td>
</tr>
<tr>
<td>1975 to 1980</td>
<td>5.00</td>
<td>23%</td>
</tr>
<tr>
<td>1970 to 1974</td>
<td>3.75</td>
<td>19%</td>
</tr>
<tr>
<td>1950 to 1953</td>
<td>3.50</td>
<td>16%</td>
</tr>
<tr>
<td>1954 to 1957</td>
<td>3.50</td>
<td>14%</td>
</tr>
<tr>
<td>1958 to 1960</td>
<td>2.00</td>
<td>13%</td>
</tr>
<tr>
<td>1980 to 1981</td>
<td>1.00</td>
<td>4%</td>
</tr>
</tbody>
</table>

* Forecast as of 3Q 2019
Sources: Marcus & Millichap Research Services, BEA
Wage Growth Outpacing Inflation

Y-O-Y Percent Change

* Through 2Q
Sources: Marcus & Millichap Research Services, BLS
More Jobs Openings Than Unemployed
(Millions)

Employment-Pop Ratio: Still Room to Grow

Source: Bureau of Labor Statistics
Apartment Markets Strengthening
(Market Tightness Index, NMHC Quarterly Survey)

Source: NMHC.
National Vacancy Rate Edging Down Further

Source: RealPage.
Rent Growth Has Eased, Still Above Average
(year-over-year change in rent)

Source: Census Bureau; MPF Research.
Apartment Transactions Running Ahead of Last Year

$ Billions

Source: Real Capital Analytics.
Cap Rate Not Much Affected by Treasury Yields

Source: Real Capital Analytics.
Questions?
One on One - Executive Discussion

Doug Bibby
President
NMHC

Steven DeFrancis
Chief Executive Officer,
Cortland
NMHC Apartment Strategies Webinar

Thank you!

•  [www.nmhc.org/Research](http://www.nmhc.org/Research)