## Quarterly Economic and Market Comments June 30, 2022

Last quarter, we showcased Howard Marks' two investment rules because we speculated that the economic and market cycle that began in 2009, and especially after 2011, may have come to an end. Three months later, the idea that the old cycle is dead is even more appealing and we turn to another legendary market analyst, Bob Farrell, who spent roughly 45 years in the investment business after joining Merrill Lynch in 1957. Key among his 10 rules are the following: (1) There are no new eras excesses are never permanent; (2) Markets tend to return to the mean over time; (3) Excesses in one direction will lead to an opposite excess in the other direction; (4) Exponential rapidly rising or falling markets usually go further than you think, but they do not correct by going sideways; (5) The public buys the most at the top and the least at the bottom; (6) Fear and greed are stronger than long term resolve.

There are a number of reasons to believe that the old market and economic cycle is over. The first is the magnitude of the sell-off in the first half of 2022, dubbed the "Nightmare on Asset Allocator Street" by Ned Davis Research. A proxy index for 10-year U.S. Treasuries saw its worst first half since 1788 just before Washington became President! The S\&P 500 saw its worst first half since 1970 and only a late month rally pulled it back from being the worst since 1932. In real terms (i.e., after inflation), the S\&P 500's performance was the worst since 1872. In June, just two of 38 non-currency assets were in positive territory, the same as during the pandemic panic in March 2020. On a year-to-date basis, four of the tracked assets are in positive territory compared to seven that managed a positive return in 2008. It was only the 4th time in the past 100 years that both stocks and bonds were down two quarters in a row at the same time. Only once - in 1931 - did both stocks and bonds decline for three consecutive quarters. As a result, for a U.S. portfolio invested $40 \%$ in fixed income securities and $60 \%$ in equities, it was the second worst start to the year since 1900. Cash was king in nominal terms, but, adjusting for inflation, the real return was negative and the lowest since 1947. Energy has been the one bright spot, although even here there was a June sell-off. Other commodities were not so lucky. The unfolding housing slump has pushed lumber prices down by more than $40 \%$ and a $25 \%$ drop in industrial metal prices in the second quarter left them $12 \%$ lower than at year-end.

A second reason to think the old cycle is over is the bursting of the bubble in the speculative favourites. Cryptocurrencies are notoriously volatile, with Bitcoin having experienced sell-offs of more than $80 \%$ since inception. Still, the $56 \%$ decline in the second quarter was the biggest in its history and Ethereum, the second largest crypto, lost $67 \%$ as the $\$ 2$ trillion in market capitalization created over the past two years evaporated. One of the largest crypto lenders halted withdrawals, crypto-focused businesses laid off employees, and stablecoins, which were designed to avoid volatility, turned out not to be stable. Luna, the parent company of the popular stablecoin, Terra, cratered from its $\$ 116$ high on April 6th to $\$ 0.008$ on May 12th. An index of non-fungible tokens (NFTs) which originated on March 20, 2021 is down $90 \%$ from its high. The volume of sales on OpenSea, the world's biggest NFT marketplace, is down $75 \%$ since May. An index of so-called "meme" stocks, which includes companies such as AMC Theaters, that rose from around $\$ 2$ at the start of 2021 to nearly $\$ 60$ last June, despite barely avoiding bankruptcy, has fallen by $65 \%$. Last, but not least, shares of the technology darling ARK Innovation Fund, whose assets surged in less than a year from $\$ 2$ billion to almost $\$ 28$ billion at its February 2021 peak, has fallen by $78 \%$. Finally, the leaders of the past cycle have been underperforming. The Nasdaq Composite fell $29.5 \%$ in the first half, its worst start to a year since the
data began in 1972. The FANG Index, which includes Apple, Amazon, and the other big tech names, was down $34 \%$. U.S. value stocks had their best performance relative to U.S. growth stocks in more than twenty years.

