Congressional Research Service
Informing the legislative debate since 1914

INSIGHT

Why Have Stock Market and Real Economy Diverged During the COVID-19 Pandemic?

September 2, 2020

During the Coronavirus Disease 2019 (COVID-19) pandemic, the stock market and the economy have experienced major turning points—the economic expansion of more than 10 years ended in February, and the U.S. stock market ended an 11-year bull run in March. While the economy continued in a deep recession, a common U.S. stock market gauge, the Standard & Poors (S&P) 500 index—an index including 500 large U.S. publicly-traded companies and capturing 80% of market capitalization—rebounded to higher than pre-pandemic levels as of August 2020. This Insight explores this seeming disconnect between the state of the economy and the performance of capital markets, as illustrated by price movements of the S&P 500.

What Does Stock Price Indicate?

At a fundamental level, a stock's price is forward-looking, building on the market's expectations of a company's worth. The price often reflects the current value of a firm's expected future profits. Many factors could influence earnings and feed into an analysis of a firm's fundamental value. Using a flower shop as an example, these factors could include anything from the business's existing financial conditions to expectations about the evolving size of the flower market and level of competition within the market to the anticipated availability of sufficient numbers of bees to pollinate the flowers.

Earnings projections may only partially explain stock prices. According to a July 14, 2020, Goldman Sachs report, the fundamental price-to-earnings valuation analysis at the time of investment explains nearly 50% of a firm's 10-year forward equity total returns. In other words, such experts estimate that a firm's earnings capacity at the time of investment normally accounts for one-half of its stock's performance over a 10-year period, leaving half of the performance to be explained by other factors.

Common causes for a stock's price to decouple from a firm's underlying earnings fundamentals include certain macroeconomic conditions, policy interventions, supply and demand for the particular financial asset, market behavior, and liquidity needs. Some of these factors are difficult to gauge and often have more pronounced effects during market turmoil.

Congressional Research Service

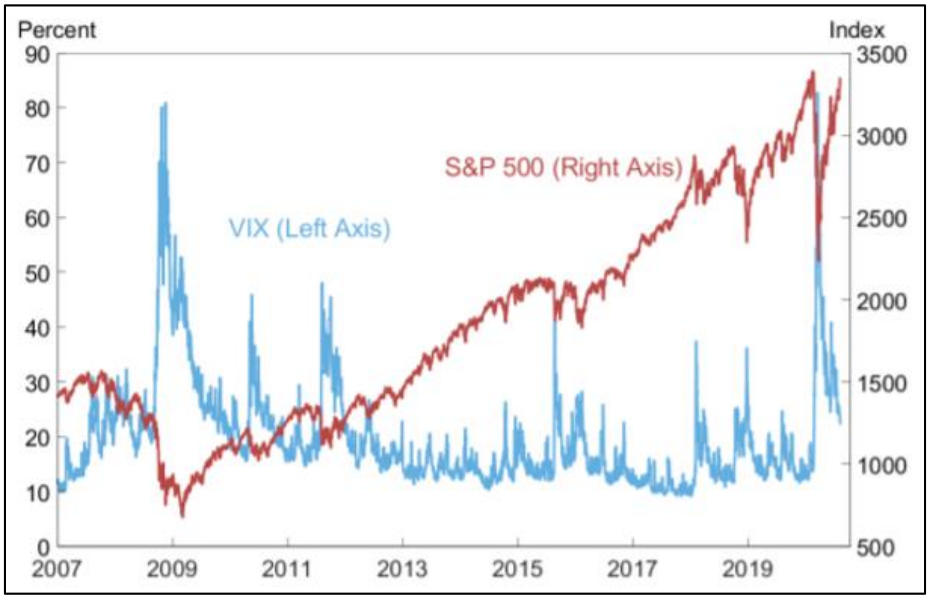
https://crsreports.congress.gov

IN11494

What Happened to the S&P 500 Stock Index During COVID-19?

During the COVID-19 pandemic, the S&P 500 index experienced the fastest drop and recovery on record. It declined 34% between February 19 and March 23, 2020. Even though the real economy has not yet recovered, the S&P 500 regained those losses and rose above its previous peak in August 2020. Price movements and volatility have been at levels last seen in the 2007-2009 financial crisis (**Figure 1**).

Figure 1. Stock Market Index and Volatility

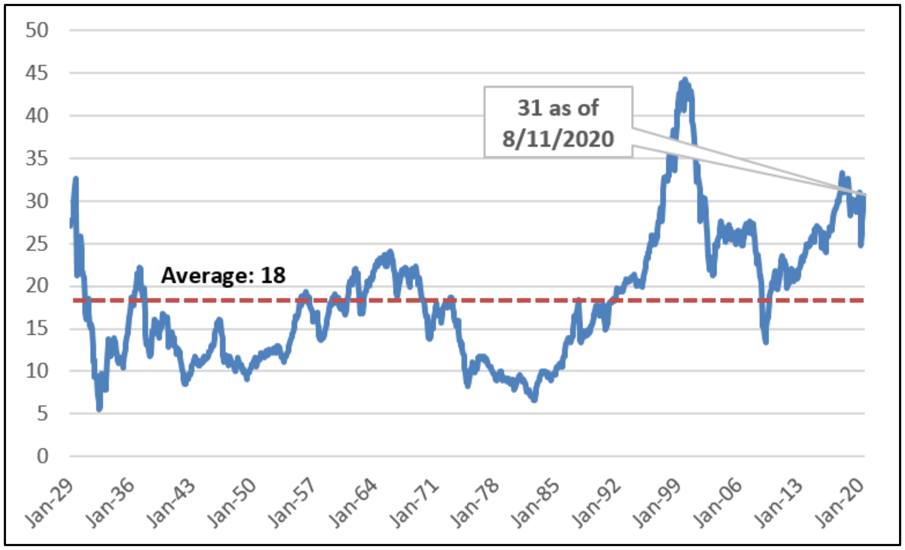


Source: Federal Reserve Bank of New York.

