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BOND'S TANTRUM, FED'S CONUNDRUM

Markets bubbled up, then bond yields caught up

It's only two months into 2021, yet one may wonder just how much excitement investors can take. Money poured into risk assets from the first day of February as market participants realized that the short-squeeze saga perpetrated by the Reddit Army was largely an inconsequential high-amplitude but short-duration event. The twin drivers of vaccination and fiscal stimulus helped to convince investors that the U.S. economy could be poised to enjoy a year of emerging market like growth, perhaps even outpacing our strategic competitor, China. The reflationary thesis turbocharged most commodity and equity prices around the globe. Bitcoin resumed its great act of levitation thanks to Elon Musk's enthusiastic affirmation. However, Fed officials seemed to have missed the reflation party invitation and continued to warn about the sorry state of the economy, elevated unemployment, and the persistent threat of disinflation. Of course, these were convenient justifications for continued monetary largess even in the face of unprecedented twin drivers. Bond investors may have become fed up with this dovish narrative and finally threw a tantrum by pushing the 10-year Treasury yield to as high as 1.61% intraday on February 25th. The sudden spike-up in long bond yields triggered a round of profit-taking in risk assets.

Despite the late selloffs, it was still a month of sizeable gains. The S&P 500 Index was up 2.6%, and the S&P 500 Equally Weighted Index was even stronger at 5.9% thanks to the outperformance of value stocks. On the commodity side, crude oil and copper soared 18% and 16%, respectively. Even the heavily shorted greenback managed to eke out a gain. Gold, however, experienced a 6% meltdown as investors felt little need for a safe haven, especially with real bond yields rapidly trending higher. Some of the Big Tech and meme stocks have also lost ground as higher bond yields made it harder to justify elevated valuations. Investors also seemed to have become more concerned about the difficult comparisons that work-from-home beneficiaries will face this year as the world comes out of the pandemic era.

The brief bond market tantrum is a warning to the Fed that, as the pace of reflation gathers momentum, investors will start to price in earlier tightening than what the Fed may desire. Bond yields are still too low to pose a threat to risk assets at this point, but a rapid and disorderly rise could be temporarily disruptive. It will be interesting to see how Fed officials finetune their messages to manage investor expectations.

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A MAN AHEAD OF HIS TIME

In 1715, Louis XIV passed away after a 72-year reign, and his nephew, the Duke of Orleans, was appointed Regent to the young Louis XV. The Sun King's decades of profligacy and military adventures had left France's finances teetering on the edge of bankruptcy. Out of desperation, the Duke approached his friend John Law to put his heretofore unorthodox economic theories into practice.

Born in Edinburgh in 1671 to a family of goldsmiths, John Law was a handsome and charismatic ladies' man who excelled at gambling thanks to his good memory and mental calculation of odds. He had a run-in with the law at age 23 for killing his opponent at a duel over the affections of a noblewoman who happened to be the king's mistress. He managed to escape from prison a few days before execution and fled to Amsterdam. Over the next two decades, he built up a nice fortune gambling in various European cities and took an interest in economic and financial matters. He published several papers advocating the establishment of a powerful central bank issuing paper currency to drive credit growth, but these were largely ignored by the establishment. In the mid-1710s, he settled in Paris while his wit and charm made him a regular at the upper society's gambling parties.

Law attributed France's financial woes to an insufficient amount of money in circulation and advocated his paper currency remedy. He convinced the Duke to set up the Banque Générale Privée ("General Private Bank") in 1716 to issue paper money, or banknotes. These notes were initially backed by the bank's reserves in gold and silver and guaranteed to be exchangeable for silver. The bank also accepted deposits in the form of government debts at face value rather than the steep discounts they were trading at. The bank quickly grew its lending and the quantity of banknotes issued was multiples of its precious metal reserves – a precursor to the fractional-reserve banking system. The increased circulation of money soon had the desired effect of lifting economic activity.

