

The CIO Monthly Perspective

October 4, 2021



Jimmy C. Chang, CFA

Chief Investment Officer
Rockefeller Global Family Office
(212) 549-5218 | jchang@rockco.com

THE COBRA EFFECT

A dovish Fed trying to sound hawkish

The S&P 500 Index's eight-month winning streak was broken by a sudden surge in long bond yields and negative developments in China. After months of repeated assurance that high inflation was transitory, the Fed turned more hawkish by acknowledging that inflation could remain elevated for longer, and that it was all but ready to start tapering so QE would be finished by mid-2022. Investors reacted by driving U.S. Treasury yields sharply higher across the curve, which wound up hurting precious metal prices while strengthening the U.S. Dollar Index (DXY) to the highest levels since last November. The sudden backup in sovereign bond yields was also a global phenomenon, with China being the only exception among major economies.

The dreaded Delta variant wave appeared to have peaked in most geographies, but global supply chain disruptions lingered on. A shortage of truck drivers in the U.K. led to panic over gasoline supply, resulting in long lines of cars around petrol stations, reminiscent of the 1970's supply shock and hyperinflation. The U.K. and Europe were also suffering from an energy crisis due to unusual weather patterns – a cold winter that drew down the region's natural gas inventory, and lower wind speeds that hurt wind power generation. The increased demand for fossil fuels has driven crude oil and natural gas prices to multi-year highs.

Here in the U.S., a record number of ships waiting to unload their cargos have been stuck for weeks outside the ports of Los Angeles and Long Beach. The entire supply chain – longshoremens, truck drivers, warehouse operators, wholesalers and retailers – appears to be experiencing acute labor shortages. The controversial vaccine mandate for employment may further increase employee turnover.

China's summer of regulatory discontent morphed into an autumn of economic woes. More than half of Chinese provinces were hit with rolling blackouts due to soaring prices and shortages of coal. Power rationing has disrupted industrial activities and will likely accentuate the global supply chain problems. Many investors breathed a sigh of relief that China Evergrande's debt debacle did not create a "Lehman moment." However, Evergrande's problems are still unresolved, and they signal tougher times ahead as it will likely take Chinese policymakers a long time to slowly let the air out of a gigantic property bubble to maintain social stability.

The upcoming earnings reporting season could be a roller-coaster ride as the impact of these issues are felt. The market pullback of late is an overdue correction in the context of a bull market. Notwithstanding the softness in the third quarter, the broader trend is still one of continued expansion.

DIE VERSCHLIMMBESSERUNG

Verschlimmbesserung (pronounced fir-sch-lim-bess-er-oong) is a unique German word that lacks an equivalent in English. It means an intended improvement that winds up making things worse. History is replete with verschlimmbesserungen through unintended consequences. The late German economist, Horst Siebert, published a book in 2002 titled *Der Kobra-Effekt*, or *The Cobra Effect*, to highlight this issue in public policymaking.

The title of the book comes from an unconfirmed anecdote about India under British colonial rule. The story alleges that a British administrator was so concerned about the venomous cobras in Delhi that he offered a bounty for every dead cobra in order to reduce the snake population. The policy worked initially as people were actively hunting down cobras for the reward. However, some enterprising folks soon began breeding cobras and turning them in for money. Upon learning of this development, the British administrator rescinded the bounty program. Unable to harvest these cobras for money, the snake breeders released them into the wild, which wound up increasing the cobra population in Delhi.

Some verschlimmbesserungen have deadlier consequences. The most egregious in history may be Chairman Mao's infamous "Smash Sparrows" campaign that began in 1958. It was part of his "Four Pests" campaign to mobilize Chinese people across the vast country to exterminate mosquitos, rats, flies, and sparrows. The former three were targeted for carrying pathogens and transmitting diseases, but it was not easy to figure out why Chairman Mao had sparrows in his crosshairs. It turned out that the poor birds were each estimated to consume up to 4.5 kilograms of grain per year, hence a perceived threat to the people's commune's food production objectives.

