### Table Of Contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Prices</td>
<td>1</td>
</tr>
<tr>
<td>S&amp;P 500 Earnings, Revenues, Margins</td>
<td>2</td>
</tr>
<tr>
<td>S&amp;P 500 Revenues &amp; Margins</td>
<td>3</td>
</tr>
<tr>
<td>S&amp;P 500 Revenues &amp; Earnings Estimates</td>
<td>4</td>
</tr>
<tr>
<td>S&amp;P 500/400/600 Forward Earnings &amp; Margins</td>
<td>5</td>
</tr>
<tr>
<td>Blue Angels</td>
<td>6</td>
</tr>
<tr>
<td>S&amp;P 500 Growth Squiggles</td>
<td>7</td>
</tr>
<tr>
<td>MSCI ex-US Growth Squiggles</td>
<td>8</td>
</tr>
<tr>
<td>Valuation</td>
<td>9</td>
</tr>
<tr>
<td>Relative Styles</td>
<td>10</td>
</tr>
<tr>
<td>Interest Rates</td>
<td>11</td>
</tr>
<tr>
<td>Equity Flows</td>
<td>12</td>
</tr>
<tr>
<td>Dollar &amp; Commodities</td>
<td>13</td>
</tr>
<tr>
<td>Stocks &amp; Commodities</td>
<td>14</td>
</tr>
<tr>
<td>Big Picture</td>
<td>15</td>
</tr>
<tr>
<td>US Economic Indicators</td>
<td>16-17</td>
</tr>
<tr>
<td>China</td>
<td>18</td>
</tr>
<tr>
<td>Eurozone</td>
<td>19</td>
</tr>
<tr>
<td>Global Demography</td>
<td>20</td>
</tr>
</tbody>
</table>
**Stock Prices**

**Figure 1.**

**RELATIVE GLOBAL PERFORMANCE OF US MSCI:**
**US MSCI (US$) DIVIDED BY ALL COUNTRY WORLD EX US MSCI**
(in both US$ and in local currencies, daily)

![Graph showing relative global performance of US MSCI](image)

Source: MSCI.

**Figure 2.**

**S&P 500 BULL & BEAR MARKETS & CORRECTIONS: 2008-2020**
(ratio scale)

![Graph showing S&P 500 bull and bear markets and corrections](image)

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.
S&P 500 Earnings, Revenues, Margins

Figure 3.

**S&P 500 REVENUES PER SHARE: FORWARD & ACTUAL**
(dollars)

**S&P 500 OPERATING EARNINGS PER SHARE: FORWARD & ACTUAL**
(dollars)

**S&P 500 PROFIT MARGIN MEASURES**
(percent)

* Time-weighted average of consensus estimates for current and next years.
Source: Standard & Poor’s and I/B/E/S data by Refinitiv.
Figure 4.

S&P 500 Revenues & Margins

S&P 500 REVENUES
(yearly percent change)

S&P 500 Revenues
Aggregated* (2.4)
Per Share (4.0)

* S&P quarterly data, not per share. Revenues are derived by multiplying S&P 500 revenues per share by the S&P 500 divisor for each quarter.
Source: Standard & Poor’s.

Figure 5.

S&P 500 OPERATING PROFIT MARGIN (I/B/E/S data) & AFTER-TAX CORPORATE PROFIT MARGIN (without IVA & CCAdj)

Corporate Profits After Tax*
(as a percent of nominal GDP)
(blue line)

S&P 500 Operating Profit Margin
Using I/B/E/S Earnings**
(percent, quarterly, nsa)
(red line)

* After-tax profits as reported to IRS excluding Inventory Valuation Adjustment (IVA) and Capital Consumption Adjustment (CCAdj), which restate the historical cost basis used in profits tax accounting for inventory withdrawals and depreciation to the current cost measures used in GDP.
** Operating Profit Margin derived using revenues from S&P and earnings from I/B/E/S data by Refinitiv.
Note: Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Standard & Poor’s, Bureau of Economic Analysis, and I/B/E/S data by Refinitiv.
S&P 500 Revenues & Earnings Estimates

Figure 6.

S&P 500 REVENUES & YRI FORECASTS
(dollars per share)

YRI Forecasts
- 2019 (1383.00)
- 2020 (1452.00)
- 2021 (1510.00)

Consensus Forecasts
- 2019 (1395.42)
- 2020 (1463.14)
- 2021 (1534.99)

S&P Actual
- Trailing 4-quarter Revenues per share (1392.49)

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

Figure 7.

S&P 500 OPERATING EARNINGS & YRI FORECASTS
(dollars per share)

YRI Forecasts
- 2019 (163.00)
- 2020 (172.00)
- 2021 (181.00)

Consensus Forecasts
- 2019 (161.54)
- 2020 (177.01)
- 2021 (195.99)

I/B/E/S Actual
- Trailing 4-quarter operating EPS (163.78)

Source: I/B/E/S data by Refinitiv.
**S&P 500/400/600 Forward Earnings & Margins**

Figure 8.

