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Still Searching for the Floor and Fed Plays Whack-A-Mole

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Economics Weekly
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It has been a roller-coaster week in the financial markets, with volatility reaching never before seen levels (for example, the VIX Index reached 82.7, its highest since 1990 and beating 2008's 80.9); fear has been chasing panic and panic chasing uncertainty, with the result that investors have preferred to shoot first and ask questions later. The unfortunate reality is that they have been flying blind, where there has been a huge gap between the unknown scale of the problem—and therefore the scale of the policy response required to solve it—and what might ultimately represent a floor from which a recovery can start to rebuild. The result has quite naturally been exceptionally high levels of volatility, which are likely to continue for a little while yet before dying down. **In this *Economics Weekly,* we discuss the Fed's response to the crisis and how it is acting with speed and force to bridge that gap between the unknown and the known, but there is still more that needs to be done.**

The Seven Stages of Grief

Investors—and financial journalists—have been dipping into the Kubler-Ross Change Curve (designed to describe the grieving stages) to assess exactly where we are in this crisis: 1) shock, 2) denial, 3) anger, 4) panic, 5) response, 6) acceptance, and 7) integration.[1] We have clearly passed phases 1 to 3 and now seem to be somewhere in between 4 and 5. That is, the back-and-forth period between the reaction of the markets (and the general populous reflected through the financial markets) and the government's responses. The message at the moment from the markets is clearly that more needs to be done.

Meanwhile, there are a several significant differences between today's crisis and that of 2008-2009; the first being that this is pandemic crisis with significant fears concerning our *physical* health (and that of our loved ones), as well as our *financial* health. As a result, it is not just a question of balance sheet repair, but one of incomes and physical well-being that demands a strong fiscal response.

Second, whereas the crisis in 2008-2009 was extremely severe, consumers kept shopping, buying coffee, visiting restaurants, taking planes and taxis, etc. Today, these activities are all coming to a sudden and complete standstill for at least a couple of months—something Larry Summers has likened to the global economy going into a coma for a couple of months.

Hence, it now seems quite plausible that the severity of the downturn in real GDP growth during second quarter 2020 could be as deep, or deeper, than the 8.4% plunge witnessed in the fourth quarter of 2008, as some economists are now predicting. Back then, the pain was spread out over a much longer period, i.e., real GDP was falling for five of the six quarters from first quarter 2008 through second quarter 2009. This time, there is little doubt that consumers will continue to feel a little woozy as they exit the crisis (e.g., slow to trickle back to public spaces), but this behavior will gradually subside as we move from acceptance to integration.

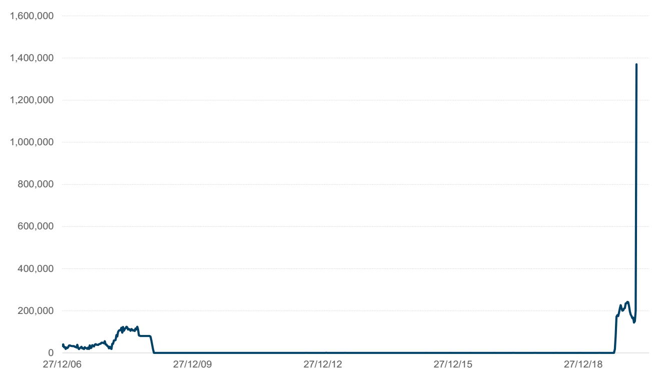
Third, both the consumer and the banking system have entered this recession on much firmer footing, as opposed to the 2008-2009 crisis, when the balance sheets of both were extremely stretch and fragile. The fact that this crisis has not had its origins in the banking system is therefore helpful, but certainly not sufficient—as the financial markets are reminding us very loudly and very clearly.

Lastly, this is still believed to be a temporary crisis; it is a virus believed to be seasonal and changes in temperature and more importantly humidity should cause it to recede. Hence, we have the advantage of knowing that while there will be a very sharp and painful economic recession today, there is also light at the end of the tunnel. This is not a "luxury" we had during the 2008-2009 crisis, when we experienced an immediate existential threat to the entire global banking system.

QE That Is QE

The Fed, in its response to this crisis, has unleashed an impressive barrage of actions to provide support to the financial system and limit the damage from the financial economy back into the real economy. While the Fed has lowered interest rates and revamped QE-that-is-QE to the tune of $700 billion ($500 billion in Treasuries and $200 billion in MBSs) so far, what perhaps should have also gotten more attention has been the slashing of the reserve requirement ratio to 0% from 10%. This move releases about $145 billion in bank deposits that may now be loaned out and will have a multiplier impact across the economy. This was also accompanied by strong rhetoric to encourage banks to visit the discount window as well as dip into their liquidity and capital buffers—which is after all what they are actually there for. It is also providing trillions in repo operations—swapping Treasuries for cash reserves (chart 1).

Chart 1. Federal Reserve Repo Agreements, $ mn

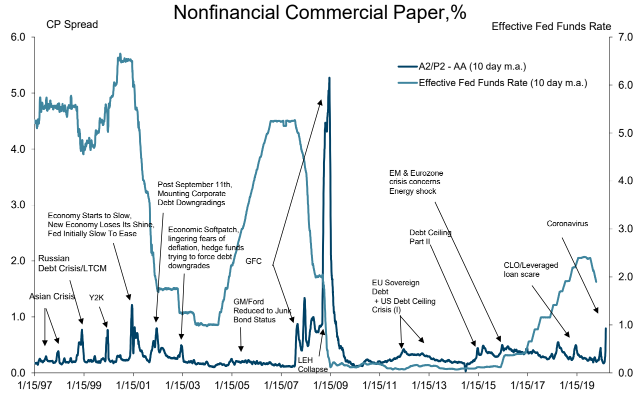


Source: Federal Reserve, William Blair Equity Research

The Fed has also dusted off its 2008-2009 playbook and re-released a few of its popular funding programs from that time. This has so far included the **CPFF (Commercial**

Paper Funding Facility), which provides support to the increasingly stretched commercial paper market (chart 2) as concerns about cash flow sustainability over the next few months have increased, in addition to its funding pipeline, money market mutual funds. Specifically, "*the CPFF will provide a liquidity backstop to U.S. issuers of commercial paper through a special purpose vehicle (SPV) that will purchase unsecured and asset-backed commercial paper rated A1/P1 (as of March 17, 2020) directly from eligible companies.*"

Chart 2. Spread Between AA Nonfinancial Commercial Paper and A2 Nonfinancial Commercial Paper,%



Source: Federal Reserve Board, William Blair Equity Research

On Wednesday at 11.30 p.m. ET, the Fed announced the addition of a further support fund for money market funds themselves, the MMLF (Money Market Mutual Liquidity Fund) for fear that we might face another "breaking the buck" moment. This happened back in 2008 when the unfortunately named Reserve Primary Fund (which some at the time mistook to mean the Federal Reserve was in trouble) saw its NAV fall below \$1.00 to \$0.97. Today, while most money market funds are seeing safe haven inflows, the slightly riskier prime money market funds—which are allowed to fluctuate and break the buck and are also a key source of funding for the CP market—are witnessing large outflows. The MMLF "*will make loans available to eligible financial institutions secured by high-quality assets purchased by the financial institution from money market mutual funds.*"

Lastly, the PDCF (Primary Dealer Credit Facility), another revived emergency fund, was established to allow the 24 primary dealers to exchange a broad range of collateral with the Fed in exchange for cash borrowed at the discount rate. This collateral includes Treasuries, investment grade debt, commercial paper and municipal bonds, and importantly, a broad range of equities. While the Fed is not legally permitted to purchase non-government-issued assets directly, through this facility it can certainly help encourage investment banks to buy such assets (on the its behalf), thereby acting to support the corporate bond and equity markets.