Across the vast proletariat paradise, sparrow eggs were crushed, nests were destroyed, and chicks were killed. Some anti-sparrow zealots even came up with the loony idea of banging pots and pans around sparrow nests in the hopes that the sleep-deprived sparrows would eventually drop dead from exhaustion. It was alleged that when the Polish embassy in Beijing refused to turn over scared sparrows landing on the premises for refuge, it was surrounded by zealots banging on drums for days until the dead sparrows were swept out.

What Chinese policymakers failed to realize was that sparrows would make up for their grain consumption by eating crop damaging insects. By the following year, the disappearance of sparrows in China allowed the insect population of leafhoppers and locusts to multiply by leaps and bounds. These insects swarmed the country and feasted on crops, compounding the decline in rice production that was already damaged by the reform efforts from the disastrous Great Leap Forward campaign. The ecological imbalance contributed to the Great Chinese Famine which lasted from 1959 to 1961. It was one of the worst man-made disasters in history, with an estimated death toll in the range of 15 to 50 million people.

| Equity Markets Indices¹ | 8/31/21 Price | 9/30/21 Price | MTD Change | YTD Change |
|---|--------------------------|--------------------------|-----------------------|-----------------------|
| MSCI All Country World | 741 | 710 | -4.3% | 9.8% |
| S&P 500 | 4523 | 4308 | -4.8% | 14.7% |
| MSCI EAFE | 2356 | 2281 | -3.2% | 6.2% |
| Russell 2000 ^{®2} | 2274 | 2204 | -3.1% | 11.6% |
| NASDAQ | 15259 | 14449 | -5.3% | 12.1% |
| TOPIX | 1961 | 2030 | 3.5% | 12.5% |
| KOSPI | 3199 | 3069 | -4.1% | 6.8% |
| Emerging Markets | 1309 | 1253 | -4.2% | -3.0% |

Fixed Income

| | | | | |
|----------------------------|-------|-------|----|-----|
| 2-Year US Treasury Note | 0.21% | 0.28% | 7 | 16 |
| 10-Year US Treasury Note | 1.31% | 1.49% | 18 | 57 |
| Bloomberg US Agg Corp Sprd | 0.87% | 0.84% | -3 | -12 |
| Bloomberg US Corp HY Sprd | 2.88% | 2.89% | 1 | -71 |

Currencies

| | | | | |
|---------------------------|------|-------|-------|-------|
| Chinese Renminbi (CNY/\$) | 6.46 | 6.44 | -0.2% | -1.3% |
| Brazilian Real (Real) | 5.15 | 5.44 | 5.6% | 4.7% |
| British Pound (\$/GBP) | 1.38 | 1.35 | 2.1% | 1.4% |
| Euro (\$/Euro) | 1.18 | 1.16 | 2.0% | 5.5% |
| Japanese Yen (Yen/\$) | 110 | 111.3 | 1.2% | 7.8% |
| Korean Won (KRW/\$) | 1159 | 1184 | 2.1% | 9.0% |
| U.S. Dollar Index (DXY) | 92.6 | 94.2 | 1.7% | 4.8% |

Commodities

| | | | | |
|------------------------|------|------|-------|--------|
| Gold | 1814 | 1757 | -3.1% | -7.4% |
| Oil | 68.5 | 75.0 | 9.5% | 54.6% |
| Natural Gas, Henry Hub | 4.38 | 5.87 | 34.0% | 131.1% |
| Copper (cents/lb) | 436 | 409 | -6.2% | 16.2% |
| CRB Index | 218 | 229 | 4.9% | 36.4% |
| Baltic Dry Index | 4132 | 5167 | 25.0% | 278.3% |

Source: Bloomberg

Mao was forced to suspend his war on sparrows and replace them with bed bugs on the eradication list in 1960. Two years later, the entire "Four Pests" campaign was called off. The Chinese government eventually imported hundreds of thousands of Siberian tree sparrows from the Soviet Union to help restore the natural balance. Come to think of it, the Chinese language also lacks an equivalent word for verschlimmbesserung. However, it's not difficult to translate the proverb, "the road to hell is paved with good intentions."

