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<td>16</td>
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Source: US Department of Labor and Standard & Poor’s.
**Global Growth Barometer**

**Figure 3.**

YRI GLOBAL GROWTH BAROMETER (on S&P 500 basis) & S&P 500

- **YRI Global Growth Barometer** (1205.2)
- **S&P 500 Index** (4655.3)

* Average of Brent crude oil and CRB raw industrials spot price index times 2 and divided by 10. Average then multiplied by 10 and 200 added. Source: Standard & Poor’s and Commodity Research Bureau.

**Figure 4.**

US STOCK PRICES vs. BRENT CRUDE OIL PRICE

- **S&P 500 Index**
- **Brent Crude Oil Price** (dollars per barrel)

Economic Surprise Index

Figure 5.

S&P 500 INDEX vs. CITIGROUP ECONOMIC SURPRISE INDEX
(percent)

S&P 500 minus its 200 day-moving average
Economic Surprise Index


Figure 6.

S&P 500 P/E vs. CITIGROUP ECONOMIC SURPRISE INDEX
(percent)

S&P 500 Forward P/E*
Economic Surprise Index

* Average weekly price divided by 52-week forward consensus expected operating earnings per share.
Source: Standard & Poor’s, I/B/E/S data by Refinitiv, and Citigroup.
Investors Intelligence Sentiment

INVESTORS INTELLIGENCE BULLS & BEARS

Ratio

Bull/Bear Ratio*

<table>
<thead>
<tr>
<th>Date</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 2</td>
<td>2.24</td>
</tr>
<tr>
<td>Nov 9</td>
<td>2.53</td>
</tr>
<tr>
<td>Nov 16</td>
<td>2.67</td>
</tr>
</tbody>
</table>

Percentage

Bulls | Bears
Nov 2 | 54.0  | 24.1  |
Nov 9 | 56.5  | 22.3  |
Nov 16| 57.2  | 21.4  |

Correction

<table>
<thead>
<tr>
<th>Date</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 2</td>
<td>21.9</td>
</tr>
<tr>
<td>Nov 9</td>
<td>21.2</td>
</tr>
<tr>
<td>Nov 16</td>
<td>21.4</td>
</tr>
</tbody>
</table>

Source: Investors Intelligence.
S&P 500 INDEX vs. BULL/BEAR RATIO OF 3.0 OR MORE* (ratio scale)

* Red shaded areas indicate Bull/Bear Ratio equal to or greater than 3.0.
Source: Standard & Poor’s and Investors Intelligence.

DOW JONES INDEX vs. BULL/BEAR RATIO OF 3.0 OR MORE* (ratio scale)

* Red shaded areas indicate Bull/Bear Ratio equal to or greater than 3.0.
Bull/Bear Ratio Under 1.0

* Green shaded areas indicate Bull/Bear Ratio equal to or less than 1.0.
Source: Standard & Poor’s and Investors Intelligence.

* Green shaded areas indicates Bull/Bear Ratio equal to or less than 1.0.
Figure 12.

**S&P 500 % FROM 200-DMA vs. BULL/BEAR RATIO OF 3.0 OR MORE**

* Red shaded areas indicates Bull/Bear Ratio equal to or more than 3.0.
Source: Standard & Poor’s Corporation.

Figure 13.

**S&P 500 % FROM 200-DMA vs. BULL/BEAR RATIO OF 1.0 OR LESS**

* Green shaded areas indicates Bull/Bear Ratio equal to or less than 1.0.
Source: Standard & Poor’s Corporation.
AAII Sentiment

*AAII Bull Ratio is the percent of bulls over the percent of bulls plus percent of bears. Source: American Association of Individual Investors (AAII).
Volatility

Figure 15.
BULL/BEAR RATIO & CONSUMER CONFIDENCE

Source: New York Board of Trade, Commodity Futures Trading Commission, and the Conference Board.

Figure 16.
VIX: S&P 500

Source: Chicago Board Options Exchange.
Figure 17.

VIX: NASDAQ 100

Source: Chicago Board Options Exchange.

Figure 18.

NEW YORK STOCK EXCHANGE WEEKLY VOLUME
(billion shares, 4-week moving average)

Dow Theory

Figure 19.

