

April 2020 Market Update

Key points

- The month of March was very challenging on many fronts as the risk of COVID-19 has led to many precautionary measures and a nearly complete slowdown of economic activity.
- The Fed responded to the market crisis quickly and effectively to facilitate liquidity and keep markets functioning.
- The U.S. government also recognized the threat to the economy from COVID-19 and it too stepped up to help mitigate the crisis by means of a \$2 trillion stimulus package.
- The oil price war between Saudi Arabia and Russia added further fuel to the already burning fire in the markets by pushing WTI crude oil prices below \$20 per barrel.

Outlook

GROWTH: Due to mandated work-from-home and stay-at-home policies by the government, we have witnessed the economy come to a near standstill. Additionally, there is a considerable amount of uncertainty around how long these virus mitigation strategies will last. The estimates on economic growth from many economists are all over the board, and it's very difficult to pinpoint where growth will eventually land in this unprecedented environment. Monetary and fiscal stimulus should help alleviate some of the economic fallout, but the reality is that we are in uncharted waters. Ultimately, we do expect the economy will experience a U-shaped recovery, but the timing is uncertain as to when that will take place.

| 2020 OUTLOOK FOR GROWTH | EXPECTATION |
|-------------------------|-------------|
| Real GDP (growth) | TBD |

INTEREST RATES: There has been a massive downward shift in the U.S. Treasury curve since the beginning of the year with front-end rates at the zero-bound and long-term rates down nearly 100 basis points. Recessionary conditions brought on by COVID-19 are the culprit for the dramatic shift in rates, and there remains a considerable amount of uncertainty as to where rates are headed from here. The economic fallout is going to be substantial, and although we subscribe to the idea of a U-shaped recovery in the economy, it remains uncertain how long interest rates will linger at these very depressed levels. Going forward, as the uncertainty around COVID-19 eventually subsides, we will have a better gauge on where rates will be headed, but for now it's difficult to see rates change much from their current levels.

| FORECAST PERIOD | 10-YEAR TREASURY YIELD |
|-----------------|------------------------|
| End of 2020 | TBD |

March 2020 recap and macro themes

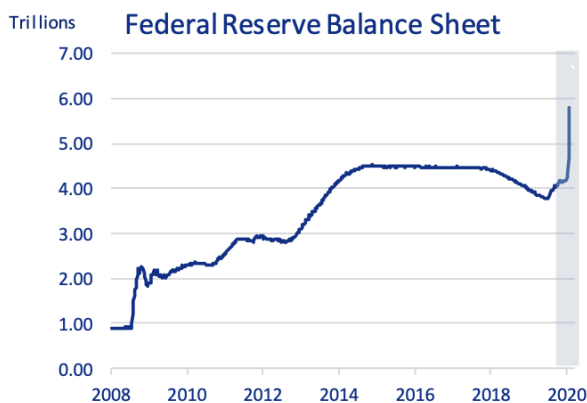
The month of March was very challenging on many fronts as the risk of COVID-19 has led to additional work-from-home measures, further social distancing, and a near complete slowdown of economic activity. From a market perspective, there was a sell-everything mentality that took grip over the financial system. Additionally, the tremendous amount of uncertainty and extreme volatility caused pockets of illiquidity to surface in many corners of the market. For instance, the commercial paper market, where high quality companies go to borrow short-term cash, effectively came to a halt as there was virtually no demand for the paper. U.S. Treasury bills, one of the most liquid assets in the world, were in such high demand that yields became negative for maturities all the way out to September. Credit spreads widened significantly as it became apparent how difficult it was to price risk in an environment where the world economy was closing down. At the end of the day, markets were effectively broken.

Fortunately, the Fed was able to recognize the problem quickly and responded in a very productive manner. This time around they threw in everything, including the kitchen sink, to facilitate liquidity and keep markets functioning. First, they removed the limits on their quantitative easing purchases and can now effectively buy unlimited amounts of Treasuries and agency mortgage-backed securities. They also added the ability to purchase commercial mortgage-backed securities and created two new programs to facilitate the purchases of corporate bonds.

