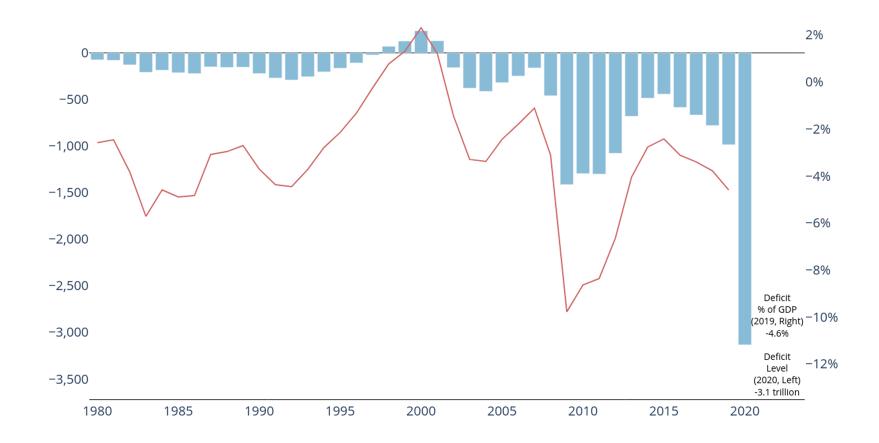


Federal Debt, Interest Rates, and Stocks Chartbook

Cliff Jarvis | Vice President - Investments | November 27, 2020

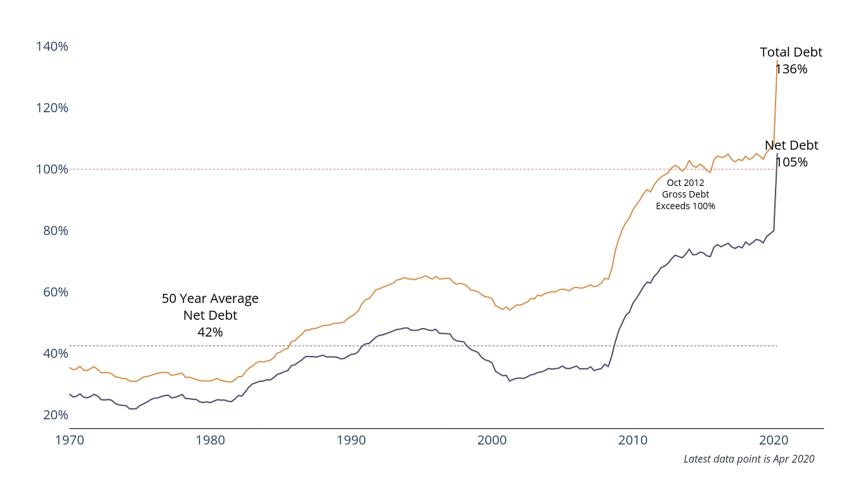
Federal Budget Deficit



• The annual budget deficit has risen sharply as government spending has far exceeded its revenues due to the Covid lockdown.

Federal Debt to GDP

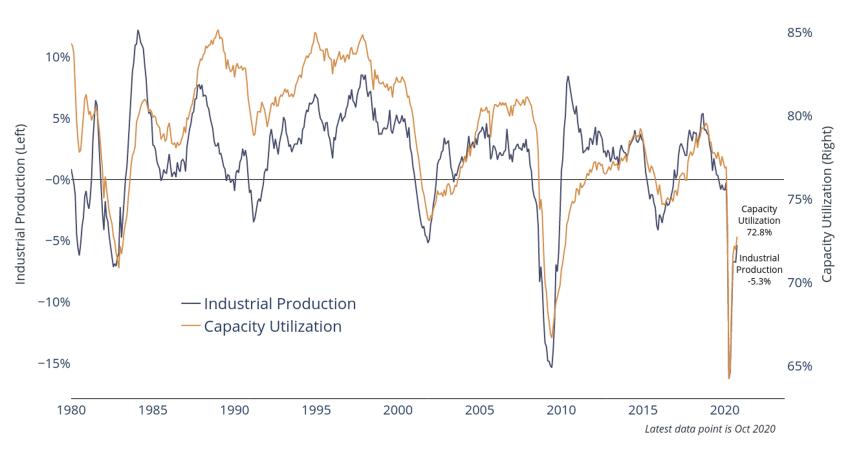
U.S. federal debt as a percentage of GDP, gross and net



- Total Federal debt has been rising over the past decade. The Covid crisis and the lockdown have pushed it substantially higher.
- What matters is whether the economy can support the level of debt. Thus, it is important to compare it to GDP.

