

Looking for something to read? See our [Reading List](#); these books, separated by category, are ones we find interesting and insightful. We will be adding to the list over time.

**[Posted: March 13, 2020—9:30 AM EDT]** Global equity markets are mixed this morning. The EuroStoxx 50 is currently up 8.7% from its last close. In Asia, the MSCI Asia Apex 50 closed down 0.6%. Chinese markets were lower, with the Shanghai Composite down 1.2% and the Shenzhen Composite down 1.1%. U.S. equity index futures are signaling a higher open.

**The newest episode of our *Confluence of Ideas* podcast series is available.** This [episode](#) discusses Confluence's asset allocation process. In earlier episodes, Bill O'Grady examined the importance of process when investors are making decisions under conditions of uncertainty, while Mark Keller talked about the process for managing the firm's value-oriented equity strategies. In this podcast, Greg Ellston, Confluence's CIO of Asset Allocation, discusses the investment team's process for managing the asset allocation strategies.

Happy Friday the 13<sup>th</sup>! Let's not bury the lede—equities are enjoying a [strong recovery](#) this [morning](#) after a [historic decline yesterday](#). [Europe is lifting as well](#). As is our usual practice, we update news on COVID-19. We also discuss how the virus crisis is rapidly revealing financial turmoil. Here are the details:

**[COVID-19](#)**: The [total number of reported cases is 135,232, with 4,981 fatalities and 69,645 recoveries](#). Here is the latest:

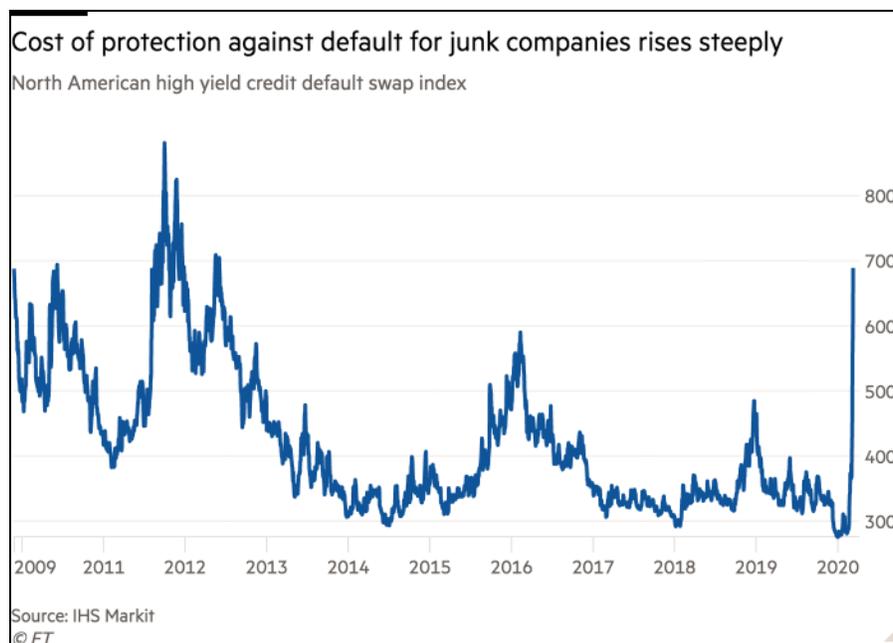
- The entertainment industry has been rocked over the past 24 hours:
  - [MLB has closed spring training and will delay the season opener. The NHL has followed suit](#) and the [NCAA has cancelled March Madness](#). Minor leagues have closed as well; both MiLB and the NBA-G league have ceased playing. The XFL is done for the year. We haven't looked at ESPN so far, but it will be interesting to see how sports channels handle a period with no sports.
  - [Broadway has gone dark](#).
  - [Select theme parks](#) have closed.
- Relations between the U.S. and China are taking a dark turn. Chinese [social media is swirling with rumors that COVID-19 came from the U.S.](#) The reports came from China's foreign ministry and have not been discouraged by Chairman Xi. In response, the [White House](#) and [members of Congress](#) are firing back. The notion that this virus started in the U.S. is patently silly; China is the fount of viruses such as coronavirus and influenza due to its geography. It lies in the temperate zone where migratory birds move. These viruses fester in wildlife and occasionally cross the species to become a problem for

humans. The CPC's propaganda machine is clearly trying to divert attention, but these attempts will weaken already frayed relations.

- As the U.S. [steadily locks down](#) with school closings, [Europe is doing the same](#). The epicenter remains in [Italy](#), where the [health system is struggling to respond](#). [Policymakers on both sides of the Atlantic](#) are trying to cope with the spread of the virus. Satellite images show [mass graves being dug in Iran](#), likely for COVID-19 victims.

Overall, the virus continues to spread. The pattern that has emerged suggests the U.S. has a couple more weeks of rapidly rising cases before the growth rate begins to taper.

