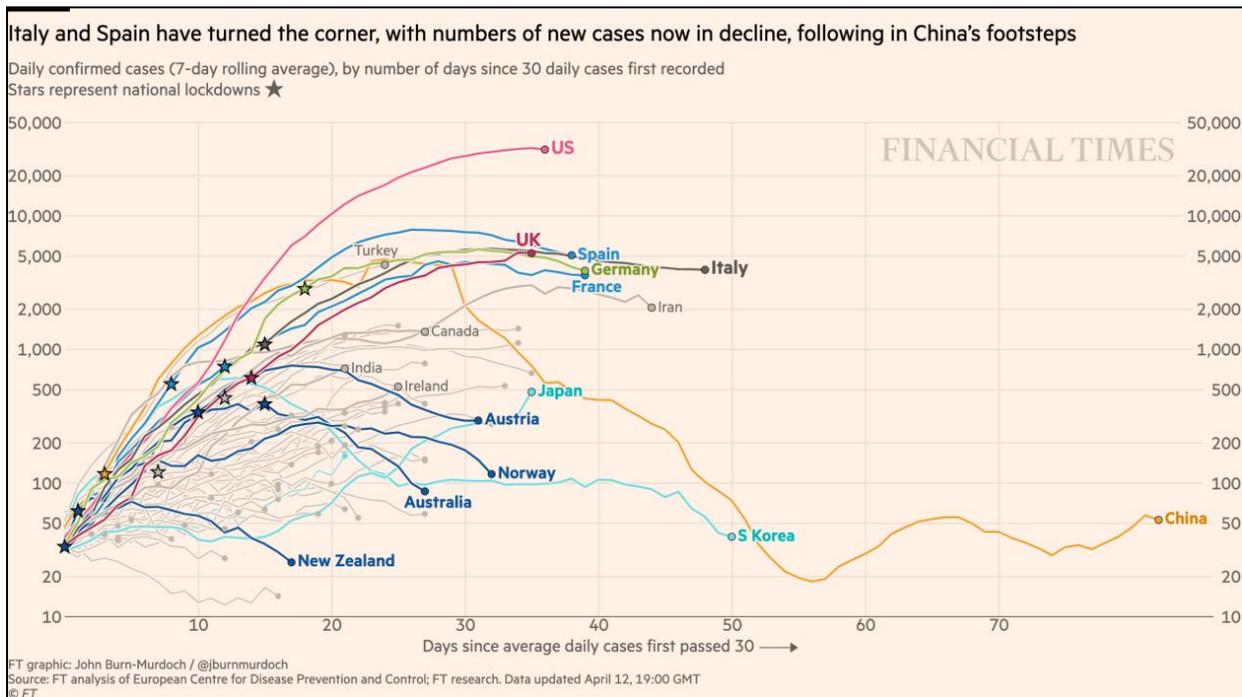


Looking for something to read? See our [Reading List](#); these books, separated by category, are ones we find interesting and insightful. We will be adding to the list over time.

**[Posted: April 13, 2020—9:30 AM EDT]** Global equity markets are generally lower this morning. The EuroStoxx 50 is up 1.5% from its last close. In Asia, the MSCI Asia Apex 50 closed down 0.3% from the prior close. Chinese markets were lower, with the Shanghai Composite down 0.5% and the Shenzhen Composite down 0.8%. U.S. equity index futures are signaling a lower open.

Good morning! Equities are modestly lower this morning; oil is steady. We update the [COVID-19](#) news. OPEC+ has a deal. Some comments on the Fed. Here are the details:

