

Quarterly Economic and Market Comments March 31, 2022

The legendary investor, Howard Marks, has two investment rules. Rule number one: Most things will prove cyclical. Rule number two: Some of the most exceptional opportunities for gain and loss will come when other people forget Rule number one. Yet investors could be forgiven for ignoring his advice as the world over the past decade has been in the grip of a cycle so prolonged and so extraordinary that most investors have come to believe that it may never end. It starts and ends with interest rates and monetary policy. Of course, interest rates had been falling relentlessly for a variety of reasons since 1980. However, in the wake of the Global Financial Crisis, the world's central bankers took things to a whole new level so that, by the end of 2020, \$18 trillion of global debt had a negative yield. That same year, Austria was able to borrow for 100 years at a rate of 0.85% and the bonds shortly thereafter traded at a 40% premium to par. The Bank of England lowered its lending rate below 1% in 2009 - something it had not done in the previous 350 years - and has kept it there to date. Undergirding this surreal interest rate regime has been the buying of securities by central bankers and the bulking up of their balance sheets. In the United States, for example, the Federal Reserve's balance sheet historically averaged about 4% of GDP; indeed, in the post-gold world between 1975 and 2007, its balance sheet grew by 7.5x, less than GDP which expanded by 8.4x. Conversely, since August 2008, America's nominal GDP increased by \$9.1 trillion or 1.6x; whereas, the Federal Reserve's balance sheet rose 10x from \$900 billion to \$9.0 trillion. It is, as one commentator notes, "Monetary policy from an alternate universe".

The alleged rationale for these policies was to prop up the economy and to ensure that consumer prices rose at a consistent rate of 2%. With regard to the former, the unemployment (U3) rate in the United States averaged 6.2% between 1975 and 2007 compared to 6.4% during the 2008-19 period (i.e., before Covid). Despite the massive "money printing" since 2007, hours worked in the private economy in the U.S. grew at a rate of just 0.7% per annum compared to a rate of 2% between 1964 and 2000. So, in terms of spurring economic growth, monetary policies of the past decade must be judged a flop. On the inflation front, between January 2012 when the Federal Reserve officially adopted its 2% inflation target and 2020, one of the most common measures of consumer price inflation averaged exactly 2%. Pretty impressive, except what's the point of trying to prop up consumer prices? Central bankers are desperately afraid of falling prices (i.e., deflation), yet the prestigious Bank for International Settlements notes, "We tested the historical link between output growth and deflation in a sample covering 140 years for up to 38 economies. Persistent CPI deflations do not appear to be linked with slower growth and may actually boost output." Furthermore, if 2% is the defacto floor, what happens, as we are seeing today, in the event of an economic, geopolitical, or some other kind of shock?

In any case, this has been the world investors have faced since 2008: microscopic interest rates, slow growth, consistent and well-contained consumer price inflation, and oceans of central bank liquidity. Good news for safe bonds and a variety of risk assets; hence, the popularity of a portfolio invested 40% in bonds and 60% in equities. However, there is one other important factor. In a world where growth is hard to find and discount rates are low, a handful of big American technology companies (FANMAG) became investment darlings. In November 2021, the weight of the largest 10 stocks in the S&P 500 hit 32%, the highest level since the so-called Nifty 50 Era of 1974. Partly, this was a reflection of the macroeconomic environment and Wall Street has been happy to churn out charts showing the close

correlation between the balance sheets of the 5 major central banks and FANMAG stock prices. At the same time, U.S. industries have become increasingly oligopolistic over the past 15 years. The FANMAG companies, as a group, are very profitable and have taken corporate profits to record highs as a percent of GDP. Still, only 30% of the return of the S&P 500 between 2011 and 2021 came from growth in earnings. The biggest factor pushing up equity prices was stock buybacks as a result of ample corporate cash flow and low interest rates which allowed companies to borrow cheaply to buy back their stock. Buyback authorizations are currently on pace to exceed last year's record level. As a result, while the cycle from the lows of 2009 to the end of 2021 was kind to a host of assets, with the exception of most inflation hedges such as commodities, the real winners were American growth stocks, especially the big technology leaders, which trounced bonds and most other equities. To cite just one example, non-American markets were sporting a higher P/E ratio than the S&P 500 when the cycle began, but, by the end of March, were trading at a discount of almost 33%.