As we start to think about the emergence of a new cycle, and given that the S\&P 500 has experienced its worst first half in more than 50 years, it is perhaps timely to look back at the past five decades which, as it happens, correspond to five pretty distinct cycles. In June 1972, investors were optimistic. The speculative excesses of the so-called "Go-Go Era" of the late 1960s were eliminated by a $35 \%$ drop in the U.S. stock market ending in the first six months of the summer of 1970 with the bankruptcy of Penn Central Railway. An easing of monetary policy saw T-bill yields fall from $7.75 \%$ to a 10 -year low of $3.25 \%$. Peace in Vietnam was said to be at hand so that a report on the annual roundtable in Barron's newspaper at year-end noted there was "not a bear among them". However, the one lesson investors took away from the most recent market decline was the importance of avoiding speculative issues and sticking with quality. This was the "Nifty 50 Era" - the notion that the key to investment success was to buy and hold the highest quality companies no matter the price paid. Events took a very different turn than the roundtable had expected. OPEC was created and the price of oil rose, followed by an oil embargo, rising inflation, rising interest rates, Watergate, and the collapse of Franklin National Bank. "Ding Dong, Avon falling", noted Barron's as stock prices fell and especially shares of the Nifty 50. When the dust settled in late 1974, the median stock in the ValueLine Index was trading at less than 5 x earnings and yielding $7.4 \%$. This seemed like the opportunity of a lifetime and, indeed, the Dow Jones Industrial Average would never again trade under 600. However, inflation had taken hold with the consumer price index peaking in 1980 at 14.7\%. Interest rates rose enough to prevent stock prices from rising, but not enough to prevent consumer prices from rising. Commodities, especially oil and gold, were the place to be. In 1979, Paul Volcker became Chairman of the Federal Reserve with the express intent to stamp out inflation - which he did. The prime rate hit a record $21.5 \%$ and 10 -year Treasuries peaked at 15.84\%. In August 1982, the Dow Jones Industrial Average bottomed out at roughly where it was more than 20 years before in 1961. Many of the Nifty 50 remained well below their 1973 highs. Coca-Cola, for example, was trading at 48 times earnings at the end of 1972 and 10 times earnings at the end of 1979. As a result, despite holding more cash than debt and producing a $20 \%$ return on equity, its stock price was down by almost $50 \%$. In 1982, with bonds providing unheard of yields and equities at valuations not seen since the 1940s, bonds were referred to by some as "certificates of confiscation" and Business Week magazine heralded "The Death of Equities". American households, who held $35 \%$ of their financial assets in equities in the late 1960s, had reduced their holdings to $11.5 \%$ in 1982. The stage was set for a new cycle.

Volcker had tamed inflation. Interest rates were falling. Oil had peaked out at $\$ 40$ per barrel and would be just over $\$ 10$ in 1998. Thatcher and Reagan were adopting more business-friendly policies. The 1980s were very different from the 1970s, but it was not completely smooth sailing. In 1987, the Dow Jones Industrials dropped $22.6 \%$ in one day, the sharpest one-day drop ever, and, by 1991, stocks still only represented $15.5 \%$ of U.S. households' financial assets. The real story in the 1980s was Japan. In 1979, Ezra Vogel wrote "Japan as Number One: Lessons for America". For the next decade, as the Japanese economy boomed and Japanese companies seemed to be beating their American rivals to the punch, Japan's competitive advantage seemed to be increasingly self-evident. In 1985, Japan's Nikkei stock index closed above 13,000 and four years later peaked at just under 39,000-\$10,000 invested in Japanese stocks in 1982 was worth $\$ 100,000$ in 1989 for a gain of $39 \%$ per annum. In 1988, 8 of the top 10 largest companies in the world were Japanese and in 1989 Japanese stocks represented $45 \%$ of global market capitalization compared to $33 \%$ for the United. States. Nor was it just equities. Commercial land prices in six major Japanese cities increased 300\% between 1985 and 1991. Then the bubble burst and the decade after 1991 was known as the "lost decade".

Unfortunately, it's now three decades as Japan's share of global stock market capitalization has fallen to $6 \%$, the biggest Japanese company, Toyota, is only the world's 40th largest, and Japan, a technology hotshot in the 1980s, is ranked 27th in digital competitiveness. Between 1997 and 2017, the Japanese economy grew at a rate of $0.13 \%$ per annum despite the fact the Bank of Japan cut interest rates to zero and kept them there. At one point in 2008, the Nikkei was trading more than $80 \%$ below its 1989 peak and remains more than $30 \%$ lower today.

As Japan was imploding, good things were happening elsewhere. The Berlin Wall came down in 1989 and, in 1991, 12 European countries signed the Maastricht Treaty creating an economic and monetary union. This was good news for Europe, but also for the United States which was now the sole global superpower. It was also the beginning of the Internet and the Dot.Com era. The U.S economy had been struggling since its boom days in the 1960s. Now, spurred on by the Internet revolution, it strengthened to the point where the federal government ran a $\$ 250$ billion surplus in 2000 and there was talk of a shortage of government bonds. American technology stocks were the place to be. In December 1999, the Nasdaq closed above 4000 for the first time ever, eclipsing the 3000 mark it had set a mere two months before, and up $85 \%$ on the year, the largest gain ever for a major domestic index. The late 1990s were, in many ways, a combination of the speculative fervour of the Go-Go era of the late 1960s and the notion from the Nifty Fifty era that no price was too high to pay for quality companies. As an example of the former, 60\% of the companies in the Russell 3000 Growth Index had negative earnings in 2000 compared to $10 \%$ twenty years before. As an example of the latter, 40 S\&P 500 companies traded at more than 10x sales (compared, for example, to $60 \%$ of the companies trading at less than 5x earnings at the 1974 bottom). In 1982, the S\&P 500 market capitalization was equivalent to $6 \%$ of global GDP; by 2000, it had reached an unheard of $40 \%$. Putting these two factors together led to the most expensive stock market in U.S. history to that point and the public was all in. U.S. households held a record $44.5 \%$ of their financial assets in equities at the 2000 peak. When the bubble burst, many speculative issues disappeared without a trace, but even quality issues suffered tremendous losses. An index of internet stocks (IIX) fell by $92 \%$ and the Nasdaq Composite by $78 \%$. A few of the highest quality issues such as Microsoft ultimately exceeded their 2000 peak, but others did not. Despite being a profitable, growing company, Cisco, for example, fell by $90 \%$ and remains more than $25 \%$ below its 2000 peak today.