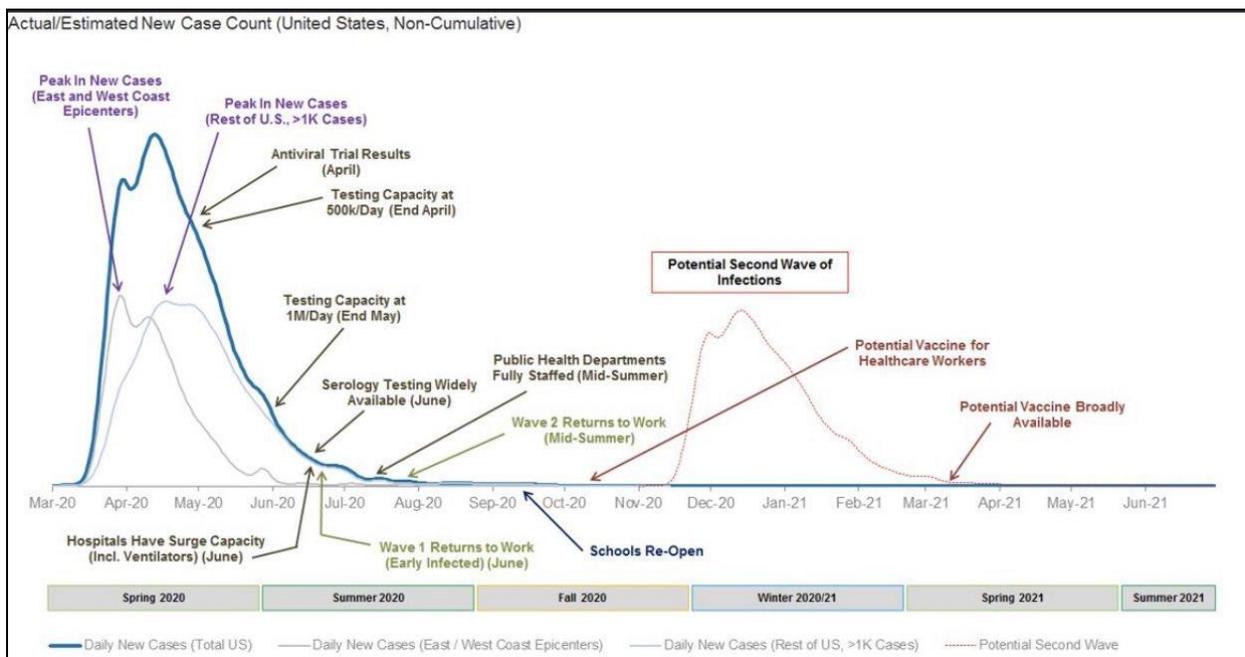
**COVID-19:** The [official number of global cases](#) is 1,860,011 with 114,983 fatalities and 438,516 recoveries. Here is the *FT* chart:



For those looking for more intensive monitoring, here is the [IHME site](#). You can not only check out the U.S. data but also look at it by state. The good news is that, according to these models, we are at the peak of fatalities now and should see slow improvement. However, a caveat...the confidence bands are extremely wide. The forecasts from these models are important but also carry a remarkable degree of uncertainty.

**The virus news:**

- PM Johnson [has left the hospital](#). He has not returned to work quite yet.
- The virus [has hit the Saudi royal family](#). The governor of Riyadh is said to be in intensive care and several dozen members have been infected as well.
- Spain is starting to ease restrictions, while India is in the early stages of the pandemic. [Nations around the world are in various phases](#) of dealing with the virus.
- Early on, COVID-19 was compared to the seasonal flu; we did that as well. As our experience has developed, [important differences have emerged](#). Those hospitalized with COVID-19 are there much longer and 10x more are hospitalized with it. The fatality rate appears to be much higher. There is also a mystery about why some people are not only asymptomatic but also virus “[super-spreaders](#).”
- New York is struggling with the [grim task](#) of burying the indigent dead.
- Morgan Stanley (MS, \$41.08) has generated a likely path for the recovery from COVID-19.

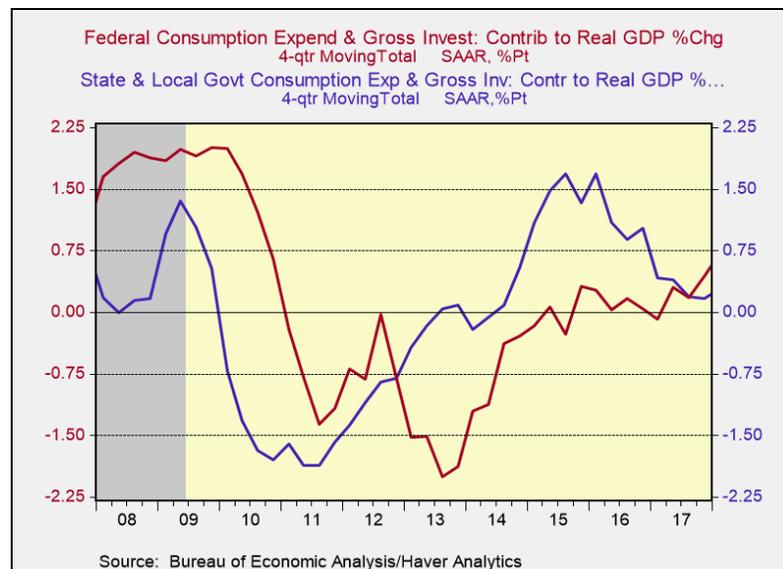


(Source: Morgan Stanley)