Note: VIX is an index that measures volatility of the U.S. stock market.

The S&P 500 continued to go up in August 2020, and some believe that a new market "bubble" is forming. A market bubble normally forms when stock prices are significantly above their fundamental valuations. One way to gauge the relative relationship between stock prices and the earnings fundamentals is to observe the cyclically-adjusted price-to-earnings ratio (CAPE), a measure of S&P 500 prices relative to long-term operating earnings. CAPE reached historically high levels as of August 11, 2020 (**Figure 2**). In such a situation, stocks are often seen as "expensive."

Figure 2. Cyclically-Adjusted Price-to-Earnings Ratio (1929-2020)



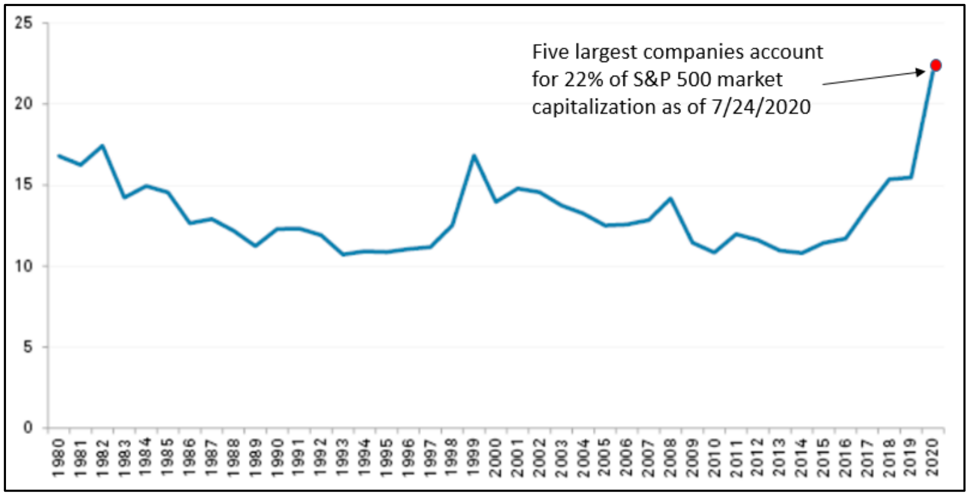
Source: CRS, based on data from Robert Shiller, Sterling Professor of Economics, Yale University.

Why Has the S&P 500 Risen as the Economy Struggles?

The S&P 500 has risen to above pre-pandemic levels, even as second-quarter gross domestic product declined by a third. This would seem to indicate the decoupling of capital markets from the real economy. Factors at work may include the following:

- **Future Outlook.** Stock indexes are forward-looking indicators. The S&P 500's fast rebound may reflect investors' optimistic outlooks for an economic recovery. If the outlook were to become pessimistic, the stock prices could quickly decline.
- **Index Composition.** The S&P 500 has become more concentrated over time (**Figure 3**). Five technology companies (Facebook, Apple, Amazon, Microsoft, and Alphabet; collectively known as FAAMG) now account for around 22% of the index's market capitalization. The perception that such technology companies in particular will grow during the pandemic may have pushed the S&P 500 higher, even as many other businesses suffer.

Figure 3. S&P 500 Market Capitalization Concentration



Source: S&P Global.

- **Retail (Individual) Investor Involvement.** With many citizens staying home during the pandemic, retail investors are trading more than ever. This investor segment normally makes up around 10% of the trading market, but since the pandemic, it has reached as high as 25%. When retail investors become a significant part of the market, pricing may become more erratic, and fundamentals matter less. For example, some analysts believe that with professional sports and other group activities on pause, certain retail investors have turned to day trading to fight boredom. These types of trading decisions could be different than those of institutional investors, who may rely more on fundamental research on the real economy.
- **Low Interest Rate Environment.** The record low long-term interest rates may have shifted demand from other lower-return asset classes to higher-return stocks. This increased demand could drive up the price of the index.
- **Policy Intervention.** Many believe that policy interventions to keep interest rates low and prevent market disruptions have distorted the markets' price discovery mechanisms. One example of a capital markets policy intervention is the emergency facilities established by the Federal Reserve and the Department of the Treasury. The facilities generally provide a backstop for key capital markets segments through government-supported lending or purchases. Critics believe that the policy interventions have changed the price signals and made capital markets allocation less efficient. Supporters argue that without the intervention, the markets and the economy would face a sharp downturn. The market outcomes since the government interventions seem to suggest that some investors have become more optimistic about market participation and risk-taking despite the economic conditions. They may believe that the government could continue to provide a backstop during market crashes, thus reducing the risks to investors and increasing the attractiveness of capital markets.

Author Information

Eva Su
Analyst in Financial Economics

Disclaimer