However, former Fed Chairs Bernanke and Yellen do not think this goes far enough. They have argued in this week's *Financial Times* that the Fed should be allowed to go even further and purchase corporate debt directly:

> Finally, as Eric Rosengren, president of the Federal Reserve Bank of Boston recently suggested, the Fed could ask Congress for the authority to buy limited amounts of investment-grade corporate debt. Most central banks already have this power, and the European Central Bank and the Bank of England regularly use it. The Fed's intervention could help restart that part of the corporate debt market, which is under significant stress. Such a programme would have to be carefully calibrated to minimize the credit risk taken by the Fed while still providing needed liquidity to an essential market. [2]

Other programs that it has not yet revived might include the powerful TAF (Term Auction Facility), whereby the Fed regularly auctioned off term funding, again, against a wide variety of collateral: "*By allowing the Federal Reserve to inject term funds through a broader range of counterparties and against a broader range of collateral than open market operations, this facility could help promote the efficient dissemination of liquidity when the unsecured interbank markets are under stress.*"

Lastly, the Fed is playing a key role in helping supply as many dollars as are needed to the international capital markets where there is a very serious and potentially extremely destabilizing dollar shortage taking place.

Companies who have borrowed in dollars, trade in dollars, have dollar-denominated contractual obligations, or simply want the safety of holding the world's reserve currency are desperately scrambling for the currency. While this is taking place across many developed markets, it is also placing tremendous strains on a number of emerging market economies and the private corporate sectors, where another crisis is potentially brewing.

As a result, the Fed initially unveiled swap lines with the usual suspects—the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank. And this was swiftly followed up yesterday with swap lines opened up with Reserve Bank of Australia, the Banco Central do Brasil, the Danmarks Nationalbank (Denmark), the Bank of Korea, the Banco de Mexico, the Norges Bank (Norway), the Reserve Bank of New Zealand, the Monetary Authority of Singapore, and the Sveriges Riksbank (Sweden). Importantly, the Fed is lending dollars to these central banks, who in turn lend to their own domestic entities those funds, and they assume the credit risk, not the Fed.

If you issue it, we'll buy it

The Fed's actions here are designed to achieve two key goals. First, it is trying to stabilize the financial markets by providing as much liquidity as needed to ensure the continued functioning of various markets that may be becoming distressed. And second, as the Peterson Institute's Adam

Posen has said, the Fed is paving the way for significant fiscal stimulus from the Treasury; effectively it is saying to the Treasury (and any potential bond market vigilantes), "If you issue it, we'll buy it."

Lastly, the Fed may, if it eventually needs to, provide funding to directly support the nonfinancial corporate sector with direct lending.

According to Fed historian and assistant professor at Wharton Peter Conti-Brown, under section 13(3) of the Federal Reserve Act (under which it also established the above facilities, and it was given permission to use by Treasury Secretary Mnuchin), the Fed is legally entitled to lend to industries that may find themselves in trouble. What that means is that while the Fed may not lend to one specific company, such as Boeing, it may lend to at least five or more entities within the industries, including Boeing, with the final approval of the Treasury Secretary. The idea being that it is not up to the Fed to pick the winners and losers, but rather to just provide support for what may be a systemically important industry.

Whether or not the Fed should do this—and whether cruise ships, hotels, and airliners represent systemically important industries—is another question entirely. The potential for the Treasury to start taking equity stakes in U.S. corporations has been another avenue mooted this week by White House Economic Advisor Larry Kudlow.

Conclusion

There are a number of similarities and differences between now and the last time we faced a financial crisis on this scale, with the main such difference being that this represents a real threat to our physical health as well as our financial health. However, it is also expected to be a temporary one, though hopefully one that does not leave too long of a trail of bankruptcies, unemployment, and, moreover, humans, behind it. This will in large part depend on the response we continue to see from policymakers with regard to our physical health and welfare (which up to now has been far too slow), support for those being let go and for households and corporations facing major cash flow shortfalls, and the health of the financial markets.

Given the nature of the crisis and the fact that it is global, this is not something the Fed can solve on its own; it needs similar support from global central banks and more importantly, substantial and rapid support from the fiscal side of the economy as well—*globally*. Fortunately, the Fed has been able to step in to provide much-needed and very sizable support, using its experience and some of the facilities established during the last financial crisis. Still, more will likely need to be done in the coming weeks, and it will continue to take some time for markets to fully suss out the scale of the problems and to decide whether or not the response has been sufficient. So far, they do not seem to be entirely convinced and are still searching for that floor.

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1. "The Lehman Echoes Are Getting Steadily Louder," John Authors, *Bloomberg News,* March 18, 2020
2. "The Federal Reserve Must Reduce the Long-Term Damage from Coronavirus," Ben Bernanke, Janet Yellen, *Financial Times,* 18 March 2020