Their analysis, like our work, is an estimate, but it is a reasonable path of the disease. By early summer, they estimate we will be seeing widescale testing, both for the virus and for immunity. Workers will start returning by June with another wave by mid-summer, based on the idea that we will (a) have a much better idea of who has immunity, and (b) testing will allow for rapid isolation of those who catch it later. Schools will reopen in the fall. By Q4, we will be testing a potential vaccine; by late Q1 2021, a vaccine will become broadly available. This schematic suggests that it will take about a year for conditions to return to normal but there will be steady improvement over time. For those with [sensitive conditions](#), returning to work may not occur for a year. But, for those under 50 without complicating conditions, or with immunity, the sheltering-in-place orders will start to ease up.

**The policy news:**

- The firestorm of Fed programs is making it hard to keep up; [Fed independence is clearly at risk](#). But, one of the nice things about a three-day weekend is that it gives one time to reflect and analyze. The Fed's decision to expand support for state and local debt is potentially a game changer. One of the key points to Federal debt is that it is issued in a currency that the debt issuer can print. In other words, default can only occur by decision because money can always be provided to service the debt. That doesn't mean that the Federal government can't get into trouble by expanding debt, but it isn't the same trouble that an issuer lacking currency sovereignty can find itself. In other words, inflation is the problem for debt issuers with currency sovereignty; default is the problem for debt issuers that lack currency sovereignty.
  - The lack of currency sovereignty is one of the key differences between Federal debt and state and local debt. The latter cannot print the currency in which it issues its debt and thus can default.
  - But, the Fed is now backstopping state and local debt which means, in reality, these issuers now have currency sovereignty. Or, put another way, by putting this debt on the Fed's balance sheet, state and local governments can, in theory, run persistent deficits.
  - In the short run, what the Fed is doing is justifiable. [One of the problems of the Great Financial Crisis was that state and local governments](#), facing a collapse in tax revenue, were forced to cut spending. In fact, spending was cut enough to mostly offset what the Federal government was spending.



Note that by Q3 2010, the Federal government was adding about 122 bps to GDP; state and local governments were subtracting 168 bps. The government does not want a situation where the stimulus is being offset by falling state and local spending.

- The trick is how this program ends. If it continues, state and local governments will have currency sovereignty and deficit spending could explode.

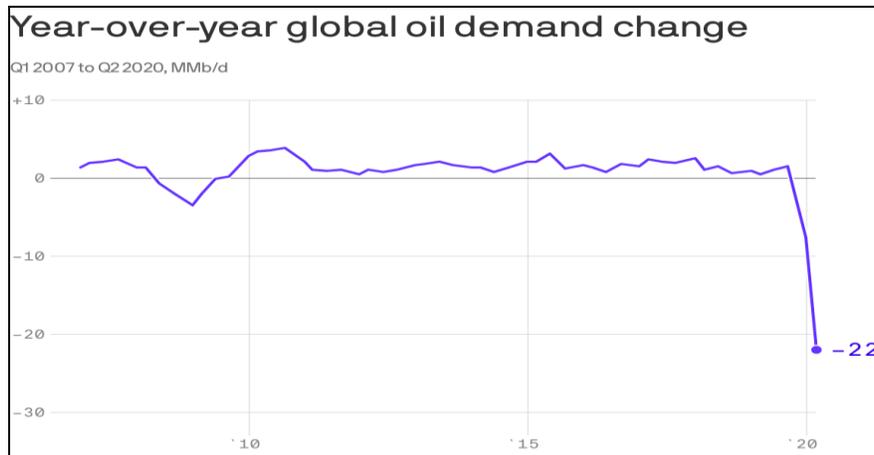
- The [airline industry is not happy](#) with the Treasury bailout proposal, [objecting to the aid consisting of loans with conditions](#). [Airline unions are warning of bankruptcies](#).

**The economic news:**

- The NY Fed has a paper that shows how COVID-19 is affecting the economic data in a pattern [similar to a natural disaster](#), but for most of the nation. In other words, it's not acting like a cyclical downturn, but a hurricane or earthquake. Thus, our usual models for warning us of a recession didn't work this time.
- We are starting to see reports of supply problems caused directly by COVID-19. [The pork industry](#) is facing [capacity loss](#) due to [infections at plants](#). [Grocery workers are contracting the virus](#) and at least 41 have perished. Locally, we are seeing increasing restrictions on in-store shopping. Meanwhile, [tariffs are hampering the imports](#) of products used for disinfecting. Food crops are being lost due to the lack of workers for harvest [or demand disruptions](#); [even tea](#) has been affected. [Other critical industries](#) are struggling to cope with infections. There are increasing concerns that the [largest job displacement](#) from COVID-19 will be with low-wage workers.
- The world economy is [facing historic contraction](#); nothing in the postwar experience compares.