All in all, this was a massive monetary stimulus package the Fed laid out, and they didn't waste any time on execution. The Fed increased their balance sheet by over \$1 trillion over a span of two weeks, which was bigger and faster than any previous bond purchasing the Fed has done.

With Wall Street taken care of, the government then turned its attention to Main Street as Congress worked on passing a massive fiscal stimulus package to help the many Americans who will be impacted by COVID-19. The fiscal stimulus package came in three waves with the first being the \$8.3bn emergency spending package passed on March 6. Wave two expanded on the spending package by adding additional sick leave, unemployment benefits, and other healthcare and preparedness measures. However, the third wave, and the largest from a fiscal spending standpoint, aims to help support the economy throughout the social distancing process. The size of the stimulus exceeded \$2 trillion, nearly 10% of GDP, and will come in the form of tax credits, small business loans, and direct payments to individuals. Overall, the government recognized the threat to the economy from COVID-19 and has stepped up in a major way to help mitigate the crisis.

This crisis is like no other we have seen with the economy effectively shutting down at such a rapid pace and outright demand in some sectors just completely vanishing. Luckily, the government was able to react as quickly as it did, as recent jobless claims data indicate the stimulus was much needed. For the week ending March 28, the number of initial jobless claims jumped to 6.648 million and is a record by any means. There are nearly 10 million people unemployed as social distancing and outright shutdowns have taken a toll on the economy. These are staggering numbers to witness, but due to the nature of this manufactured economic slowdown, we still expect a strong recovery in the coming months. Admittedly, some areas of the economy might not come back as quickly, but a U-shaped recovery remains our base case.



Source: Bloomberg, Allianz Investment Management LLC

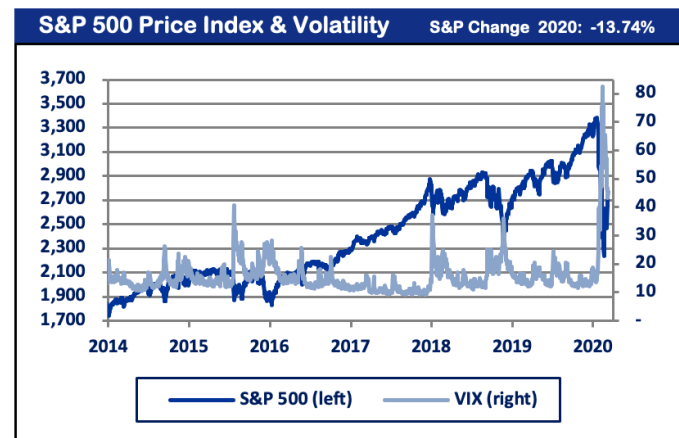
Market indicators (figure a)

- Equities continued their sell-off throughout the month of March with all three major indexes declining over the month. Markets were inundated with coronavirus-related headlines throughout the month, which only exacerbated an already ugly picture in markets. Going forward we expect equity volatility to remain as investors continue to digest and understand the true ramifications of the coronavirus on U.S. corporations and the economy as a whole.
- Volatility, as measured by the VIX Index, was elevated above 30 throughout the month of March as the coronavirus wreaked havoc on markets. The volatility witnessed was unprecedented, with the VIX Index reaching a high of 82.6 in mid-March as the economy essentially shut down as a result of the coronavirus and asset pricing became difficult. We expect volatility to be elevated for some time as market uncertainty related to the coronavirus continues.
- U.S. Treasury rates declined across the curve in March with the front-end falling the most as a result of the Fed's cumulative 150 bps rate cut. The shift does not come as a surprise as investors opted for safe-haven assets like U.S. Treasuries over risk assets throughout March. Overall, it's difficult for us to estimate where rates will go from here as market volatility remains in unprecedented territory.
- Oil was in a state of free fall throughout March after Saudi Arabia and Russia could not come to an agreement on production policy. As a result, both countries pushed out oil at rapid speeds. The influx of supply weighed heavily on oil prices and WTI crude oil fell to under \$20 per barrel in March. In total, we expect the price compression on oil to continue until Saudi Arabia and Russia can come to some sort of agreement and eventually reduce their levels of oil production.