In 1717, Law formed Compagnie d'Occident ("Company of the West"), also known as the Mississippi Company. It was granted a trading and taxing monopoly over the French colony in the New World, a vast territory spanning from present-day Louisiana to parts of Canada. Settlers were dispatched there to harvest its riches, and an outpost near the mouth of the Mississippi River was named La Nouvelle-Orléans (New Orleans) in honor of the Duke. To finance its operation, the company issued equity at 500 livre per share but also accepted government bonds as payment. Lured by the exaggerated promise of precious metals and other riches in the New World, investors from all walks of life eagerly bought the stock. The stock for government bond scheme also made Compagnie d'Occident France's largest creditor.

Equity Markets Indices[1]	1/31/21 Price	2/28/21 Price	MTD Change	YTD Change
MSCI All Country World	643	657	2.2%	1.7%
S&P 500	3714	3811	2.6%	1.5%
MSCI EAFE	2124	2169	2.1%	1.0%
Russell 2000®[2]	2074	2201	6.1%	11.5%
NASDAQ	13071	13192	0.9%	2.4%
TOPIX	1809	1864	3.1%	3.3%
KOSPI	2976	3013	1.2%	4.9%
Emerging Markets	1330	1339	0.7%	3.7%
Fixed Income				
2-Year US Treasury Note	0.11%	0.13%	2	1
10-Year US Treasury Note	1.07%	1.41%	34	49
BBG Barc US Agg Corp Sprd	0.97%	0.90%	-7	-6
BBG Barc US Corp HY Sprd	3.62%	3.26%	-36	-34
Currencies				
Chinese Renminbi (CNY/$)	6.43	6.48	0.8%	-0.7%
Brazilian Real (Real)	5.47	5.60	2.4%	7.8%
British Pound ($/GBP)	1.37	1.39	-1.6%	-1.9%
Euro ($/Euro)	1.21	1.21	0.5%	1.2%
Japanese Yen (Yen/$)	104.68	106.57	1.8%	3.2%
Korean Won (KRW/$)	1118.75	1123.40	0.4%	3.4%
U.S. Dollar Index (DXY)	90.58	90.88	0.3%	1.0%
Commodities				
Gold	1848	1734	-6.1%	-8.7%
Oil	52.2	61.5	17.8%	26.8%
Natural Gas, Henry Hub	2.56	2.77	8.1%	9.1%
Copper (cents/lb)	356	409	15.1%	16.4%
CRB Index	174	190	9.3%	13.5%
Baltic Dry Index	1452	1675	15.4%	22.6%

Source: Bloomberg

Over the next few years, with the support of the Duke, the company acquired most of France's overseas trade interests and Banque Générale, which was renamed Banque Royale. Law agreed to pay off France's national debt in exchange for control of the French mint and taxation for nine years. His masterful handling of France's monetary and economic affairs made him one of the country's most powerful and wealthiest individuals. Meanwhile, speculation on his company's stock raged on. The share price soared to 10,000 livre by late 1719, and the word "millionaire" was coined to describe people who struck rich.

Unfortunately, much of the prosperity turned out to be ephemeral. The New World failed to deliver the promised

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riches, and Banque Royale's massive issuance of banknotes was creating hyperinflation. People started to redeem paper currency for gold and silver, which prompted Law, who was appointed the Controller Generale of Finances (the Finance Minister) in early 1720, to ban currency exchange for precious metals. This abrupt act triggered a loss of confidence and the bubble started to burst. By the end of 1720, the banknotes were worthless and the fabled Mississippi Company was broke. One nobleman allegedly lamented that the paper money saga had enriched a thousand beggars but impoverished a hundred thousand honest men. John Law had to abandon his vast collection of properties in France and fled to Brussels to escape the angry populace. He spent his remaining years gambling for a living and died a poor and lonesome man in Venice in 1729.

HISTORY RHYMES

John Law is nowhere to be found in the pantheon of great economists and tycoons. He is merely a footnote in history and has been caricatured as the charlatan who precipitated the infamous Mississippi Bubble. However, he was a visionary in pioneering what was then unorthodox policies that later became the foundation of modern-day central banking. One could argue that John Law was a cross between Ben Bernanke and Elon Musk -- with the former's fortitude in pursuing unconventional policies to save the economy, and the latter's marketing flare and political cunning in promoting new ventures. He was also right about French Louisiana's potential; just look at how things had turned out one hundred years later.

