

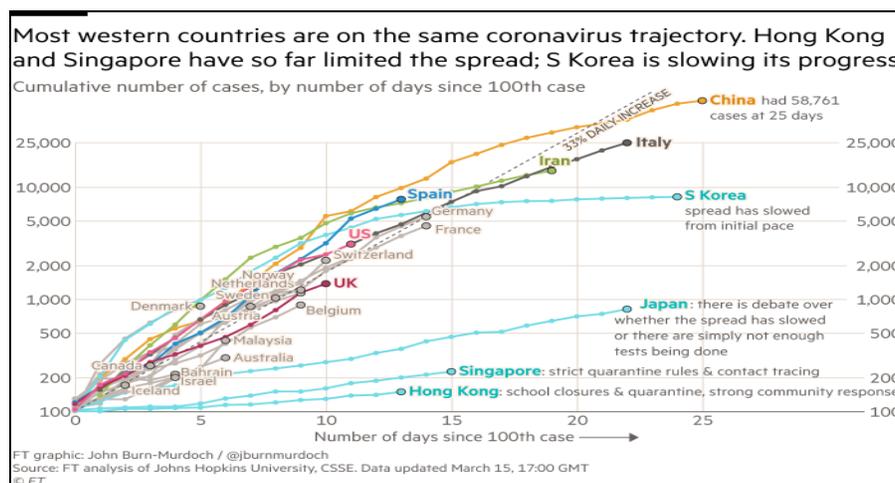
Looking for something to read? See our [Reading List](#); these books, separated by category, are ones we find interesting and insightful. We will be adding to the list over time.

**[Posted: March 16, 2020—9:30 AM EDT]** Global equity markets are lower this morning. The EuroStoxx 50 is currently down 7.5% from its last close. In Asia, the MSCI Asia Apex 50 closed down 3.3%. Chinese markets were lower, with the Shanghai Composite down 3.4% and the Shenzhen Composite down 4.8%. U.S. equity index futures are signaling a lower 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.

It has been a very busy three days. We update the [COVID-19](#) news. Risk assets reacted favorably to Friday's press conference at the White House. However, [we are not seeing any follow-through today; global equities are lower and bond yields are down](#) across the board. Gold continues to sell off. The Fed moved aggressively, cutting the policy rate and opening QE4. Other central banks are following along. Here are the details:

**COVID-19:** The world now has [169,387 reported cases of COVID-19, with 6,513 fatalities and 77,257 recoveries](#). The following is a chart of infections from *FT*.



Assuming the U.S. continues to track Italy, cases will be up to 25k in a week or so. Here are some bullet points for today:

- ***The U.K.'s natural experiment may be ending:*** The [Johnson administration was bucking the trend](#) of most Western nations by not ordering gathering places to close. [The idea was that the virus](#) can't be contained anyway, so instead the government allowed movement to take place. As infections rose, a "herd immunity" would develop faster. For the population under the age of 50, this policy arguably makes sense. Most younger people are not threatened by the disease. However, [for those over 60 it could be deadly](#). His government is [rethinking the policy](#).
- ***Shutdowns increase:*** [Schools](#), restaurants, theaters, churches and sporting events are [all closing](#). Nearly [30 million school-aged children](#) are now home. The administration is instructing Americans to "[hunker down](#)." The [same is true across Europe](#). [Spain](#) and Italy have been most aggressive as infection rates rise.
- ***All this is having an economic impact:*** The [airline industry](#) is [reeling](#). In [Europe](#), the [automobile industry](#) is starting to shut down. The [restaurant industry](#) is getting hit hard. In the U.S., this industry represents about 4.75% of GDP.