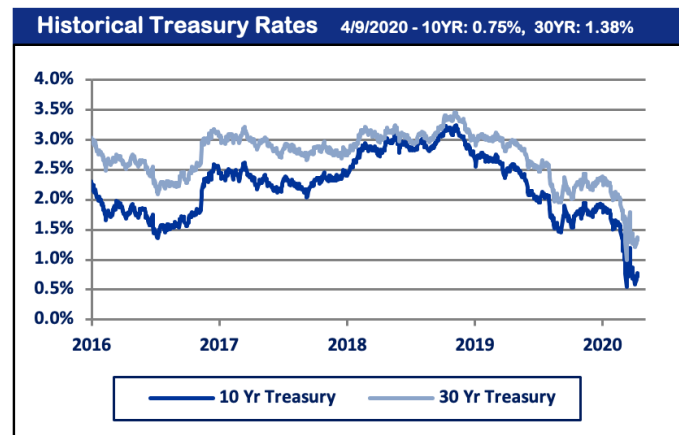
Economic indicators (figure b)

- Consumer sentiment dipped in March from 95.9 to 89. This does not come as a surprise given the significant market volatility and precautionary measures from the government, such as social distancing and shelter in place, that have weighed negatively on consumers. In total, we expect consumer sentiment to be further suppressed as the implications of the coronavirus continue to make their way into the daily lives of consumers.

