# INTUITION<sup>°</sup>

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As US Stock Markets Soar Despite Pandemic Fallout, Some Ask When The Crash Will Come

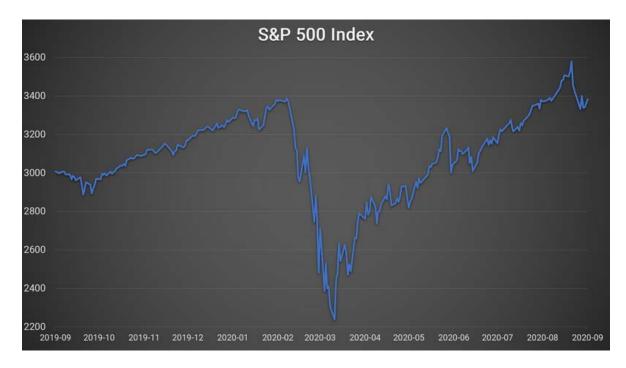
From Crisis To Opportunity: Central Banks Seize The COVID-19 Moment To Embrace Change



# As US Stock Markets Soar Despite Pandemic Fallout, Some Ask When The Crash Will Come

Despite the brutal economic consequences of the coronavirus pandemic and a recent correction, US stock markets appear ready to end the year in the black. This is an extraordinary performance at a time when the global economic outlook seems increasingly bleak and global trade seems increasingly threatened. What is driving this surprising market strength? Is it corporate and economic fundamentals, or is it the unintended result of broader monetary machinations?

Despite the economic havoc wrought by the coronavirus pandemic, between the end of March and the beginning of September, the S&P 500 experienced virtually uninterrupted growth. Although the market is off its early-September highs, it has nevertheless erased almost all its first-quarter, pandemic-related losses in an extraordinary burst of growth. From its low point on March 23, it rose almost 58% by September 1.



Source: Yahoo! Finance, September 2020.

This exceptional performance comes despite high US unemployment, rising federal debt, slowing global trade, and ongoing social and economic disruption caused by the pandemic. It is also an unusually strong performance given that 2020 is an election year.

What accounts for US stocks' unexpected resilience?

# Two schools of thought

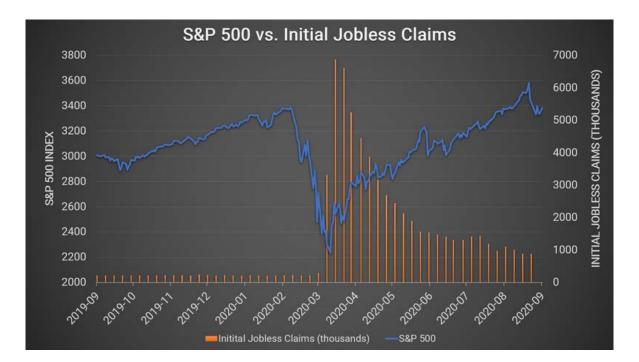
There are, essentially, two schools of thought. The first attributes the US stock market's performance to fundamental factors. The second argues that stock market outperformance is the unintended consequence of global monetary policy choices and challenging economic realities.



# It's the economy, stupid

The core of this argument is that the stock market is forward-looking. Stock prices do not reflect current economic conditions. Rather, stock prices rise and fall in anticipation of *future* conditions.

Consider, for example, the relationship between the stock market and job losses. One would expect the stock market to weaken in the face of rising unemployment, as job losses affect consumer spending and corporate profits. However, as the chart below illustrates, the stock market plunged ahead of the dramatic late March and early April spike in jobless claims and then began to rise ahead of the fall in jobless claims. In other words, the market anticipated future job losses (or future improvements in the rate of job losses) rather than responding to them after the fact.



Source: Yahoo! Finance, Federal Reserve Bank of St Louis, September 2020.

As this example illustrates, the stock market tends to be proactive, rather than reactive. The pandemic downturn was reflected in the first-quarter slump in stock prices, but prices have since risen in anticipation of the US economy's V-shaped recovery.

This argument posits that stock prices are rising based on improving US economic fundamentals and in anticipation of stronger and more robust corporate profits going forward.

While this view may be correct, the market is nevertheless at historically high levels, especially given current economic conditions. In mid-September, the Schiller PE ratio for the S&P 500 was 31.07, compared to its historic mean of 16.74. This suggests that stocks are currently pricing in historically high future earnings, which may struggle to materialize given ongoing global economic weakness.

