



## April 2020

## **Financial Markets and Coronavirus**

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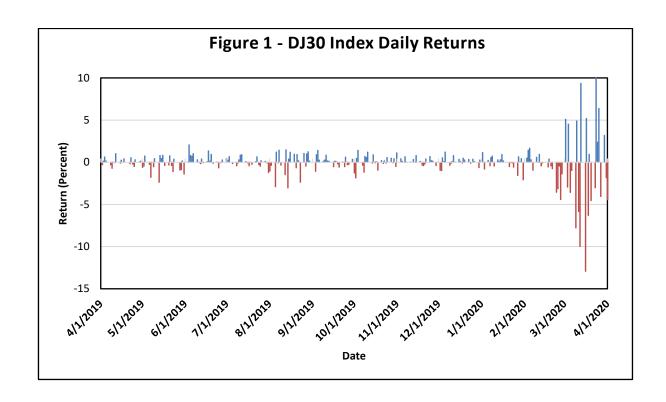
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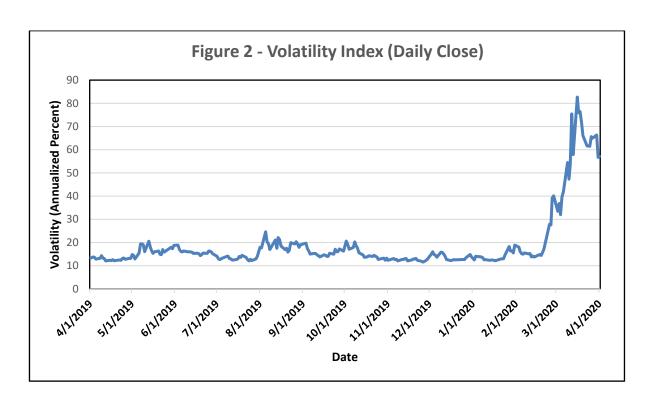


Oh, what a quarter! We are in the midst of what can truly be called a rare event. The coronavirus outbreak has hit us from all directions. Rightfully, the primary focus of the outbreak has been the health-related implications. However, implications for the economy and financial markets have also been front and center. It is these implications that are the focus of this month's newsletter.

We have clearly entered a period of increased market volatility. The large day to day fluctuations of the value of the stock market are evidence of this observation. For example, the Dow Jones Industrial Average fell by almost 13 percent on March 16 and increased by over 11 percent on March 24. Figure 1 plots the daily returns in percent of the Dow Jones Industrial Average from April 1, 2019 through April 1, 2020. Notice that the recent returns in the month of March are very volatile. The returns are large in magnitude and move in both directions.

A real-time measure of this increased uncertainty is provided by the VIX volatility index published by the Chicago Board Options Exchange (CBOE). This index is a forward-looking measure of stock market volatility expressed on an annualized percentage basis. Figure 2 is a graph of the index level over the past year. One can see that from April of 2019 until the end of this past February, the VIX rarely went above 20 percent. Over this period, its average daily close was 15.2 percent. In contrast, since the end of February, the index has averaged 56.6 percent and even exceeded 80 percent on March 16. Since 1990, this 80 percent volatility level has not been seen except for two days in the financial crisis of 2008.





What is the source of this heightened stock market volatility? As is often the case, this volatile period can be explained by a primary factor – increased economic uncertainty. The economic impact of coronavirus is significant and, importantly, difficult to evaluate. While political considerations relating to the upcoming election also play a role, that role takes a back seat relative to the coronavirus issues.

Economists expect real economic growth to decline sharply in the second quarter of this year. This slowdown will be global in nature. The forecasts of the decline do exhibit substantial variation – an observation consistent with the high level of economic uncertainty. At an annualized rate, the forecasts of real GDP growth in the second quarter range from approximately -10 percent to lower than -30 percent. The consensus forecast is a decline of approximately 18 percent.

The question of whether a recession will happen is also difficult to determine. Technically, a recession is defined as two successive quarters of a decline in real GDP. While there is wide agreement that second quarter GDP will decline, there is less agreement about the third quarter. Estimates of both the rate and magnitude of growth of economic activity varies widely. If the health impact of the virus can be limited to the next few months and there is a reduction of government restrictions on economic activity, many economists feel that the U.S. economy could bounce back with positive growth in the third quarter. The consensus forecast is an increase of approximately 13 percent.

A more relevant question for investors is what to expect the impact of this virus to be on the value of the U.S. equity market. Again, there is not agreement on this. A key consideration is the duration of the virus. If the virus can be contained to the second quarter, the impact can be greatly reduced. Back in February, Wharton professor Jeremy Siegel noted in an interview that it was possible the impact would be relatively small. He reasoned that on their own, 2020 corporate earnings represent less than 10 percent of the value of most companies. Thus, if the effect of the virus was to completely zero out 2020 earnings, it would have a negative valuation impact less than 10%. However, this analysis builds in an important assumption – that earnings beyond 2020 will not be impacted. Given the impact on businesses is already substantial, it seems unlikely that this assumption will hold and as we have already observed the impact is likely to be greater. (From its closing high on February 12, the Dow Jones Industrial Average is currently down 28 percent as of Friday, April 3.)

Thus, the duration and magnitude of the economic impact will be key. From an economic perspective, the recent price decline reflects the consensus impact of coronavirus on the value of the market in a forward-looking sense. If the virus is contained at the level currently anticipated, the market should hold its own and be stable. But if the impact is greater than expected, one should expect a market decline to reflect the negative outcome. On the other hand, if the virus is eliminated more quickly than anticipated, markets will rebound. The bottom line is that market movements are difficult to predict, a fact that PMA has reiterated when advising against strategies related to market timing.

While not as large as equity markets, in the fixed income markets, corporate bonds have also suffered some losses. Intervention by the Federal Government and the Federal Reserve in the corporate sector has helped to stabilize this market. For portfolios, this stabilization combined with fixed income diversification has kept the losses relatively low and has helped provide some down-side protection. Further, we believe it will likely be the case that as the equity market recovers, corporate bonds will also recover.

How should one respond to the current crisis? As always, it is important to keep in mind the unpredictable nature of the stock market. Historically, in times of severe market stress, dramatic shifts out of stocks has not been a value-adding transaction as a market rebound has been missed. As Figure 1 shows, good and bad days can cluster together. Missing a few of the good days can have a significant impact on the value of one's portfolio.

From a risk control perspective, it is prudent to closely monitor the risk of the various asset categories. At PMA we do, on an ongoing basis, monitor these risks. If justified from our analysis, adjustments are made. As an example, at a PMA investment committee meeting in October 2019, we did lower exposure to high yield bonds. We do recognize that there are many things happening in the marketplace and many factors that need to be considered when analyzing valuation and the risk of stocks and bonds. At PMA, we include these factors in our analysis as we strive to control risk and to achieve high risk-adjusted performance.