Highlights in the Week Ahead

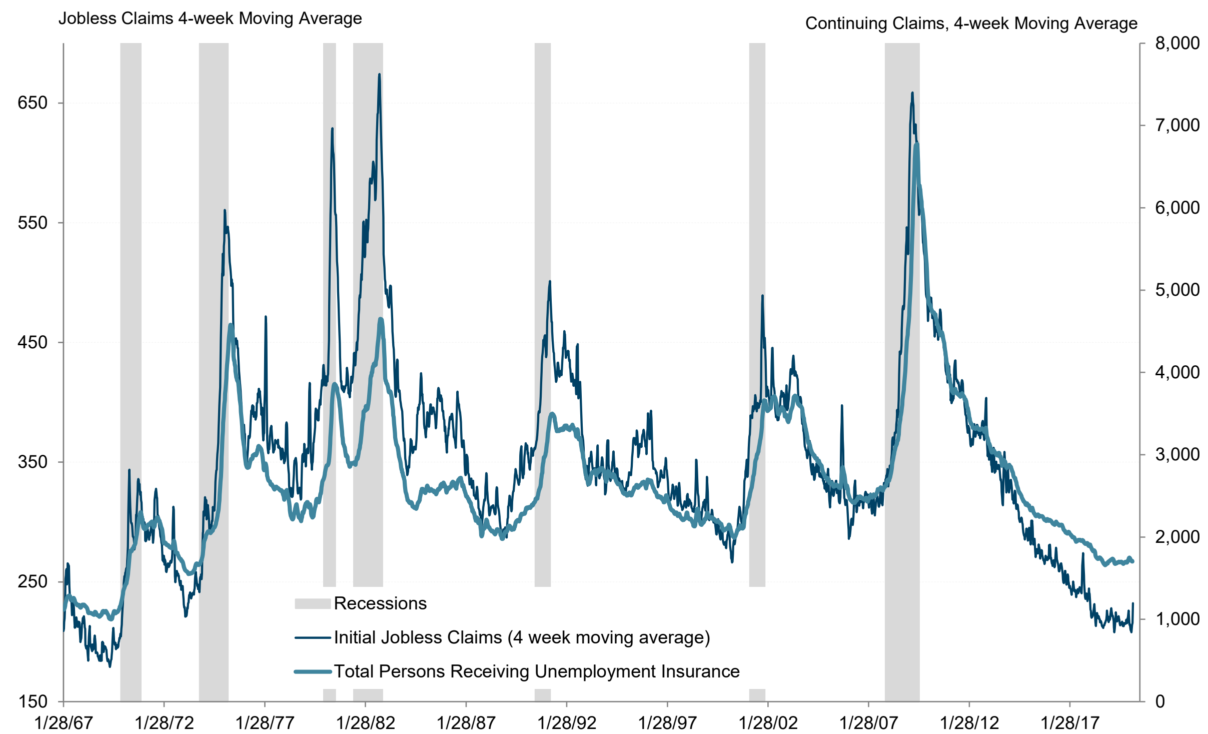
20 March 2020

Date	Time (EDT)	Indicator	Last	Consensus	WB Estimate	Actual
24 Mar	10:00 a.m.	New Home Sales (Feb)	7.9%	-1.8%	-2.4%	
25 Mar	8:30 a.m.	Durable Goods Orders (Feb)	-0.2%	-0.9%	-1.5%	
		Orders Less-transportation	0.8%	-0.4%	-1.0%	
26 Mar	8:30 a.m.	GDP (Q4 Final)	2.1%	2.1%	2.1%	
26 Mar	8:30 a.m.	Initial Jobless Claims (Mar 21)	281K	NA	NA	
27 Mar	8:30 a.m.	Personal Income (Feb)	0.6%	0.4%	0.4%	
		Personal Spending	0.2%	0.3%	0.2%	

Sources: Bloomberg, William Blair

Indicator of the Week: Initial Jobless Claims

Initial Jobless Claims & Continuing Jobless Claims



Source: Department of Labor, Bloomberg, William Blair

Economic Scorecard

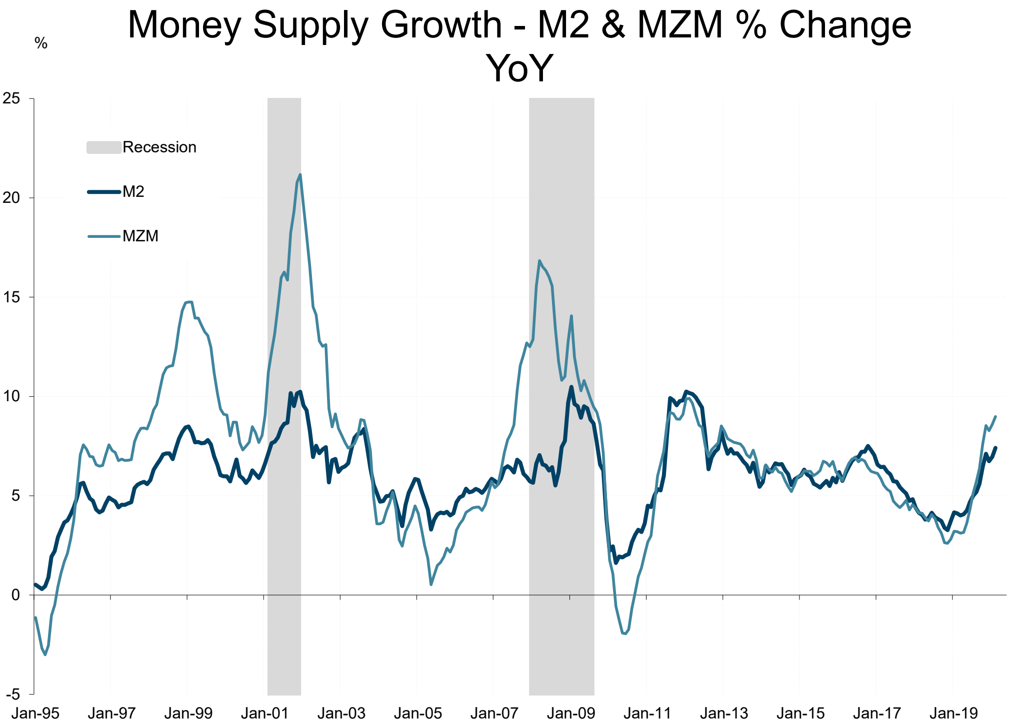
Rolling monthly heat map, % Change on Year Ago (unless otherwise noted)