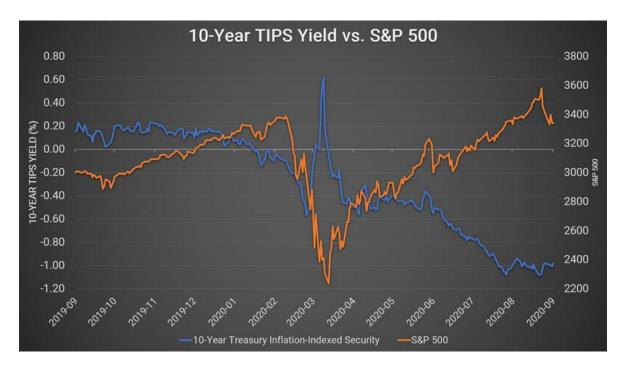
# It's the Fed, stupid

The second school of thought attributes the market's strength to the impact of monetary policy. Specifically, in the face of massive monetary stimulus and ultra-low interest rates, real yields – the return bond investors can expect after inflation – have collapsed.

The yield on 10-year inflation-linked Treasuries (TIPS) is around -1% - a historically low level. Such deeply negative TIPS yields suggest that investors believe the economic future is bleak and that inflation may rise.

While negative yields have shown up in Europe and Japan in recent years, the US has traditionally offered a safe harbor – positive real yields on safe-haven assets. Now, with TIPS yields turning negative, markets around the world are dealing with the fallout.

From a market perspective, negative real yields on Treasuries means that more and more investors are being forced into riskier assets. The search for yield is driving a flood of money into stocks, pushing up prices even in the face of troublesome fundamentals. As the chart below shows, the stock market has been broadly negatively correlated with TIPS yields over the last year, suggesting that falling real yields may be playing a role in rising markets.



Source: Federal Reserve Bank of St Louis, September 2020.

Whatever the driver behind the US stock market rally – whether its economic fundamentals, monetary policy, or a combination of various factors – many are asking whether the market is overheating and sowing the seeds of a future downturn.

Unfortunately, the answer to that question will depend on how rapid and complete the post-COVID economic recovery is, as well as on investor sentiment and the trajectory of yields in other markets. For now, however, it seems that US stocks may just continue to defy gravity.

Intuition Know-How has a number of tutorials that are relevant to equity markets and trading:

- Equity Markets An Introduction
- Equity Trading An Introduction
- Equity Trading Technical vs. Fundamental Trading
- Equity Valuation An Introduction
- Equity Returns Analysis
- US Equity Market



# From Crisis To Opportunity: Central Banks Seize The COVID-19 Moment To Embrace Change

Central banks worldwide are embracing extraordinary policies in a bid to stave off the worst economic impacts of the COVID-19 pandemic. The US Federal Reserve has announced a dramatic shift in its monetary policy approach, for example, and the European Central Bank has taken the unprecedented step of allowing for deviations from the capital key in its bond purchases. These and other developments suggest that the pandemic may lead to lasting changes in how the world approaches economic management and monetary policy.

2020 has been a year of extraordinary change. Millions of employees rapidly shifted to working from home, businesses retooled their product lines and processes virtually overnight, and teachers and students switched to online learning as education systems shuttered.

The upheaval caused by the COVID-19 pandemic has reached even the most conservative institutions, including central banks. The US Federal Reserve (Fed), for example, in August announced the most sweeping changes to its monetary policy approach in decades.

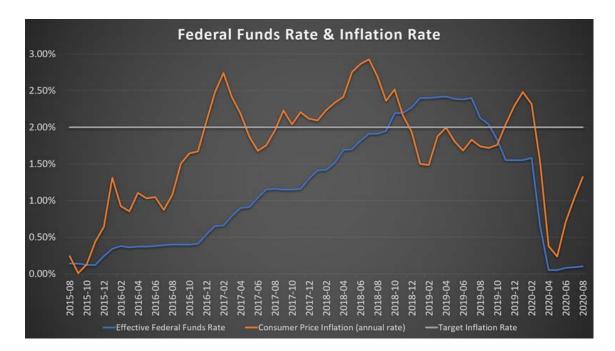


# The Fed recalibrates

The Fed conducts its monetary policy under a twin mandate to promote both maximum employment and price stability. In the past, the central bank has interpreted this mandate to mean that it should keep inflation at or below 2% and that it should act – usually by raising interest rates – when unemployment falls to a level the Fed deems likely to promote higher inflation.

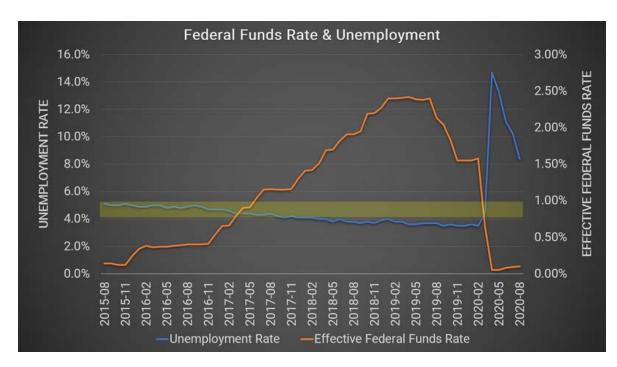
While this broad approach worked well in the decades following the 1970s when the Fed was grappling with inflation, it has been less appropriate in recent years and, indeed, has led to undesirable outcomes.