**Financial concerns:** In this week's Asset Allocation Weekly (AAW; see section below, p.7), we make the case that the chances of recession have increased to probably 80%. We still haven't seen confirmation from most of our data signals, but we expect the signals will be forthcoming. Thus, we aren't certain, but it is probably safe to assume that there is at least a 4/5 chance of a downturn. What has happened here is that the economy has succumbed to three problems. First, the disruptions from COVID-19 will weaken consumption; as we noted in our [Outlook 2020 report](#), GDP growth has become extraordinarily dependent on consumption so it will be hard to maintain positive GDP growth under measures being taken to isolate the virus. Second, the Saudi/Russia oil war will dampen demand in the oil patch and further weaken growth. The third head of this hydra that has emerged is what appears to be liquidity problems in the financial system. As the chart in the AAW shows, the Bloomberg Financial Conditions Index is at levels last seen when Bear Sterns collapsed. Evidence of stress has been surfacing in recent days. [Spreads in the Treasury market have widened](#), suggesting that [those holding the paper](#) are not willing to lend it to those who need the collateral. [Credit default swap rates](#) have soared.

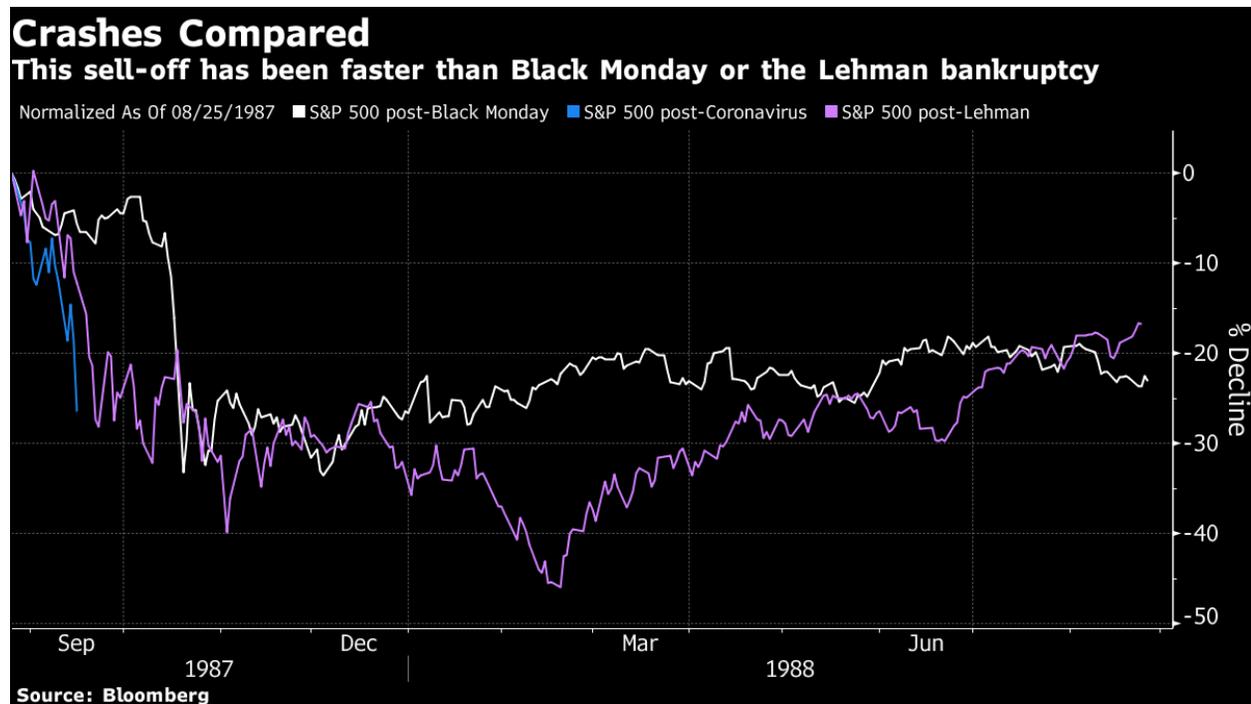


As we noted yesterday, [banks are reporting that rarely tapped credit lines](#) are suddenly being hit, suggesting [corporations are facing cash shortages](#). [Margin calls](#) are rising. The [need for liquidity](#) has led to participants [selling what they can, not what they should](#). This phenomenon

likely explains why [gold prices have been falling](#) in the face of a bear market in stocks and aggressive central bank action. [Corporate lawyers are reporting](#) a jump in business. We have been reporting on issues in the repo markets since September and have not seen convincing evidence that the Fed has resolved them. So far, its actions have prevented bigger problems but not fixed the “plumbing.” Perhaps now it will get the problem resolved.