HOW THE MAGICAL 2% WAS BORN

The venerable Federal Reserve was created in December 1913 to run the nation's monetary policy and to act as the lender of last resort in times of financial stress. Over time, politicians and

various interest groups all looked to the Fed for more - from funding the government's spending to guaranteeing full-time employment. In 1977, Congress amended the Federal Reserve Act and explicitly stated that the Fed's goals are "maximum employment, stable prices and moderate long-term interest rates." However, the third goal - moderate long-term interest rates - is seldom mentioned as it is assumed to be the outcome upon achieving the "dual mandate."

With high inflation as the economic scourge of the 1970s and the early 1980s, Fed Chairmen Paul Volcker and Alan Greenspan were more focused on the price stability part of the dual mandate. However, "price stability" was never clearly defined by any central bank until the Reserve Bank of New Zealand officially came up with a 2% inflation target in 1990. Interestingly, the 2% target was not derived from any rigorous academic studies or cost-benefit analyses. It was arbitrarily set at the behest of the Reserve Bank Act of New Zealand, which the Parliament passed in haste shortly before Christmas 1989 so lawmakers could leave for the holiday.

New Zealand suffered double-digit inflation for much of the 1970s and the 1980s. On April 1, 1988, Roger Douglas, the Minister of Finance, shocked his colleagues and central bank officials by proclaiming on a TV interview that the government's policy was directed at driving inflation down to zero to 1% in the coming couple of years. It sounded like an April Fool's joke with inflation hovering at 9% at the time. Douglas sensed that most people's inflation expectations were still anchored at around 5% to 7%. He thought that an aggressively low inflation target announced to the public could help bring down expected price and wage increases among businesses, labor unions, and consumers.

With the passage of the Reserve Bank Act, David Caybill, Douglas' successor, had to define an inflation target with Donald Brash, the newly installed Governor of the Reserve Bank of New Zealand. They decided to take Douglas' arbitrarily stated figures as a starting point and widened the band to 2% for more maneuverability. Thus, the magical 2% inflation target was born. This inflation-targeting, with a publicly stated numerical objective, immediately got the attention of other central banks as it was considered a radical move at the time.

Amazingly, businesses, labor unions, and the government soon started to use the 2% inflation as a guidepost in contract negotiations, and the march toward the 2% inflation target became a self-fulfilling process. By the end of 1991, with a little help from a recession in the prior year, New Zealand's inflation had finally dipped below 2%. This success with inflation targeting prompted many other central banks to formally adopt a numerical inflation target, and the 2% inflation rate became the gold standard in modern central banking.

A NUMBERS GAME

Since Paul Volcker broke the back of inflation in the early 1980s, inflation in the U.S., as measured by the change in the

Consumer Price Index (CPI), has drifted lower with each passing decade. Inflation was running at an annualized pace of 5.1% in the 1980s, 2.9% in the booming 1990s, 2.6% in the turbulent 2000s bookended by two recessions, and 1.7% in the 2010s. There are several explanations for this steady decline in the rate of inflation: technological advances; wage arbitrage with China, which provided the West with cheap labor; defanging of labor unions; and demographic changes. There is, however, another material but often ignored factor - several rounds of major revision in how inflation is calculated with the goal of keeping it as low as possible.

How CPI is calculated has been highly politicized and manipulated ever since Congress asked the Bureau of Labor to collect data on wholesale and retail prices in the 1890s. The effort was aimed at gauging the cost of living in order to resolve various political, social, and economic disputes. During the 1960s, CPI was used to determine levels of welfare payments, including the growing Social Security outlays. By the late 1980s, nearly half of the federal budget was linked directly or indirectly to the cost-of-living adjustment (COLA). As such, Washington had every incentive in the face of rising deficits to adopt new calculation methods to suppress the reported CPI. During the 1980s, the Bureau of Labor Statistics tackled the biggest component of the index by replacing housing prices with owners' equivalent rent of primary residences. In subsequent decades, the BLS also adopted the substitution effect and hedonic price adjustment. The former replaces pricier items with relatively less expensive substitutes (e.g., assuming people would consume more chicken if the price of beef goes up), and the latter would adjust an item's price downward based on quality enhancements. In short, one can no longer make an apples-to-apples comparison between today's inflation figures and past data. According to the website Shadowstats.com, which attempts to quantify today's inflation using the 1980's and 1990's CPI calculation methodologies, the 5.3% rise in headline CPI reported for August 2021 is equivalent to 13.2% using the methodology from 1980. Come to think of it, the late great Paul Volcker could have broken the back of inflation by simply changing the calculation methodology in 1981 rather than resorting to a tough recession.

