GLOBAL INVESTMENT OUTLOOK AND STRATEGY UPDATE — April 8, 2020

As the novel coronavirus (COVID-19) continues to wreak havoc on our health and well-being, economy, and financial markets, it is inevitable that the U.S. and world economies will experience a recession. As mentioned in prior communications, the financial markets have been anticipating a recession as demonstrated by the over 30 percent equity market decline from the highs in mid-February and the volatile record-low bond yields. The question is, will the recession be deep and prolonged, or will it be shallow and brief? With the extreme equity and bond market volatility and declines over the last three weeks, we believe the consensus is anticipating the weaker scenario – a deep, prolonged global recession. At this time, we do not forecast such a dire scenario, but rather a material economic slowdown that should reaccelerate once the coronavirus is contained. At the end of 2019 and prior to the coronavirus outbreak, U.S. and global economies were on solid footing with growth estimated in the +2.0 to +2.5 percent range. Positive tailwinds included the signing of the U.S.-China Phase I trade deal, resolution of Brexit, pro-growth U.S. tax reform, and accommodative global monetary policies. We believed that these tailwinds could more than offset the headwinds of residual impacts from the U.S.-China trade tariffs, Hong Kong protests, 2020 U.S. presidential election, Iranian conflict, and Boeing 737 Max manufacturing stoppage. The coronavirus' negative impact is now overwhelming all other factors and we believe will reduce global GDP materially, but not lead to a deep, prolonged recession.

Encouragingly, global policymakers' recent extraordinary actions reflect their understanding of this risk. Global central banks and governments have implemented aggressive stimulus measures to help prevent a prolonged downturn (Exhibit 1). The Federal Reserve launched an unlimited quantitative easing program to aid companies and municipalities; the European Central Bank announced a €750 billion private and public purchase program to help keep economies going and financial markets functioning normally; and the U.S. government recently finalized a $2.6 trillion relief program (Exhibit 2). There is likely more to come.

While it is impossible to call a market bottom, the already meaningful market downdraft is providing intermediate and long-term investment opportunities. We expect markets to improve long before an economic recovery materializes. It is very possible that markets will recover once there is a belief that the number of new coronavirus cases has plateaued and that there is "light at the end of the tunnel." Predicting the exact timing of the reversal is extremely difficult, but we think that investors should maintain a diversified portfolio of high-quality stocks and bonds underpinned by strong fundamentals. This provides greater scope to manage risk in challenging market conditions.

Exhibit 1: Recent Global Stimulus Measures

	Central Bank Liquidity Injection		Govt. Fiscal Stimulus	
	$ Tln	% GDP	$ Tln	% GDP
U.S.	2.50	11.7%	2.71	12.7%
Euro Area	1.10	8.3%	0.48	3.6%
Japan	0.20	3.9%	0.99	19.2%
U.K.	0.25	9.0%	0.07	2.4%
China	1.27	8.9%	0.54	3.8%
Others*	0.62		1.63	
Total	**5.94**	**6.9%**	**6.42**	**7.4%**

** includes Row, ADB, IMF, WB*

Source: Cornerstone Macro, 4/6/20

Exhibit 2: U.S. Fiscal Stimulus – The CARES Act

Provision	Cost ($B)
Rebates to Individuals & Tax Relief	$312
Small Businesses	376
Corporate Tax Relief	648
Payroll Grants to Airlines/Cargo/Contractors	32
ESF Loans/Loan Guarantees/Investments	500
Unemployment Insurance	260
Coronavirus Relief Fund	150
Appropriations	340
TOTAL	**$2,598**

Source: Cornerstone Macro, 4/7/20

As disrupting as the coronavirus is, we believe it is a short-term issue and not a time to panic. The importance of active management versus passive management is also critical to highlight. Active management allows clients to have opportunistic investment exposure in selective geographic regions, industry sectors, and specific securities. Passive investing, on the other hand, is more a binary decision – "invest or don't invest in the market." Passive investments in a broad index fund or exchange-traded fund provide investors with no input regarding the quality of holdings in the fund.