**The market news:**

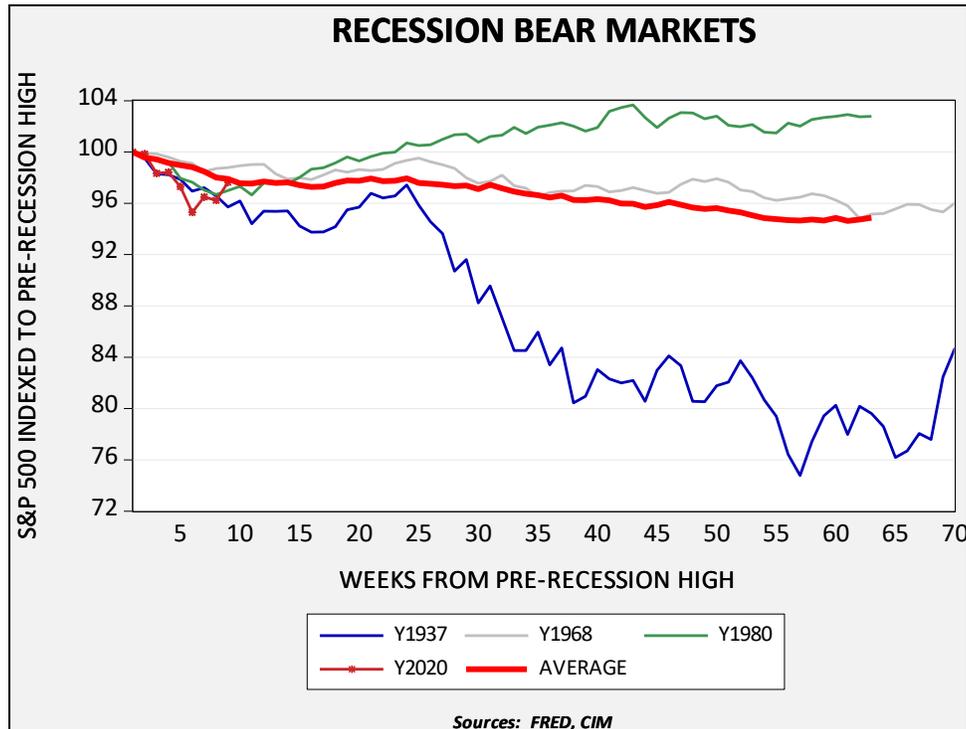
- [OPEC+ has a deal](#), although details are rather scant. Oil prices are mostly steady on the news; given the rally we saw on early reports, an agreement was mostly discounted. The [headlines](#) show a [nearly 10.0 mbpd reduction agreement](#). [U.S. pressure](#) was instrumental in getting this deal together. Unfortunately, the cut pales in comparison to demand loss.



(Sources: Axios, IHS)

As we noted last week, history tends to show that the larger the cartel, the harder it is to avoid the free-rider problem. The good news is that the arrangement likely prevents a sudden collapse. However, it doesn't mean that a bottom is in place either. Meanwhile, we are [starting to see well shut-ins](#); it is highly unlikely that many of these wells will ever restart in the absence of much higher prices. Studies by regional Fed banks, including [Dallas](#) and [Kansas City](#), warn of massive bankruptcies if prices remain below \$30 per barrel.

- Given the sharp recovery seen in equities, we have been getting questions about whether this pace of improvement will continue. History would suggest it won't.