Central banks are responding to the immediate crisis. We had a brief respite to equity selling yesterday [when the Fed](#) announced a [massive \\$1.5 trillion injection of liquidity](#) to ease problems in the repo market. The [ECB responded as well](#), although Legarde [disappointed the market](#), which was hoping for a “whatever it takes” approach. Her comment of “I am not here to close rate gaps” was a rookie error. Other central banks have moved as well. The Bank of Canada expanded its bond-buying and repo operations. The BOJ added liquidity (\$19 billion). The PBOC cut reserve requirements. The Bank of Norway cut rates, and the Riksbank injected liquidity. The [BOE says it will continue](#) to support markets. There is action on the fiscal front as well. The [House leadership, working with Treasury Secretary Mnuchin](#), have [put together a fiscal package](#). We will be watching to see how the Senate responds.

Although today’s recovery is obviously welcome, the most likely outcome for the next several weeks is a choppy basing process.



This chart shows how the S&P responded to 1987 and post-Lehman. It suggests a long period of basing. We discuss our views on the path of equities in this week’s AAW below.

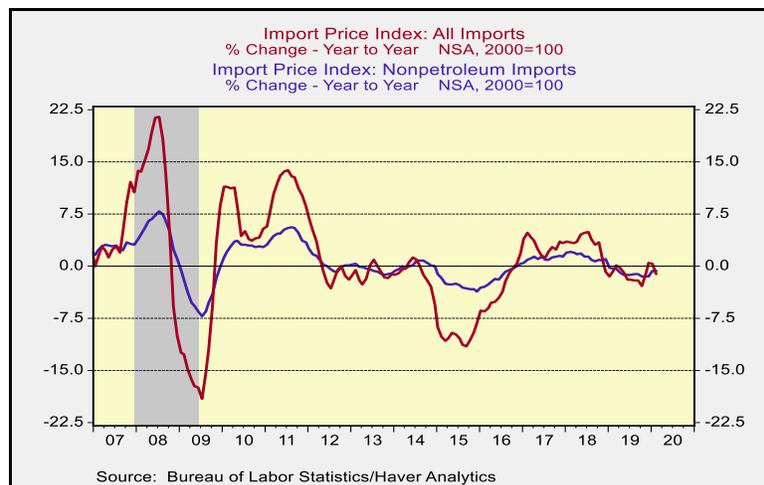
So the bottom line is that this expansion has probably come to an end due to the combined impact of COVID-19, the oil market share war and financial fragility.

**Conflict in the Middle East:** On Thursday, the U.S. conducted [airstrikes against an Iran-backed militia](#). The airstrike was in response to a rocket attack that killed two Americans soldiers and a British service member earlier this week. This was the first attack from the U.S. since the drone strike that killed Qassem Soleimani, and the Pentagon has warned of possible [additional actions](#).

**Putin forever:** President Putin is [backing a measure that would allow him to stay in office until 2036](#), or until age 83. This isn't a huge surprise; the only suspense was how he would remain in office.

## U.S. Economic Releases

February import prices fell 0.5% compared with an expected decline of 1.0% and a flat reading in January. The decline was driven mostly by falling energy costs. February import prices excluding fuels actually rose 0.2% compared to expectations that they would match their 0.1% rise in the previous month. On the other side of the ledger, February export prices dropped a sharp 1.1%. That was nearly three times the anticipated decline, and it was more than enough to erase January's revised increase of 0.6%. Overall import prices in February were down 1.2% from the same month one year earlier, while export prices were down 1.3%.



The chart above focuses on the year-over-year change in overall import prices and non-petroleum import prices since right before the last recession.

The table below shows the economic releases scheduled for the rest of the day.

| Economic Releases               |   |     |     |          |       |        |
|---------------------------------|---|-----|-----|----------|-------|--------|
| EDT                             | Indicator                                     |     |     | Expected | Prior | Rating |
| 10:00                           | U. of Michigan Consumer Sentiment             | m/m | Mar | 95.0     | 101.0 | ***    |
| 10:00                           | U. of Michigan Current Conditions             | m/m | Mar | 112.8    | 114.8 | **     |
| 10:00                           | U. of Michigan Expectations                   | m/m | Mar | 88.1     | 92.1  | **     |
| 10:00                           | U. of Michigan Inflation Expectations 5-10 Yr | m/m | Mar |          | 2.3%  | **     |
| Fed Speakers or Events          |   |     |     |          |       |        |
| No speakers or events scheduled |   |     |     |          |       |        |

## Foreign Economic News

We monitor numerous global economic indicators on a continuous basis. The most significant international news that was released overnight is outlined below. Not all releases are equally significant, thus we have created a star rating to convey to our readers the importance of the various indicators. The rating column below is a three-star scale of importance, with one star being the least important and three stars being the most important. We note that these ratings do change over time as economic circumstances change. Additionally, for ease of reading, we have also color-coded the market impact section, which indicates the effect on the foreign market. Red indicates a concerning development, yellow indicates an emerging trend that we are following closely for possible complications and green indicates neutral conditions. We will add a paragraph below if any development merits further explanation.