	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20
Growth																		
US Leading Indicators	6.5	5.2	4.9	4.0	3.4	2.9	2.7	2.4	2.4	1.7	1.5	1.0	0.3	0.2	0.2	0.1	0.8	0.7
US Coincident Indicators	2.7	2.3	2.2	2.2	2.4	2.2	2.2	1.8	1.8	1.7	1.5	1.5	1.6	1.4	1.5	1.2	1.1	1.4
US Lagging Indicators	2.3	2.8	3.0	2.9	2.9	3.1	3.2	2.9	2.4	2.8	3.5	2.9	2.8	2.6	2.5	2.2	1.7	1.8
Consumer																		
Total Retail Sales	3.9	4.8	4.1	1.6	2.4	2.2	3.8	3.8	3	3.3	3.5	4.4	4	3.1	3.3	5.4	5	4.3
Personal Income	5.4	5.1	4.7	5	4.5	4.7	4.7	4.8	4.7	4.6	4.1	4.1	4.3	4.1	4.4	3.6	4	
Real Disposable Personal Income	4	3.8	3.7	4.2	3.2	3.4	3.3	3.1	3	2.9	2.5	2.6	3	2.7	2.9	1.8	2.2	
Real Personal Consumption	3.1	3.2	3	1.7	2.4	2.3	2.8	2.7	2.6	2.6	2.6	2.5	2.7	2.3	2.3	3.3	2.7	
Personal Saving Rate (%)	7.5	7.3	7.2	8.8	8.3	8.8	8.4	8	7.8	7.8	7.4	7.7	7.8	7.7	7.8	7.5	7.9	
Consumer Confidence (Conference Board)**	135.3	137.9	136.4	126.6	121.7	131.4	124.2	129.2	131.3	124.3	135.8	134.2	126.3	126.1	126.8	128.2	130.4	130.7
Employment																		
Employment Growth	1.7	1.6	1.5	1.6	1.7	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.4	1.3	1.4	1.4	1.4	1.6
ASA Temporary Staffing Index	3.9	3.7	1.1	-12.7	-0.6	-1.3	-1.9	-3.0	-2.4	-1.7	-4.6	-4.7	-5.1	-6.5	1.4	-6.9	-6.2	-6.8
ISM Employment Index Manufacturing*	58.5	56.6	57.8	56.2	55.2	53.2	57.1	52.4	53.1	54.3	51.3	47.6	46.5	47.9	46.8	45.2	46.6	46.9
ISM Employment Index Services*	61.9	58.4	57.8	56.2	56.4	55.6	55.9	54.5	57.1	55.2	55.7	53.7	51.7	53.9	54.9	54.8	53.1	55.6
Unemployment Rate, %	3.7	3.8	3.7	3.9	4	3.8	3.8	3.6	3.6	3.7	3.7	3.7	3.5	3.6	3.5	3.5	3.6	3.5
Average Hourly Earnings	3	3.3	3.4	3.4	3.3	3.5	3.4	3.3	3.3	3.4	3.5	3.5	3.1	3.2	3.3	3	3.1	3
Initial Jobless Claims (avg. wkly. chg. '000s)	213	216	226	217	220	225	217	216	217	221	214	217	213	215	216	226	210	213
Jop Openings	16.7	13.4	21.0	17.1	13.2	7.2	7.3	4.3	3.9	-1.3	-1.2	-1.1	-3.2	1.0	-9.5	-10.3	-7.4	-1.2
Layoff Announcements	70.9	153.6	51.5	35.3	18.7	117.2	0.4	10.9	85.9	12.8	43.2	39	-24.8	-33.5	-16	-25.2	27.8	-26.3
Housing Market																		
Housing Starts	6.7	-4.3	-7.8	-5.6	-3.2	-10.9	-9.6	0.2	-5.1	4.5	1.7	7.5	2.4	10.7	14.9	40.2	25.8	39.2
New Home Sales	-5.5	-11.7	-14	-14	2.5	3.9	6	4.3	-8	18	8.4	17.2	19.4	26.9	12.5	25.5	18.6	
Existing Home Sales	-3.9	-5.0	-8.2	-10.1	-8.6	-2.5	-5.6	-3.7	-1.1	-2.0	0.8	2.5	3.2	4.2	3.1	10.4	9.6	
Median House Price (Existing Homes)	-1	2.8	-10.2	-4	-7.3	-2	-7.4	7.8	-1.3	0.4	-5.9	1.7	-3.8	-1.8	6.3	-1.7	14	
Existing Homes Inventory (Mths' supply)	4.1	4.1	4.1	4.3	4.3	3.9	3.9	4	4	4	3.9	3.8	3.9	3.9	3.9	3.6	3.5	
New Homes Inventory (Mths' supply)	6.4	7.2	6.5	7.4	6.5	6.1	5.8	6.1	6.7	5.4	6	5.5	5.3	5.4	5.5	5.5	5.1	
NAHB Homebuilder Sentiment*	67	68	60	56	58	62	62	63	66	64	65	67	68	71	71	76	75	74
Inflation																		
Consumer Price Index	2.3	2.5	2.2	1.9	1.6	1.5	1.9	2	1.8	1.6	1.8	1.7	1.7	1.8	2.1	2.3	2.5	2.3
CPI Less-food & energy	2.2	2.1	2.2	2.2	2.2	2.1	2	2.1	2	2.1	2.2	2.4	2.4	2.3	2.3	2.3	2.3	2.4
Producer Price Index	2.7	3.1	2.6	2.6	1.9	1.9	2	2.4	2.1	1.6	1.6	1.9	1.5	1	1.1	1.3	2.1	1.3
PPI Less-food & energy	2.6	2.7	2.7	2.9	2.6	2.5	2.3	2.5	2.4	2.2	2.2	2.3	2	1.6	1.3	1.1	1.7	1.4
PCE Price Index	2	2	1.9	1.8	1.4	1.3	1.4	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.5	1.7	
PCE Prices Less-food & energy	2.0	1.9	2.0	2.0	1.8	1.6	1.5	1.6	1.5	1.6	1.6	1.8	1.7	1.6	1.5	1.5	1.6	
Business Activity - US																		
Industrial Production	5.4	4.1	4.1	3.8	3.6	2.7	2.3	0.7	1.7	1.0	0.4	0.3	-0.2	-0.8	-0.4	-0.9	-1.0	0.0
New Cap Gds Orders less-aircraft & parts	0.5	5.7	6.4	2.2	3.5	2.3	2.2	2.4	0.7	-0.5	0.7	-1.9	0.2	-0.5	-1.5	1.8	1.3	
Business Inventories	4.6	5.2	4.7	2.2	5.3	4.9	5	5.3	5.3	5.2	4.8	4.2	3.7	3	2.8	2.2	1.1	
ISM Manufacturing PMI*	59.3	58.5	58.8	55	55.5	54.1	54.6	53.4	52.3	51.6	51.3	48.8	48.2	48.5	48.1	47.8	50.9	50.1
Markit US Manufacturing PMI*	55.6	55.7	55.3	53.8	54.9	53	52.4	52.6	50.5	50.6	50.4	50.3	51.1	51.3	52.6	52.4	51.9	50.7
ISM Non-Manufacturing Index*	61.2	60.3	60.2	58	56	58.5	56.3	55.7	56.3	55.4	54.8	56	53.5	54.4	53.9	54.9	55.5	57.3
Markit US Services PMI*	53.5	54.8	54.7	54.4	54.2	56	55.3	53	50.9	51.5	53	50.7	50.9	50.6	51.6	52.8	53.4	49.4
Business Activity - International																		
Germany Manufacturing PMI Markit/BME*	53.7	52.2	51.8	51.5	49.7	47.6	44.1	44.4	44.3	45	43.2	43.5	41.7	42.1	44.1	43.7	45.3	48
Japan Manufacturing PMI Jibun Bank*	52.5	52.9	52.2	52.6	50.3	48.9	49.2	50.2	49.8	49.3	49.4	49.3	48.9	48.4	48.9	48.4	48.8	47.8
Caixin China Manufacturing PMI*	50	50.1	50.2	49.7	48.3	49.9	50.8	50.2	50.2	49.4	49.9	50.4	51.4	51.7	51.8	51.5	51.1	40.3
China Manufacturing PMI*	50.8	50.2	50	49.4	49.5	49.2	50.5	50.1	49.4	49.4	49.7	49.5	49.8	49.3	50.2	50.2	50	35.7
UK Manufacturing PMI Markit/CIPS*	53.7	51.1	53.3	54.3	52.8	52.1	55.1	53.1	49.4	48	48	47.4	48.3	49.6	48.9	47.5	50	51.7
France Manufacturing PMI Markit*	52.5	51.2	50.8	49.7	51.2	51.5	49.7	50	50.6	51.9	49.7	51.1	50.1	50.7	51.7	50.4	51.1	49.8
Currencies* **																		
Euro (EUR/USD)	-1.8	-2.9	-4.9	-4.5	-7.8	-6.7	-9.0	-7.1	-4.5	-2.7	-5.3	-5.3	-6.1	-1.4	-2.6	-2.2	-3.1	-3.0
Renmimbi (USD/CNY)	3.2	5.1	5.3	5.7	6.5	5.7	7.0	6.4	7.7	3.7	0.9	4.8	4.1	0.9	1.0	1.2	3.2	4.5
Yen (USD/Yen)	1.1	-0.6	0.9	-2.7	-0.3	4.4	4.3	1.9	-0.5	-2.6	-2.8	-4.3	-4.9	-4.3	-3.6	-1.0	-0.5	-3.1
Sterling (GBP/USD)	-2.7	-3.9	-5.7	-5.6	-7.6	-3.6	-7.0	-5.3	-5.0	-3.9	-7.4	-6.2	-5.7	1.4	1.4	3.9	0.7	-3.3
Canadian $ (USD/CAD)	3.5	2.1	3.1	8.5	6.6	2.7	3.5	4.2	4.3	-0.3	1.4	2.1	2.6	0.1	-0.1	-4.7	0.9	1.8
Mexican Peso (USD/MXN)	2.5	6.2	9.3	0.0	2.7	2.4	6.9	1.2	-1.5	-3.4	2.7	5.1	5.4	-5.4	-4.1	-3.7	-1.4	1.9
US Equities																		
S&P 500	15.7	5.3	4.3	-6.2	-4.2	2.6	7.3	11.2	1.7	8.2	5.8	0.9	2.2	12.0	13.8	28.9	19.3	6.1
S&P 400 Midcap	12.5	-0.5	-1.1	-12.5	-6.1	2.5	0.9	5.2	-7.0	-0.3	-0.9	-8.0	-4.2	7.1	7.0	24.1	9.4	-5.0
S&P 600 Smallcap	17.5	4.2	2.1	-9.8	-2.6	5.7	0.1	2.9	-11.8	-6.3	-8.1	-16.4	-10.8	1.6	3.2	20.9	4.9	-9.1
Russell 2000	13.8	0.6	-0.7	-12.2	-4.8	4.2	0.7	3.2	-10.3	-4.7	-5.8	-14.1	-10.2	3.4	6.0	23.7	7.6	-6.3