The first guarter of 2022 was a different kettle of fish. Commodities and equity markets of resourcebased countries such as Brazil, Indonesia, Australia, and Canada were the only places to hide. The Reuters equal-weighted commodity index had its best quarter since the data first began in 1956. The run-up in the price of nickel as a result of the Ukraine crisis was so large that the London Metal Exchange closed trading owing to severe financial pressure on commercial interests trading in nickel as a hedge. Large and small capitalization American stocks, developed international stocks, emerging markets, real estate benchmarks, and bonds of virtually all stripes fell by at least 3.5% in the guarter for the first time in more than 40 years. This is a change from normal behaviour during this cycle when, if risk-on assets like equities were falling, risk-off assets like Treasuries would rally. Instead, yields rose and bond prices declined to the point that most of the world's negative yielding debt disappeared and Austria's 100-year bond has now fallen in price by more than 50%. The Bloomberg Global Bond Index had its worst decline since inception and 10-year U.S. Treasuries (or equivalents) have only seen a worse total return quarter twice since the U.S. Civil War. Within the American equity space, growth stocks dramatically underperformed so-called value stocks unlike most of this cycle. At the lows, more than 20% of the stocks on the tech-heavy NASDAQ were down by more than 75% from their highs, more than 40% were down 50% or more, and there were more new 52-week lows than at any point in more than 30 years, at least. Salesforce suffered its worst quarter since 2011; for Netflix (down 38%), it was the worst since 2012; for PayPal (down 39%), its worst ever. Still, it could have been a lot worse if not for a strong rally at quarter-end. Nvidia closed down 7% having been down as much as 27% in mid-March. In a quarter when an index of all the major global asset classes posted a 5.7% negative return, the Morningstar US Market Index had daily gains between 2% and 3% six times. Facebook lost about \$230 billion in market value in a single session after posting disappointing earnings, the biggest loss in market value for a U.S. company in history, but the next day, Amazon recorded the biggest ever one-day gain in market value. Tesla shares jumped 8% in a single session on the announcement of a stock split and "meme" stocks GameStop and AMC jumped 25% and 45% respectively in one day near quarter end. The crosscurrents of the quarter are perhaps best illustrated by the CST China Internet ETF, which tracks offshore Chinese technology listings. It followed its worst-ever week in mid-March with its best week ever.

So, was the first quarter the beginning of the end of the old cycle or another head fake as in 2011, 2015, 2018, and 2020? In the wake of Covid and the Russian invasion of Ukraine, a number of thoughtful people are suggesting the world has permanently changed - "the world before and the world after", as one commentator put it, or, "the Vibe Shift", as it's called on social media. Before we get too carried away, however, we would do well to recall Zhou En Lai's response when questioned about the implications of the French Revolution, "Too early to tell." That seems a tad extreme, but knowing in real time which events will turn out to be of lasting significance and what that significance will be is pretty

daunting. For example, the assassination of Archduke Ferdinand by Gavrilo Princip was considered one of the ten most consequential events of the millennium in a 2000 poll; yet, in June 1914 when it happened, no one foresaw that it would usher in the carnage of WWI, never mind the many ways in which it utterly changed the world forever. So, while it's easy to exaggerate the importance of current events or misread their significance, it's also possible to trivialize them unduly. Indeed, in the days after the invasion of Ukraine, Wall Street, as is its wont, produced a list of more than 50 crisis events of the past century. The conclusion? Crisis events cause excessive investor pessimism which create the conditions for a rally in financial markets and most of the events turn out to be of passing fancy. Most, but not all, and therein lies the rub. Six months after Russia invaded Crimea, the Dow Jones Industrial Average was 11% higher; six months after it invaded Georgia, it was 10% lower.

