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The CIO Monthly Perspective

December 1, 2022

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BROKEN PROMISES

The rise and fall of an "altruistic billionaire"

The gulf between equity bulls and bears has seemingly widened in November. Buoyed by softer-than-expected inflation data, optimists have started to anticipate a post-Fed pivot world with an economic soft-landing and a new secular bull market – some even used the term "the Roaring Twenties." Market bears, however, would point to the most inverted Treasury yield curves in decades as indicators of an imminent recession. The 2s/10s Treasury curve inversion hit a 40-year high of 81 bps, and the Fed's preferred gauge of the 3-month/10-year yield differential hit 77 bps, the largest degree of inversion in 21 years.

For the upcoming Federal Open Market Committee (FOMC) meeting on December 14, the consensus is that the Fed will "step down" its pace of tightening to 50 bps, which implies a Fed funds rate of 4.25% to 4.50%. It may be the last "easy" decision for the Fed as future meetings in 2023 will likely be fraught with greater dissension on the pace of further tightening and the timing of the eventual pause. I suspect the Fed funds rate will rise to a cycle peak of 5%, followed by an extended period of pause despite a weakening economy. Unlike past downturns, the Fed may not rush to rescue the economy as it believes that some pain – e.g., higher unemployment – is needed to tame the inflation beast.

The status of China's zero-COVID policy has been a market moving catalyst of late. There was much optimism that policymakers would relax its draconian policies, which would bode well for economic growth. However, the surging number of new cases with winter's arrival have instead led to even broader lockdowns across the country. After a fire killed scores of residents trapped in an apartment locked from the outside — a common practice in China for mobility control — Chinese citizens spontaneously took to the streets in multiple cities to protest the inhumane treatment. While China's security apparatus has managed to get the situation under control and will ultimately hunt down many of the protesters, it remains to be seen if this most serious challenge to the Chinese Communist Party's (CCP) authority in more than three decades will turn out to be a watershed moment. In short, the macro environment is far more complicated than the "Fed pivot means risk on" narrative that some Pollyannish investors seem to embrace.

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A CRISIS OF CONFIDENCE

It was a triumphant return to Gotham in 1906 for Frederick "Fritz" Augustus Heinze, a Brooklyn native who had traded the comfort and privilege of city life for the unruliness and danger of the Wild West 17 years earlier. Born to wealthy immigrant parents in 1869, Heinze was a bright and charismatic lad when he graduated from Columbia School of Mines at age 20. Instead of heeding his father's advice to pursue further studies in Germany, he headed west to seek his fortune.

Heinze started as a mining engineer in Butte, Montana, and soon made a name for himself with his blend of hard-drinking, fun-loving antics, and East Coast sophistication. Bankrolled by an inheritance of $50,000 from his recently deceased father ($1.6 million in 2022), Heinze set up his own company and expanded it quickly through a combination of luck, hard work, good labor relations (e.g., by shortening the working day from ten to eight hours), and generous support of politicians. He pursued bare-knuckle tactics that sometimes involved sabotage and hand-to-hand combat against bigger competitors. He would emerge from these conflicts unscathed, thanks to backing from local judges and politicians. In 1902, he consolidated his various mining interests into a company called United Copper Company and was recognized as one of the three "Copper Kings" of Montana. In 1906, after a decade of a bruising mining war, one of the other Copper Kings bought out Heinze's mining interests in Butte for $12 million (roughly $400 million in 2022).

Upon returning to New York City with an estimated fortune of $25 million, Heinze sought to become a major player on Wall Street. He befriended Charles W. Morse, who was known as the "Ice King" for having built up substantial wealth from his monopoly in New York's corrupt ice business. The Ice King got the Copper King to serve on the boards of at least six national banks, ten state banks, five trust companies, and four insurance companies despite not having any experience in these industries. Heinze also had himself appointed as President of the Mercantile National Bank, while his brothers Otto and Arthur formed a brokerage firm.

In October 1907, Otto noticed many speculators had borrowed and sold short United Copper shares, betting that the price of the stock would drop so they could buy the shares back at lower prices to close the short positions. He proposed a plan to his brothers and Morse to aggressively purchase United Copper stocks to squeeze the shorts. Otto figured that with the family controlling the majority of the shares outstanding, short sellers would have to buy the shorted shares from his brothers and himself, thereby allowing them to make a fortune by charging higher selling prices. They asked Charles T. Barney, the President of the Knickerbocker Trust Company, New York's third-largest trust bank, to finance the scheme but was turned down. However, Morse was able to line up alternative financing for the short squeeze and the scheme went into operation on Monday, October 14.