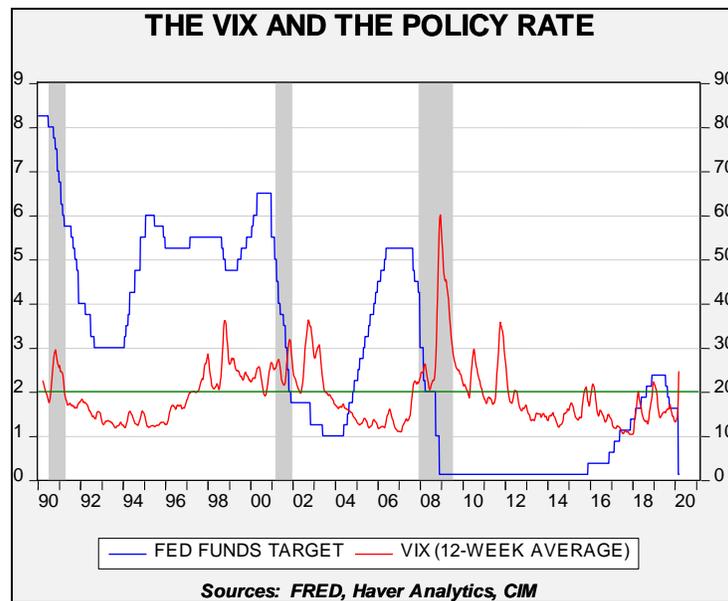
As [economic data from China rolls](#) out, [the impact is stunning](#). Industrial output fell 13.5% for January and February compared to a year earlier. Retail sales plunged 20.5% for the same period and fixed asset investment dropped 24.5%.

- ***Nationalism is on the rise:*** [Border closings are being announced across Europe](#), [undermining the free movement](#) of the [past three decades](#). [Travel bans](#) are being extended. [Germany is being rocked](#) by reports that the U.S. [tried to buy exclusive rights](#) to a [COVID-19 vaccine](#) from a [German company](#). Nations within Europe are trying to ban the export of protective gear; [the EU is trying to stop](#) that, [but it is willing to prevent the export outside the EU](#).
- ***There is some good news:*** [Vaccine trials](#) are starting.

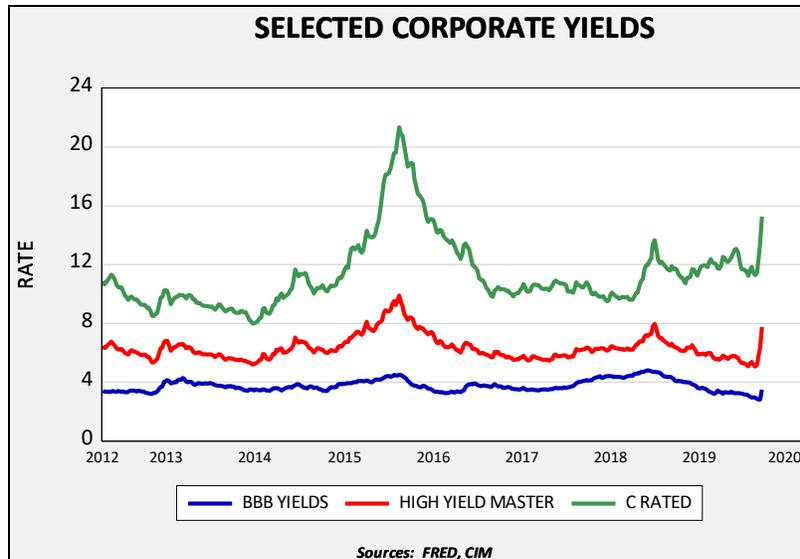
We will have much more to say on the virus and other issues in the next day or so; an update to our 2020 Outlook is coming soon. Suffice it to say, the odds of recession have increased dramatically in recent days and may be unavoidable.

**The Fed:** In a surprise move, the [FOMC decided to skip the formalities](#) of Tuesday and Wednesday's meeting and [cut to the chase](#). It [cut the policy rate of a range of 0% to 0.25%](#) and announced QE4 by planning to purchase \$700 billion of Treasury and mortgage paper. Specifically, it plans to buy \$500 billion of Treasuries and \$200 billion of mortgage-backed securities; this will take the balance sheet to over \$5.0 trillion. In addition to these measures, the Fed reduced the discount rate to 25 bps and encouraged banks and primary dealers to use the window. Using the discount window mechanism would help support liquidity issues in the repo market. It also reduced the [reserve requirement ratio to 0%](#). The FOMC also [lowered prices on dollar swap rates](#) with other central banks in a bid to reduce global liquidity issues. It is not clear in the statement how quickly the Fed intends to increase its balance sheet. There was one dissenter: Cleveland's Loretta Mester opposed the rate cut but did support the other policy actions. The Fed did have "[friends](#)" as other central banks took action as well.