BERNANKE'S PLAYBOOK

Up until the Great Financial Crisis (GFC), the Fed's policies had been quite conventional, and inflation was still viewed as the bane of the central bankers' existence. However, in November 2002, while he was still a governor on the Federal Reserve Board, Ben Bernanke presciently warned of the risk of deflation in a speech titled *Deflation: Making Sure "It" Doesn't Happen Here*. He laid out various anti-deflation policy tools - bringing the Fed Funds to the zero bound, asset purchases, including foreign government bonds, and aggressive fiscal policy using Milton Friedman's famous "helicopter drop" of money. In the wake of the Great Financial Crisis, most of the policies outlined

in this “helicopter money” speech, sans purchase of foreign bonds, were put into practice.

When Bernanke first introduced quantitative easing after the Fed Funds rate was brought to the zero bound in late 2008, many thought it would unleash the force of inflation. By the autumn of 2011, the U.S. CPI had climbed to as high as 3.9% year-on-year due to a combination of easy comparisons and an “echo” bubble in commodities triggered by China’s aggressive infrastructure spending. However, the core CPI (excluding food and energy prices) did not rise appreciably above 2%, prompting the Federal Open Monetary Committee (FOMC) to officially introduce a 2% inflation target on January 25, 2012. The 2% target is based on the price index for personal consumption expenditures (PCE), which has historically been about 50 bps below the levels of CPI. In other words, the Fed’s inflation target is a 2.5% CPI; this is an important point as most of us tend to associate the 2% inflation target with the CPI rather than the PCE.

At the press conference following the inflation targeting announcement, Chairman Bernanke was asked why the Fed would want to debase the U.S. dollar’s purchasing power by 2% a year. Bernanke retorted that the argument was “not really a very good one” unless the questioner was one of those people who put their lifetime savings “in the mattress.” The scholarly Fed chairman pointed out that over a longer period of time, even a certificate of deposit (CD) “will compensate you for inflation.” Well, I don’t know what “over a longer period of time” meant to Bernanke, but it turned out that the one-year CD rate had stayed well below the CPI until early 2018, and it had fallen back below the rate of inflation by late 2019. Today, a typical one-year CD yields about 12 bps, far below the 4.4% year-to-date increase in the CPI or the 3.6% rise in the PCE.

Mr. Bernanke should have stated that the intent of QE was to prod investors to take risks rather than park money in CDs. Indeed, QE was initially designed to drain “safe” securities from the market and force investors to channel their money into riskier assets. The resulting wealth effect was supposed to fuel economic growth by driving more consumption and capital spending. There was much concern that too much money supply would drive up inflation. However, empirical evidence has shown that the much-feared inflation threat had never materialized since the increased monetary base was stuck in the banking system as financial institutions were put under much tougher regulatory scrutiny after the Great Financial Crisis. In short, inflation was rampant in financial asset prices, but not in the real economy.

Chairman Bernanke’s aggressive monetary prescriptions were instrumental in rehabilitating the U.S. economy and in rekindling the market’s animal spirits. The S&P 500 Index surged more than 130% from the GFC’s nadir in March 2009 to reach a new all-time-high on the last trading day of March 2013. With the mission to save the economy and the market largely accomplished, it was time to contemplate a graceful exit from

the era of unconventional monetary policies.

A NORMALIZATION INTERLUDE

In May 2013, with unemployment at 7.5%, Chairman Bernanke surprised the market by signaling the intention to taper the Fed’s pace of asset purchases. While the “taper tantrum” sent bond yields sharply higher and roiled emerging markets, U.S. equities rose steadily throughout the tapering process, which began in December 2013 and was completed by late 2014. The taper-induced surge in Treasury yields was short-lived -- the 10-year U.S. Treasury yield had peaked at 3.02% on the final day of 2013 and then headed steadily lower. It turned out that the bond market was prescient about two catalysts on the horizon that would materially bring down the rate of inflation.