Looking at Covid and Ukraine, it's natural to emphasize the human suffering; however, from an investment point of view, such a focus is misplaced. Death and suffering have sadly, been part of the human condition. Other than something as epic as the Black Death of the 14th Century, that killed 60% of Europe's population and led to a dramatic, long-lasting increase in real wages, markets are impervious to a big body count. In any case, and although it sounds callous, the death toll from Covid and, so far, in Ukraine, is modest relative to numerous previous catastrophes. For example, relative to population, Britain lost 4.5 times more lives in the 141 days of the Somme Offensive than in two years of Covid and the Russians deliberately killed 3.3 million Ukrainians in the 1930's (part of the 14 million non-combatants in "the Bloodlands" killed by Stalin and Hitler over 12 years.)

When Covid really appeared two years ago, it was possible to have a sense of how things would play out; after all, we had the Spanish Flu as a template. Of course, the remarkably speedy development of a vaccine reduced the number of deaths, but the world has experienced the pandemic in waves as it did then and we do seem to be moving from pandemic to endemic even as the U.K. is currently experiencing its highest case count since April 2020 and Shanghai, China's largest city, is in lockdown. In the case of the war in Ukraine, on the other hand, it is by no means obvious how things will play out and what the longer-term implications will be. Nevertheless, based on what we know today, there are perhaps three observations that could be made regarding the joint impact of Covid and Ukraine. Taken together, they suggest that the groundwork for a new cycle may have been laid.

One of the initial impacts of Covid was to accelerate the move to an online world. E-commerce sales in the U.S. jumped more than 25% above their already rising trend and the stocks of companies benefiting from this soared. Stock prices in this area, as we saw in the first quarter rundown, subsequently gave back many of their gains and online sales seem to be moving toward their long-term trend. However, the big changes that seem likely to stick are workplace protocols such as the four-day workweek and working from home. Over the past century, as workers streamed from the factory to the office. employers brought with them the same assembly line mentality. Employees were expected to commute an hour or two a day to work at their desk five days a week from 9 to 5 and, indeed, what was the alternative? Meetings had to be face-to-face which also involved a lot of business travel. Covid proved that the technology existed to move to a new model. When oil was \$2 per barrel, global warming was not on the radar screen, and most women were at home, the need for change was not apparent. Today, with both parents working and the financial and environmental costs of sitting in traffic all too obvious, the idea of a more flexible working environment seems like something whose time has come. Since we are in the early innings, it's hard to know how this will play out. Ridership on New York subways is still more than 40% below where it was pre-Covid. To what extent does this reflect the fact we have not yet gone back to "normal" and to what extent does it reflect a new "normal"? The impact on corporate profitability is also unclear. On the one hand, there is a ton of data suggesting that more flexible working protocols have improved employee productivity. Shedding expensive office