The Fed continues to guide policy based on financial risk. We note that the policy rate tends to be cut when the 12-week average of the VIX rises above 20.



We also note that credit has been hit hard.



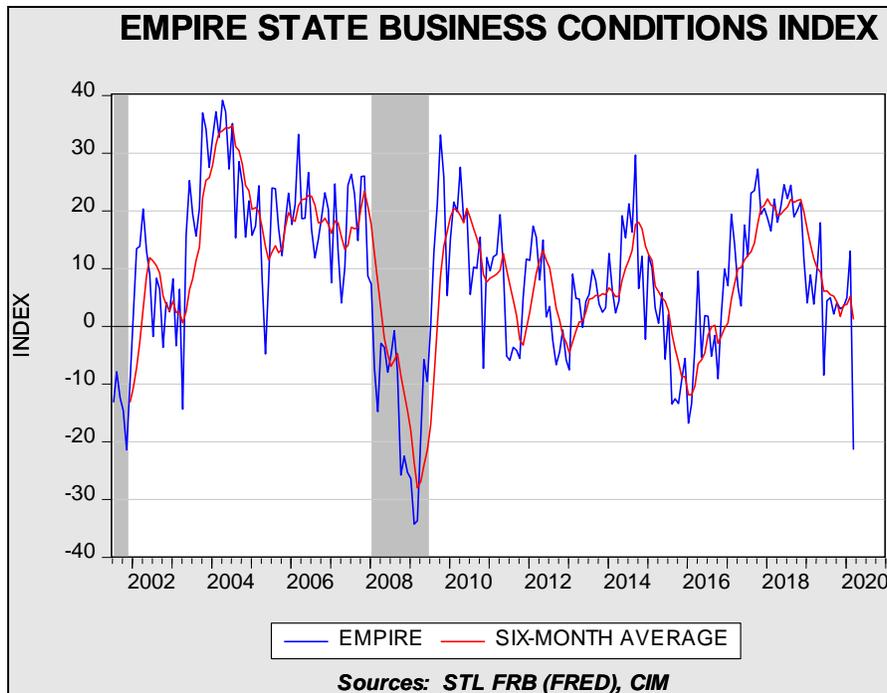
This chart shows rates on selected corporate yields of various credit quality. [Funding strains are evident](#) in the “hockey stick” turns in recent days; there is a [clear rush for cash](#).

The question now is, “what’s left?” There are two other directions the Fed could take. Currently, it cannot buy assets other than Treasuries or mortgages. It could ask Congress to buy other assets, e.g., corporate bonds, and perhaps equities. Or, it could consider buying foreign bonds, which would weaken the dollar. We do note the dollar fell on the move to ZIRP and a weaker dollar should support net exports. For the time being, monetary policy is mostly exhausted.

What about fiscal policy? This is the next line of defense. We are starting to see a consensus among both [conservative](#) and [liberal](#)-leaning economists on the wisdom of direct payments to households. Sending money directly was done in Hong Kong recently and tax rebates in the U.S. were implemented by the Carter administration. The worry is that political divisions will prevent actions from being taken. We suspect that direct action will likely occur but only after conditions deteriorate further.

### U.S. Economic Releases

Empire manufacturing for March came in well below expectations at -21.5 compared to the forecast of 3.0.



The chart above shows the six-month average of Empire manufacturing. The drop in the Empire State Manufacturing Index is reflective of the devastating impact that COVID-19 has had on an already struggling manufacturing sector. The raw data is consistent with recession, one of the first reports that has given this signal. The smoothed data remains in expansion, highlighting how rapidly conditions are deteriorating.