| Country             | Indicator                    |     |     | Current      | Prior         | Expected      | Rating | Market Impact                |
|---------------------|------------------------------|-----|-----|--------------|---------------|---------------|--------|------------------------------|
| <b>ASIA-PACIFIC</b> |                              |     |     |              |               |               |        |                              |
| Japan               | Tertiary Industry Index      | m/m | Jan | 0.8%         | -0.3%         | 0.0%          | ***    | Equity bullish, bond bearish |
| New Zealand         | BusinessNZ Manufacturing PMI | m/m | Feb | 53.2         | 49.6          |               | ***    | Equity bullish, bond bearish |
|                     | Food Prices                  | m/m | Feb | 0.0%         | 2.1%          |               | ***    | Equity and bond neutral      |
| South Korea         | Export Price Index           | y/y | Feb | -1.8%        | -2.5%         |               | *      | Equity and bond neutral      |
|                     | Import Price Index           | y/y | Mar | -0.9%        | 2.7%          |               | *      | Equity and bond neutral      |
| China               | Foreign Direct Investment    | y/y | Feb | -25.6%       | 4.0%          |               | *      | Equity bearish, bond bearish |
| India               | Trade Balance                | m/m | Feb | -\$9850 Mil. | -\$15170 Mil. | -\$11400 Mil. | *      | Equity bullish, bond bearish |
|                     | Exports                      | y/y | Feb | 2.9%         | -1.7%         |               | *      | Equity bullish, bond bearish |
|                     | Imports                      | y/y | Feb | 2.5%         | -0.7%         |               | *      | Equity bullish, bond bearish |
| <b>EUROPE</b>       |                              |     |     |              |               |               |        |                              |
| Germany             | CPI                          | y/y | Feb | 1.7%         | 1.7%          | 1.7%          | ***    | Equity and bond neutral      |
|                     | CPI EU Harmonized            | y/y | Feb | 1.7%         | 1.7%          | 1.7%          | ***    | Equity and bond neutral      |
| France              | CPI                          | y/y | Feb | 1.4%         | 1.4%          | 1.4%          | ***    | Equity and bond neutral      |
|                     | CPI EU Harmonized            | y/y | Feb | 1.6%         | 1.6%          | 1.6%          | ***    | Equity and bond neutral      |
| <b>AMERICAS</b>     |                              |     |     |              |               |               |        |                              |
| Mexico              | Industrial Production        | y/y | Jan | -1.6%        | -1.0%         | -1.5%         | ***    | Equity and bond neutral      |
|                     | Manufacturing Production     | y/y | Jan | -0.9%        | -0.5%         | -1.5%         | **     | Equity and bond neutral      |

## Financial Markets

The table below highlights some of the indicators that we follow on a daily basis. Again, the color coding is similar to the foreign news description above. We will add a paragraph below if a certain move merits further explanation.

|                                    | Today            | Prior | Change | Trend   |
|------------------------------------|------------------|-------|--------|---------|
| <b>3-mo Libor yield (bps)</b>      | 77               | 78    | -1     | Up      |
| <b>3-mo T-bill yield (bps)</b>     | 28               | 32    | -4     | Neutral |
| <b>TED spread (bps)</b>            | 50               | 46    | 4      | Neutral |
| <b>U.S. Libor/OIS spread (bps)</b> | 17               | 16    | 1      | Up      |
| <b>10-yr T-note (%)</b>            | 0.89             | 0.81  | 0.08   | Neutral |
| <b>Euribor/OIS spread (bps)</b>    | -49              | -47   | -2     | Neutral |
| <b>EUR/USD 3-mo swap (bps)</b>     | 36               | 13    | 23     | Down    |
| <b>Currencies</b>                  | <b>Direction</b> |       |        |         |
| dollar                             | Up               |       |        | Neutral |
| euro                               | Down             |       |        | Up      |
| yen                                | Down             |       |        | Up      |
| pound                              | Down             |       |        | Down    |
| franc                              | Down             |       |        | Up      |

## Commodity Markets

The commodity section below shows some of the commodity prices and their change from the prior trading day, with commentary on the cause of the change highlighted in the last column.