Industrial Production and Capacity Utilization

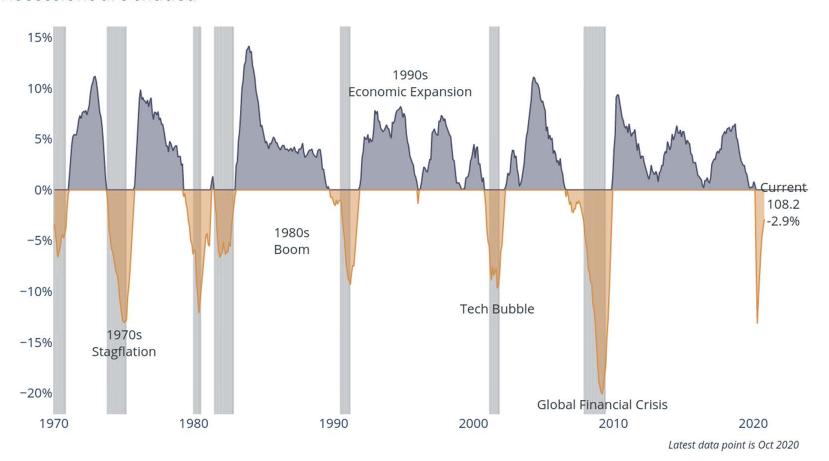
Year-over-year changes in seasonally adjusted data



- Industrial production is an important indicator of economic activity.
- Similarly, capacity utilization tells us whether there is spare or excess capacity in the system.
- Manufacturing activity has recovered somewhat but is still below previous levels.

Leading Economic Indicators

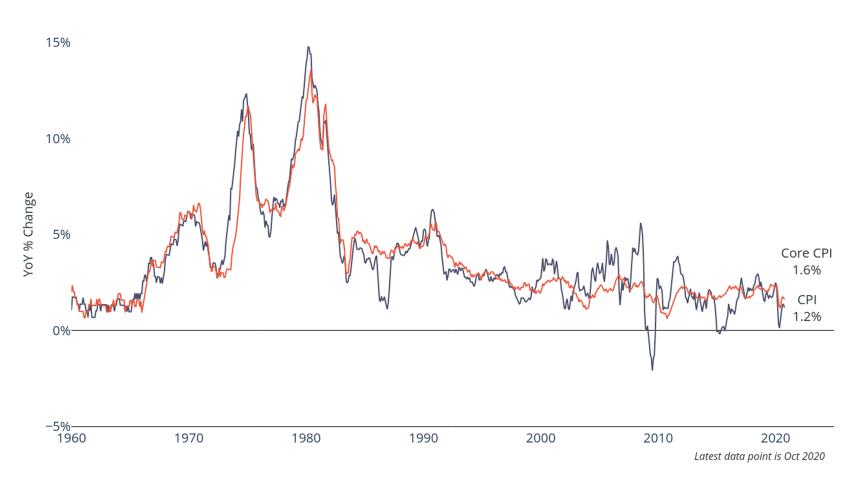
Conference Board LEI year-over-year percent change Recessions are shaded



- This chart shows the year-over-year percent change in an index of leading economic indicators.
- At the moment, these leading economic indicators are negative due to the coronavirus.

Consumer Price Index

CPI and Ex Food and Energy, YoY % Change



- CPI is a commonly cited measure of inflation. It uses a basket of goods and services to track price changes for consumers.
- Inflation has been substantially lower than average over the past decades.
- Inflation is often the main driver of interest rates.