In the wake of the Dot.Com bust, Americans turned their attention to real estate where a housing bubble was brewing. In the equity space, the world discovered commodities, emerging markets, and, in particular, the BRIC (Brazil, Russia, India, China) economies. Commodities had spent 20 years in the doghouse after their starring role in the 1970s, but they needed a catalyst to spark investor interest. That catalyst came in the form of strong economic growth in emerging markets. In Brazil, better governance allowed the country to take advantage of impressive endowments including a vast commodity base and a population of more than 200 million. Stock prices in Brazil rose by roughly 20x between the 2002 low and the 2008 peak. Strong growth in China was nothing new. In the wake of Mao's craziness, Deng Xiaoping boldly proclaimed in 1978, "To get rich is glorious" and, following his reemergence, China's experienced staggering rates of growth of $10 \%$ per annum. In 1978, China's economy was roughly the same size as Italy; today, it is approaching the size of the United States. Over the past two decades, China's share of global GDP has roughly quadrupled. In 2000, nearly 40\% of the firms in the fortune 500 were American and only a handful were Chinese; today, the number of American and Chinese firms is about the same. This strong Chinese growth had real implications for commodities, especially since the growth was extremely capital intensive. From 2000-10, China's imports of iron ore and oil jumped 11-fold and 10-fold respectively. In 2000, Chinese steel production was just over 100 million tonnes annually compared to more than 700 million elsewhere in the world. By 2013, Chinese production was equal to the rest of the world at more than 800 million tonnes. In
three years, between 2011 and 2013, China consumed $45 \%$ more cement than the United States did in the twentieth century. Between 2005 and 2008, this hyper growth got reflected in a run-up in the Shanghai stock index from less than 1000 to more than 6000 as Chinese stocks traded at a premium P/E ratio of more than $15 \%$ compared to the S\&P 500. Then came the Global Financial Crisis and the BRIC/commodity boom, as well as the U.S. housing boom, was over. The Shanghai Index and Brazilian stocks both declined by $73 \%$ and they remain $45 \%$ and $55 \%$ below their 2008 peaks today. Oil, which was almost $\$ 150$ per barrel in 2008, declined by $77 \%$ in 2008-09 and then to essentially zero during the pandemic. Brazil's average annual real GDP growth was less than $0.5 \%$ between 2012 and 2021, recalling images of Japan's "lost decade". Meanwhile, growth has been slowing in China, partly, but not exclusively, because of Covid, and Deutsche Bank estimates that 2020 and 2022 will represent the two slowest years of economic growth in China since 1976.