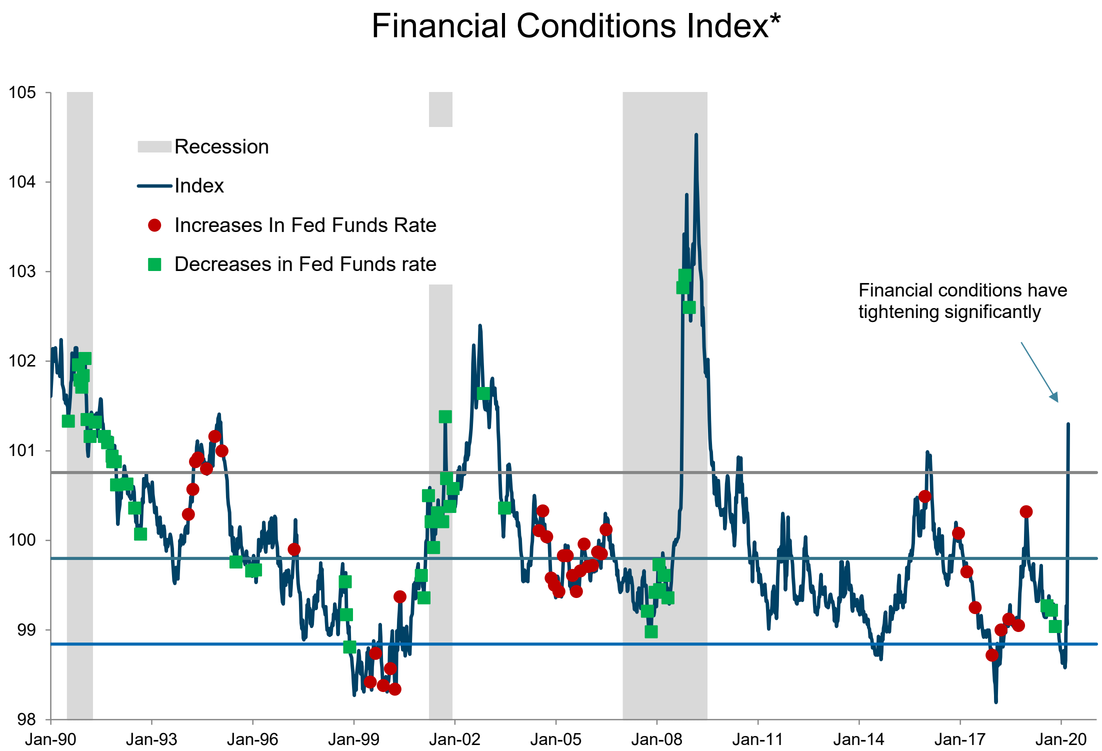
* Diffusion Index, **1985=100, ***Currencies - green/red = strengthening/weakening foreign currency vs dollar

Source: ISM, Federal Reserve, Census Bureau, Bureau of Labor Statistics, Conference Board, Bloomberg, William Blair