space and taking fewer expensive business trips must also be good for the corporate bottom line. On the other hand, there is a sense in all of this of worker empowerment, employees demanding - and, in many cases receiving - more money and working conditions more to their liking. Capital has gained at the expense of labour for the past 40 years or more and if this is in the process of changing, it's clearly pretty important. One factor driving demands by labour for a better deal is income and wealth inequality. Over the past 25 years, the net worth of the wealthiest 400 Americans has risen from 5% of GDP to nearly 20%, with much of that increase since 2008, even as two-thirds of Americans claim they would not be able to pay all their bills without their next pay check. Over the past four decades, the percentage of U.S. workers in a union has fallen by 50%, but baristas at nine company-owned Starbucks have voted to unionize since December with another 140 stores filing for union recognition. Perhaps more significantly, Amazon workers in Staten Island voted to unionize at quarter-end, marking the first successful U.S. organizing effort in the history of the nation's second largest private employer. and President Biden has promised to be the "most pro-union President in American history." With continuing claims for unemployment insurance at their lowest level since 1969, workers are in a good position. As one bartender said recently, "I'm in hot demand, baby. I've worked in like six bars in the last six months because I keep getting better offers I can't turn down." Nor is this just a North American phenomenon. The unemployment rate in the Eurozone dipped below 7% for the first time ever and the hourly minimum wage in Germany is slated to jump from 9.5 euros at the end of 2021 to 12 euros this October. On the surface, this is bad news for inflationary pressures and for corporate profit margins which are inversely correlated with employment costs. At the same time, the S&P 500 is 70% less labour intensive than it was 40 years ago, although most of that change took place before the current Higher wages should drive higher levels of industrial automation and lead to improved productivity, stronger growth, and lower inflation. It may well mean less money available for stock buybacks, however, and, indeed, Starbucks just announced it was mothballing its multi-billion dollar buyback program in order to invest in its operations.

A second outcome of Covid and now the war in Ukraine is increased polarization within countries and between countries. When Covid broke out, it was often said, "We are all in this together." It wasn't true, of course, but, still, at the time, 85% of CNN/MSNBC viewers and the same percentage of FOX viewers trusted the CDC to provide them with accurate information about Covid. Today, 85% of the CNN/MSNBC contingent still trust the CDC, but the number of trusting FOX viewers has fallen to 20%. Face masks, vaccines, and, astonishingly, Ivermectin, became the source of fierce controversy. Thanks to promotion by the usual suspects, Ivermectin prescriptions exploded from 3600 per week prior to the pandemic to 88,000 in August 2021. Now the final incontrovertible results are in: Ivermectin is useless against Covid. Of course, political polarization has been rising in the U.S. far more markedly than elsewhere, but the trucker's siege of Ottawa in Canada showed the extent to which Covid increased political divisions outside of the U.S. A poll in November showed that trust in government had fallen over the previous year to less than 50% in Germany and the U.K. and less than 40% in the U.S. Depressingly, trust rose in China, Saudi Arabia, and Russia. The war in Ukraine on the other hand, seems to have brought people together in Europe and North America. For the time being, people are hating Putin more than they are hating each other. Putin has also succeeded in unifying Europeans and reinvigorating NATO. This is all to the good, but the fallout from Covid and Ukraine has pushed indices of economic policy uncertainty and geopolitical risk to their highest levels since 9/11 and the Iraq War. In addition, in a vote at the United Nations to condemn Russia's invasion of Ukraine, a vote that one would think was a "no brainer", countries representing more than 50% of the world's population - including China, India, Pakistan, and Brazil - voted no or abstained. Clearly, there are important divisions in the world such that one of the important wellsprings of global economic prosperity since WWII, globalization, is at risk. The volume of world trade relative to industrial production was already treading water since the Great Financial Crisis. Then, Trump launched his trade war with China, constantly referred to Covid as the "China Flu", and the rhetoric against China by American politicians has been heating up ever since. Over the past 25 years China has been the world's factory. Of the ten busiest seaports in the world, six are in China and an estimated one-third of global shipping passes through the South China Sea. China has had a zero Covid policy and the lockdowns there and the resulting supply disruptions caused the world, and the United States in particular, to realize how dependent they had become on China as a source of supply. Now, according to Larry Fink, Co-founder and CEO of BlackRock, the world's largest asset management firm, Russia's invasion of Ukraine "has put an end to the globalization we have experienced over the last three decades. Companies and governments will be looking more broadly at their dependencies on other nations". "Nearshoring", moving business operations closer to home, has entered the lexicon as multinational companies rethink global supply chains. While this may be the smart thing to do, a less open global economy will be less efficient, leading to slower overall growth and higher inflation.