Cash is King

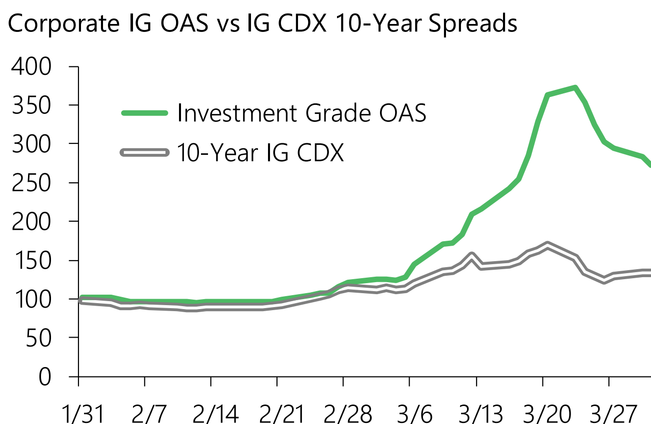
As the coronavirus spread through multiple communities in the U.S. last month, Treasury yields declined sharply due to an initial *flight to quality* from stocks to Treasury bonds. By the third week of March, liquidity began to dry up, and investors went from selling what they wanted to sell to selling whatever they could sell. The *flight to quality* quickly turned into a *flight to cash* with run-on-the-bank like behavior. High yield bond prices went into a freefall that was exacerbated by massive withdrawals from corporate ETFs. Next to experience dramatic selling pressure were investment-grade bonds, then muni bonds, and even money market securities. By the time the Federal Reserve (Fed) stepped in with a plan to launch an unprecedented bond-buying program, even gold and Treasury bonds were being sold aggressively while T-Bill yields turned negative.

Exhibit 3 below shows the sharp widening of yield spreads over Treasuries for investment-grade corporate bonds. Note the relatively small widening in spread or cost to buy credit default insurance (CDX) on the same universe of bonds. Usually, these spreads rise and fall in tandem. The widening gap represents the impact from the need for cash versus fear of default. The spread has since narrowed as the Fed has begun buying investment-grade corporate bonds, money market securities, agency mortgage bonds, and more.

The list of what the Fed is NOT buying is shorter than what they are buying and getting shorter by the day. The only sectors we believe the Fed will not ultimately invest in are high yield or junk-rated bonds and stocks. So far, the Fed has purchased more than $1.6 trillion worth of bonds and grown its balance sheet to about $6 trillion. There is currently no hard and fast limit to how far the Fed will go to support the bond market, and it is widely accepted that it will continue to buy as many bonds as needed to meet investors' desire for liquidity.

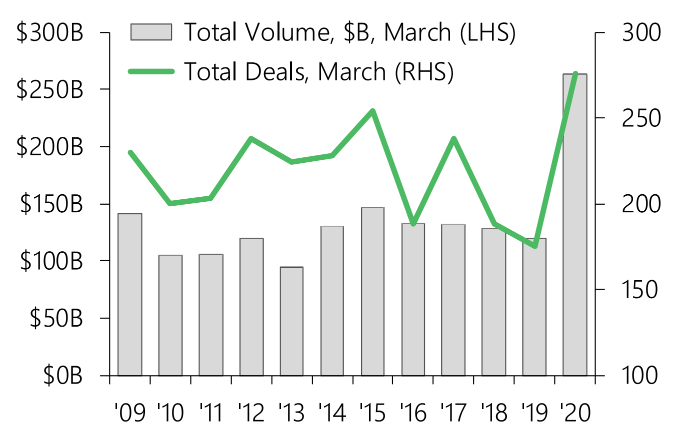
Corporations are also desperate for cash, and the Fed's success at returning liquidity to the corporate bond market has sparked what is going to be record volumes of corporate borrowing in the public investment-grade bond market (Exhibit 4). Even though companies are having to pay yields one to two percent more than Treasury yields versus a couple of months ago, absolute yields are still very low. Being able to borrow large sums of money and pay less than 5 percent interest in these uncertain times is too irresistible to pass up. The floodgates of new deals have sprung open, and it is difficult to say how much supply of corporate bond debt will be issued, but it could be multiples of what would exist during more normal times.

