

## Insights: March 2020

### Market Overview and Performance

During our attempts to compile this month's Insights letter, we have been forced to re-write our opening comments several times. At this very moment, the Dow Jones Industrial Average has declined an astounding -20.7% in just 19 trading days. Similarly, The S&P 500 Index has fallen by -19.9% in only 15 days. To put that in context, the previous fastest times from all-time highs to down about -20% was 28 days in 1929, 31 days in 1998, 38 days in 1987, and 52 days in 1990. Encouragingly, outside of the Great Depression, the S&P 500 was up 23%, 28% and 38% one year later. Let us be very clear in saying this however – we are currently experiencing a true Black Swan event with an unknown origin, unknown consequences and unknown solutions. As of today, the Covid-19 Virus outbreak has infected some 140,000 people and killed 5,000 people globally. This is not a trivial event by any means and all signs suggest that the infection level and the ensuing

repercussions will get significantly worse before they get better. If China and past viral episodes are trustworthy guides, the situation should improve within the next six months. However, as Christine Lagarde, President of the European Central Bank urged EU leaders on March 10th, "Take action and raise spending in order to counter the economic effects of Covid-19 or otherwise be at risk of a scenario that will remind many of us of the 2008 Great Financial Crisis". While we envision the next two quarters as being extremely challenging, ideally, as Goldman Sachs suggests, by closer to year end economic and earnings growth will be accelerating, the Fed funds rate will be close to the zero bound, fiscal stimulus will be in effect and asset price levels will be attractive. As preventive measures are now being put into place across the globe, we hope this proves to be the case. As always, thank you for reading our latest Insights.

	<i>Month to Date February 28</i>	<i>Year to Date</i>
<b>Equity</b>		
S&P 500 Index	-8.23	<b>-8.27</b>
Russell 2000 Index	-8.42	<b>-11.36</b>
MSCI EAFE Index	-9.04	<b>-10.94</b>
MSCI Emerging Markets Index	-5.27	<b>-9.69</b>
<b>Fixed Income</b>		
Barclay's U.S. Aggregate Bond Index	1.80	<b>3.76</b>
Barclay's U.S. Aggregate Credit Index	1.99	<b>6.13</b>
Barclay's U.S. Aggregate Corporate High Yield Index	-1.41	-1.38
Barclay's Municipal Bond Index	1.29	<b>3.11</b>
<b>Macro Measures</b>		
Gold	-1.34	2.86
Crude Oil	-13.19	<b>-26.70</b>
CBOE Volatility Index	<b>112.9</b>	<b>191.07</b>
USD Dollar Index	-1.66	-0.64

**Current Theme – A True Black Swan Arrives – The Covid-19 Virus Sends Shockwaves Through Both Society and the Global Markets**

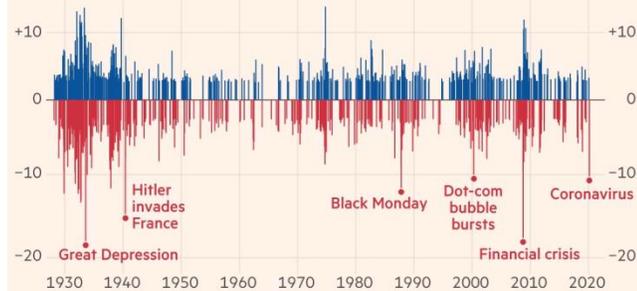
Risk Assets Have Been Sold at a Historically Rapid Pace While Safe Havens such as Bonds Reach Never Before Seen Levels – Governments and Central Banks Across the Globe are Forced into Action

While the recent wild gyrations in the markets are somewhat breath-taking to watch, they are clearly indicative of an unhealthy environment. For example, the -7.6% decline experienced on March 9<sup>th</sup> has only been felt during two other periods – twice in 1987 and 4 times in 2008. As seen below, these rapid shocks have only occurred during times of extreme duress.