|                             | Price      | Prior      | Change     | Explanation |
|-----------------------------|------------|------------|------------|-------------|
| <b>Energy Markets</b>       |            |            |            |             |
| Brent                       | \$35.06    | \$33.22    | 5.54%      |             |
| WTI                         | \$33.16    | \$31.50    | 5.27%      |             |
| Natural Gas                 | \$1.92     | \$1.84     | 4.29%      |             |
| Crack Spread                | \$11.38    | \$10.09    | 12.76%     |             |
| 12-mo strip crack           | \$10.40    | \$9.75     | 6.66%      |             |
| Ethanol rack                | \$1.37     | \$1.38     | -0.52%     |             |
| <b>Metals</b>               |            |            |            |             |
| Gold                        | \$1,586.12 | \$1,576.15 | 0.63%      |             |
| Silver                      | \$15.82    | \$15.82    | -0.03%     |             |
| Copper contract             | \$250.65   | \$247.25   | 1.38%      |             |
| <b>Grains</b>               |            |            |            |             |
| Corn contract               | \$ 369.25  | \$ 365.75  | 0.96%      |             |
| Wheat contract              | \$ 511.00  | \$ 505.50  | 1.09%      |             |
| Soybeans contract           | \$ 868.00  | \$ 859.50  | 0.99%      |             |
| <b>Shipping</b>             |            |            |            |             |
| Baltic Dry Freight          | 633        | 631        | 2          |             |
| <b>DOE inventory report</b> |            |            |            |             |
|                             | Actual     | Expected   | Difference |             |
| Crude (mb)                  | 7.7        | 1.7        | 6.0        |             |
| Gasoline (mb)               | -5.0       | -2.9       | -2.2       |             |
| Distillates (mb)            | -6.4       | -2.3       | -4.2       |             |
| Refinery run rates (%)      | -0.50%     | 0.45%      | -0.95%     |             |
| Natural gas (bcf)           | -48.0      | -57.0      | 9.0        |             |

## Weather

The 6-10 and 8-14 day forecasts currently call for warmer-than-normal temperatures in the Midwest, Southeast, Mid-Atlantic and New England regions. Cooler-than-normal temperatures are expected throughout the West, but especially in Montana and the Southwest. Wet conditions are expected throughout most of the country except for the Pacific Northwest and Florida.

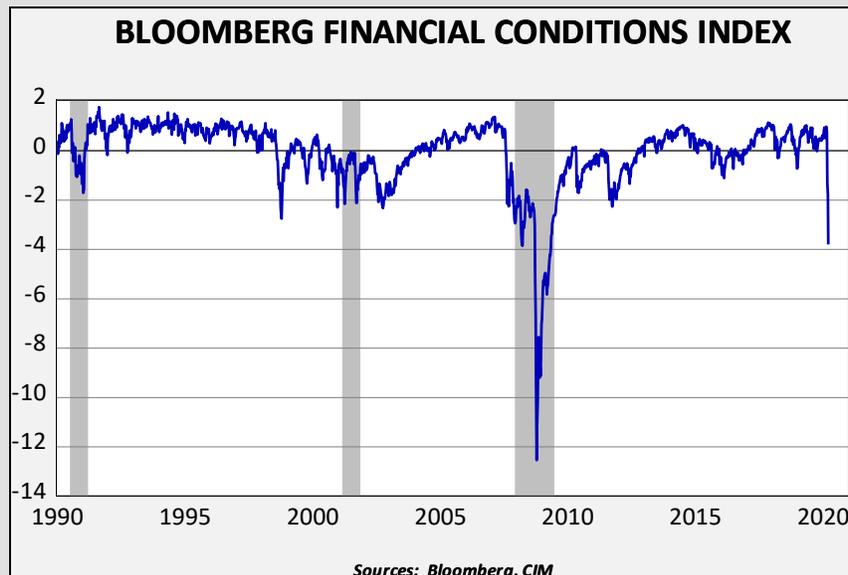
## Asset Allocation Weekly

Confluence Investment Management offers various asset allocation products which are managed using “top down,” or macro, analysis. We report asset allocation thoughts on a weekly basis, updating this section every Friday. Note that this report is also offered as a separate document on our [website](#).

March 13, 2020

Our baseline position has been that the COVID-19 virus would have a significant impact in terms of magnitude but be of limited duration and thus would probably not put the economy into recession. Over the past week, two events have occurred which put this position into question. The first is the oil market collapse triggered by a market share war between Russia and Saudi Arabia.<sup>1</sup> The second issue is that the financial system is exhibiting symptoms of liquidity problems.

We have noted a sudden decline in financial conditions as measured by the Bloomberg Financial Conditions Index for the U.S.



Our data uses the Friday closes for the index. The index is composed of eight variables<sup>2</sup> which are standardized and totaled. The more negative the reading, the greater the level of financial stress. The index was positive until the last week of February. The current level of stress is about on par with March 2008 during the collapse of Bear Stearns.

This data suggests a serious level of financial problems in the financial system. We have noted difficulties in the funding markets since September. Although the Fed has consistently claimed there was nothing systemic in the rise of repo rates, the persistence of the funding shortages despite the expansion of the Fed’s balance sheet by \$400 billion argues otherwise.