Exhibit 3: U.S. Corporate Bond Spreads



Source: Bloomberg, 3/31/20

Exhibit 4: U.S. Corporate IG Volume



Source: Bloomberg, 3/31/20

Most sectors in the investment-grade taxable bond universe are trading better as the *flight to cash* has subsided. While sustained market stability will only occur with a slowing of the spread of the virus, it's a relief to see some semblance of rationality return to the bond market. However, we still expect downgrades in the leisure and energy sectors, and things will get worse before they get better even for the companies that survive.

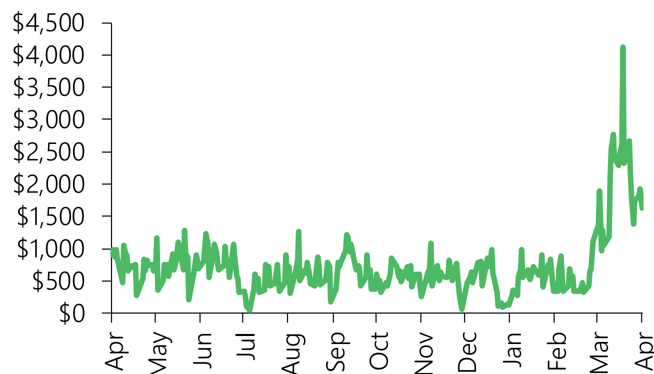
An Uncharacteristic Wild Ride for Municipals

After an extended period of strong returns and record low yields, the usually quiet municipal bond market was disrupted in March by a sudden flight to cash. Selling from municipal ETFs and leveraged mutual funds followed and exacerbated notable spread increases in high yield municipals and increases in short-term rates. The record surge of attempted sales of high-grade municipals that ensued was not met by a proportionate number of ready buyers (Exhibit 5). A liquidity shortage of this magnitude has not been seen since the financial crisis in 2008. Fortunately, the high-grade market rebounded sharply after the Federal Reserve declared municipal securities eligible for its vast new bond-buying program. This also followed the passage of $2.1 trillion in emergency relief to state and local governments as well as healthcare systems, transportation providers, businesses, and individual taxpayers. By month-end, these bold measures appeared to have unclogged the temporary imbalance of sell orders.

Even with this unprecedented federal support, the municipal market may undergo further bouts of volatility in the coming weeks as the war against COVID-19 takes its course. Some selling re-emerged in early April as the market awaited details of the Fed's steps to buy municipal bonds. The depth and duration of the economic downturn will be a source of uncertainty in weeks ahead. We expect a significant volume of cyclical rating agency downgrades. We anticipate negative headlines over yawning budget gaps and the reduction of tax revenues. Localities with revenues dependent on oil and gas, hospitality, and tourism will be hit hard. Higher education institutions face uncertainties over enrollments; non-profit hospitals will show financial stress due to deferrals of elective treatments in favor of costly adjustments to COVID-19 care. Not all municipal bond issuers will receive enough aid to recoup lost revenues and unexpected costs.

This new credit-intensive environment will present ample opportunities for active investment managers. Our positioning in defensive tax-exempt sectors such as Housing should differentiate our performance (Exhibit 6). We believe that, before long, innate demand for tax-exempt bonds will strongly re-emerge due to a preponderance of factors: 1) passing the apex of the growth curve for virus cases and dissipation of the current panic; 2) a gradual re-start of the economy with unprecedented fiscal and monetary stimulus, and pent-up demand; 3) clearing of temporary municipal bond supply imbalances by the ramp-up of huge Federal Reserve purchases, if necessary; 4) the sharp reduction in new tax-exempt bond issues causing a scarcity effect, coupled with substantial reinvestment flow from heavy bond redemptions and scheduled paydowns; 5) opportunistic "crossover" buyers taking advantage of extremely attractive municipal bond yields out of sync with alternative

Exhibit 5: Municipal Bond Bids Wanted



Source: Bloomberg, 4/1/20

Exhibit 6: Municipal Bond Index Returns (%)

