Figure 1.

S&P 500 INDEX & BOOM-BUST BAROMETER*

S&P 500 Index

Boom-Bust Barometer

* CRB raw industrials spot price index (weekly average) divided by weekly initial unemployment claims, showing four-week moving average.

Figure 2.

CRB RAW INDUSTRIALS vs INITIAL UNEMPLOYMENT CLAIMS

CRB Raw Industrials Spot Price Index (1967=100)

Initial Unemployment Claims
(4-week ma, thousands, sa, inverted scale)

Figure 3.

S&P 500 FORWARD EARNINGS & BOOM-BUST BAROMETER (weekly)

* Time-weighted average of consensus estimates for the current year and next year.

** CRB raw industrials spot price index (weekly average) divided by weekly initial unemployment claims, showing four-week moving average.


Figure 4.

S&P 500 OPERATING EARNINGS PER SHARE: FORWARD & ACTUAL (I/B/E/S data by Refinitiv) (dollars per share)

* Time-weighted average of consensus estimates for current year and next year. Monthly through December 2005, then weekly.

Source: Standard & Poor’s until Q4-1993, then I/B/E/S data by Refinitiv.
Figure 5.

S&P 500 FORWARD REVENUES & EARNINGS PER SHARE

- Forward Revenues* (1442.10)
- Forward Earnings* (176.27)

* Time-weighted average of consensus estimates for current year and next year.
Source: I/B/E/S data by Refinitiv and Standard & Poor’s.

Figure 6.

S&P 500 REVENUES PER SHARE: ACTUAL (S&P quarterly data) & FORWARD (I/B/E/S weekly data)
(dollars, ratio scale)

- 52-week Forward*
- Actual (x4)

* Time-weighted average of consensus estimates for current year and next year. Monthly through December 2005, then weekly.
Source: Standard & Poor’s (for actual revenues) and I/B/E/S data by Refinitiv (for forward revenues).
Figure 7.

**S&P 500: CONSENSUS QUARTERLY Y/Y EPS GROWTH 2019**
(consensus analysts' estimates in percent, weekly)

2019 By Quarter as of 07/18/19

<table>
<thead>
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<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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<td>2.8</td>
<td>-2.0</td>
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<tr>
<td>Jul 18</td>
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<td>-1.5</td>
<td>-0.2</td>
<td>6.6</td>
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Source: I/B/E/S data by Refinitiv.

Figure 8.

**S&P 500 OPERATING EARNINGS ANNUAL GROWTH FORECASTS**
(based on analysts’ consensus estimates, percent, weekly)

2011 (14.9)
2012 (6.0)
2013 (6.1)
2014 (7.0)
2015 (0.5)
2016 (1.5)
2017 (11.2)
2018 (23.8)
2019 (2.5)
2020 (10.5)

Latest data thru 07/18/19

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

* S&P 500, FORWARD EARNINGS, and VALUATION
  (weekly, ratio scale)

**Blue Angels: S&P 500**

- Actual 07/23/19
- Implied* 07/18/19


Source: Standard & Poor’s and I/B/E/S data by Refinitiv.

**Figure 10.**

* S&P 500 FORWARD P/E & CORRECTIONS: 2008-2019
  (daily)

-7/23

Note: Corrections are declines of 10% or more, while minor ones are 5%-10% (all in blue shades). Bear markets are declines of 20% or more (in red shades). Number of calendar days in parentheses.

Source: Standard & Poor’s.
**Figure 11.**

**S&P 500, FORWARD EARNINGS, and VALUATION**

(ratio scale)

Blue Angels: S&P 500

- Actual
- Implied*

* Implied price index calculated using forward earnings times forward P/E of 15.0. Monthly through March 1994, weekly thereafter.

Source: Standard & Poor’s and I/B/E/S data by Refinitiv.

**Figure 12.**

**S&P 500 FORWARD P/E RELATIVE TO “AVERAGE P/E OF 15”**

(% above/below P/E of 15)

% overvalued/undervalued

(12.9)

* Implied price index calculated using forward earnings times forward P/E of 15.0. Monthly through March 1994, weekly thereafter.

Source: Standard & Poor’s and I/B/E/S data by Refinitiv.
Figure 13.

S&P 500 INTERNET & DIRECT MARKETING REVENUES & RETAIL SALES

Retail Sales: Electronic Shopping & Mail Order Houses
(billion dollars, saar)

Consensus Forecasts:
Forward revenues*
Internet Retail


Figure 14.

S&P 500 INTERNET & DIRECT MARKETING OPERATING EPS & RETAIL SALES

Retail Sales: Electronic Shopping & Mail Order Houses
(billion dollars, saar)

Consensus Forecasts:
Forward earnings*
Internet Retail

Figure 15.

S&P 500 HOME IMPROVEMENT REVENUES & RETAIL SALES

Retail Sales:
- Building Materials & Garden Equipment (billion dollars, saar)

Consensus Forecasts:
- Forward revenues: Home Improvement*


Figure 16.

S&P 500 HOME IMPROVEMENT OPERATING EPS & RETAIL SALES

Retail Sales:
- Building Materials & Garden Equipment (billion dollars, saar)

Consensus Forecasts:
- Forward earnings: Home Improvement*


Figure 17.

S&P 500 RESTAURANTS REVENUES & RETAIL SALES

Retail Sales: Food Services & Drinking Places
(billion dollars, saar)

Consensus Forecasts:
Forward revenues*
Restaurants


Figure 18.

S&P 500 RESTAURANTS OPERATING EPS & RETAIL SALES

Retail Sales: Food Services & Drinking Places
(billion dollars, saar)

Consensus Forecasts:
Forward earnings*
Restaurants