Interest Rates

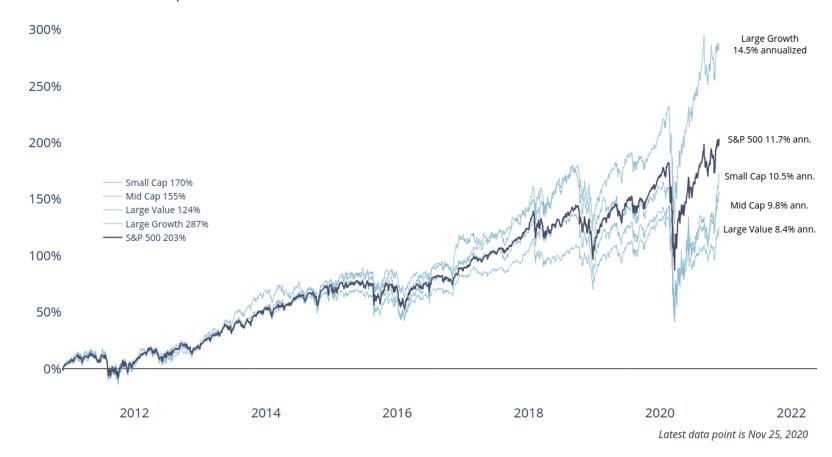
10-year and 2-year yields since 2012



- Long-term interest rates have plummeted in 2020 due to the pandemic and economic uncertainty.
- The 10-year Treasury yield continues to hover at historically low levels due partly to subdued inflation.
- Interest rates could be sensitive to changes in inflationary expectations.

Size and Style Returns - Past 10 Years

Large, mid and small caps are the S&P 500, S&P 600 and S&P 400, respectively Price returns and compound annual returns shown



- This chart shows a history of stock market size and style returns.
- Historically, Growth and Value stocks have trended together.
- However recently, a number of factors have opened up a wide gap between the two.

Definitions and Methodology

The **S&P 500** is a market capitalization-weighted index of large cap U.S. stocks. U.S. **mid cap** and **small cap** are the S&P 400 and S&P 600, respectively. **Value** and **growth** are the corresponding Standard and Poor's value and growth indices.

MSCI EME is an index of emerging market stocks. **MSCI EAFE** is an index of developed market stocks. **MSCI ACWI** is an index of global stocks.

The **forward P/E** is a ratio of the current market price of an index divided by an estimate of earnings over the next twelve months. The **Shiller P/E** is based on Robert Shiller's cyclically adjusted price-to-earnings ratio.

The **AAII Investor Sentiment** index is based on a weekly survey conducted by AAII.

Unless stated otherwise, **earnings** and **valuations** data are from Refinitiv indices.

The **LEI**, or Leading Economic Index, is produced monthly by the Conference Board.

Consumer sentiment indices are based on surveys conducted by the University of Michigan Surveys of Consumers.

Asset Class Performance and Asset Classes Relative to U.S. Stocks charts: The EM, EAFE, Small Cap, Fixed Income and Commodities are these indices, respectively: MSCI EM, MSCI EAFE, Russell 2000, iShares Core U.S. Bond Aggregate, Bloomberg Commodity Index.

The Balanced Portfolio is a hypothetical 60/40 portfolio consisting of 40% U.S. Large Cap, 5% Small Cap, 10% International Developed Equities, 5% Emerging Market Equities, 35% U.S. Bonds, and 5% Commodities.

The **Bloomberg Commodity Index** is a broadly diversified basket of physical commodities futures contracts.

The **DXY** is a U.S. dollar index based on a basket of currencies, including the Euro, Yen, Pound, Canadian Dollar, Swedish Krona and Swiss Franc.

Portfolio Risk/Reward and Portfolio Drift Since 2009 charts: stocks and bonds are the S&P 500 and iShares Core U.S. Bond Aggregate, respectively. Each portfolio represents a hypothetical stock/bond asset allocation.

The **MSCI Factor** indices are created and maintained by MSCI to capture factor returns. They cover various factors including Quality, Size, Momentum, Volatility, Value and Yield. The Multi-Factor index tracks the performance of Value, Momentum, Quality and Size.

The MSCI USA index tracks large and mid cap U.S. stocks.

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