	1Q20	LTM		1Q20	LTM
Muni Bond	-0.63	3.85	GO Bond	0.11	4.51
3-Year	-0.37	1.93	Revenue Bond	-1.01	3.66
5-Year	-1.04	2.19	Electric	-0.07	4.15
7-Year	-1.00	2.91	Hospital	-1.26	3.92
10-Year	-0.40	4.00	Housing	0.12	4.79
Long	-1.19	4.91	IDR/PCR	-4.30	0.57
			Transportation	-1.68	2.87
AAA	0.54	4.52	Education	0.03	4.78
AA	0.03	4.30	Water & Sewer	0.34	4.72
A	-1.30	3.45	Special Tax	-0.10	4.45
BAA	-4.72	1.13	Tobacco	-1.84	3.75
Muni High Yld	-6.88	-0.74	Minnesota	0.15	4.03

Source: Bloomberg Barclays, 4/1/20

investments on a risk-adjusted basis; and 6) the fundamental long-term soundness of the overwhelming majority of state and local credits.

With long-term yields not seen in many months, and the Fed likely to be very accommodative for some time, the opportunity set for long-term investors to add attractively valued tax-exempt bonds, especially with intermediate and longer duration, has expanded considerably in the past few weeks. We view the current environment as a good buying opportunity to add to taxable and tax-exempt municipal exposure.

Investment Strategy

Equities: We continue to invest and upgrade portfolios in high-quality, fundamentally solid, real companies. We want to own enterprises that can survive short-term turmoil. Such companies possess the following characteristics: sales and earnings growth, efficiently managed with operating margin leverage, strong free cash flow generation, healthy balance sheets, dominant market share positions, and proactive management teams. Our preferred sectors include technology, health technology, health services, communications, and capital goods. These sectors provide a diversified portfolio and a combination of more traditional growth and cyclical growth areas.

Taxable Bonds: We expect supply constraints to begin to impact multiple industries in the coming days and weeks and slow production. In response, we have cut exposure to corporate bonds and closed-end funds even further where appropriate, while also reducing relative positioning in lower-rated securities and industries likely to be disproportionately impacted, as we expect yield spreads to widen further in coming weeks. We have positioned portfolios with durations longer than the benchmark where allowed with sensitivity to longer maturity bonds concentrated in Treasuries. When we anticipate a recovery in financial markets, we expect to add to credit at that time, with an emphasis on companies that were disproportionately impacted by the virus. We also expect to simultaneously lower portfolio durations at that time, as we do not believe the current absolute lower yields will be sustained once the threat of the virus has diminished.

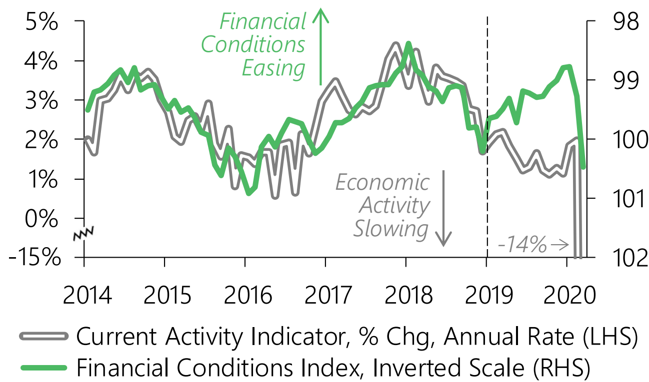
We had built up some cash and/or Treasury positions in most portfolios earlier in the year and have recently begun investing some of that cash. The more opportunistic and/or risky the strategy we manage, the more cash and Treasuries we had in the portfolios. For example, some portfolios that invest in closed-end funds had as much as 25 percent in cash and Treasuries. Within closed-end fund strategies, we have been buying shares of some funds at prices 15 percent to 20 percent below the value of the funds' underlying holdings. On the other end of the risk spectrum, our Short Duration strategy that invests in high coupon government-guaranteed agency mortgages has seen only modest yield spread widening versus Treasuries. We still believe buying mortgages with yields between 2 percent and 2.5 percent is attractive considering that the 10-year Treasury yields less than 1 percent.