Other Economic Indicators

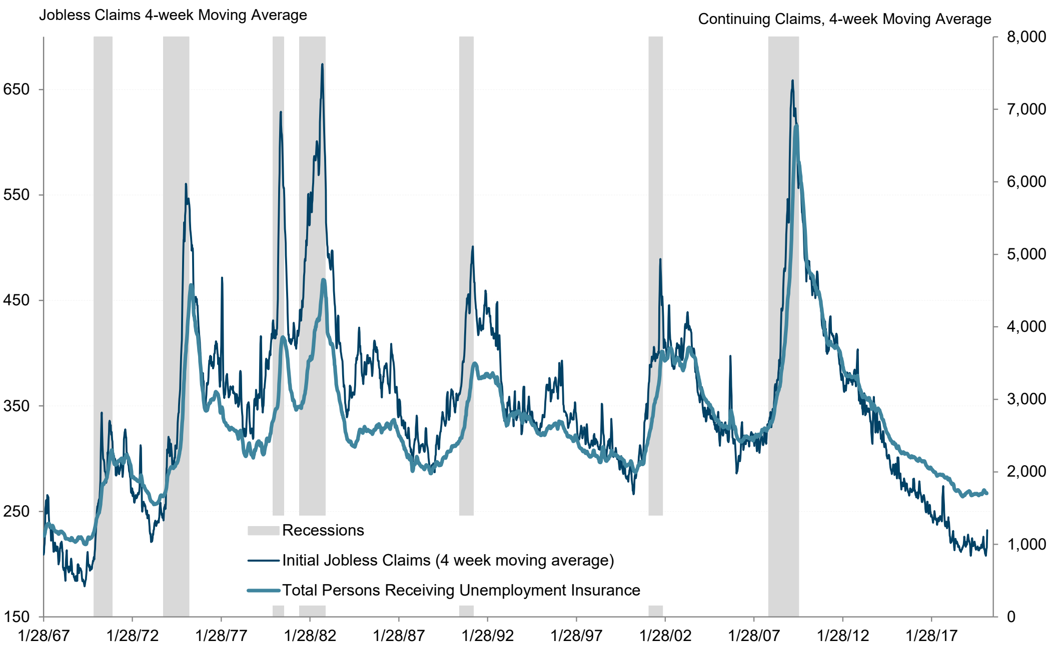


Source: Federal Reserve, William Blair



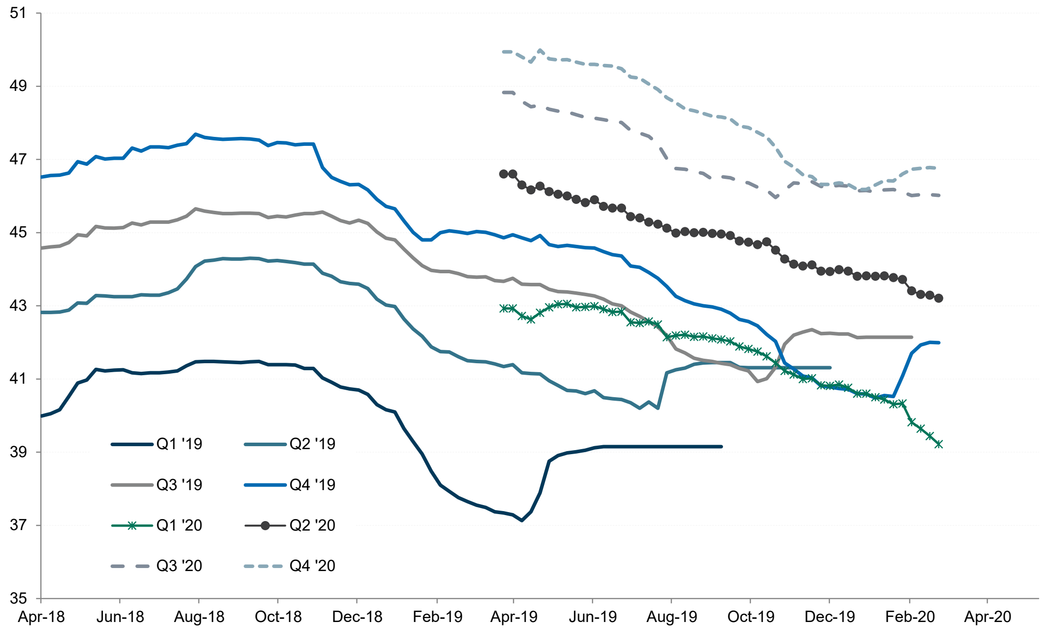
*The Goldman Sachs FCI is a weighted sum of a short-term bond yield, a long-term corporate yield, the exchange rate, and a stock market variable. Since 2005, the long-term corporate yield has been measured as a sum of the 10-year swap rate and the 10-year credit default swap spread.
Source: Bloomberg, William Blair

Initial Jobless Claims & Continuing Jobless Claims

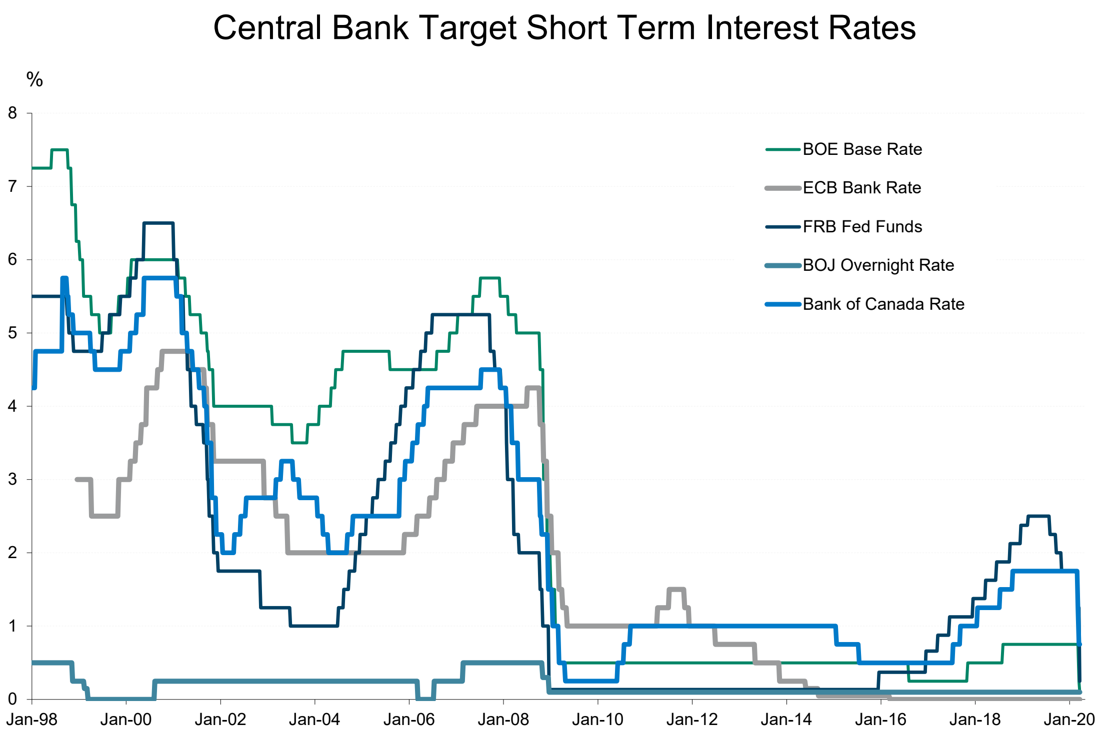


Source: Department of Labor, Bloomberg, William Blair

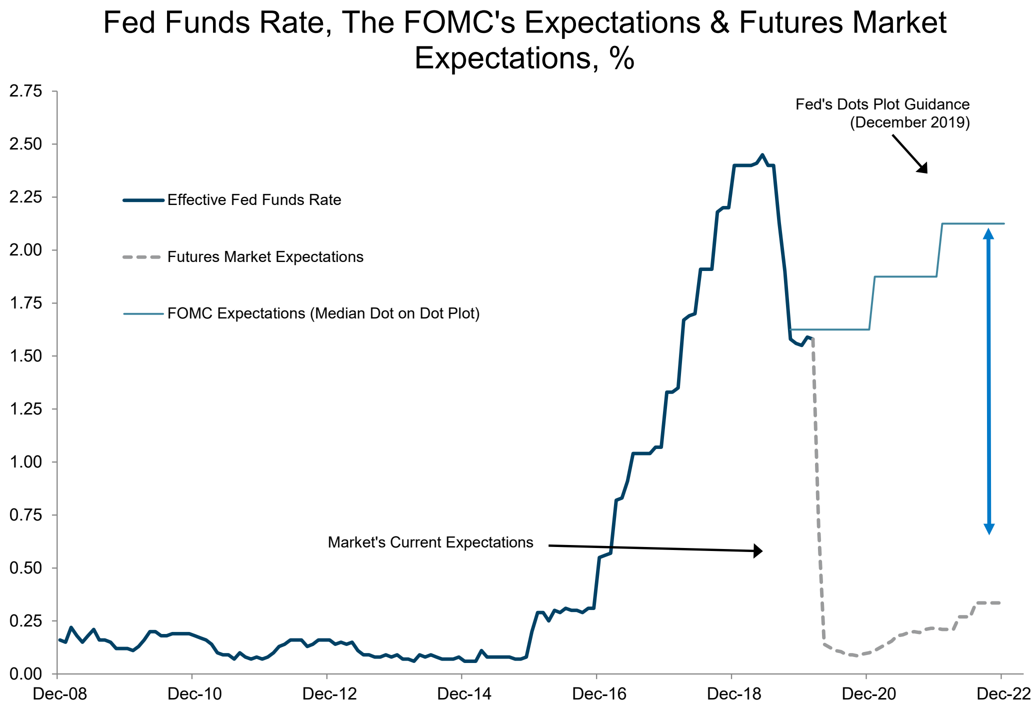
Progression of S&P 500 Bottom-Up EPS Estimates
(2019 Q1 - 2020 Q4, $/Shr)