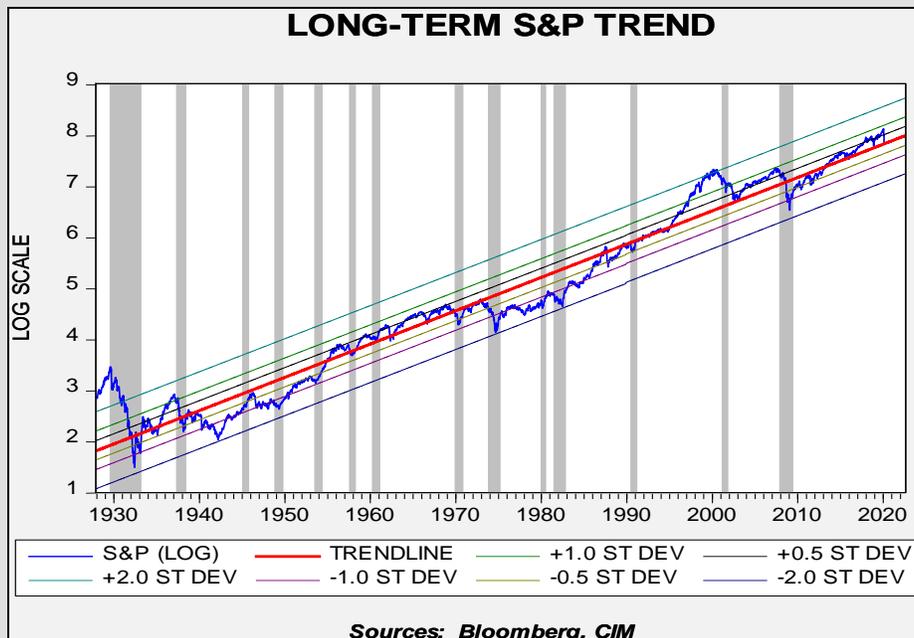
<sup>1</sup> We discussed this issue in our most recent [Weekly Energy Update](#).

<sup>2</sup> TED spread, LIBOR/OIS spread, commercial paper/T-bill spread, Baa/10-year T-Note spread, Muni/10-year T-Note spread, swap volatility, the S&P 500 and the VIX. There are other similar indices with a larger set of variables, but the Bloomberg variation is calculated daily, whereas the others are calculated weekly or monthly.

What is the nature of the financial stress? Its roots most likely lay with interest rates being too low for too long; investors had to extend their portfolio risk to find attractive yields. The financial services industry took steps to provide financial products with more attractive yields. Some of this product creation went to the non-bank financing system which funds itself in the repo markets. If repo markets are disrupted, they can no longer service the debt they used to own the higher yielding assets and liquidations occur. If no liquid market exists for these products, the owners may be forced to sell other assets (gold, Treasuries, equities, investment grade bonds) to find necessary liquidity. Recent weakness in “risk off” assets would tend to confirm rising levels of financial stress. A contributing factor is the plunge in oil prices, which raises default risk among energy companies.

The Federal Reserve should be able to corral this problem if it moves aggressively enough to force liquidity into the financial system. Unfortunately, as we saw in 2008, it may be difficult to pinpoint exactly where the funding problems lie. But, the key lesson from 2008 is that enforcing moral hazard is a bad idea; we doubt such a policy will be executed in this event. Although a few of our economic indicators have moved to signal recession, the preponderance have not. On the other hand, the yield curve did invert last year, and we have been on “recession watch” for some time.<sup>3</sup>

How does all this affect equity markets? The chart below can offer some guidance. This chart shows the weekly close of the S&P 500 going back to late 1927. We log-transform the index and regress a time trend through the data. The parallel lines represent various standard error levels from trend; the gray bars show recessions. It is obvious that, with the exception of 1945, every recession has led to some degree of stock market weakness.



<sup>3</sup> Hence the title of our 2020 outlook, “Storm Watch.”

To compare recessions, we measured the high reached before the recession to the low in the index during the downturn in terms of movements in standard errors. Here is a table of the events.

| RECESSION        | LOG SCALED                |                          | LOG SCALED                       |         | PROJECTION |
|------------------|---------------------------|--------------------------|----------------------------------|---------|------------|
|                  | HIGH DEVIATION FROM TREND | LOW DEVIATION FROM TREND | RANGE FROM HIGH TO LOW DEVIATION |         |            |
| 1929-33          | 4.165                     | -1.674                   | 5.839                            | 383.31  |            |
| 1936-37          | 1.399                     | -0.782                   | 2.180                            | 1485.43 |            |
| 1949             | -0.843                    | -1.572                   | 0.729                            | 2541.87 |            |
| 1953             | -0.437                    | -0.917                   | 0.480                            | 2787.37 |            |
| 1957             | 0.637                     | -0.240                   | 0.876                            | 2407.30 |            |
| 1960             | 0.630                     | 0.072                    | 0.558                            | 2708.13 |            |
| 1970             | 0.558                     | -0.798                   | 1.355                            | 2015.90 |            |
| 1973-75          | 0.106                     | -1.967                   | 2.074                            | 1545.20 |            |
| 1980             | -1.188                    | -1.653                   | 0.465                            | 2803.13 |            |
| 1981-82          | -0.857                    | -1.975                   | 1.118                            | 2201.12 |            |
| 1990             | 0.113                     | -0.549                   | 0.662                            | 2605.69 |            |
| 2001             | 1.689                     | -0.011                   | 1.700                            | 1774.60 |            |
| 2007-09          | 0.908                     | -1.571                   | 2.479                            | 1329.69 |            |
| now              | 0.786                     | -0.037                   | 0.823                            |         |            |
| Average          |                           |                          |                                  | 2045.29 |            |
| Normal Recession |                           |                          |                                  | 2455.50 |            |
| Deep Recession   |                           |                          |                                  | 1388.95 |            |
| w/o Depression   |                           |                          |                                  | 1640.36 |            |