The first catalyst was the European Central Bank’s (ECB) introduction of the negative interest rate policy (NIRP) in June 2014 by cutting its deposit facility rate to -0.1%. This unprecedented move by a major central bank was merely the first of five cuts that eventually took the policy rate to -0.5% by September 2019. The other catalyst was a multi-year slide in crude oil prices, with July 30, 2014 being the last time that the WTI crude oil price had traded above \$100 per barrel.

The ECB’s NIRP was probably the most controversial monetary policy in recent history, as it turned the lenders-earn-and-borrowers-pay paradigm upside down to encourage more risk taking, borrowing, and spending. It was amazing that Germany, known for its high savings rate and vigilance against inflation, went along with the decision. The Faustian bargain may have been based on the expectation that this upside-down policy would materially weaken the euro to benefit Germany’s export-heavy economy. Indeed, since the controversial policy was announced on June 5, 2014, the euro has weakened from 1.37 to its current level of 1.16 against the U.S. dollar.

The combination of the Fed’s tapering and the ECB’s NIRP led to a powerful surge in the value of the dollar - the U.S. Dollar Index (DXY) rallied more than 25% in a span of six months, from around 80 in June 2014 to over 100 by early 2015. The strong currency, which lowered the price of imports, and the collapsing oil price - the WTI crude oil price fell from over \$100 per barrel for much of the first half of 2014 to below \$40 per barrel at the end of 2015 - resulted in back-to-back years of sub 1% CPI in 2014 and 2015.

In December 2015, with the CPI and the unemployment rate at 0.5% and 5.1%, respectively, Fed Chair Yellen raised the Fed Funds rate for the first time since the Great Financial Crisis. Judged by the Fed’s current outcome-based policymaking approach, the rate hike in December 2015 would be unfathomable today. However, policymaking at the time was still forecast-based, and the FOMC wanted to create a sufficient cushion in interest rates so there would be room to ease at the onset of the next recession.

Chair Yellen’s first rate hike turned out to be a controversial one

as concerns about the global economy – a slowdown in China’s growth and weakness across oil producing countries – triggered a 10% correction in the S&P 500 Index at the start of 2016. Crude oil price collapsed to the mid-\$20s per barrel and the fear of rising defaults among oil producers also plagued high yield bonds. The market turmoil forced the Fed to stay put until December 2016, six weeks after Donald Trump’s surprise victory that rekindled the market’s animal spirits. In June 2017, the FOMC announced the intention to start the long-awaited quantitative tightening (QT), which sought to reduce the size of the Fed’s balance sheet by gradually reducing reinvestments of maturing securities. QT commenced in October of that year, shortly before President Trump nominated Jerome Powell to succeed Chair Yellen.

CHAIR POWELL’S METAMORPHOSIS

Chair Powell is the first Fed Chairman since William Miller, Paul Volcker’s predecessor, without formal economics training. During his first year as the Chair, Powell was viewed as a hawk by the market and was frequently berated by President Trump. In early October 2018, shortly after his third rate hike which took the Fed Funds rate above 2%, he set in motion a market correction by saying that the benchmark rate was still “a long way” from neutral. The sell-off picked up steam in December following his fourth rate hike and the comment that the Fed’s balance sheet reduction was “on autopilot.” A disorderly equity sell-off on Christmas Eve finally convinced Chair Powell that the Fed’s tightening campaign was at risk of choking off the economic expansion.

A chastened Chair Powell did a quick policy U-turn. By early 2019, the Fed started to signal that there would be no further rate hikes and that QT would end soon. The Fed then cut the Fed Funds rate at the July, September, and October FOMC meetings and ended QT in August 2019. Chair Powell’s quick metamorphosis from a hawk to a dove was quite amazing considering that the unemployment rate would hit an all-time low of 3.5% in September 2019. Then, in reaction to a seizure in the overnight repo market, the Fed started to pump liquidity into the system again. During the final four months of 2019, the Fed had expanded its balance sheet by more than \$400 billion, but Chair Powell insisted that it was not QE.