*S&P 500/400/600 FORWARD EARNINGS*
(dollars per share, ratio scale)

Forward Earnings*
- S&P 500 LargeCap (177.74)
- S&P 400 MidCap (120.57)
- S&P 600 SmallCap (58.47)

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

Figure 9.

*S&P FORWARD PROFIT MARGINS* 
(using analysts average earnings and sales forecasts, percent)

Forward Profit Margins*
- S&P 500 (12.0)
- S&P 400 (7.1)
- S&P 600 (5.2)

* Time-weighted average of the consensus estimates for current and next year using forward earnings divided by forward revenues.
Source: I/B/E/S data by Refinitiv and Standard & Poor’s.
Figure 10.

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

Blue Angels: S&P 500
- Actual 01/17/20
- Implied* 01/09/20

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

---

Figure 11.

ALL COUNTRY WORLD EX-US MSCI, FORWARD EARNINGS, & VALUATION

- All Country World Ex-US MSCI Index (in local currencies) 01/20/20
- Blue Angels Implied Price Index* 01/17/20

* Implied price index calculated using forward earnings times forward P/Es. Monthly through December 2005, weekly thereafter.
Source: Standard & Poor’s and I/B/E/S data by Refinitiv.
S&P 500 Growth Squiggles

Figure 12.

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

- 2011 (9.9)
- 2012 (1.5)
- 2013 (1.7)
- 2014 (3.1)
- 2015 (-3.7)
- 2016 (1.9)
- 2017 (6.4)
- 2018 (8.9)
- 2019 (4.1)
- 2020 (4.8)
- 2021 (4.9)

Latest data thru 01/16/20

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

Figure 13.

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 (1.1)
- 2020 (8.8)
- 2021 (10.9)

Latest data thru 01/16/20

Source: I/B/E/S data by Refinitiv.
MSCI ex-US Growth Squiggles

Figure 14.

ALL COUNTRY WORLD EX-US MSCI ANNUAL REVENUE GROWTH FORECASTS
(based on analysts' consensus estimates, percent, weekly)

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

Figure 15.

ALL COUNTRY WORLD EX-US MSCI ANNUAL EARNINGS GROWTH FORECASTS
(based on analysts' consensus estimates, percent, weekly)

Source: I/B/E/S data by Refinitiv.
Figure 16.
FORWARD P/E RATIOS FOR S&P STOCK PRICE INDEXES*
(daily)

S&P 500 LargeCap (18.7)
S&P 400 MidCap (17.4)
S&P 600 SmallCap (17.8)

* Daily stock price index divided by 52-week forward consensus expected operating earnings per share.
Source: I/B/E/S data by Refinitiv and Standard & Poor’s.

Figure 17.
MSCI FORWARD P/E
(weekly)

Capped at 20

Forward P/E*
Emerging Markets (13.0)
EMU (14.5)
Japan (14.5)
UK (13.2)
US (19.0)

* Price divided by 12-month forward consensus expected operating earnings per share.
Source: I/B/E/S data by Refinitiv.
Figure 18.

S&P 600
(as a ratio of S&P 500)

S&P 400
(as a ratio of S&P 500)

Source: Standard & Poor’s.

Figure 19.

RELATIVE INDEXES: S&P 500 GROWTH DIVIDED BY S&P 500 VALUE
(ratio)

Source: Standard & Poor’s and Haver Analytics.
Figure 20.

**US TREASURY 10-YEAR & 2-YEAR YIELDS & FED FUNDS RATE**

(percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>10-Year Yield</th>
<th>2-Year Yield</th>
<th>Fed Funds Target Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1.84</td>
<td>1.58</td>
<td>1.63</td>
</tr>
</tbody>
</table>

Interest Rates

Source: Federal Reserve Board.

Figure 21.

**US YIELD CURVE* & FINANCIAL CRISES**

(basis points, weekly)

- Penn Central
- Franklin National
- Silver Bubble
- Continental Illinois
- S&L Crisis
- Mexican Peso
- Pacific Rim
- 9/11 Attacks
- Subprime Meltdown
- Tech Bubble
- Russia & LTCM
- Lehman & AIG

* 10-year US Treasury yield less federal funds rate.
Note: Blue shaded areas denote periods of monetary easing between cyclical peaks and troughs in the federal funds rate. Red shaded areas denote monetary tightening periods.
Source: Federal Reserve Board.
**Figure 22.**

*S&P 500 DIVIDENDS & BUYBACKS*

(Trillion dollars, annualized)

- **Buybacks**
- **Dividends**
- **S&P 500 Index**

Source: Standard & Poor’s.

**Figure 23.**

*EQUITY ETFs*\

(Yearly net inflows, billion dollars)

* Net share issuance by equity ETFs.

Figure 24.