Range represents the change in standard error from high to low. So, the Great Depression saw the market fall nearly six standard errors, a true “six-sigma” event. The current decline is consistent with a normal recession, so if policymakers can secure the financial system and absorb the quarantine effect of COVID-19, then equity markets should stabilize soon. A deep recession (but not including the Great Depression) would put the S&P 500 around 1640, a much more profound decline.

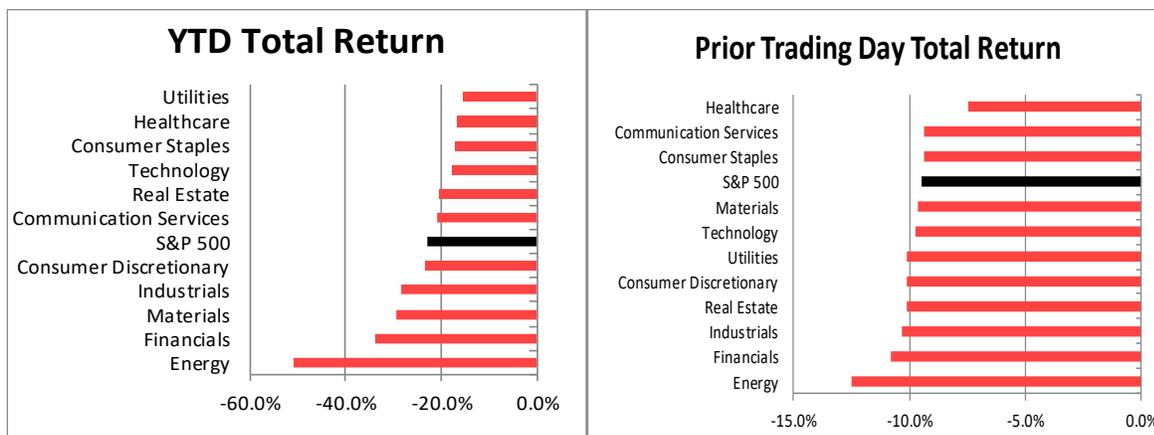
The postwar experience doesn’t support two consecutive deep recessions, which is why we have argued that another 2008 is unlikely. Of course, we did have consecutive deep recessions in the 1930s: the 1936-37 recession was caused by profoundly inept policy when the Roosevelt administration tightened fiscal policy while the Federal Reserve raised rates. The odds of a similar event occurring in the current situation is improbable; both fiscal and monetary policy are accommodative and will almost certainly become more so. About the only way we have a deep recession is if the policy response is strikingly underwhelming. Although possible, that is a low probability outcome.

So, the bottom line is that we will likely see a few weeks of churning and perhaps a decline toward 2300, but the worst of this downturn is probably over. Liquidity injections and the natural waning of COVID-19 should improve sentiment over time. We are probably very close to the low in terms of price but not in terms of time. It will probably take a few weeks of basing before a durable recovery can develop.

*Past performance is no guarantee of future results. Information provided in this report is for educational and illustrative purposes only and should not be construed as individualized investment advice or a recommendation. The investment or strategy discussed may not be suitable for all investors. Investors must make their own decisions based on their specific investment objectives and financial circumstances. Opinions expressed are current as of the date shown and are subject to change.*

## Data Section

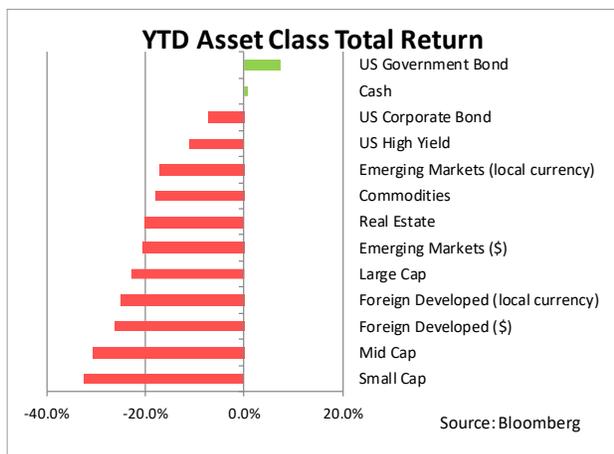
### U.S. Equity Markets – (as of 3/12/2020 close)



(Source: Bloomberg)

These S&P 500 and sector return charts are designed to provide the reader with an easy overview of the year-to-date and prior trading day total return. Sectors are ranked by total return; green indicating positive and red indicating negative return, along with the overall S&P 500 in black. These charts represent the new sectors following the 2018 sector reconfiguration.