Source: Refinitiv, William Blair



Source: Bloomberg, William Blair



Source: Bloomberg, Federal Reserve, William Blair

S&P 500 Sector Performance

Global Industry Classification System	Current Weight* 19-Mar-20	Week Ago 12-Mar-20	Month Ago 19-Feb-20	Qtr-to-Date 31-Dec-19	Year-to-Date 31-Dec-19
S&P 500 Index	**100.00**	**-2.87**	**-28.85**	**-25.42**	**-25.42**
S&P400 MidCap Index		**-7.65**	**-37.22**	**-36.14**	**-36.14**
S&P600 SmallCap Index		**-5.38**	**-37.50**	**-37.80**	**-37.80**
Dow Jones Industrials		**-5.25**	**-31.56**	**-29.61**	**-29.61**
Nasdaq Composite		**-0.71**	**-27.16**	**-20.31**	**-20.31**
Communication Services	**11.22**	**0.48**	**-24.85**	**-20.16**	**-20.16**
Advertising	0.08	-4.51	-35.07	-34.55	-34.55
Alternate Carriers	0.05	8.83	-24.23	-23.54	-23.54
Broadcasting	0.15	-14.13	-47.27	-50.71	-50.71
Cable & Satellite	1.21	-0.15	-24.29	-20.36	-20.36
Integrated Telecommunication Services	2.14	1.98	-13.86	-16.70	-16.70
Interactive Home Entertainment	0.38	-1.86	-15.30	-12.08	-12.08
Interactive Media & Services	5.29	-0.49	-28.16	-20.16	-20.16
Movies & Entertainment	1.56	4.05	-26.09	-22.13	-22.13
Publishing & Printing	0.03	3.44	-34.85	-32.63	-32.63
Wireless Telecommunication Svcs	0.33	3.51	-20.94	1.32	1.32
Consumer Discretionary	**10.22**	**-4.62**	**-30.25**	**-25.86**	**-25.86**
Apparel Retail	0.38	-20.76	-40.38	-36.98	-36.98
Apparel & Accessories & Luxury Goods	0.19	-5.83	-42.14	-50.00	-50.00
Auto Parts & Equipment	0.07	-27.41	-51.56	-55.73	-55.73
Automobile Manufacturers	0.21	-20.33	-47.14	-51.75	-51.75
Automobile Retail	0.26	-17.09	-31.62	-36.17	-36.17
Casinos & Gaming	0.19	-24.69	-58.32	-58.98	-58.98
Computer & Electronics Retail	0.07	-1.17	-39.80	-37.64	-37.64
Consumer Electronics	0.06	-3.80	-32.37	-28.14	-28.14
Department Stores	0.04	-12.23	-56.75	-60.07	-60.07
Distributors	0.07	-21.55	-40.97	-44.38	-44.38
Footwear	0.42	-5.20	-31.35	-30.57	-30.57
General Merchandise Stores	0.50	4.39	-15.33	-17.99	-17.99
Home Furnishings	0.04	-23.87	-46.18	-50.08	-50.08
Home Improvement Retail	1.10	-17.16	-36.37	-30.51	-30.51
Homebuilding	0.17	-24.58	-49.63	-40.98	-40.98
Hotels, Resorts & Cruise Lines	0.24	-26.89	-63.05	-65.57	-65.57
Household Appliances	0.02	-19.67	-43.91	-44.03	-44.03
Housewares & Specialties	0.03	10.00	-37.54	-35.33	-35.33
Internet Retail	4.88	9.72	-16.41	-3.97	-3.97
Leisure Products	0.03	-12.08	-51.58	-55.22	-55.22
Motorcycle Manufacturers	0.01	-8.20	-46.38	-49.74	-49.74
Restaurants	1.07	-10.05	-34.30	-29.86	-29.86
Specialized Consumer Services	0.01	-6.16	-36.14	-37.18	-37.18
Specialty Stores	0.16	-9.14	-28.03	-22.31	-22.31
Consumer Staples	**9.08**	**2.86**	**-16.57**	**-14.62**	**-14.62**
Agricultural Products	0.09	6.09	-23.90	-27.81	-27.81
Brewers	0.04	0.29	-29.83	-28.55	-28.55
Distillers & Vintners	0.18	-0.68	-35.09	-29.91	-29.91
Drug Retail	0.21	18.36	-6.76	-17.66	-17.66
Food Distributors	0.09	-14.71	-51.30	-56.62	-56.62
Food Retail	0.13	17.37	15.71	17.90	17.90
Household Products	1.99	8.07	-10.48	-8.12	-8.12
Hypermarkets & Supercentres	2.28	12.19	-1.73	1.96	1.96
Packaged Foods & Meats	1.29	0.81	-17.95	-17.95	-17.95
Personal Products	0.18	-2.33	-29.13	-26.92	-26.92
Soft Drinks	1.79	-5.19	-24.88	-19.29	-19.29
Tobacco	0.83	-4.31	-21.89	-23.47	-23.47
Energy	**2.36**	**-13.36**	**-53.35**	**-57.92**	**-57.92**
Integrated Oil & Gas	1.26	-15.46	-47.51	-52.87	-52.87
Oil & Gas Drilling	0.01	-19.80	-71.84	-71.83	-71.83
Oil & Gas Equipment & Services	0.18	-5.63	-62.27	-67.53	-67.53
Oil & Gas Exploration & Production	0.45	-6.19	-58.31	-62.19	-62.19
Oil & Gas Refining & Marketing & Transportation	0.24	-12.03	-57.67	-63.13	-63.13
Oil & Gas Storage & Transportation	0.23	-20.90	-57.03	-57.14	-57.14