OVERDOING CRISIS MANAGEMENT

Chair Powell did an admirable job when confronted with the unprecedented COVID-19 crisis. As markets seized up in March 2020, which infected even the most liquid and safest U.S. Treasury market, the Fed lived up to its role as the lender and buyer of last resort. By merely announcing its plan to purchase a whole gamut of assets from municipal securities to even junk bonds, the Fed was able to stabilize those markets. The Fed expanded its balance sheet by nearly \$3 trillion during the three months from March through May 2020. The massive liquidity injection and the timely fiscal stimulus wound up creating the strongest bull market opening since the Great

Depression.

As the U.S. economy mounted a strong numerical rebound in the third quarter of 2020, the Fed’s pace of QE slowed to a trickle. From June to the election day in November 2020, the Fed’s balance sheet was essentially unchanged. The market and the economy did just fine. The S&P 500 Index climbed 11% during that period, and financial conditions were getting progressively looser. By mid-November 2020, the prospect of normalization was also brightened by the availability of mRNA vaccines. Despite these positive developments, the Fed had decided to get even more dovish as if the fate of the world depended on the collective wisdom of this small clique of unelected FOMC members.

In August 2020, the Fed officially revised its inflation-targeting policy from achieving 2% inflation to a goal of “inflation that averages 2% over time.” It gives the Fed cover to let inflation temporarily rip above 2%. In December 2020, the Fed officially introduced another round of QE to the tune of \$120 billion per month, or \$1.44 trillion per year.

Most investors were too giddy with this massive QE to ponder whether the move was warranted in late 2020. A cynic may argue that Chair Powell had held back QE during the run-up to the presidential election to get back at his erstwhile tormentor-in-chief. However, I suspect the upsized QE might have been designed to indirectly fund the new administration’s “Build Back Better” spending initiatives. Indeed, in this era of deficit-financed fiscal spending binge, the Fed has become Uncle Sam’s biggest indirect financier. Since the start of the pandemic in March 2020, Uncle Sam has run up \$5 trillion of debt while the Fed’s balance sheet has grown by \$4.1 trillion, or 83% of the federal government’s increase in debt. Year to date, the Fed’s balance sheet has ballooned by \$1.1 trillion while the net increase in federal debt was only \$680 billion.

VERSCHLIMMBESSERUNG VON THE FED

The Fed’s ultra-loose monetary policies have emboldened speculators and created some classic bubbles. It was not a coincidence that on December 16, 2020, the day of the Fed’s \$120 billion per month QE announcement, Bitcoin surged double digits to above \$20,000 for the first time. It kicked the cryptocurrency craze into overdrive. About a month later, the shocking short squeeze of Gamestop kicked off the meme stock craze that struck fear in the hearts of professional short sellers. Stock and crypto trading is so in vogue now that there are numerous anecdotes of people quitting their jobs to become day traders, which has contributed to the labor shortage issue. Robinhood was reportedly organizing college tours to attractive new customers. My friends’ ninth-grade daughter was recently asked to write about non-fungible tokens (NFTs) by the editor of her school paper. It makes me wonder who will be left to do productive work if everyone can get rich by being financial speculators or house flippers.

The Fed’s verschlimmbesserung has led to widening

inequality, as the rapid asset price appreciation has disproportionately benefited the moneyed classes. First time home buyers must compete with deep-pocketed institutional investors who have been scooping up houses for rental income. Less affluent retirees are deprived of interest income for their hard-earned savings while their limited budgets must contend with soaring food and rental prices. However, it is not a problem according to our inflation statisticians, as their substitution effect could have retirees happily switching from beef to chicken. I wonder if they have considered modeling octogenarians riding scooters in lieu of driving a car.