Tax-Exempt Bonds: Tax-exempt bonds experienced unprecedented downward movement in prices in the second week of March. This downdraft appears to be technical in nature, due to redemptions in open-end mutual funds, rather than fundamental in nature. Credit profiles of most municipal bond issuers remain stable and strong. With long-term yields not seen since spring of 2019, and the Fed likely to be accommodative for some time, the opportunity set for long-term investors to add attractively valued tax-exempt bonds, especially with intermediate and longer duration, has expanded considerably in the past few days. We view the current environment as a good buying opportunity to add to tax-exempt municipal exposure.

Notable Data Points

Activity Dived on Shutdowns & Tighter Credit

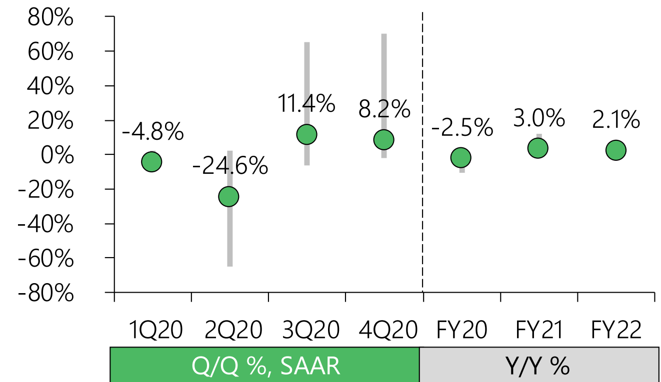
Current Economic Activity vs Financial Conditions
United States



Source: Goldman Sachs, 4/1/20

No Man's Land – Little Consensus on Consensus

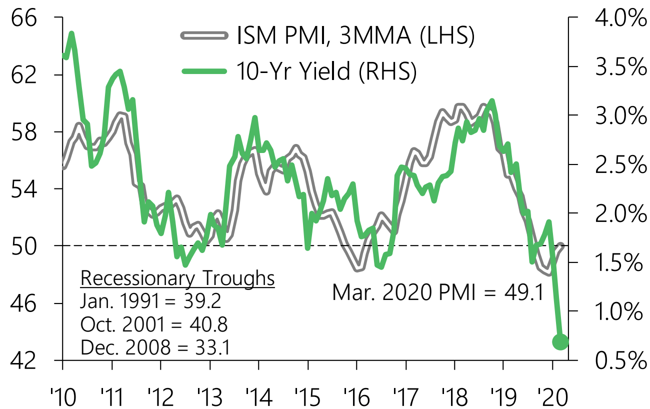
Consensus GDP Forecast
United States



Source: Bloomberg, 4/4/20

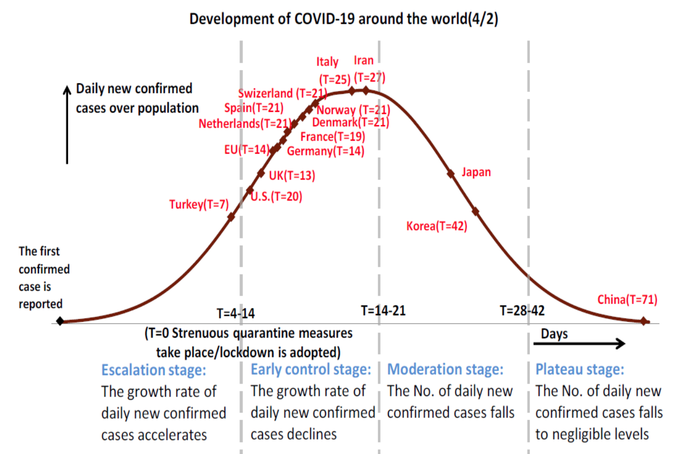
Treasury Yield Implies Sizable PMI Contraction

U.S. Manufacturing PMI vs U.S. 10-Year Treasury Yield



Source: Tullett Prebon, Institute for Supply Management, 4/4/20

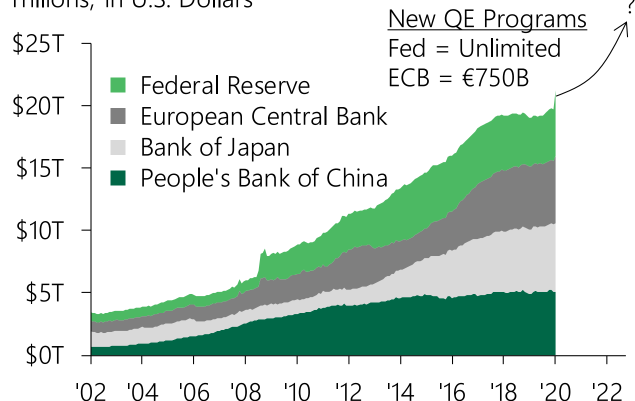
COVID-19: U.S. Entering Early Control Stage