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

Economic Releases						
EDT	Indicator			Expected	Prior	Rating
16:00	Total Net TIC Flows	m/m	Jan		\$85.6 Bil	**
16:00	Net Long-Term TIC Flows	m/m	Jan		\$78.2 Bil	**
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>								
China	New Home Prices	m/m	Jan	0.0%	0.3%		**	Equity bearish, bond bearish
	Retail Sales	m/m	Feb	-20.5%	-4.0%		**	Equity bearish, bond bearish
	Property Investment	ytd	Feb	-16.3%			**	Equity bearish, bond bearish
	Industrial Production	y/y	Feb	-13.5%	-3.0%		***	Equity bearish, bond bearish
Japan	Core Machine Orders	y/y	Jan	-0.3%	-3.5%	-1.1%	*	Equity bearish, bond bearish
India	Wholesale Prices	y/y	Feb	2.3%	3.1%	2.4%	**	Equity and bond neutral
<b>EUROPE</b>								
Italy	CPI EU Harmonized	y/y	Feb	0.2%	0.3%	0.3%	***	Equity and bond neutral
UK	Rightmove House Prices	y/y	Mar	3.5%	2.9%		**	Equity and bond neutral
Switzerland	Producer & Import Prices	y/y	Feb	-2.1%	-1.0%		***	Equity bullish, bond bearish
<b>AMERICAS</b>								
Brazil	FGV Inflation IGP-10	m/m	Mar	0.6%	0.0%	0.3%	**	Equity bearish, bond bullish

## 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>	84	74	10	Up
<b>3-mo T-bill yield (bps)</b>	17	26	-9	Neutral
<b>TED spread (bps)</b>	68	48	20	Neutral
<b>U.S. Libor/OIS spread (bps)</b>	9	16	-7	Up
<b>10-yr T-note (%)</b>	0.76	0.96	-0.20	Neutral
<b>Euribor/OIS spread (bps)</b>	-43	-49	6	Neutral
<b>EUR/USD 3-mo swap (bps)</b>	38	51	-13	Down
<b>Currencies</b>	<b>Direction</b>			
dollar	Down			Neutral
euro	Up			Up
yen	Up			Up
pound	Up			Down
franc	Up			Up
<b>Central Bank Action</b>	<b>Current</b>	<b>Prior</b>	<b>Expected</b>	
BOJ Policy Balance Rate	-0.100%	-0.100%	-0.100%	On forecast
BOJ 10-yr Yield Target	0.000%	0.000%	0.000%	On forecast
RBNZ Official Cash Rate	0.250%	1.000%		On forecast
Federal Reserve Upper Limit	0.250%	1.250%		On forecast
Federal Reserve Lower Limit	0.000%	1.000%		On forecast

## 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	\$30.98	\$33.85	-8.48%	Central Bank Easing
WTI	\$29.93	\$31.73	-5.67%	
Natural Gas	\$1.82	\$1.87	-2.73%	
Crack Spread	\$4.89	\$9.21	-46.87%	
12-mo strip crack	\$6.08	\$9.19	-33.84%	
Ethanol rack	\$1.37	\$1.37	-0.01%	
<b>Metals</b>				
Gold	\$1,496.90	\$1,529.83	-2.15%	Market Uncertainty
Silver	\$12.97	\$14.72	-11.87%	
Copper contract	\$237.20	\$246.40	-3.73%	
<b>Grains</b>				
Corn contract	\$ 361.75	\$ 365.75	-1.09%	
Wheat contract	\$ 501.50	\$ 506.00	-0.89%	
Soybeans contract	\$ 842.00	\$ 848.75	-0.80%	
<b>Shipping</b>				
Baltic Dry Freight	631	633	-2	

## Weather

The 6-10 and 8-14 day forecasts currently call for a cold front to move into the eastern region, with warmer-than-normal conditions remaining in Florida. Wet conditions are expected throughout most of the country except for Texas, Florida and most of New Mexico.