figure a

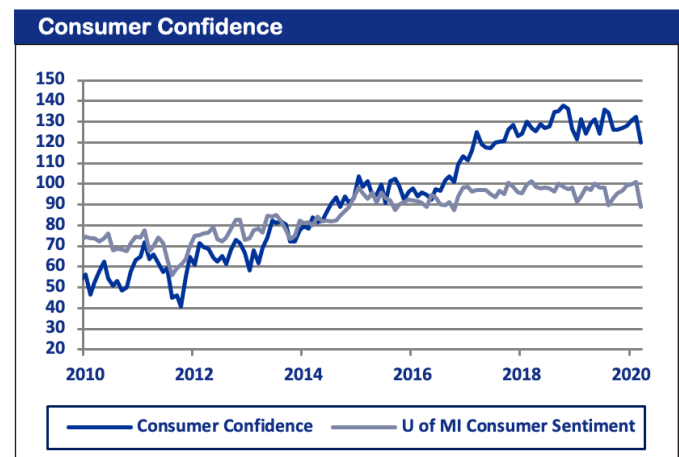


Sources: S&P, CBOE



Source: Bloomberg

figure b

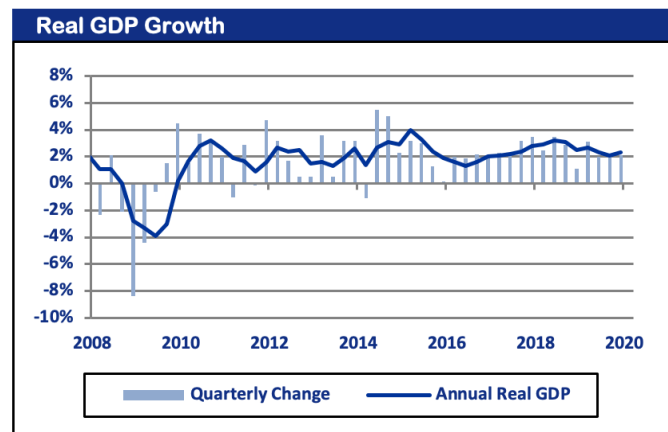


Source: Bloomberg

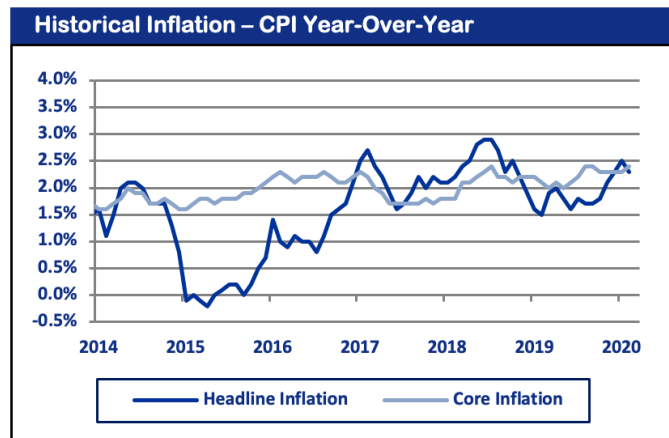
Economic indicators (continued)

- No new GDP data has been released since our last release. As such, the second estimate for GDP in the fourth quarter of 2019 remains at 2.1%. Unfortunately, how the economy performed in the fourth quarter of last year doesn't take away from the slower pace of the economy we have witnessed so far throughout 2020. Overall, we are in a recessionary-like environment, but it's going to take time to measure the true ramifications from COVID-19 on growth and the economy.
- Surprisingly the manufacturing survey held up better than expected with the index falling to only 49.1 versus expectations of 44.5. Most notable within the survey was the drop in new orders to 42.2 which indicates further slowdown in the sector is coming. On the nonmanufacturing side the index slipped to 52.5, but still remained above 50. There was broad weakness, especially seen in new orders. Overall, it's likely the timing of the survey played an impact on the results, and we don't anticipate the April surveys will paint a better picture.
- Month-over-month CPI increased 0.1% in February, bringing the YoY figure to 2.3%. Within the data, price increases in food and shelter were more than enough to offset the declines from energy and ultimately led to the increase. Going forward, we expect energy to weigh on the index, especially given the recent oil price war between Russia and Saudi Arabia that dropped oil prices to below \$35 per barrel.
- The March payroll report showed job losses were steeper than anticipated as more temporary layoffs or furloughs were reflected within the survey. As expected, the majority of the job losses came from the hospitality sector with 446k of the 701k payroll reductions coming from the hotel and restaurant categories. While the number of job losses in the economy looks alarmingly high and will arguably look worse in the April survey, it's important to remember that furloughed employees are considered unemployed in the survey and by definition will be temporary while social distancing and widespread shutdowns remain in place.

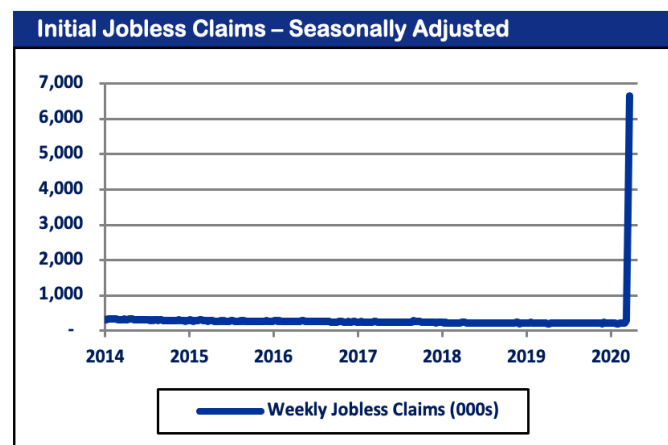
figure b (continued)