It's ironic that most free-market proponents and economists would frown upon price controls by governments or business cartels, yet readily accept central banks' outright manipulation of interest rates which are the prices of money. With the risk-free rate being one of the most important variables in our modern economy, the unconventional policies of central banks, from QE to NIRP, might have created far more distortion in society than many run-of-the-mill government interventions. To paraphrase Oscar Wilde, financial markets, starting with fixed income, have been so distorted that participants know the price of everything and the value of nothing. The proof is that more than \$13 trillion of bonds worldwide still have negative yields, and most developed market sovereign bonds currently carry negative real yields. In a world of less blatant intervention by central banks, rational investors would shun negative yielding bonds and at least demand sufficient income to cover the expected rate of inflation. As Chairman Bernanke said in 2012, even a CD should compensate for inflation, right?

IN FED WE TRUST?

The Fed's strong crisis management and subsequent dovishness in the face of rising inflation have elevated the market's moral hazard - a lack of concern for risk on the assumption that the Fed would always provide a backstop. Many may conclude that if the Fed was able to limit the duration of a bear market caused by the pandemic and the worst economic collapse since the Depression to under 40 days, a garden variety recession in the future would barely hurt the market. It has fostered a "bad news is good news" trading mentality as the Pavlovian response to bad economic data is to expect the Fed to stay looser for longer to keep asset prices elevated and interest rates unnaturally low. Indeed, the co-CIO of a leading hedge fund has recently said that a recession would not be a problem for the market because we know what the policy playbook will be - more easing and deficit-financed spending.

The Achilles heel of this easy money fueled "prosperity" is, of course, inflation, or stagflation to be more precise. If confronted with an imminent recession while inflation remains elevated, would the Fed still pursue ultra-loose policies to reflate the economy? Easing in the face of elevated inflation would run the risk of tanking the U.S. dollar and stoking even higher inflation.

The Fed is, of course, aware of this issue, hence the common response on higher-than-expected inflation is always "transitory." The Fed hopes that the repeated incantation of "transitory" would help keep people's inflation expectations well anchored. Indeed, the modern central bank's orthodoxy is, as shown in the Reserve Bank of New Zealand's inflation targeting experience, that any inflationary shocks would have a much less persistent effect on inflation trends as long as the public's inflation *expectations* are well anchored.

The bad news for the Fed is that various surveys have shown the public's inflation expectations rising to multi-year highs. The Fed is also at risk of losing credibility as its army of PhDs has badly underestimated inflation in 2021. At the December 2020 FOMC meeting, the Fed had forecasted PCE inflation of 1.8% for 2021. In subsequent meetings, it had to keep on raising its forecast to play catch up - 2.4% at the March meeting, 3.4% in June, and then 4.2% at the most recent meeting on September 22nd. Then, as if there was not already enough uncertainty about this recovery from the pandemic, Jeremy Rudd, a respected Fed economist, published a staff working paper arguing that the widely accepted inflation-expectation-drives-trend-inflation belief "rests on extremely shaky foundations" and could "easily lead to serious policy errors."

At the end of a recent "Fed Listens" virtual roundtable where Chair Powell heard an earful from small business owners on the real-life challenges in running a business these days, he acknowledged, "We are really living in unique times...I've never seen these kinds of supply-chain issues, never seen an economy that combines drastic labor shortages with lots of unemployed people." Indeed, COVID-19 has been so disruptive that no one knows for sure how things will play out.

NO HISTORICAL PARALLELS

At the post-FOMC meeting press conference two week ago, Chair Powell signaled that tapering will likely start before year end and QE would be wrapped up by the middle of 2022. It has become clear that QE has ceased to be of help to the real economy when our system is flushed with money that has no place to go. More than \$1 trillion (\$1.6 trillion on September 30th!) have been parked at the Fed via reverse repos each day due to a lack of appropriate investment alternatives, yet the Fed is still draining \$120 billion of safe securities from the market each month. Even Chair Powell has acknowledged that QE's "usefulness is much less" now.

Once tapering gets started, the focus of investors will shift to the timing of the next rate hike. With QE set to be wrapped up in mid-2022, the Fed is unlikely to hike the Fed Funds rate before the November 2022 mid-term election. That leaves the December 2022 FOMC meeting as the earliest window for tightening. In fact, the market has now priced in a rate hike for that meeting.