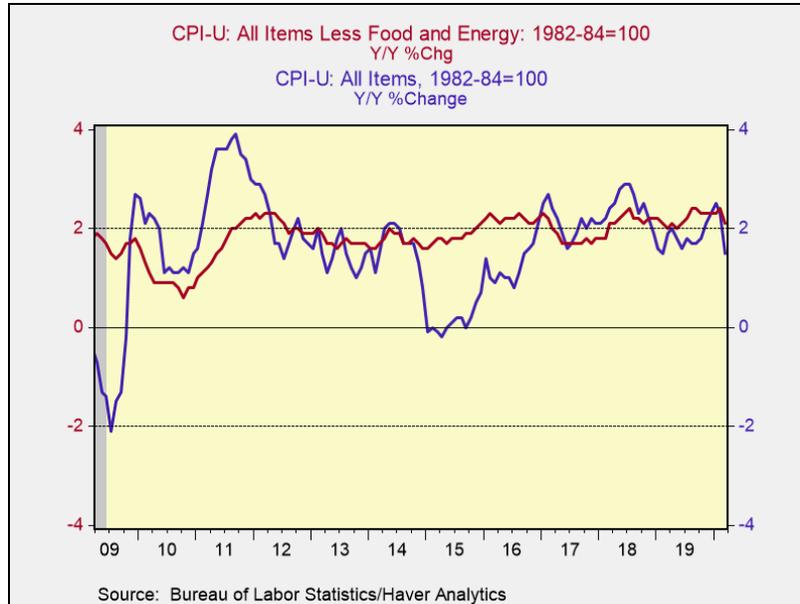
We have weekly data for the S&P 500 Friday closes going back to 1928. We reviewed every recession (except 1945, which had very odd behavior) and indexed each market to the pre-recession high. The red line shows the average of all recessions, along with the three highest correlating periods. We overshot both the average and the other correlating years. We have rallied back to the average, but note that the average and 1968/1980 cycles remained rather flat until after week 15. We are currently on week eight. If history is any guide, we will likely see equities churn for another couple of months, at best. At worst, we will stay sideways for more than a year. Each recession is different and this one we are now experiencing is clearly unusual. However, it would be a bit of a stretch to expect that what we have seen recently will continue.

***The foreign policy news:***

- [Argentina is spiraling to its ninth debt default](#) just as the G-20 is working on a [broad set of debt relief measures](#) for poor nations.
- [Fires in the forests surrounding the Chernobyl plant are spewing radiation](#) imbedded in the trees; so far, radiation levels have not reached dangerous levels.
- [Daniel Ortega, the president of Nicaragua, has been missing for a month.](#) His country has not ordered any sort of social distancing. There is increasing concern that Ortega is (a) incapacitated, perhaps by COVID-19, or (b) is worried about catching it and is engaged in social distancing, while not recommending it for anyone else.

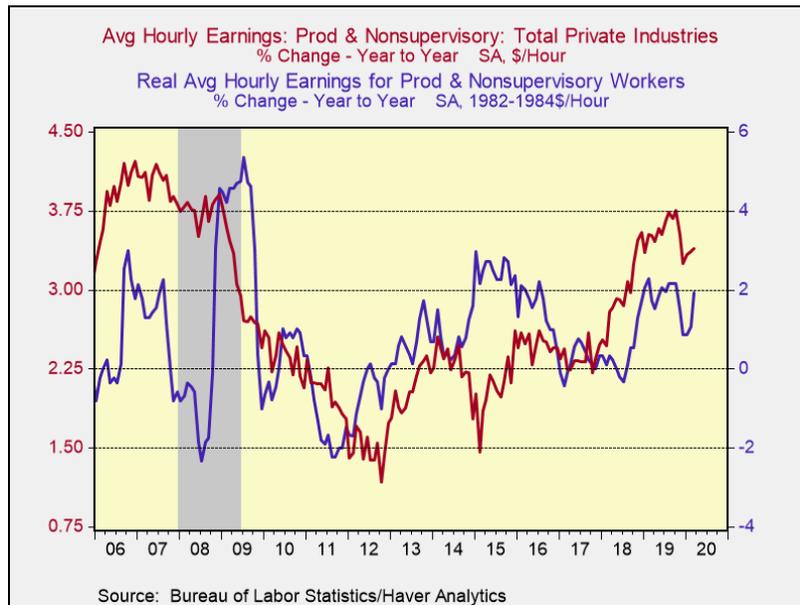
## U.S. Economic Releases

In March, CPI fell 0.4% from the prior month compared to expectations of a drop of 0.3%. Meanwhile, core CPI fell 0.1% compared to expectations of a 0.1% rise.



The chart above shows the annual change in core and headline CPI. The steep drop in CPI was likely the result of the dive in oil prices. Additionally, there was also a sharp decline in airfare.

Real hourly earnings rose 1.6% from the prior year, while real weekly earnings rose 0.7%.



The chart above shows the annual change in hourly earnings and real hourly earnings. Deflationary pressures have benefited workers who have been able to work during the pandemic.

The table below shows the Fed events scheduled for the rest of the day.