**Pace of the Decline in Stocks Has Been Historic**

How the “coronavirus crash” compares to historic market falls

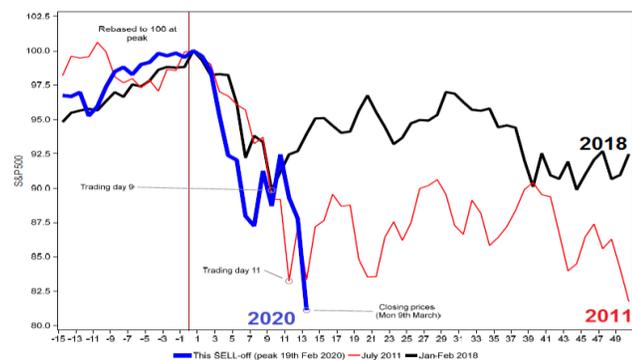
Week-on-week change in S&P 500 (%)



Source: Financial Times, Refinitiv

To give a better sense of perspective, the roughly 15 day sell-off this year has been more severe than the past recent episodes of 2011 and 2018. Notably, during both of those periods, the market was still trading near its lows some 50 trading days after the previous peak.

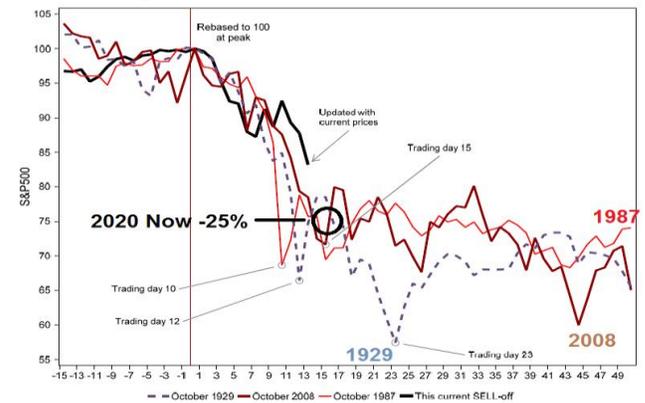
**2020 Sell-off More Severe Than 2011 and 2018 Declines**



Source: Longview Economics; Macrobond

As we stated in our opening comments, events have been changing rapidly as we write, and we now have an S&P 500 decline which puts the path more in-line with the downfalls witnessed in 1929, 1987 and 2008. Those are scary years to any investor and we are not suggesting that this year will follow suit, however, it is beneficial to use these times as a measure of just how drastic the selling has been over the last few weeks.

**2020 Pace of Decline Now Closer to Past Market Shocks**



Source: Longview Economics; Macrobond

You may notice that similar to 2011 and 2018, those markets were still bouncing around their lows 50 trading days later. The key takeaway here being that making a bottom is a process, not a one-time event.

**S&P 500 Has Quickly Broken Traditional Support Levels**



Source: Bloomberg

So without knowing what events will unfold, what would be a reasonable expectation for a bottom in the current environment? Based on technical analysis seen above, using proven mathematical ratios created by taking two extreme points, we believe there is a reasonable expectation that we will re-visit the December 2018 low of 2350 on the S&P 500 which would equate to a decline of over -31% from the high.

Whether that proves to be true or not, it is a reasonable assumption that we are in an extended period of volatility given the large array of unknown outcomes we are faced with. As illustrated below, during the summer of 2011 when the US credit rating was downgraded, the S&P experienced a very choppy period of 5 months with a VIX reading above 30.

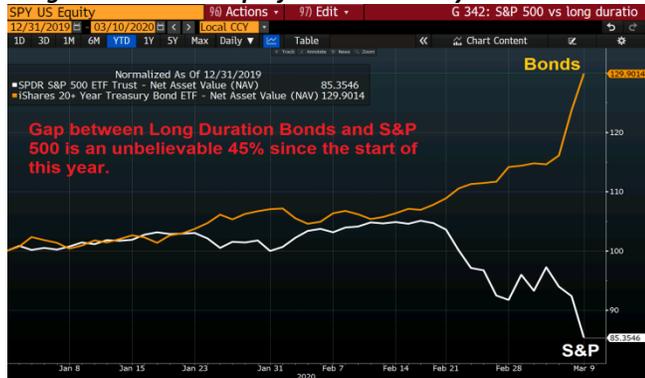
**Current Market Parallel to 2011 – 5 Months of Volatility**



Source: Adaptive; Stockcharts

Unsurprisingly, the fears of a global recession driven by the outbreak of the Covid-19 virus that sparked the selling in risk assets has also herded investors toward the perceived safe haven of bonds. As a result, bond prices have spiked and incredibly, long-duration bonds have outperformed US stocks by an astounding +45% thus far in 2020.