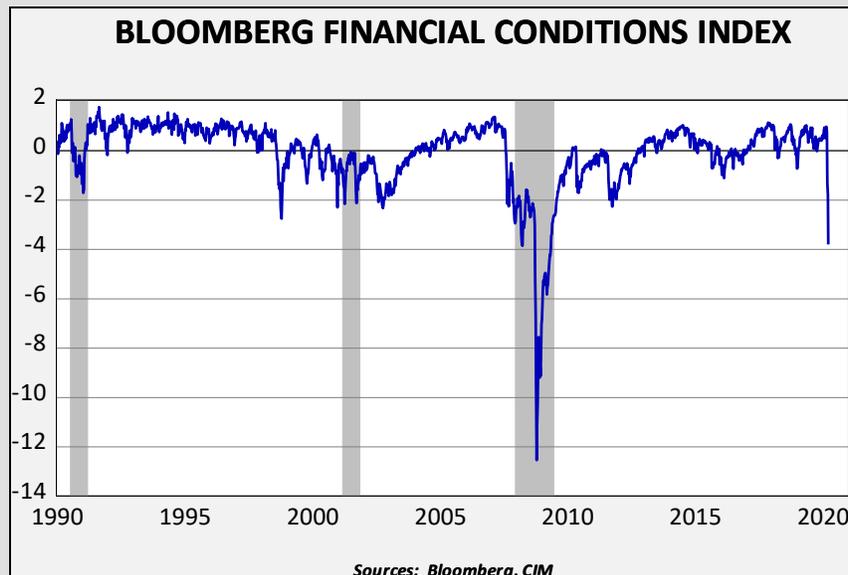
## Asset Allocation Weekly

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.

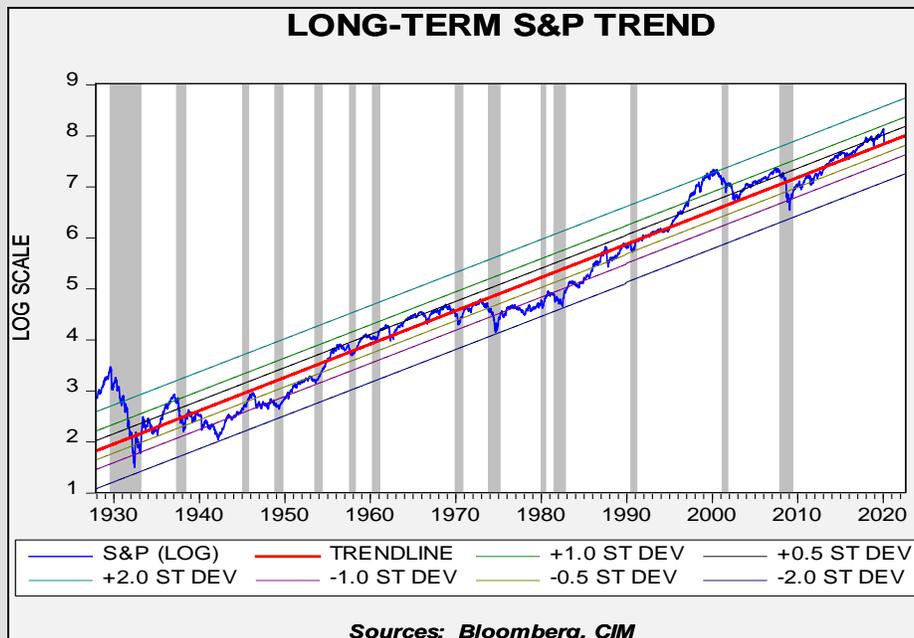
<sup>1</sup> We discussed this issue in our most recent [Weekly Energy Update](#).

<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.

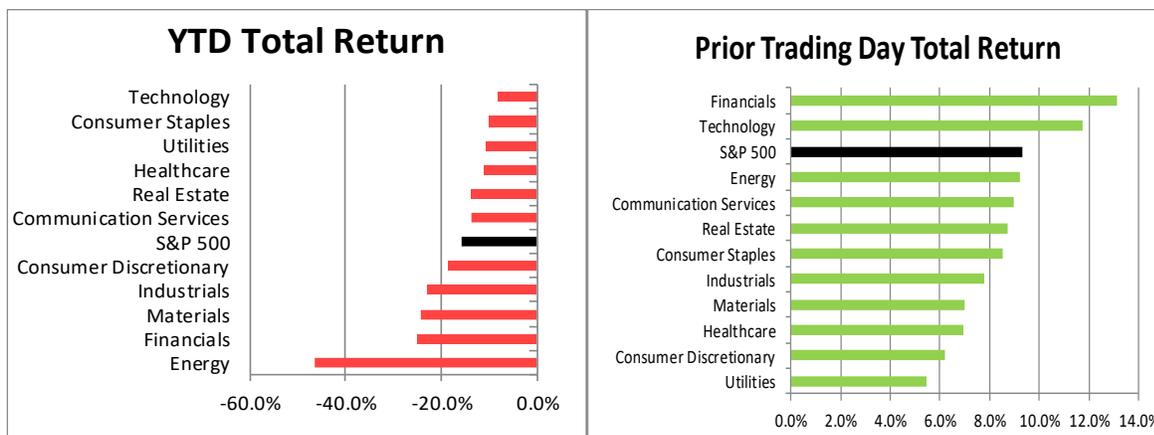
The postwar experience doesn’t support two consecutive deep recessions, which is why we have argued that another 2008 is unlikely. Of course, we did have consecutive deep recessions in the 1930s: the 1936-37 recession was caused by profoundly inept policy when the Roosevelt administration tightened fiscal 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