Speaking of Messrs. Bernanke and Musk, they are the epitomes of our present era's liquidity-fueled prosperity. Bernanke is the single most important individual in transforming quantitative easing (QE) from an unconventional and temporary policy tool to a permanent feature of central banking that gives policymakers great latitude in conducting market intervention and, according to some, price manipulation. QE has encouraged moral hazard on a grand scale and desensitized many investors to risk. Ironically, as the wealth effect unleashed by QE ingrains itself in the economy, central bankers are now increasingly taken hostage by the market. They seem to be fearful of saying or doing things that might trigger the so-called market tantrum which could potentially destabilize the financial system.

The risk-seeking market behaviors fostered by central bankers have made Elon Musk the world's richest man and a great market influencer. While Musk's drive and intellect have led Tesla to create world-class vehicles, the company's stratospheric valuations are a gift from growth-at-any-price investors. At its peak market capitalization in January 2021, Tesla's share price had appreciated ten-fold in less than a year. Tesla's market capitalization was more than the combined market value of the world's ten largest automakers even though its 2021 sales are expected to be a mere 3% of these automakers' projected revenues, according to consensus estimates posted on Bloomberg. Tesla also put to rest skeptics' concern about its financial sustainability by taking advantage of its stock's meteoric rise with equity issuance. In early February, Tesla announced that it had invested $1.5 billion in Bitcoin. The news turbocharged Bitcoin prices and may have given Tesla more paper profits from Bitcoin than it has ever made in selling electric vehicles and regulatory credits.

The Wall Street Journal recently ran an article titled, "How the Stock Market Works Now: Elon Musk Tweets, Millions Buy." It discussed the phenomenon of celebrities moving markets by swaying countless traders and investors with their tweets. These so-called "messiahs of momentum" include Elon Musk, Mark Cuban, and rappers and rock stars like Snoop Dogg and Gene Simmons. However, the article failed to mention Michael Saylor, who has become the leading corporate evangelist for Bitcoin.

A PERPETUAL WEALTH CREATION MACHINE?

Michael Saylor was a boy wonder who co-founded MicroStrategy, a business intelligence software company, at age 24 in 1989. It went public in 1998 and had enjoyed a 52-fold rise in stock price at its peak during the dot-com bubble. The share price subsequently collapsed by 99.9% as a result of an earnings restatement and the dot-com bubble implosion, prompting the company to do a 1-for-10 reverse stock split. Its stock performance languished during the 2010's decade with an annualized gain of 4.5% (compared to 13.5% for the S&P 500 Index). However, its stock went on a tear after the company announced last August that it had invested $250 million in Bitcoin – it was the first corporation to make a sizeable investment in cryptocurrency. This pioneering move pushed its share price up 10-fold from $124 to a closing high of $1,273 on February 9th. On that day, MicroStrategy's 71,000 units of Bitcoin was worth about $3.3 billion and its market value hit $9.7 billion. Stripping out the roughly $1 billion of pre-pandemic value for its software business, investors were valuing MicroStrategy's Bitcoin holdings at 2.5 times their market value. Such an enthusiastic market reception prompted Michael Saylor to announce that the company would issue $900 million of convertible notes to buy more Bitcoin. The stock subsequently lost 45% in a span of nine trading sessions to close at $691 on February 23rd, a volatile day during which Bitcoin had declined as much as 18% intraday. True to Saylor's word, MicroStrategy announced on February 24th that it had purchased an additional $1 billion of Bitcoin, upping the company's Bitcoin investment to over 90,000 units (worth roughly $4 billion at the end of February). Saylor also made the bold prediction that by 2026, a billion people would have

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stored their life savings in Bitcoin using their mobile phones. These developments, along with supportive comments for Bitcoin from Cathie Wood, head of Ark Invest and Wall Street's most visible evangelist for assets with "exponential growth trajectories," predictably generated another rally for the cryptocurrency.