Economic Releases		
No economic releases today		
Fed Speakers or Events		
	Speaker or event	District or position
11:05	James Bullard Holds a Covid-10 Briefing in Zoom	President of the Federal Reserve Bank of St. Louis
12:30	Charles Evans Speaks in Pittsburgh	President of the Federal Reserve Bank of Chicago
15:00	Raphael Bostic to Speaks to Alabama Works	President of the Federal Reserve Bank of Atlanta

## 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	Money Stock M2	y/y	Mar	3.3%	3.0%	2.9%	*	Equity and bond neutral
	Money Stock M3	y/y	Mar	2.7%	2.5%	2.5%	*	Equity and bond neutral
<b>AMERICAS</b>								
Mexico	Formal Job Creation Total	m/m	Mar	-130.6k	123.1k		**	Equity bearish, bond bearish

## 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
3-mo Libor yield (bps)	122	131	-9	Up
3-mo T-bill yield (bps)	14	22	-8	Neutral
TED spread (bps)	108	109	-1	Up
U.S. Libor/OIS spread (bps)	8	8	0	Up
10-yr T-note (%)	0.72	0.72	0.00	Neutral
Euribor/OIS spread (bps)	-22	-25	3	Neutral
EUR/USD 3-mo swap (bps)	-38	-38	0	Down
<b>Currencies</b>	<b>Direction</b>			
dollar	Flat			Neutral
euro	Down			Up
yen	Up			Up
pound	Up			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	\$31.25	\$31.48	-0.73%	
WTI	\$22.96	\$22.76	0.88%	
Natural Gas	\$1.78	\$1.73	2.54%	
Crack Spread	\$9.39	\$9.47	-0.90%	
12-mo strip crack	\$5.68	\$6.24	-9.05%	
Ethanol rack	\$1.14	\$1.14	0.04%	
<b>Metals</b>				
Gold	\$1,690.24	\$1,696.65	-0.38%	
Silver	\$15.29	\$15.57	-1.80%	
Copper contract	\$232.85	\$225.95	3.05%	
<b>Grains</b>				
Corn contract	\$ 336.25	\$ 336.75	-0.15%	
Wheat contract	\$ 562.75	\$ 557.50	0.94%	
Soybeans contract	\$ 870.50	\$ 871.00	-0.06%	
<b>Shipping</b>				
Baltic Dry Freight	635	607	28	

## Weather

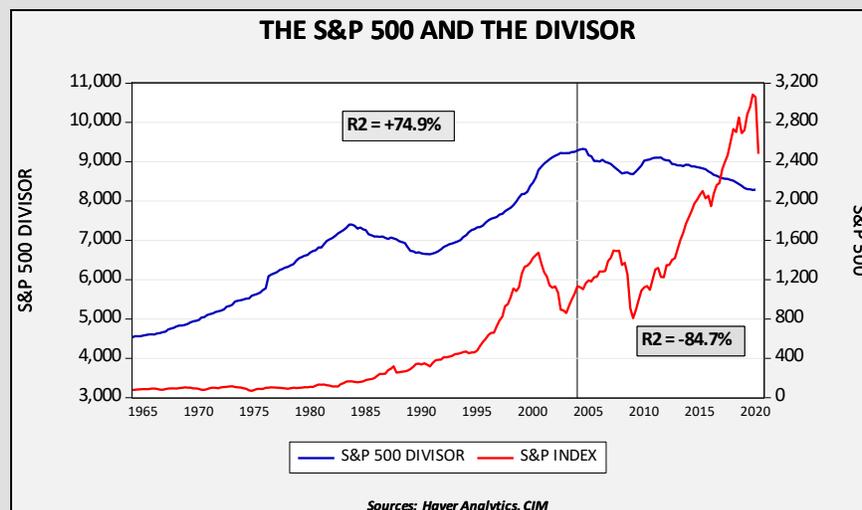
The 6-10 and 8-14 day forecasts currently call for colder-than-normal temperatures for the Midwest and Mid-Atlantic regions, with warmer-than-normal temperatures for the rest of the country. Wet conditions are expected for most of the country, with dry temperatures expected in the Rocky Mountains and Pacific regions.