### Asset Class Performance – (as of 3/12/2020 close)

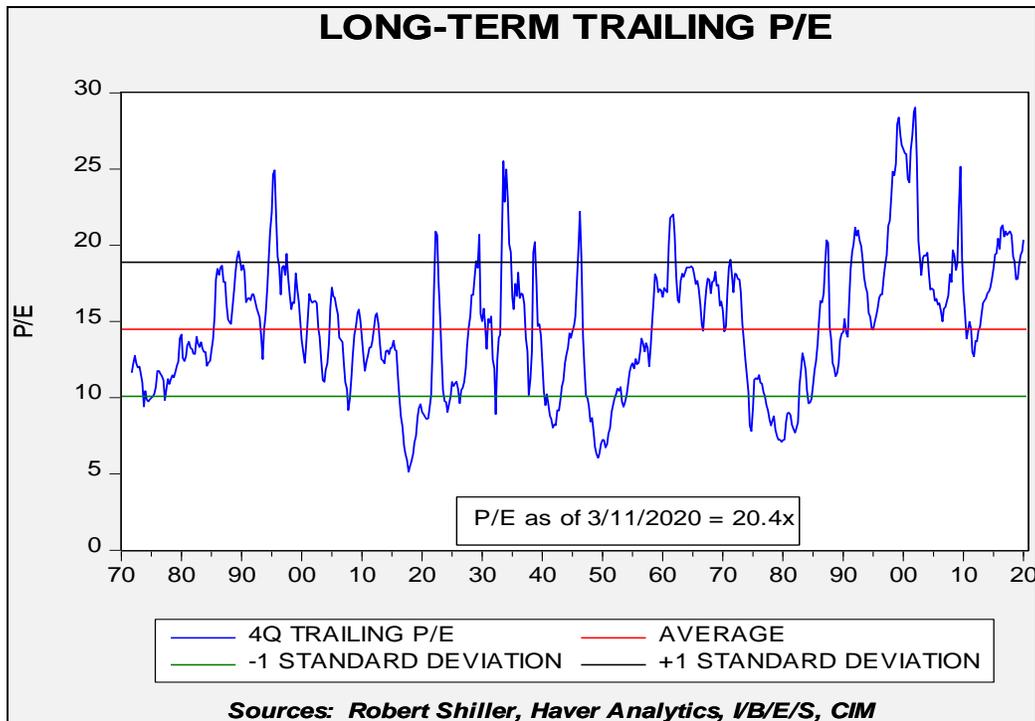


This chart shows the year-to-date returns for various asset classes, updated daily. The asset classes are ranked by total return (including dividends), with green indicating positive and red indicating negative returns from the beginning of the year, as of prior close.

Asset classes are defined as follows: Large Cap (S&P 500 Index), Mid Cap (S&P 400 Index), Small Cap (Russell 2000 Index), Foreign Developed (MSCI EAFE (USD and local currency) Index), Real Estate (FTSE NAREIT Index), Emerging Markets (MSCI Emerging Markets (USD and local currency) Index), Cash (iShares Short Treasury Bond ETF), U.S. Corporate Bond (iShares iBoxx \$ Investment Grade Corporate Bond ETF), U.S. Government Bond (iShares 7-10 Year Treasury Bond ETF), U.S. High Yield (iShares iBoxx \$ High Yield Corporate Bond ETF), Commodities (Bloomberg total return Commodity Index).

## P/E Update

March 12, 2020



Based on our methodology,<sup>4</sup> the current P/E is 20.4x, down 0.2x from last week. The decline in the P/E was caused by falling index values.

*This report was prepared by Confluence Investment Management LLC and reflects the current opinion of the authors. It is based upon sources and data believed to be accurate and reliable. Opinions and forward-looking statements expressed are subject to change. This is not a solicitation or an offer to buy or sell any security.*

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<sup>4</sup> This chart offers a running snapshot of the S&P 500 P/E in a long-term historical context. We are using a specific measurement process, similar to *Value Line*, which combines earnings estimates and actual data. We use an adjusted operating earnings number going back to 1870 (we adjust as-reported earnings to operating earnings through a regression process until 1988), and actual operating earnings after 1988. For the current quarter, we use the I/B/E/S estimates which are updated regularly throughout the quarter; currently, the four-quarter earnings sum includes three actual quarters (Q2, Q3 and Q4) and one estimate (Q1). We take the S&P average for the quarter and divide by the rolling four-quarter sum of earnings to calculate the P/E. This methodology isn't perfect (it will tend to inflate the P/E on a trailing basis and deflate it on a forward basis), but it will also smooth the data and avoid P/E volatility caused by unusual market activity (through the average price process). Why this process? Given the constraints of the long-term data series, this is the best way to create a long-term dataset for P/E ratios.