Source: CICC Research, 4/2/20

Massive CB Liquidity Will Keep Credit Flowing

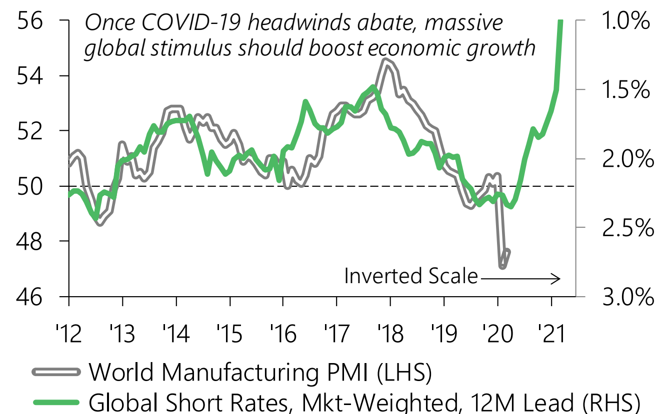
Combined Assets of Four Largest Central Banks
Trillions, in U.S. Dollars



Source: PBoC, BoJ, ECB, Federal Reserve, 3/31/20

Recovery Will Be Aided by Record Low Rates

Global Short-Term Interest Rates vs Manufacturing PMI

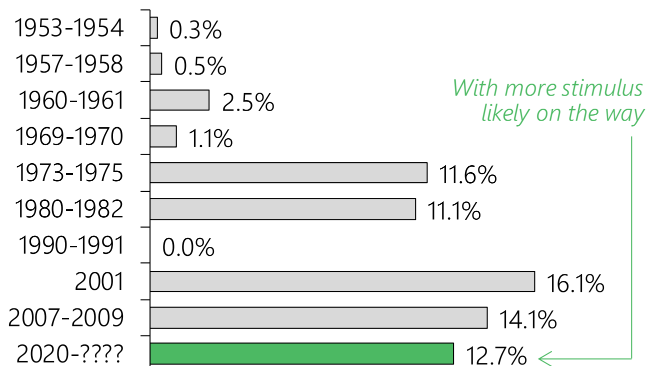


Source: Markit/JP Morgan, FactSet, 4/3/20

Notable Data Points

Large Fiscal Stimulus; With More on the Way

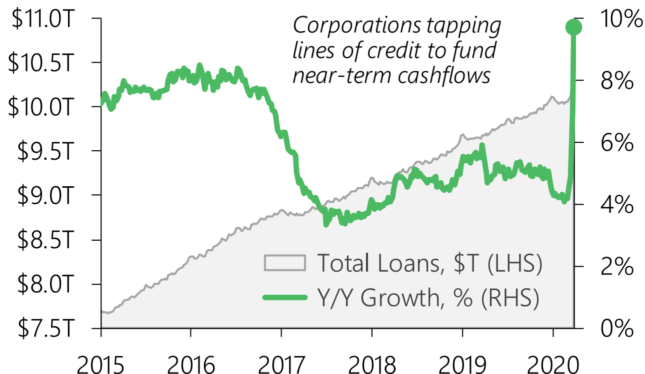
U.S. Fiscal Stimulus During & After Postwar Recessions
Percent of GDP