**Long Bonds Have Outperformed Stocks by 45% YTD!**



Source: Bloomberg

In fact, as the global virus situation appears to be more perilous by the day, the doubts and uncertainties surrounding the global economy have only gotten

worse. This presents us with the unprecedented scenario where the entire US yield curve is now yielding below 1% for the first time in history.

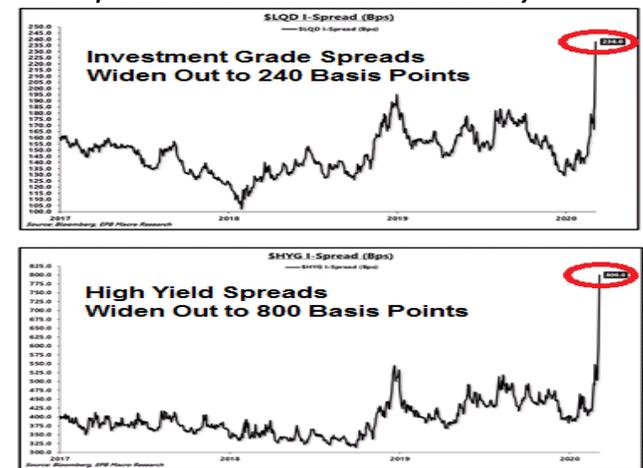
**Entire US Yield Curve is Below 1% - Historic Sign of Stress**



Source: Bloomberg

There is little ambiguity surrounding the interpretation of these events – the bond market is without a doubt messaging that uncertainty about the future is essentially as high as it’s ever been. We also see this in both investment grade and high yield bond spreads which have spiked notably as of late. This is a sign that investors are less certain about the credit worthiness of the companies issuing these bonds. Importantly though, these spreads are still very far away from the levels seen in 2008 and even the 2015-2016 period.

**Credit Spreads Have Widened Out Considerably**

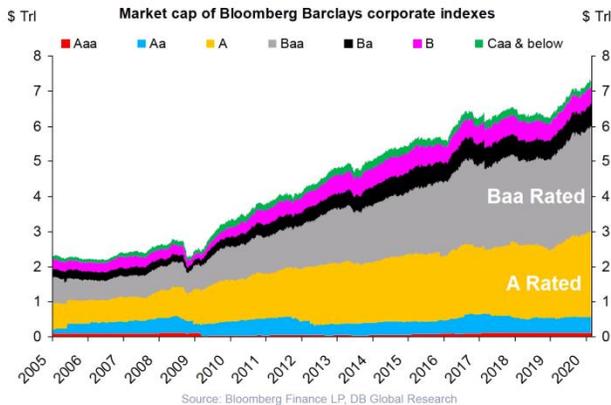


Source: Bloomberg; EPB Macro Research

One key difference is that the US credit market has grown from \$2 billion in 2008 to \$7 trillion today. The primary driver of that growth has been the surge in issuance of single A and Baa rated bonds as one can see in the chart at the top of the following page.

Companies holding these ratings are essentially the lowest level of investment grade bonds. If the economy becomes more challenging for their particular segment of the market, there is the possibility that they begin to have difficulty meeting their debt obligations going forward.

