**Figure 1.**

EXISTING HOME SALES & PENDING HOME SALES INDEX

Source: National Association of Realtors.

**Figure 2.**

INTEREST RATE ON FIXED-RATE MORTGAGE

* Average conventional 30-year commitment rate. Weekly data thru December 2003, daily thereafter.

Source: FHLMC Primary Mortgage Market Survey.
Figure 3.

**HOUSING AFFORDABILITY INDEX**

* Index=100 when median family income qualifies for an 80% mortgage on a median priced existing single-family home. Rising index indicates more buyers can afford to enter market.

Source: National Association of Realtors.

Figure 4.

**EXISTING SINGLE-FAMILY HOME PRICES**

(Thousand dollars, 12-month moving average)

- Average Price (304.7)
- Median Price (268.2)

Source: National Association of Realtors.
**Figure 5.**

*S&P 500 HOMEBUILDING STOCK PRICE INDEX*<sup>*</sup>
(DHI LEN PHM)

- 200-day moving average.
- Ratio scale.
- Source: Standard & Poor’s and Haver Analytics.

**Figure 6.**

*S&P 500 HOMEBUILDING ANNUAL REVENUE GROWTH FORECASTS*<sup>*</sup>
(based on analysts’ consensus estimates, percent, weekly)

Source: I/B/E/S data by Refinitiv.
**Figure 7.**

**S&P 500 HOMEBUILDING ANNUAL EARNINGS GROWTH FORECASTS**

(based on analysts' consensus estimates, percent, weekly)

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>NA</td>
</tr>
<tr>
<td>2012</td>
<td>NA</td>
</tr>
<tr>
<td>2013</td>
<td>95.9</td>
</tr>
<tr>
<td>2014</td>
<td>-55.4</td>
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<tr>
<td>2015</td>
<td>26.9</td>
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<tr>
<td>2016</td>
<td>16.2</td>
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<td>2018</td>
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</tr>
<tr>
<td>2019</td>
<td>7.5</td>
</tr>
<tr>
<td>2020</td>
<td>8.6</td>
</tr>
</tbody>
</table>

Latest data thru 10/31/19

Source: I/B/E/S data by Refinitiv.

**Figure 8.**

**S&P 500 HOMEBUILDING VALUATION**

- Forward P/E* (11.4)
- P/E not available during 2007-2010 because earnings are negative.
- P/E capped at 5 and 25.

* Price divided by forward consensus expected operating earnings per share.

Source: I/B/E/S data by Refinitiv.
Figure 9.

**EXISTING SINGLE-FAMILY HOMES AVAILABLE FOR SALE**

(million units)

Source: National Association of Realtors.

Figure 10.

**UNEMPLOYMENT RATE**

( percent)

Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: Bureau of Labor Statistics.
Figure 11.

REAL AVERAGE HOURLY EARNINGS
PRODUCTION & NONSUPERVISORY WORKERS*
(2012 dollars per hour, ratio scale)

* Average hourly earnings deflated by personal consumption expenditures deflator.

Figure 12.

S&P 500 INTERNET & DIRECT MARKETING RETAIL STOCK PRICE INDEX*
(AMZN BKNG EBAY EXPE)

* 200-day moving average.
* Ratio scale.
Source: Standard & Poor’s and Haver Analytics.
* Time-weighted average of the consensus estimates for current year and next year.
Source: I/B/E/S data by Refinitiv.

Source: I/B/E/S data by Refinitiv.
Figure 15.
S&P 500 INTERNET & DIRECT MARKETING RETAIL VALUATION

Forward P/E* (45.8)

* Price divided by forward consensus expected operating earnings per share. Monthly through 2005, then weekly.
Source: Thomson Reuters I/B/E/S.

Figure 16.
FORWARD P/E: CONSUMER DISCRETIONARY WITH AND WITHOUT INTERNET & DIRECT MARKETING RETAIL

Consumer Discretionary (21.8)
Internet & Direct Marketing Retail (45.8)
Consumer Discretionary ex-Internet & Direct Marketing Retail (17.1)
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