The challenge for tightening in late 2022 or 2023 is that the Fed may be confronted with a potentially slowing economy by then.

The world's two largest economies, the U.S. and China, will likely pump sufficient stimulus in 2022 to prop up economic growth before the mid-term elections in the U.S., and China's 20th National Congress in late 2022. The former will determine if President Biden will be able to get anything meaningful accomplished legislatively in the last two years of his term. The latter will rubber-stamp China's top leaders for the following five years, including Chairman Xi's bid for a third term. Once we get past these events, there could be a fiscal cliff waiting in 2023. Based on historical patterns, Republicans are likely to recapture the House in November 2022, which will likely end the fiscal gravy train. In China, assuming that Chairman Xi is successful in consolidating his power to get a third term, he will likely be even more aggressive in putting his Maoist ideology into practice, which would not bode well for China's economic growth.

Historically, the Fed usually starts to tighten when growth is still accelerating, and it pauses after the cycle has peaked out. By staying dovish for so long in the current cycle, the Fed's expected tightening schedule will likely coincide with a rapidly slowing economy, just like Chair Yellen's first hike in December 2015. Whether the Fed dares to pull the trigger will likely depend on where inflation settles, beyond this unique period of supply chain disruptions and artificial labor shortages. There is also the question of who will be chairing the Fed as Powell's odds of renomination have suddenly plunged in the betting

market. It was not a good sign that Senator Warren called Chair Powell a "dangerous man" to his face and said she would not vote for his renomination. President Biden may wind up yielding to progressive lawmakers to nominate a Democrat as he needs their support to pass his big spending agenda. Progressives will also influence the selection of three Fed governors and two district presidents in the coming months, which would likely make the institution even more dovish.

A dovish Fed will be more worried about a slowing economy than elevated inflation. It may also refrain from tightening in a slowing economy for fear of bursting the various bubbles in the system, as the implosion could unleash much deflationary pressure. In other words, the Fed might just find itself trapped by the bubbles it has helped create. When that eventuality becomes apparent to the market, various inflation hedges will likely outperform materially.

The road ahead will likely be bumpier as the tsunami of stimulus recedes while supply chain disruptions linger on. It's hard to find historical parallels to the current environment, so the prudent thing is to stay diversified and keep some dry powder to capitalize on potential opportunities. I suspect that, in time, economists and historians will be debating whether the Powell Fed's switch to reaction-based policymaking was appropriate while investors will be looking back to 2021 and saying, "those were the days."

For more information on Rockefeller Capital Management: rockco.com

This paper is provided for informational purposes only and should not be construed, as investment, accounting, tax or legal advice. The views expressed by Rockefeller Global Family Office's Chief Investment Officer are as of a particular point in time and are subject to change without notice. The views expressed may differ from or conflict with those of other divisions in Rockefeller Capital Management. The information and opinions presented herein are general in nature and have been obtained from, or are based on, sources believed by Rockefeller Capital Management to be reliable, but Rockefeller Capital Management makes no representation as to their accuracy or completeness. Actual events or results may differ materially from those reflected or contemplated herein. Although the information provided is carefully reviewed, Rockefeller Capital Management cannot be held responsible for any direct or incidental loss resulting from applying any of the information provided. References to any company or security are provided for illustrative purposes only and should not be construed as investment advice or a recommendation to purchase, sell or hold any security. Past performance is no guarantee of future results and no investment strategy can guarantee profit or protection against losses. These materials may not be reproduced or distributed without Rockefeller Capital Management's prior written consent.

Rockefeller Capital Management is the marketing name for Rockefeller Capital Management L.P. and its affiliates. Rockefeller Financial LLC is a broker-dealer and investment adviser dually registered with the U.S. Securities and Exchange Commission (SEC). Member Financial Industry Regulatory Authority (FINRA); Securities Investor Protection Corporation (SIPC).

1 Index pricing information does not reflect dividend income, withholding taxes, commissions, or fees that would be incurred by an investor pursuing the index return.

2 Russell Investment Group is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. Russell® is a trademark of Russell Investment Group.