**Corporate Bond Market Has Grown to \$7 Trillion**

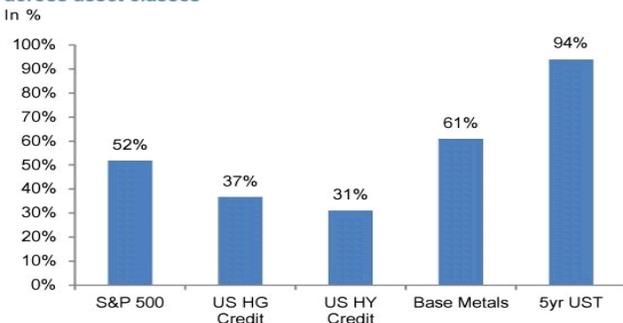


Source: Bloomberg; DB Global Research

Many energy companies for example, are going to be significantly challenged with oil falling from \$45 to \$30 per barrel. Defaults will likely occur. This combined with the stress seen in both the stock and government bond market have caused investors to price in an elevated probability of recession as seen below.

**Market Has Priced in a Significant Risk of Recession**

Figure 21: Probability of a recession as currently (Mar 06<sup>th</sup>) priced across asset classes



Source: JP Morgan

The Federal Reserve obviously has to look beyond asset prices and incorporate real economic data into their policies, and as we have tried to articulate, we are in uncharted territory at the moment. This is due to the fact the global economy is facing the unique dynamic of both a supply and demand shock occurring concurrently. China accounts for roughly

30% of the global manufacturing supply chain according to the United Nations, far beyond any other country. Due to the Covid-19 virus, China literally shut down its manufacturing capabilities for several weeks. This is highly disruptive to the global economy, but in an ideal world, would prove to be a temporary aberration. However, with the virus now spreading widely across the globe, we are now seeing a demand shock as well. Consumers, who represent the bulk of the US GDP growth, have been shocked into a spending freeze. As evidence, the CEO of Southwest Airlines stated recently that the current environment has “9/11 type feel.”

**Emergency Rate Cuts Do Not Portend Positive Returns**

Cut	Cumulative S&P 500 return following inter-meeting Fed rate cuts (%)						
	1 week	2 weeks	4 weeks	3 months	6 months	12 months	18 months
Oct-98	3.0	3.7	6.7	15.7	26.3	19.1	29.5
Jan-01	(2.5)	(1.3)	1.4	(18.1)	(8.4)	(13.5)	(29.2)
Apr-01	(0.8)	2.4	3.8	(2.5)	(13.0)	(9.2)	(29.0)
Sep-01	(3.4)	(0.0)	4.9	9.2	12.2	(15.9)	(16.6)
Aug-07	2.3	1.9	2.6	0.9	(6.6)	(10.2)	(42.8)
Jan-08	4.0	2.0	2.9	5.0	(2.6)	(35.9)	(27.2)
Oct-08	(7.8)	(9.0)	(3.3)	(7.9)	(16.2)	8.2	20.5
<b>Median</b>	<b>(0.8)</b>	<b>1.9</b>	<b>2.9</b>	<b>0.9</b>	<b>(6.6)</b>	<b>(10.2)</b>	<b>(27.2)</b>
<b>% positive</b>	<b>43%</b>	<b>57%</b>	<b>86%</b>	<b>57%</b>	<b>29%</b>	<b>29%</b>	<b>29%</b>

Source: Goldman Sachs

The Fed tried to combat these twin negative forces by first implementing an emergency 50 basis point rate cut on March 3<sup>rd</sup>. Unfortunately, this action had no effect, and the market has now priced in a 100 point cut at the March 18<sup>th</sup> meeting which will in practicality take interest rates to zero. As seen above however, these emergency cuts have a poor record of improving the market environment in the following months.

**Drop in Demand has Crushed Leisure Stocks by -40%**

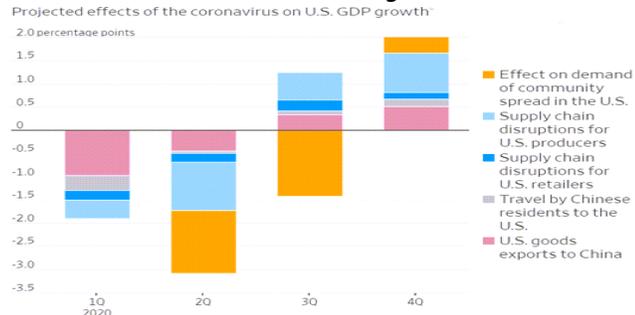
Exhibit 3: Airlines, Casinos, and Hotels & Cruises have underperformed sharply as of March 5, 2020