Source: Bloomberg



Source: Bloomberg



Source: Bloomberg

| EVENT | Previous | Survey | Actual | Next |
|-----------------------------|----------|--------|--------|---------------------------|
| ISM Manufacturing Index | 50.10 | 44.5 | 49.1 | Friday, May 01, 2020 |
| GDP Annualized | 2.10% | 2.10% | 2.10% | Wednesday, April 29, 2020 |
| Unemployment Rate | 3.50% | 3.80% | 4.40% | Friday, May 08, 2020 |
| Retail Sales | 0.60% | 0.20% | -0.50% | Wednesday, April 15, 2020 |
| Consumer Price Index (YoY) | 2.50% | 2.20% | 2.30% | Friday, April 10, 2020 |
| U. Mich. Consumer Sentiment | 95.9 | 90.0 | 89.1 | Thursday, April 09, 2020 |
| Home Price Index (MoM) | 0.43% | 0.40% | 0.30% | Tuesday, April 28, 2020 |

Definitions

Table columns

Previous – Observation as of the end of the prior month

Survey – Economist survey prediction for current month's observation

Actual – Actual observation as of the end of the current month

Next – Date of next period's observation

ISM Manufacturing Index

Based on a survey from the Institute for Supply Management, this index indicates a positive growth in the manufacturing sector when the figure is above 50 and a contraction of the sector when it is below 50. An increase in the figure indicates either slowing contraction or accelerating growth. The index represents underlying figures in employment, inventories, new orders, production levels, and deliveries. (Source: Bloomberg)

Unemployment rate

Based on a monthly survey of households, the unemployment rate is one of many figures in the Current Population Survey that move markets by indicating what portion of the population is at work, looking for work, what they are getting paid, and how many hours they work. The unemployment rate is the percentage of workers unable to find work who are actively seeking a job. The survey is conducted by the Bureau of Labor Statistics.

Retail sales

Retail sales measure the total amount of purchases by consumers in stores that sell merchandise, food, and other services to end consumers. This measure is a significant indicator of trends in consumer spending, which moves markets because consumer spending accounts for over 2/3 of U.S. economic output. Data is compiled by the U.S. Bureau of the Census.

Consumer Price Index (CPI)

The Consumer Price Index measures the prices of a fixed basket of goods that reflect an average consumer's cost of living. CPI is a popular indicator of inflation, driving prices on U.S. inflation-linked bonds and used to adjust tax brackets and Social Security payments. CPI is compiled by the Bureau of Labor Statistics monthly.

Home Price Index

The S&P CoreLogic Home Price Index is the seasonally-adjusted average price of residential homes in 20 major cities in the U.S. Data is published with a two-month lag (numbers available in March reflect price changes from January). Housing prices affect consumer wealth and consumers' ability to borrow and spend, which in turn affects U.S. economic growth.

Gross domestic product (GDP)

Gross Domestic Product is the sum of the value of all goods and services produced in the economy. It is one of the most comprehensive benchmarks for economic performance. Real GDP measures economic productivity adjusted for inflation, which measures growth that is not due to goods getting more expensive. GDP is published by the Bureau of Economic Analysis.

University of Michigan Consumer Sentiment Index

The index is derived from surveys of 500 households by the University of Michigan on consumer finances and attitudes regarding the economy. The index is set to 100 as of 1966, reached a high of 107.3 in June of 1999 and a low of 56.4 in June of 2008. High consumer confidence levels lead to robust consumer spending, whereas low consumer confidence levels lead consumers to pull back on spending.

S&P 500® Index

The S&P 500® Index is a market-capitalization-weighted index of the 500 largest U.S. publicly traded companies by market value.

Chicago Board Options Exchange (CBOE) Volatility Index® (VIX® Index)

Created by the Chicago Board Options Exchange (CBOE), the Volatility Index®, or VIX®, is a real-time market index that represents the market's expectations of 30-day forward-looking volatility. Derived from the price inputs of the S&P 500® index options, it provides measure of market risk and investors' sentiments.

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