As the chart below illustrates, the Fed began raising interest rates in late 2015, even though inflation remained well below target. It continued raising rates throughout late 2018 and early 2019, even as inflation again fell below target. Some argued that the Fed's decision to steadily raise rates led to slower economic growth and lower wage growth.



Source: Federal Reserve Bank of St Louis, September 2020.

Certainly, looking only at inflation, the Fed's approach seems to have been out of keeping with its mandate. However, when one also considers the unemployment rate (see chart below), the Fed's hawkish stance becomes more intelligible. The Fed has generally considered an unemployment rate of between 5% and 6% to be the non-accelerating inflation rate of unemployment (NAIRU) – the level of unemployment that does not lead to inflation.



Source: Federal Reserve Bank of St Louis, September 2020.

As US unemployment levels fell below the NAIRU range in late 2018, the Fed began to worry about the potential inflationary effects of ultra-low unemployment and to raise interest rates, even though inflation remained broadly contained. As unemployment continued to fall, the Fed continued to raise interest rates to avert inflation that never materialized.



Following a long-planned policy review that began in 2019 and concluded in July 2020, the Fed announced a set of strategic updates intended to avoid the monetary policy mistakes of recent years. Specifically, Fed chair Jerome Powell announced two major changes:

- The Fed's 2% inflation target will henceforth be an average periods of below-average inflation can be followed by periods of above-average inflation without triggering an interest rate increase.
- The Fed will no longer attempt to prevent employment from rising above its estimate of the maximum sustainable level (in other words, it won't try to keep unemployment within the NAIRU range).

While these changes may seem relatively modest, by central banking standards they are consequential. The inflation-targeting change implies that the Fed will actively seek periods of above-average inflation after periods of below-average inflation in order to achieve an average rate of 2%, and the decision to no longer raise rates preemptively when unemployment falls below a certain level is a significant departure from the policy of the last five years.

# Changes afoot elsewhere

The Fed is not the only central bank engaging in extraordinary monetary policies.

In the European Union (EU), for example, the European Central Bank (ECB) announced that it would deploy funds under its Pandemic Emergency Purchase Program (PEPP) in a "flexible manner." While this does not sound revolutionary, in the language of the EU's central banking it was an important departure from standard practice – usually, the ECB's bond-buying programs are scaled in proportion to the capital key, which reflects each EU country's population and contribution to euro area GDP.

By unhitching the PEPP from the capital key, the ECB gave itself the flexibility to provide support where needed, even if that meant



a greater amount of smaller countries' bonds would be purchased. This move was widely regarded as a step in the direction of a more comprehensive capital markets union among euro area economies, something that many politicians and policymakers have advocated for a number of years.

More broadly, central banks around the world have enthusiastically embraced monetary policy stances in the wake of the crisis that would have seemed impossible even 15 years ago.

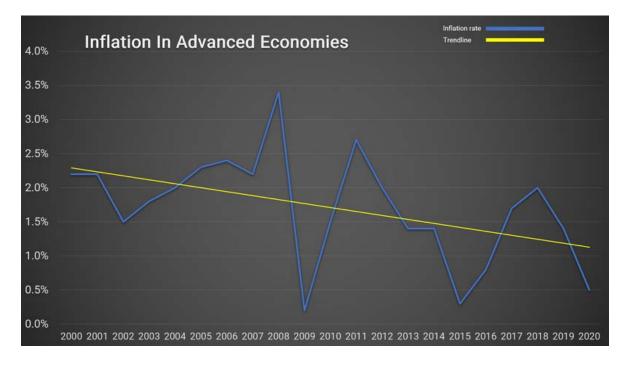
The ECB, the Fed, the Bank of Japan (BOJ) – and, to a lesser extent, the Bank of England – have embraced direct asset purchases and virtually unlimited bond-buying programs, as well as a range of extraordinary measures related to bank capital, lines of credit, and previously unimaginable negative interest rates.



# A brave new world of central banking

As monetary policy innovation continues apace and central banks enter new asset markets – in the US, for example, the Fed rolled out a program to lend directly to small businesses – many worry about the long-term inflationary impact of today's policy choices.

Yet, after two decades of steadily falling inflation in advanced economies – despite historically low interest rates – many observers believe that such policy innovation is necessary and appropriate to restore wealthy economies to robust health.



Source: International Monetary Fund, September 2020.

# Intuition Know-How has a number of tutorials that are relevant to monetary policy and central banks:

- Financial Authorities (US) Federal Reserve
- Financial Authorities (UK) Bank of England
- Financial Authorities (Europe) ECB
- Financial Authorities (Japan)
- Financial Authorities (China)
- Monetary Policy
- Inflation An Introduction
- Inflation Indicators
- Employment & Unemployment An Introduction
- Labor Market Indicators