Financials	**10.41**	**-3.99**	**-37.28**	**-36.80**	**-36.80**
Asset Management & Custody Banks	0.81	4.15	-34.13	-31.38	-31.38
Consumer Finance	0.49	-19.29	-50.57	-49.35	-49.35
Diversified Banks	3.35	-0.65	-40.29	-42.62	-42.62
Financial Exchanges & Data	1.13	-6.52	-28.29	-21.64	-21.64
Insurance Brokers	0.52	-14.45	-33.91	-27.61	-27.61
Investment Banking & Brokerage	0.75	2.72	-38.16	-35.25	-35.25
Life & Health Insurance	0.39	-8.94	-51.10	-50.91	-50.91
Multi-line Insurance	0.17	-17.83	-51.61	-52.94	-52.94
Multi-Sector Holdings	1.16	-0.74	-23.80	-22.88	-22.88
Property & Casualty Insurance	0.78	-9.15	-33.48	-28.92	-28.92
Reinsurance	0.04	-6.76	-35.56	-32.36	-32.36
Regional Banks	0.83	-3.36	-43.13	-45.13	-45.13
Health Care	**14.91**	**-3.03**	**-21.07**	**-19.58**	**-19.58**
Biotechnology	2.47	4.95	-9.47	-6.77	-6.77
Health Care Distributors	0.28	1.96	-23.02	-10.09	-10.09
Health Care Equipment	3.39	-4.48	-26.19	-23.95	-23.95
Health Care Facilities	0.17	-17.11	-43.18	-42.91	-42.91
Health Care Services	0.76	-5.49	-28.74	-26.40	-26.40
Health Care Supplies	0.16	-11.58	-37.63	-34.98	-34.98
Health Care Technology	0.09	-8.03	-22.50	-18.94	-18.94
Life Sciences Tools & Services	1.05	-1.00	-21.85	-21.43	-21.43
Managed Health Care	1.56	-13.35	-28.83	-26.27	-26.27
Pharmaceuticals	4.99	-1.40	-16.20	-16.88	-16.88
Industrials	**8.04**	**-7.32**	**-35.86**	**-33.92**	**-33.92**
Aerospace & Defense	1.94	-14.13	-45.52	-42.45	-42.45
Agricultural & Farm Machinery	0.18	-8.23	-27.45	-30.94	-30.94
Air Freight & Logistics	0.55	10.20	-17.31	-20.67	-20.67
Airlines	0.20	-28.64	-60.22	-60.56	-60.56
Building Products	0.32	-13.69	-31.81	-30.64	-30.64
Construction & Engineering	0.07	-6.52	-27.93	-22.29	-22.29
Construction Machinery & Heavy Trucks	0.49	1.28	-27.67	-32.10	-32.10
Diversified Support Svcs	0.17	-10.14	-36.74	-27.94	-27.94
Electrical Components & Equipment	0.43	-3.11	-32.78	-32.21	-32.21
Environmental & Facilities Services	0.37	-0.30	-21.14	-12.43	-12.43
Human Resource & Employment Services	0.02	-12.31	-35.80	-39.51	-39.51
Industrial Conglomerates	1.21	-5.51	-32.17	-30.46	-30.46
Industrial Machinery	0.66	-10.94	-38.07	-36.37	-36.37
Railroads	0.83	-2.82	-33.40	-29.59	-29.59
Research & Consulting Svcs	0.40	-4.10	-28.58	-20.58	-20.58
Trading Companies & Distributors	0.18	-0.24	-26.19	-28.62	-28.62
Trucking	0.10	-1.55	-26.25	-20.63	-20.63
Information Technology	**24.94**	**-0.72**	**-27.31**	**-18.72**	**-18.72**
Application Software	2.12	2.37	-25.23	-12.83	-12.83
Communications Equipment	1.01	11.29	-19.13	-19.90	-19.90
Data Processing & Outsourced Services	4.21	-7.07	-31.18	-22.54	-22.54
Electronic Components	0.18	-3.34	-29.44	-32.55	-32.55
Electronic Equipment & Instruments	0.15	7.05	-22.65	-24.23	-24.23
Electronic Manufacturing Services	0.12	-15.93	-39.01	-40.41	-40.41
Internet Software & Services	0.16	4.36	-18.32	-7.39	-7.39
IT Consulting & Services	1.14	-0.91	-31.59	-26.71	-26.71
Semiconductor Equipment	0.41	-10.88	-38.03	-32.62	-32.62
Semiconductors	3.66	-1.25	-31.60	-24.20	-24.20
Systems Software	6.27	3.57	-23.37	-9.60	-9.60
Technology Distributors	0.06	-3.51	-35.40	-38.21	-38.21
Technology Hardware, Storage & Peripherals	5.46	-2.02	-25.35	-18.36	-18.36
Materials	**2.39**	**-3.13**	**-30.66**	**-31.72**	**-31.72**
Commodity Chemicals	0.17	8.76	-43.25	-50.72	-50.72
Construction Materials	0.11	-12.91	-34.12	-38.54	-38.54
Copper	0.04	-19.94	-52.56	-56.25	-56.25
Diversified Chemicals	0.03	-2.74	-43.62	-47.96	-47.96
Fertilizers & Agricultural Chemicals	0.16	-4.02	-35.04	-35.80	-35.80
Gold	0.16	-6.07	-9.59	-3.93	-3.93
Industrial Gases	0.60	-1.13	-29.03	-24.87	-24.87
Metal & Glass Containers	0.09	-4.86	-21.95	-7.05	-7.05
Paper Packaging	0.24	6.55	-27.43	-31.80	-31.80
Specialty Chemicals	0.74	-6.17	-30.12	-32.08	-32.08
Steel	0.04	-2.98	-35.40	-45.23	-45.23

Real Estate	**2.89**	**-11.49**	**-30.53**	**-26.07**	**-26.07**
Health Care REITs	0.17	-17.66	-55.20	-52.64	-52.64
Hotel & Resort REITs	0.04	-1.52	-38.06	-44.21	-44.21
Industrial REITs	0.28	-7.01	-33.28	-26.69	-26.69
Office REITs	0.19	-15.04	-36.44	-34.49	-34.49
Real Estate Service	0.06	-11.43	-37.79	-35.65	-35.65
Residential REITs	0.40	-17.99	-33.29	-28.56	-28.56
Retail REITs	0.24	-29.47	-48.89	-50.34	-50.34
Specialized REITs	1.52	-5.63	-17.83	-9.88	-9.88
Utilities	**3.43**	**-4.80**	**-26.24**	**-20.21**	**-20.21**
Electric Utilities	2.29	-5.61	-27.08	-20.05	-20.05
Gas Utilities	0.06	4.04	-17.63	-11.93	-11.93
Independent Power Producers & Energy Traders	0.04	-9.77	-46.27	-44.92	-44.92
Water Utilities	0.10	-2.42	-17.00	-6.30	-6.30
Multi-Utilities	1.10	-3.65	-24.60	-20.45	-20.45

*Current Weight is market cap based, based on calculations by William Blair Intl. Ltd.

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DOW JONES: 20087.20
S&P 500: 2409.39
NASDAQ: 7150.58

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Outperform (Buy)	71	Outperform (Buy)	23
Market Perform (Hold)	29	Market Perform (Hold)	9
Underperform (Sell)	1	Underperform (Sell)	0

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