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YRI FUNDAMENTAL STOCK MARKET INDICATOR and S&P 500 INDEX

YRI Fundamental Stock Market Indicator*

S&P 500 Index

* Average of Consumer Comfort Index and Boom-Bust Barometer, which is CRB raw industrials spot price index divided by initial unemployment claims, four-week moving average.
Source: Bloomberg, Commodity Research Bureau, Department of Labor, and Standard & Poor’s Corporation.

YRI BOOM-BUST BAROMETER & CONSUMER COMFORT INDEX

Boom-Bust Barometer*

Consumer Comfort Index

* CRB raw industrials spot price index divided by initial unemployment claims, four-week moving average.
Source: Bloomberg, Commodity Research Bureau, Department of Labor.
Figure 3.
S&P 500 INDEX & INDUSTRIAL COMMODITY PRICES

S&P 500 Index
CRB Raw Industrials
Spot Index


Figure 4.
S&P 500 INDEX & INITIAL UNEMPLOYMENT CLAIMS

S&P 500 Index
Initial Unemployment Claims (thousands, sa, four-week moving average, inverted scale)

Source: US Department of Labor and Standard & Poor’s.
Figure 5.

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

- YRI Global Growth Barometer* (988.8)
- S&P 500 Index (2673.5)

* 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 Corporation and Commodity Research Bureau.

Figure 6.

US STOCK PRICES vs. BRENT CRUDE OIL PRICE

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

* Nearby futures price.
Source: Financial Times and Standard & Poor’s Corporation.
**Figure 7.** S&P 500 INDEX vs. CITIGROUP ECONOMIC SURPRISE INDEX (percent)

S&P 500 minus its 200 day-moving average

Economic Surprise Index


**Figure 8.** 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

Figure 9.

INVESTORS INTELLIGENCE BULLS & BEARS

<table>
<thead>
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<th>Ratio</th>
<th>Bull/Bear Ratio*</th>
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<tbody>
<tr>
<td>Nov 6</td>
<td>2.15</td>
</tr>
<tr>
<td>Nov 13</td>
<td>2.26</td>
</tr>
<tr>
<td>Nov 20</td>
<td>2.00</td>
</tr>
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Source: Investors Intelligence.
Figure 10.

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.

Figure 11.

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 14.

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 15.

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.
Figure 16.

AAII SENTIMENT INDEX FOR STOCKS

AAII Bull Ratio*

AAII Bull/Bear Ratio

Latest Readings
Bulls     Bears
Nov 14     35.1      36.0
Nov 21     25.3      47.1

* AAII Bull Ratio is the percent of bulls over the percent of bulls plus percent of bears.
Source: American Association of Individual Investors (AAII).
Bull/Bear Ratio vs. Consumer Confidence

Figure 17.

BULL/BEAR RATIO & CONSUMER CONFIDENCE

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

Figure 18.

BULL/BEAR RATIO & CONSUMER COMFORT INDEX

Source: New York Board of Trade, Commodity Futures Trading Commission, and Bloomberg.
Figure 19.

S&P 500 Put Call Ratio

Source: Chicago Board of Options Exchange.

Figure 20.

Source: Chicago Board of Options Exchange.
Figure 21.

VIX: S&P 500

Source: Chicago Board Options Exchange.

Figure 22.

VIX: NASDAQ 100

Source: Chicago Board Options Exchange.
Figure 23.

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

Figure 24.

DOW JONES STOCK AVERAGES
(ratio scale)

Industrials (DJIA)
Transportation (DJTA)


Figure 25.

S&P 500 STOCK INDEXES
(ratio scale)

Industrials Composite*
Transportation Composite

* S&P 500 excluding Financials, Transports, and Utilities.
Source: Standard & Poor's.
Figure 26.

S&P 500 INDEX: 2008-2017*
(log scale)

-56.8% (517)
-16.0% (70)
-19.4% (157)
-9.9% (60)
-7.7% (62)
-5.8% (34)
-7.4% (28)
-12.4% (96)
-13.3% (100)
-10.2% (13)
-10.2% (64)


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 27.

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

% from 200-day moving average (-3.2)

Source: Standard & Poor’s.
S&P 500 INDEX

Latest price: 2673.45
50-dma: 2784.42
200-dma: 2761.73

(-) Latest price is -4.2% below the 50-dma.
(-) Latest price is -3.3% below the 200-dma.

Source: Standard & Poor’s.

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.
Figure 30.

S&P 500* (price indexes)

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

INDUSTRIALS

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

CONSUMER DISCRETIONARY*

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

INFORMATION TECHNOLOGY

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

CONSUMER STAPLES

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

MATERIALS

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

ENERGY

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

REAL ESTATE

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

FINANCIALS

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

COMMUNICATION SERVICES

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

HEALTH CARE

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

UTILITIES

11/26

06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

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

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

200-day moving average
S&P 500 Sectors Stock Price Index Minus 200-dma

Figure 31.

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

INDUSTRIALS

CONSUMER DISCRETIONARY

INFORMATION TECHNOLOGY

CONSUMER STAPLES

MATERIALS

ENERGY

REAL ESTATE

FINANCIALS

COMMUNICATION SERVICES

HEALTH CARE

UTILITIES

% from 200-dma (-3.2)

(-6.2)

(-4.7)

(-6.8)

(3.3)

(-7.0)

(-10.8)

(3.1)

(-4.2)

(-4.2)

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

Figure 32.

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

INDUSTRIALS

CONSUMER STAPLES

INFORMATION TECHNOLOGY

ENERGY

MATERIALS

FINANCIALS

TELECOMMUNICATION SERVICES

HEALTH CARE

UTILITIES

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