Which brings us to the current cycle which we surmise is ending. Some have dubbed the past decade as the "Everything Bubble". This Is not really accurate since not everything was in a bubble. A better description would be the "Central Bank Bubble" since the unprecedented and radical actions of central bankers were so "central" to where the bubbles emerged. A study by Bank of America concluded that corporate earnings explained roughly $50 \%$ of equity market returns in the 13 years leading up to the Global Financial Crisis. Changes to the Federal Reserve's balance sheet were not a factor. Since 2010, earnings explain only $20 \%$ of market returns; changes to the Fed's balance sheet, $50 \%$. The first and obvious bubble created by the central bankers was in bonds; for example, 10-year German bunds, whose yield fell from $4.7 \%$ in 2008 to a negative yield of almost $1 \%$ during the Covid panic in 2020. As one observer noted, " $0 \%$ interest rates make zero sense" yet, by the end of 2020, there was more than $\$ 18$ trillion of negative yielding government debt. Then there are those sectors that are very sensitive to the level of interest rates. Real estate comes to mind. The value of land owned by households in Australia equals 330\% of Australia's GDP, a level slightly higher than that reached in Japan at the peak of its asset bubble in 1990. It's worth noting that the ratio in Japan subsequently fell to $125 \%$ over a period of 25 years or roughly to where things stood in Australia 25 years ago. Over the past 50 years, the price of the average house in the U.K. has risen by 60 times or double the average wage and housing prices in Amsterdam, adjusted for inflation, have broken out of their four century trading range to a level almost seven times the average of the past 400 years. In the United States, the value of household real estate in March was 163\% of U.S. GDP, just below the $175 \%$ reached during the housing bubble in 2006; on the other hand, the price of a new home is a record 4.7 x the median family income, two standard deviations from the mean of the past 40 years and well above the 2006 peak. Last, but by no means least, microscopic interest rates made future earnings more valuable than they would have been if interest rates were higher. As a result, investors turned to growth stocks, as opposed to so-called value stocks, and especially to the biggest U.S. technology stocks which typically had great franchises, great balance sheets, and were, in fact, growing in a world where growth was hard to come by. Indeed, almost all the growth in global earnings in the decade after 2009 was attributable to technology and revenues of the 15 largest U.S. tech/telecom/ecommerce companies surpassed the 1969 peak - then the companies were industrial companies - as a \% of U.S. GDP. As in prior cycles, however, things got taken to an extreme. In November of last year, the weight of top 10 stocks in the S\&P 500 reached $32 \%$, the highest since the Nifty 50 era. Apple and Amazon were worth more than $\$ 1$ trillion more than all the stocks in the Russell 2000 Index and the top 6 FANMAG companies had a higher market capitalization than all the companies trading in Canada and Europe. The Nasdaq Composite had grown bigger than the rest of the world's stock market. The median P/E ratio of the ten largest U.S. stocks reached 38, equal to the Dot.Com peak, and 73 stocks were trading above 10x sales compared to 40 stocks in 2000.

So, what can we learn from this trip down memory lane and what, if anything, does it tell us about the next decade? Clearly, the past 50 years have been kind to Howard Marks and Bob Farrell. It's a history of cycles and there were indeed no new eras. The hot areas typically went up a lot more than rational analysis would have predicted and they did not correct by going sideways. A study by Ruchir Sharma concluded that the big winners in one decade typically had enormous gains followed by negative returns over the next ten years. Interest rates are a classic example of excesses in one direction leading to an opposite excess in the other direction. Interest rates on Italian 10-year government bonds rose from $7 \%$ in 1971 to an unheard of $22 \%$ ten years later only to fall to less than $1 \%$ over the next 40 years. Neither the high in 1981 nor the low in 2021 would have been remotely on anyone's radar screen ten years before they happened. Similar interest rate movements occurred around the world over the past five decades. On a shorter-term time horizon, 5 -year Greek bonds, which yielded more than $60 \%$ during the European debt crisis in 2011, astonishingly had a negative yield ten years later. Finally, the public does indeed buy the most at the top and the least at the bottom. At the top of the Go-Go and Dot.Com eras, U.S. households had an average $40 \%$ of their financial assets in equities; at the bottom in 1982 and 2009, they had 16.5\%.

So, what is the next cycle likely to look like? It's important to note that the themes that characterized the past five cycles did not materialize completely out of thin air. Gold did well in the 1970s because the price was allowed to rise after being fixed for decades and inflation really was out of control. The price of oil also rose for similarly logical reasons. Japan really did execute an amazing industrial renaissance after World War II. The internet really did change the way we do things. China really did turn itself into an economic gorilla. The world's central bankers really did flood the world with liquidity. The problem is that all of these trends ended in bubbles that burst. Are there obvious trends waiting to be recognized over the next decade? Value stocks have been outperforming growth stocks in 2022, but the under-performance in the past cycle was massive. It has been estimated that the performance of value relative to growth in the period to 2020 was the worst in 200 years. On a price-to-book basis, Russell 1000 Growth valuations exceeded the Russell 1000 Value valuations by six standard deviations from the norm. It was, one analyst noted, "Value investing's darkest hour". This seems like a logical area to explore. Foreign markets - the U.K., Europe, Latin America, and others - look inexpensive relative to their American counterparts. Commodities have rallied mightily from the lows, but, as with value stocks, were extremely depressed in a longer-term context. The list of possibilities goes on, but first, of course, we have to get through the current bear market. A rotten half such as we just experienced typically leads to a rally in subsequent quarters. On the other hand, interest rates are still rising, equities are not cheap in the historical context, and investors, despite their skittishness, remain pretty committed to equities. So, further volatility would not come as a surprise. However, two lessons we can take away from an examination of the past 50 years, which seem to be standing us in good stead in this difficult environment, is to avoid highly speculative areas of the market and, conversely, to avoid overpaying for quality securities.