Inflation. This is the third outcome of Covid and the war in Ukraine and probably what will have the biggest impact on markets, at least in the short run. Throughout the past decade, many investors thought that policies being pursued by the world's central bankers would lead to higher rates of consumer price inflation. It didn't happen, partly because governments were relatively restrained in their fiscal policies and partly because globalization meant that China was able to export deflation to the World, dubbed "The China Price Driven Inflation Sabbatical" by one observer. Between 2012 and 2019, service inflation in the United States consistently came in around 2.5%, but this was offset by durable goods deflation of 2.0% owing to the offshoring of America's industrial economy, as well as questionable statistical adjustments to the actual price of goods. Then came Covid and governments, especially in North America, and backstopped by their central bankers, abandoned any sense of fiscal restraint. The money supply exploded and now, with a lag, consumer prices. Right out of the textbooks. Researchers at the Federal Reserve recently concluded, "Though many of the pandemic distortions are common to other countries, we show that U.S. inflation has risen more quickly. In seeking an explanation, we turn to the combination of direct fiscal support introduced to counteract the economic devastation caused by the pandemic." Between the pre-crisis peak in November 2007 and the pre-Covid peak in February 2020, real U.S. retail sales grew at an annual rate of 0.8%, but, during the next 13 months as the economy was hit with \$6 trillion of federal stimulus, spending grew at a 17.2% annual rate. Even as demand was buoyant, supply was being disrupted by lockdowns and disruptions to the global supply chain. An index of supply chain bottleneck inflation has risen over the past year from its traditional 1% rate to 4.5%. Now comes the war in Ukraine and sanctions on the country with the world's largest reserves of natural resources. Russia and Ukraine account for roughly a quarter of global wheat and barley exports and are leading exporters of fertilizers and metals, especially nickel. Russia also produces almost as much oil as Saudi Arabia. The war and sanctions will undoubtedly maul the Russian economy, but they will have a negative impact on the rest of the world too and will make trying to get inflationary pressures under control that much more challenging. Short-term electricity prices have surged 1000% in many countries in Europe and the inflation-adjusted retail gas price in the U.S. had its biggest monthly jump ever in March. Emerging markets have seen a bigger surge in food prices than during the 2011 "Arab Spring". Consumer price inflation in the U.K. was 6.2% in February and some economists think it could hit 10% in the coming months. The Governor of the Bank of England stated recently, "The shock from energy prices this year will be larger than any year in the 1970s and represents an historic shock to real incomes."

Inflation in the U.S. in February was almost the same as in the U.K. and, by coincidence, almost the same as it was 40 years ago. There, any historical comparison ends. Back then, inflation was falling from its 11% peak and the Fed Funds rate was 16%. Today, inflation is rising and, in February, the Fed Funds rate was essentially zero. The spread between the rate of interest and the rate of inflation is unprecedented, with the result that the market is expecting nine hikes of 0.25% in the Fed Funds rate between now and year end, the fastest monetary tightening since 1994. This tightening is likely to have a negative impact on the economy and financial markets. On previous occasions in this cycle, when the Federal Reserve was predisposed to tightening, they backed off quickly as soon as a negative impact on the economy or the markets became evident. Some believe they will do it again, but, in those prior instances, the inflationary pressures were relatively insignificant. Others believe that a recession is all but inevitable, but that the rate of inflation will fall more quickly back into the 2% target zone than markets expect. Then there are those who believe that a new long-term inflationary cycle is underway that will persist, notwithstanding rising interest rates. The previously noted outcomes from Covid and the sanctions lend some support to this view; indeed, it has been estimated that globalization has reduced secular inflation by about 2%. However, the war in Ukraine adds an additional element of short-term uncertainty to any expectations. From 2000 to 2010, emerging markets appreciated 16% per year while the NASDAQ returned 1.5% per annum. The most recent cycle was basically the mirror image. It is reasonable to suppose that this cycle is ending. Knowing what will replace it is far from obvious.