Source: BofA/Merrill Lynch, 3/27/20

Loan Growth Spiking as Lines of Credit Tapped

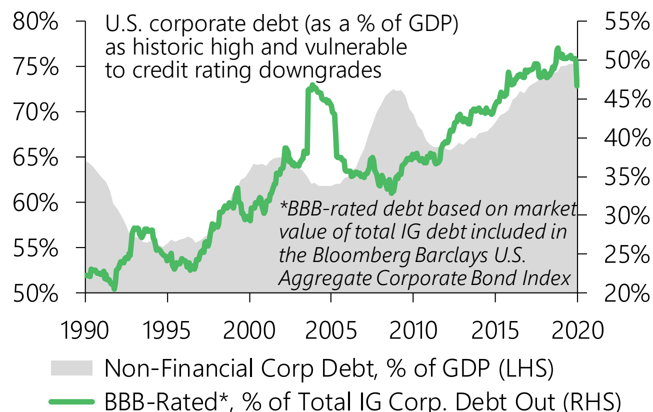
Commercial Bank Credit
Total Loans and Leases, $ Trillion



Source: Federal Reserve, 3/27/20

More Credit Rating Downgrades Forthcoming

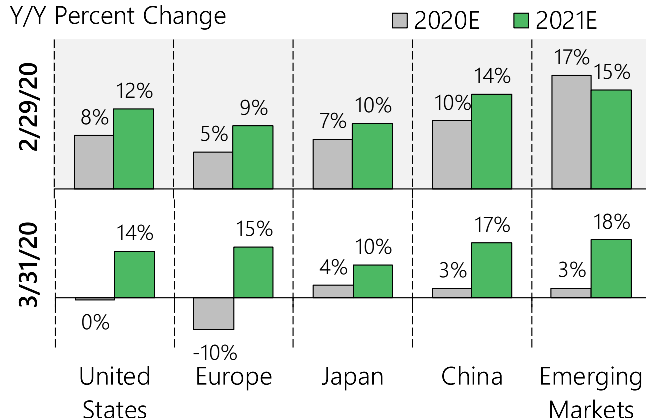
U.S. Corporate Debt Outstanding



Source: Bloomberg Barclays, Bank for International Settlements, 4/1/20

EPS Estimates Reduced to More Realistic Levels

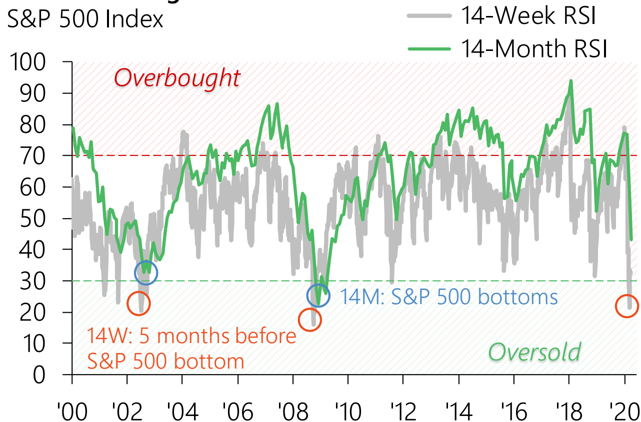
Bottom-Up EPS Estimates for MSCI Indices
Y/Y Percent Change



Source: FactSet, 4/1/20

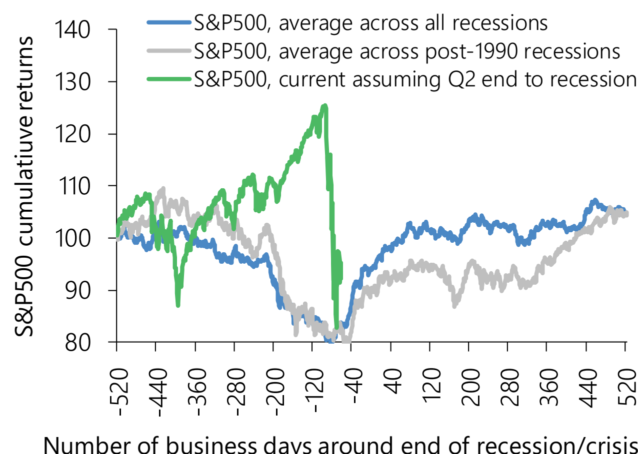
RSI Signaling a Looming Equity Market Bottom

Relative Strength Indicator
S&P 500 Index



Source: FactSet, 4/3/20

Stocks Trough 2 Months Before Recession End



Source: JP Morgan, 3/24/20