DOW JONES STOCK AVERAGES (ratio scale)

Industrials (DJIA)
Transportation (DJTA)


Figure 20.

S&P 500 STOCK INDEXES (ratio scale)

Industrials Composite*
Transportation Composite

* S&P 500 excluding Financials, Transports, and Utilities.
Source: Standard & Poor’s.
**S&P 500 Moving Averages**

**Figure 21.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>-56.8%</td>
<td>517</td>
</tr>
<tr>
<td>2009</td>
<td>-16.0%</td>
<td>70</td>
</tr>
<tr>
<td>2010</td>
<td>-19.4%</td>
<td>157</td>
</tr>
<tr>
<td>2011</td>
<td>-9.8%</td>
<td>60</td>
</tr>
<tr>
<td>2012</td>
<td>-7.7%</td>
<td>62</td>
</tr>
<tr>
<td>2013</td>
<td>-5.8%</td>
<td>34</td>
</tr>
<tr>
<td>2014</td>
<td>-12.4%</td>
<td>96</td>
</tr>
<tr>
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<td>-10.2%</td>
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<tr>
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<td>-19.8%</td>
<td>95</td>
</tr>
<tr>
<td>2017</td>
<td>-33.9%</td>
<td>100</td>
</tr>
<tr>
<td>2018</td>
<td>-9.6%</td>
<td>21</td>
</tr>
<tr>
<td>2019</td>
<td>-6.8%</td>
<td>34</td>
</tr>
<tr>
<td>2020</td>
<td>-5.2%</td>
<td>32</td>
</tr>
</tbody>
</table>

Note: Dips are declines of less than 10%. Corrections are declines of 10% to 20%. Bear markets are declines of 20% or more. Number of days in parentheses.

Source: Standard & Poor’s Corporation.

**Figure 22.**

**S&P 500 INDEX** (as a percent of 200-day moving average)

<table>
<thead>
<tr>
<th>Year</th>
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</tr>
<tr>
<td>2020</td>
<td>-5.2%</td>
<td>32</td>
</tr>
</tbody>
</table>

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

Source: Standard & Poor’s.
Figure 23.

S&P 500 INDEX*

Latest price: 4655.27
50-dma: 4538.83
200-dma: 4304.40

(+) Latest price is 2.5% above the 50-dma.
(+) Latest price is 7.5% above the 200-dma.

* Ratio Scale
Source: Standard & Poor’s.

Figure 24.

S&P 500 INDEX TECHNICALS
THE DEATH CROSS & THE GOLDEN CROSS
(50-dma relative to 200-dma, percent, weekly)

Source: Haver Analytics and Standard & Poor’s Corporation.
S&P 500 Sectors Stock Price Index & 200-dma

Figure 25.

S&P 500* (price indexes)

HEALTH CARE

COMMUNICATION SERVICES

INDUSTRIALS

CONSUMER DISCRETIONARY

INFORMATION TECHNOLOGY

CONSUMER STAPLES

MATERIALS

ENERGY

REAL ESTATE

FINANCIALS

UTILITIES

Includes Real Estate through September 2016

* S&P 500 sector price indexes on ratio scales.

Source: Haver Analytics and Standard & Poor’s Corporation.
S&P 500 Sectors Stock Price Index Minus 200-dma

Figure 26.

S&P 500
(price index as percentage of 200-dma)

HEALTH CARE

COMMUNICATION SERVICES

INDUSTRIALS

CONSUMER DISCRETIONARY

INFORMATION TECHNOLOGY

CONSUMER STAPLES

MATERIALS

ENERGY

REAL ESTATE

FINANCIALS

UTILITIES

Source: Standard & Poor’s.
S&P 500 Sectors Stock Price Index Relative to S&P 500

Figure 27.

CONSUMER DISCRETIONARY
(as a ratio of S&P 500 Index)

INDUSTRIALS

CONSUMER STAPLES

INFORMATION TECHNOLOGY

ENERGY

MATERIALS

FINANCIALS

COMMUNICATION SERVICES

HEALTH CARE

UTILITIES

Source: Haver Analytics and Standard & Poor’s Corporation.