Source: FactSet; Goldman Sachs Investment Research

As the chart on the previous page clearly demonstrates, the level of interest rates will unfortunately be completely useless when trying to encourage spending among a consumer group who is now effectively retracting from large social environments. Consequently, there is the very real possibility that the US enters a recession. As one can see in the estimates of US GDP growth from Goldman Sachs below, while Q1 is anticipated to be negative largely due to China (pink and blue), Q2 and Q3 may show a contraction in growth due primarily to a sharp drop in US demand due to the virus spread (orange).

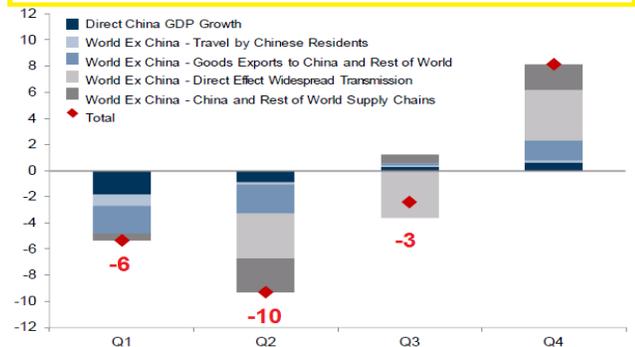
**Covid-19 Estimated to Result in Negative US GDP Growth**



Similarly, Goldman Sachs estimates that global GDP growth will be hampered for the next three quarters, but even more severely than the US. Again, Q1 is largely a China story (blue) but Q2 and Q3 will suffer from widespread virus transmission and global supply chain disruption (gray). To compound this difficult environment, we now have the onset of an irrational oil price war between Russia and Saudi Arabia which will only serve to lower revenue streams, create job losses and result in greatly reduced capital investment in many areas.

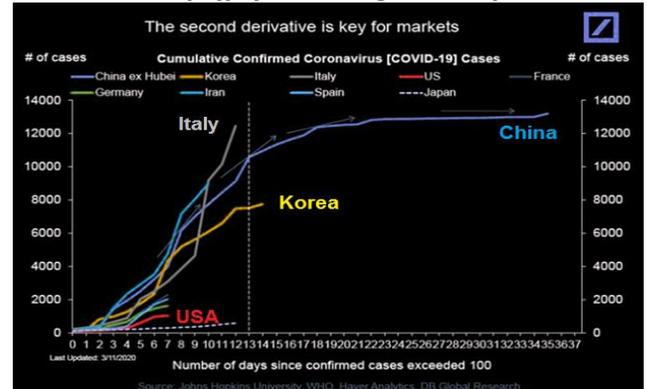
**Global Growth May Be Severely Impacted by Covid-19**

Downside scenario, the Q1 hit deepens in Q2  
Downside scenario: impact of COVID-19 on 2020 ann. global growth, pp



Taken together, all these factors seem rather bleak, and things will undoubtedly be challenging for the foreseeable future. However, there is reason to believe that as time passes things will improve.

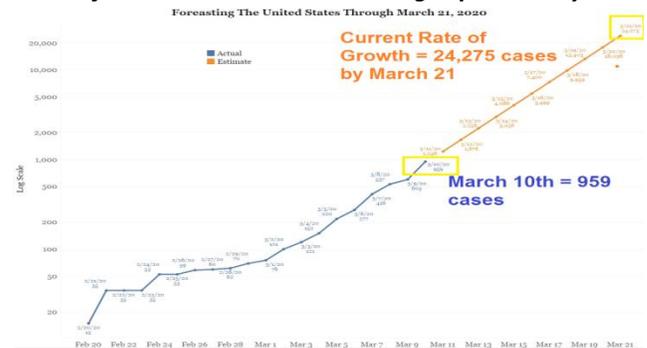
**Markets Will Key off of Plateauing Global Infection Rates**



Source: John Hopkins University; WHO; Haver Analytics; DB Research

Consider the chart above from Deutsche Bank. As they illustrate, infection rates have generally been tracking along a similar growth curve globally. Once the rate of growth plateaus as it has in China, both investor and consumer sentiment may improve.