This phenomenon of a company being richly rewarded for transforming itself from a stagnant business to a hot proxy on Bitcoin is an example of what George Soros called reflexivity – a feedback loop that causes prices to deviate from equilibrium. To wit, MicroStrategy's investment in Bitcoin was viewed as validation of the cryptocurrency by institutional investors, which drove up Bitcoin's price. Higher Bitcoin prices in turn lifted MicroStrategy's share price, which led the company to invest more in Bitcoin, even with borrowed money. The company's CEO, now a widely-followed Bitcoin evangelist, would make bold predictions about Bitcoin's adoption to further buoy prices. Unlike touting meme stocks which ultimately have to meet or exceed sales expectations, evangelizing Bitcoin is akin to converting more people into believers without having to deliver on tangible results. Executives in other companies looked on MicroStrategy's success with envy and some have jumped on the Bitcoin bandwagon, which kept the positive feedback loop going. It's as if a perpetual wealth creation machine has been effectuated by the power of belief.

MARKET TANTRUM

To old-timers who have lived through a few episodes of irrational exuberance, these bubbly phenomena portend an unhealthy market. Some blame the Fed's ultra-loose policies for creating such an environment. However, central bankers have refused to acknowledge that there are bubbles brewing in the market. Fed Chairman Powell recently said that "the connection between low interest rates and asset values is not as tight as people think." He also continued to emphasize that the Fed will keep its ultra-loose policies for an extended period of time since "it may take more than three years" to reach its goal of sustaining inflation at 2%.

While Fed officials have so far refused to drift even slightly away from their "inflation-is-too-low" narrative, markets were gradually pricing in higher inflationary expectations. The 2 and 5-year U.S. breakeven inflation rates, or the market's inflation expectations, have crept up to the highest levels in nearly a decade. Commodity prices from base metals, crude oil, lumber to corn have soared. Long bond yields around the globe were also moving up steadily, prompting some central banks to intervene. The Reserve Bank of Australia had to extend its QE program in the face of its 10-year bond yield climbing from 1% at the end of 2020 to 1.6% at the start of last week. Christine Lagarde, President of the European Central Bank, tried verbal intervention as Germany's 30-year bund yield flipped from negative 0.16% at the beginning of 2021 to positive 0.16% by mid-February. The dam finally broke on February 25th, a day after Chairman Powell's dovish semiannual testimony before Congress. The 10-year U.S. Treasury yield breached the 1.4% threshold and surged to an intraday high of 1.61% before settling down at 1.52%. Australia's 10-year yield followed suit by spiking up to 1.9%, prompting its central bank to accelerate bond purchases to suppress yields.

We suspect this bond market "tantrum" is a harbinger of things to come. At the end of February, the market's 5 and 10-year inflation expectations were priced at 2.42% and 2.15%, respectively. Bond yields should rise above these levels as the macro environment normalizes, but markets are vulnerable to rapid paces of increase. Some talking heads on financial news suggested that the Fed might need to step in to talk down bond yields if the tantum continues. I wonder what the Fed is supposed to say if the "tantrum" was triggered by the concern that our esteemed central bankers may be underestimating the strength of the economic recovery and inflationary pressure ahead. In that case, more dovish chatter would only exacerbate the situation.

THE SECULAR INFLATION DEBATE

For more than three decades, the mega trend of lower inflation has allowed the Fed to use monetary easing tools to deal with economic and financial issues. Investors have been rewarded with risk-on Pavlovian responses to all these easing moves; bad news could be spun as good news because it meant more Fed easing. A reversal of the secular disinflation backdrop will force policymakers and market participants to adjust to a new paradigm. What will be the circuit breaker to halt future market declines if they are triggered by the fear of rising inflation?

On this all-important subject of inflation, there is a consensus that inflation is set to rise temporarily due to a combination of the base effect and transient supply chain disruptions. What is still being debated is the longer-term inflationary outlook.