S&P GOLDMAN SACHS COMMODITY INDEX & TRADE-WEIGHTED DOLLAR
(daily)

Goldman Sachs Commodity Index (nearby futures price)

JP Morgan Nominal Broad Effective Exchange Rate*

Source: Standard & Poor’s, JP Morgan, and Haver Analytics.

Figure 25.

BRENT CRUDE OIL PRICE & TRADE-WEIGHTED DOLLAR

Brent Crude Oil Futures Price* (dollars per barrel)

JP Morgan Nominal Broad Effective Exchange Rate** (inverted scale)

* Nearby futures price.
** Argentina, Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Czech Republic, Denmark, Ecuador, Egypt, France, Germany, Hong Kong, Hungary, Japan, India, Indonesia, Israel, Italy, Korea, Kuwait, Malaysia, Mexico, Morocco, New Zealand, Nigeria, Norway, Pakistan, Panama, Peru, Philippines, Poland, Romania, Russia Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Kingdom, Ukraine, Uruguay, Venezuela, Vietnam, and United States. Source: JP Morgan and Haver Analytics.
**Figure 26.**

*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 27.**

**EMERGING MARKETS MSCI STOCK PRICE INDEX (in dollars)**

- **MSCI Stock Price Index**
- **CRB Raw Industrials Spot Price Index**

* Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow.

**CONSUMER PRICE INDEX**: 1800-1947

- War of 1812 (1812-1815)
- Civil War (1861-1865)
- World War I (1914-1918)
- World War II (1939-1945)

* Annual data. Base index from 1800 to 1947 is 1967 = 100.
** 1982-84=100.

Source: Census Bureau, Historical Statistics of the United States

---

**PRODUCTIVITY: NONFARM BUSINESS**
(20-quarter percent change, annual rate)

- Latest (1.0)
- Q3

Note: Shaded areas denote recessions according to the National Bureau of Economic Research.
Figure 30.

ATA TRUCK TONNAGE INDEX
(2015=100, sa)

Source: American Trucking Association.

Figure 31.

COINCIDENT ECONOMIC INDICATORS: RECOVERIES & EXPANSIONS*
(2016=100, sa, ratio scale)

* Red horizontal lines span cyclical peaks through subsequent cyclical recoveries. Green horizontal lines are expansion periods following recoveries.
Source: Conference Board, Haver Analytics, and YRI calculations.
Figure 32.

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

* Average hourly earnings deflated by personal consumption expenditures deflator.

Figure 33.

MANUFACTURING PRODUCTION & CAPACITY
(2012 = 100, ratio scale)

Note: C = China joined WTO on December 11, 2001. Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Federal Reserve Board.
**China**

* Figure 34.

CHINA RETAIL SALES & CPI  
( Yearly percent change )

- Retail Sales (8.0)
- CPI (4.5)
- Real Retail Sales* (3.5)

* Yearly percent change in retail sales minus yearly percent change in CPI.  
Source: China National Bureau of Statistics.

* Figure 35.

BANK LOANS & MONEY SUPPLY  
( Trillion US dollars )

- China: Bank Loans (nsa) (21.8)
- US: Bank Loans (sa) (10.0)
- China: M2 (28.3)

Source: Federal Reserve Board and People’s Bank of China.
**Eurozone**

**Figure 36.**

EUROZONE: INDUSTRIAL PRODUCTION EXCLUDING CONSTRUCTION (January 2006=100)

- Germany (Nov=109.5)
- France (Nov=94.1)
- Italy (Nov=85.3)
- Spain (Nov=81.8)

Source: Haver Analytics.

**Figure 37.**

EUROZONE: ECONOMIC SENTIMENT INDICATOR* & REAL GDP

- The overall economic sentiment indicator (ESI) is derived from the industrial (weight 40%), service (30%), consumer (20%), construction (5%), and retail trade (5%) confidence indicators.

Source: Statistical Office of the European Communities, European Commission, and Haver Analytics.
**Global Demography**

*FERTILITY RATES* (children per woman)

2019 Values                   2095 Values

- **World (2.5)**
- **US (1.8)**
- **Europe (1.6)**
- **Africa (4.5)**
- **Latin Am** (2.1)
- **China (1.7)**
- **India (2.3)**

2019 Values

- **World (2.5)**
- **US (1.8)**
- **Europe (1.6)**
- **Africa (4.5)**
- **Latin Am** (2.1)
- **China (1.7)**
- **India (2.3)**


** Including the Caribbean.


*Figure 38.*

---

**WORLD: ELDERLY DEPENDENCY RATIO & PROJECTIONS** (number of workers per senior)

2019 Values                   2095 Values

- **World (7.2)**
- **US (4.0)**
- **Europe (3.5)**
- **Africa (16.1)**
- **Latin Am** (7.7)
- **China (6.2)**
- **India (10.5)**

2019 Values

- **World (7.2)**
- **US (4.0)**
- **Europe (3.5)**
- **Africa (16.1)**
- **Latin Am** (7.7)
- **China (6.2)**
- **India (10.5)**


** Including the Caribbean.


*Figure 39.*