**Cases of Covid-19 Virus in US Growing Exponentially**



Source: John Hopkins University; Bianco Research

However, there is obviously no guarantee of this shift in sentiment occurring. And similarly, there is no guarantee that growth rates will be similar in every country (Italy is a current outlier) or that the virus will not re-accelerate. For the time-being, as the graph clearly shows, the US is only at the very beginning of its virus episode for a variety of reasons. Based on current testing, the case number in the US has been doubling every three days. At that rate, cases will be close to 25,000 by March 21<sup>st</sup> so we all need to be prepared for some quite negative headlines in the coming weeks.

## Going Forward

For much of the last two years, we used the “Going Forward” section of Insights to espouse our views on both the market opportunities and challenges that were created by the trade war disputes which essentially dominated all investment activity. However, as we sit only 10 weeks into 2020, those conversations are completely irrelevant. As discussed, the global economy is in uncharted waters with the number two economy, China, shutting down almost completely in Q1 and the number one economy, the US, following suit as we approach the start of Q2. The repercussions of these measures are hard to grasp, but in all likelihood, most of the globe is already in recession.

If this was purely an economic situation, we would have the tools and knowledge to manage our asset allocation to address the environment accordingly. However, that is not the scenario we are facing. As the US begins the initial phase of social distancing policies with school closures and work from home initiatives, the future consequences are unknown. Without a doubt however, it will prove to be a significant challenge for a consumption driven economy like the US where only 29% of employees have the ability to work from home (Bureau of Labor) and only 40% of Americans can afford a \$400 unexpected expense (The Federal Reserve).

While we are still ardent believers in long-term investment horizons and broad diversification to achieve superior risk adjusted returns over time, we did take action as the seriousness of the current situation became more clear. While we had already been in the process of taking profits since the very start of this year in names that delivered outsized returns in 2019, we began aggressively raising cash beginning during the week of February 24<sup>th</sup> when the S&P 500 broke its 200 day moving average. We are now at our policy maximum limits in cash across our portfolios. Additionally, this current week, we have eliminated any exposure to long-dated maturity fixed income after the extreme run-up in prices resulting from the market uncertainty.

Unsurprisingly, with market sentiment deteriorating, investor behavior with regard to sectors has also been altered. Every single sector is down by double-digits

year to date led by the energy space which has fallen by an astounding -52% in just a matter of weeks. Even on the strong recovery days we have experienced, defensive sectors, and *not* those that have been hit the hardest, have drawn the most investor capital. As evidence, the leading sectors thus far in 2020 are Real Estate, Consumer Staples and Utilities, each of which are down over -15%. This behavior does not suggest that a meaningful recovery is likely near-term. That being said, we are strong believers in purchasing strong cash-flows at discounted prices and think there will be significant opportunities to purchase high quality companies in the technology, financial, consumer and industrial sectors that have been sold down more than merited in our view. This also holds true for small and mid-cap stocks which have fared worse than their large-cap counterparts.

Equity markets outside of the US have generally declined in line with, and in some cases worse than US markets. While we continue to believe that compelling opportunities exist within non-US exposure, we would not be adding to our allocations until we get more clarity on the impact of the virus on economies abroad.

Serving as a testament to diversification, our fixed income exposure has provided both positive returns and volatility reduction this year. We continue to place our emphasis on less interest rate sensitive options available with shorter duration exposures and unconstrained strategies as a focus. We also favor municipal bonds and short-term corporate bonds based on the belief that the opportunity in these segments provides a better relative value. A notable change this year however, is that many areas of the fixed income space have been irrationally driven up by a “flight to quality” trade mentality. This has resulted in a poor risk/reward scenario for the near-term.

Our measured allocation to gold has continued to serve us well as a non-correlated asset during times of market stress. We continue to believe that this exposure will add value in the coming months.

Thank you for taking the time to read our thoughts and opinions on the markets this month and we look forward to speaking with you soon.