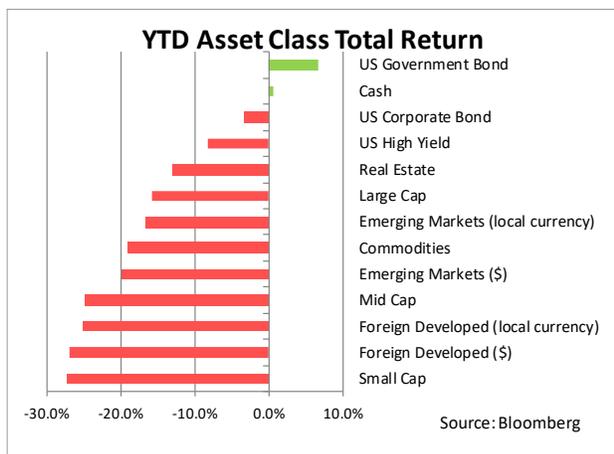
### U.S. Equity Markets – (as of 3/13/2020 close)



(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 3/13/2020 close)

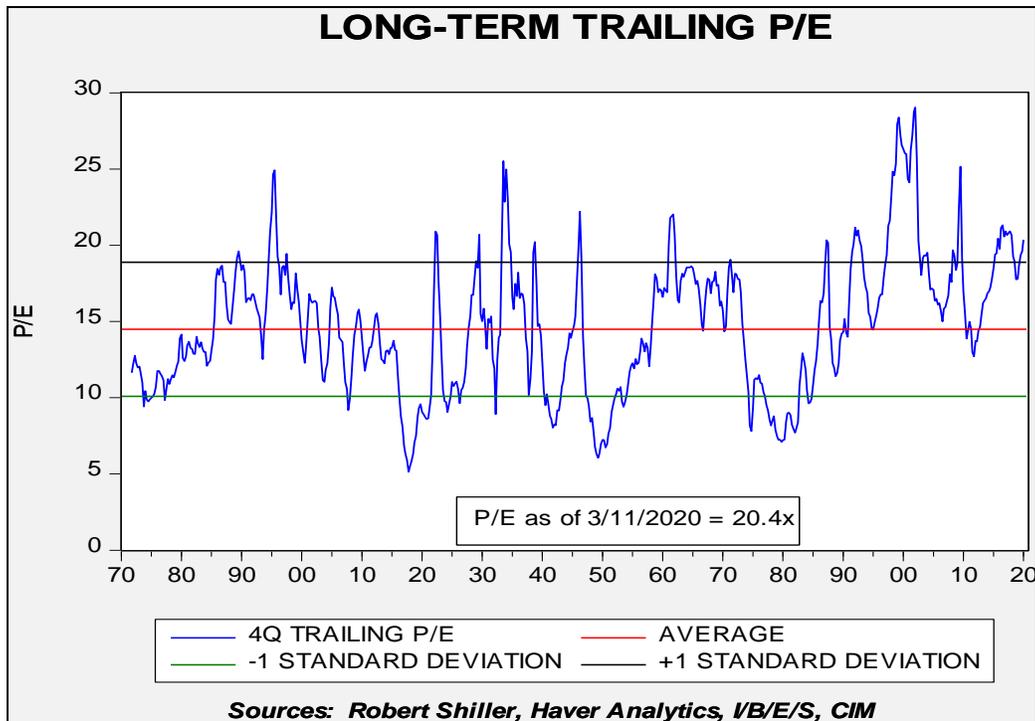


This chart shows the year-to-date returns for various asset classes, updated daily. The asset classes are ranked by total return (including dividends), with green indicating positive and red indicating negative returns from the beginning of the year, as of prior close.

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.