## 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](#).

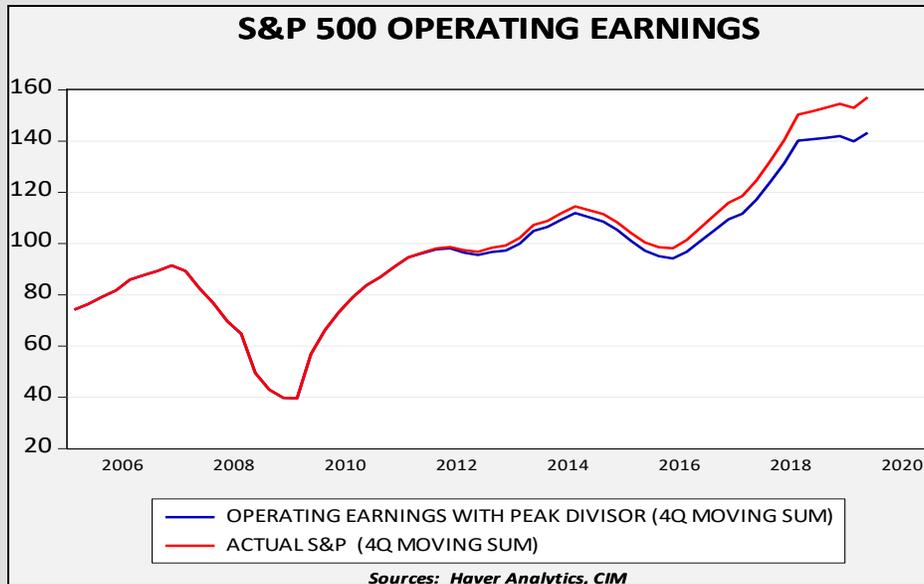
April 9, 2020

One of the more controversial issues of the past bull market was the impact of share buybacks. The way we like to frame that issue is with the S&P 500 divisor. The divisor is a number that is used to smooth out the index; when stocks leave the index, through replacement or mergers, or when new stock is issued or purchased, the divisor adjusts to prevent discrete jumps in the index. Therefore, if companies are buying back stock, the divisor will decline, all else held equal.



This chart shows the divisor and the S&P 500 from 1964. In general, it would be reasonable to assume that as stock prices rise, but especially if the P/E multiple rises, companies would generally want to issue stock. Thus, the divisor would be expected to follow the overall movement of the market. And, from 1964 until 2004, that was generally true. The two series were positively correlated at the 74.9% level. However, from 2005 to the present, despite a major bull market from 2009 to 2020, the trend in the divisor was lower. In fact, the sign of the correlation reversed to negative.

The divisor is used to calculate earnings per share; a falling divisor boosts the earnings per share reading. If we assume that the divisor had remained at the most recent peak in 2011, the chart below shows the impact on earnings per share.



This chart shows operating earnings on a rolling four-quarter basis. Using Q4 2019, the latest actual data available,<sup>1</sup> the reported operating earnings per share was \$157.12; adjusting for the 2011 peak divisor shows a reading of \$143.28.

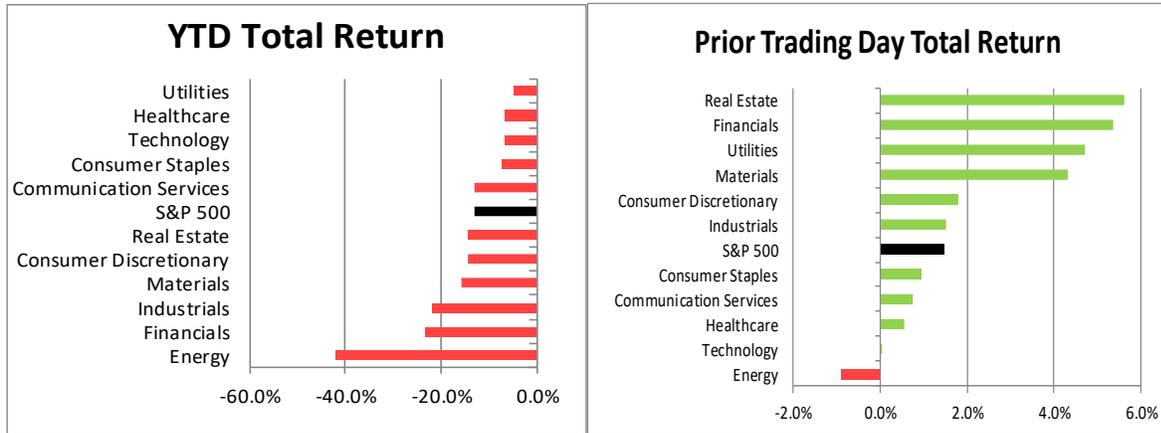
The extensive policy actions taken by the government and the Federal Reserve to backstop the economy and the financial markets will likely come with the costs of direct regulations and social control. In other words, taking the government's money or using the Fed's balance sheet to simply support shareholders through dividends and buybacks is probably not going to be possible. If that is the case, it is highly likely that earnings growth will be less than what we have seen in recent years. Margins are another element we are monitoring; these have been remarkably strong for the past decade. So far, we have not seen aggressive actions to reduce margins but a retreat from globalization and a return to regulation could bring down margins as well.