It seems that most policymakers and market participants believe the forces of technological innovation (higher productivity, automation, and disintermediation), aging demographics (slower growth potential), and wage arbitrage will keep a lid on inflation in the long run. Disinflationists also find support in empirical data from the last decade showing that QE was not inflationary, and Japanese government's heavy debt load has turned out to be deflationary.

The so-called inflationistas argue that the experience of the past decade is not a good precedent for the post-COVID-19 era. QE has failed to stoke healthy economic growth

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and higher inflation because the base money created was largely trapped in the banking system. The Great Financial Crisis had forced many banks to scale back lending while some governments inappropriately adopted a philosophy of fiscal austerity. COVID-19 has changed this dynamic as fiscal policies have now taken the baton from monetary measures to inject money more precisely into the real economy. For example, inclusive of the $1.9 trillion of fiscal stimulus, the U.S. government will have passed $5.3 trillion of emergency fiscal aid in less than a year, which is nearly five times the size of the rescue packages that Congress had appropriated to deal with the Great Financial Crisis ($1.1 trillion on an inflation-adjusted basis). Former U.S. Treasury Secretary Larry Summers recently warned that stimulus "on a scale closer to World War II levels than normal recession levels will set off inflationary pressures of a kind we have not seen in a generation." He was, of course, roundly criticized by his Democratic compatriots for not toeing the party line. I suspect Summers' warning may turn out to be prescient. The Congressional Budget Office currently estimates that the U.S. economy in 2021 is running below its potential by about 1.9%, or roughly $420 billion. The $1.9 trillion of proposed fiscal package, at about 8.3% of GDP, could quickly close this 1.9% output gap and send the economy into overdrive.

The reflationary impulse of these huge fiscal programs will be felt for years to come, as not all the funding will be disbursed in 2021. The economy will get another powerful shot in the arm if the Biden Administration is successful in pushing through a multi-trillion-dollar infrastructure deal later in the year. These big fiscal spending packages could lead to a replay of the 1960s' experience where reflation turned into inflation.

The U.S. economy had operated below its potential (aka having a negative output gap) for much of the late 1950s and early 1960s due to two recessions in a span of five years (8/57 to 4/58, and 4/60 to 2/61). During the six-year period from 1958 through 1963, the economy had a negative output gap in 19 of the 24 quarters, or nearly 80% of the time. With the economy operating below its potential, inflation had remained below 2% and averaged 1.3% for the seven-year period from 1959 through 1965. By 1965, it was clear that the U.S. economy was starting to overheat thanks to President Johnson's guns and butter policies (the Vietnam War and the Great Society). Fed Chairman William McChesney Martin's rate hikes led to a famous showdown with President Johnson in 1965, but they were too late to forestall higher inflation. Inflation took off in early 1966 and averaged 3.9% in the final four years of that decade; it headed a lot higher in the 1970s.

Another potential driver of higher inflation is commodities prices, which tend to have boom-bust cycles that persist for years. There was a commodity super-cycle during the 2000's due to China's rapid growth. The super-cycle led to over-investment in mining projects which created the condition for a bust over the ensuing decade. Now, with the global economy poised to rebound strongly, commodities prices have already gone on a tear. Commodity bulls argue that years of curtailed capital spending and higher environmental hurdles to start new mines will likely result in a new multi-year upcycle.