*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.*

<sup>1</sup> These numbers will appear lower than what is commonly shown because we use data from Standard and Poor's. The media usually reports data from Thomson/Reuters, the owners of I/B/E/S, the service that collects earnings estimates. Thomson/Reuters earnings tend to be about 7% higher than Standard and Poor's.

**Data Section**

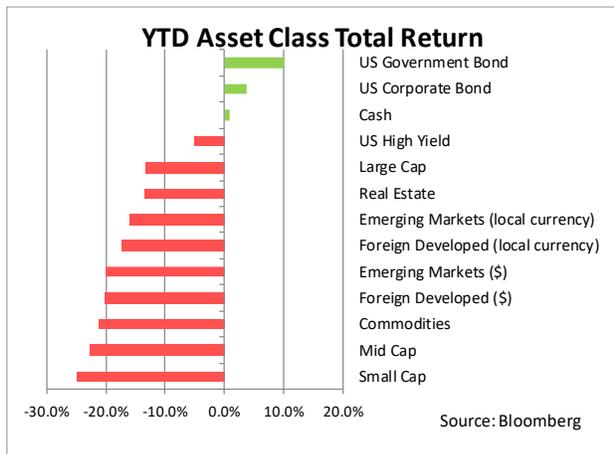
**U.S. Equity Markets – (as of 4/9/2020 close)**



(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 4/9/2020 close)**

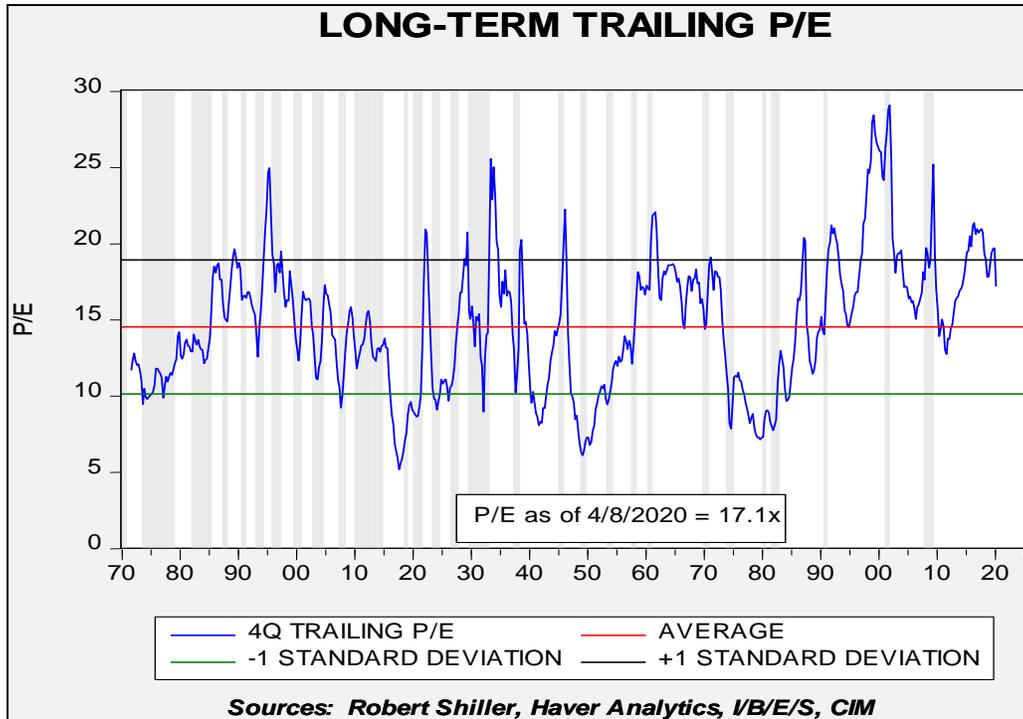


This chart shows the year-to-date returns for various asset classes, updated daily. The asset classes are ranked by total return (including dividends), with green indicating positive and red indicating negative returns from the beginning of the year, as of prior close.

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

April 9, 2020



Based on our methodology,<sup>2</sup> the current P/E is 17.1x, up 1.0x from last week. The rise in the P/E was caused by the recovery in the S&P and falling earnings estimates.

*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.*

<sup>2</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 two actual quarters (Q3 and Q4) and two estimates (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.