THE NORMALIZATION CONUNDRUM

I believe the amalgamation of aggressive fiscal policies, rising commodity prices, and continued liquidity injection via QE will lift the odds of inflation rising to sustainably higher levels than the Fed's arbitrary 2% target. Where inflation ultimately settles depends on how proactively the Fed takes away the proverbial punch bowl. Central bankers always speak so assuredly of their ability to tame inflation when it becomes a real threat. There are, of course, many tools at their disposal, but the question is whether they have the fortitude and political will to put them to work considering the potential collateral damage. These tools basically fall into two categories: raising interest rates and reducing QE. When Fed Chairman Paul Volcker lifted interest rates to break the back of inflation in the early 1980s, the U.S. gross federal debt accounted for merely 32% of GDP; it is about 130% today. A 1% uptick in the general level of interest rates would increase Uncle Sam's annual interest payments by about $280 billion, which is 54% higher than Washington's interest outlays in 2020, more than 5% of the federal government's total spending in a typical year (pre-pandemic levels), and 40% more than the Pentagon's annual budget for the Navy. Higher rates will also make it more expensive for Aunt Yellen to finance Uncle Sam's continued deficit spending, not to mention the added burden in the real economy. Similarly, it will be difficult for the Fed to taper QE anytime soon, as the U.S. Treasury would have a hard time finding willing buyers at low interest rates for several trillion dollars of debt issuance in the coming years.

The seeming fragility of our financial system to higher interest rates have prompted some to predict that the Fed will ultimately pursue yield curve control (YCC) to artificially suppress interest rates. YCC would have the Fed channel its asset purchases at particular maturities to keep their interest rates in a targeted range. Researchers often point to the Bank of Japan as a textbook success with YCC. Some are also cheering Australian central bank's success in bringing down its 10-year bond yield from 1.9% to below 1.7% with accelerated bond buying in the last few days. However, there is not much empirical data on how well YCC would work in a sustained inflationary environment. One potential risk with YCC is that, by suppressing yields below their natural equilibrium levels, the Fed may stoke more inflationary concerns, which could lead to unintended consequences such as a disorderly decline of the greenback. The Fed would also subject itself to a potential loss of credibility should bond vigilantes strike back to push yields above the Fed's targeted range.

TARNISHED GOLD

The latest episode of the bond market tantrum is not likely to derail risk assets' rally, as yield levels are still extremely low. I also do not expect YCC to be considered until yields have climbed much higher, perhaps with the 10-year Treasury yield at or above 2.5%. Cyclical and value stocks are likely to outperform in a reflationary environment with rising rates. Real estate and infrastructure investments could also be attractive as their income would likely be adjusted to higher inflation. The rally in various commodities-related investments will likely continue as well since they are viewed as both reflation and inflation plays. However, there is one commodity that has been left out of the rally of late - gold.

Gold has been stuck in a downtrend since peaking last summer. Many attribute this weakness to the recent backup in real long bond yields and the market share loss to Bitcoin, the new digital gold. There was also less of a need for gold's safe haven role with the economy getting stronger by the day.

I view this price weakness as a possible opportunity to hedge against a potentially more volatile normalization process down the road. I believe we are currently in the best part of the business cycle with the alignment of accelerating growth, more fiscal stimulus, and still accommodative monetary policies. However, at some point in the future, rising inflationary pressure will likely force the Fed to either let inflation run hot or start normalizing monetary policy. I suspect the need to finance Uncle Sam's continued profligacy will likely drive the Fed to choose the former by pursuing some forms of yield curve control. The easing tendency of YCC (i.e., yield suppression) in an environment of stronger growth and rising inflation could cause inflation expectations to become unanchored. Such a scenario could weaken the U.S. dollar and send gold prices soaring. In short, gold could be a hedge on something potentially going wrong in the normalization process. After all, it just seems like a fairy tale to have a heavily indebted economy, ravaged by a pandemic, and being kept alive by money printing and debt-financed stimulus, transforming itself into a self-sustaining growth engine without a hitch. It is simply too good to be true.

In the final analysis, the Fed's army of PhD's may turn out to be right with the assessment that the risk to inflation is still on the downside. Perhaps the massive fiscal stimulus packages will strengthen the economy so much that higher rates can be well tolerated. However, having just finished reading a book by Danielle DiMartino Booth, a former advisor to the Dallas Fed, on the inner workings of the Fed leading up to and in the aftermath of the Great Financial Crisis, I can't help but wonder if Uncle Sam's profligacy and the Fed's 2% inflation obsession will ultimately lead to some unintended consequences. Let me wrap it up with a quote from the late great Paul Volcker on modern central bankers' 2% inflation target, "*I know of no theoretical justification*."

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