Equity Market Indices[1]	10/31/22 Price	11/30/22 Price	MTD Change	YTD Change
MSCI All Country World	586	631	7.6%	-16.4%
S&P 500	3872	4080	5.4%	-14.4%
MSCI EAFE	1750	1944	11.1%	-16.8%
Russell 2000®[2]	1847	1887	2.2%	-16.0%
NASDAQ	10988	11468	4.4%	-26.7%
TOPIX	1929	1986	2.9%	-0.3%
KOSPI	2294	2473	7.8%	-17.0%
Emerging Markets	848	972	14.6%	-21.1%
Fixed Income				
2-Year US Treasury Note	4.49%	4.31%	-17	358
10-Year US Treasury Note	4.05%	3.61%	-44	210
BBG US Agg Corp Spread	1.58%	1.33%	-25	41
BBG U.S. HY Corp Spread	4.64%	4.48%	-16	165
Currencies				
Chinese Renminbi (CNY/$)	7.31	7.09	-2.9%	11.6%
Brazilian Real (Real)	5.18	5.19	0.2%	-6.9%
British Pound ($/GBP)	1.15	1.21	-4.9%	12.2%
Euro ($/Euro)	0.99	1.04	-5.0%	9.3%
Japanese Yen (Yen/$)	148.71	138.07	-7.2%	20.0%
Korean Won (KRW/$)	1424.65	1318.40	-7.5%	10.9%
U.S. Dollar Index (DXY)	111.53	105.95	-5.0%	10.7%
Commodities				
Gold	1634	1769	8.3%	-3.3%
Oil	86.5	80.6	-6.9%	4.6%
Natural Gas, Henry Hub	6.36	6.93	9.0%	85.8%
Copper (cents/lb)	338	373	10.5%	-16.4%
CRB Index	274	280	2.1%	20.4%
Baltic Dry Index	1463	1355	-7.4%	-38.9%

Source: Bloomberg

The Heinze brothers' aggressive buying drove the price of United Copper shares from $32 to $62. The following morning, Otto asked short sellers to return their borrowed shares. However, he had overestimated how much of the float his family had cornered, and short sellers had no problem buying the stock from elsewhere. As word got out that the Heinze brothers had failed to corner the

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market, United Copper's share price quickly collapsed to $10 by Wednesday's close.

The first casualty of the Heinze brothers' failed scheme was Otto's brokerage firm, which went bankrupt due to its inability to repay its borrowed money. F. Augustus Heinze's State Savings Bank of Butte Montana then announced its insolvency as it had held United Copper shares as collateral against some of its lending. Next came the savings bank's correspondent bank, New York's Mercantile National Bank where F. Augustus Heinze was serving as President. He was forced to resign on Thursday, October 17 as depositors rushed en masse to withdraw money from the bank. While the Mercantile had sufficient capital to meet a few days of withdrawals, panicked depositors started to pull money from every bank that Morse and Heinze were involved with, commencing a classic bank run.

In 1907, there were more than 20,000 banks in the U.S. They would lend out most of their customers' deposits but keep a small portion, called reserves by the regulators, readily in cash. Rural banks often deposited their reserves in banks in cities to earn interest income while maintaining the ability to call back the reserves as needed. In turn, banks in smaller cities would deposit their reserves in larger city banks. A portion of these reserves eventually wound up at the biggest banks on Wall Street, the country's financial center. Any failure among these financial center banks would send fear reverberating across the financial system from New York to rural America.

Upon learning of the bank run, 70-year-old John Pierpont Morgan, the most powerful banker of that era, rushed back to New York on the night of Saturday, October 19. The following morning, there was a line of bank presidents outside his brownstone on Madison Avenue and 36th Street waiting to seek guidance from the intimidating and short-tempered tycoon who stood at 6 feet 2 inches tall with broad shoulders, piercing eyes, and a large, deformed nose.

On October 21, Charles Barney was sacked by the Knickerbocker Trust Company's board of directors for his association with Charles Morse. The next day, depositors started to pull money out of the trust, even though Charles Barney never lent money to the Heinze brothers. $8 million was withdrawn from the Knickerbocker's coffers in less than three hours, forcing it to suspend operations. Banks became reluctant to lend money, pushing interest rates on margin loans above 70% and triggering a stock market crash. After the widening financial contagion took out several more banks, financial institutions down the banking chain started calling back their reserves to guard against a run on their own deposits.

J.P. Morgan designated a committee of bankers to audit the books of banks in crisis to determine which ones were worth saving. The committee's decision to let the Knickerbocker Trust Company fail triggered so much panic that Treasury Secretary George Cortelyou had to travel up to New York from Washington D.C. on October 23 to confer with Morgan on crisis management. The following morning, the U.S. Treasury deposited $25 million into several New York banks in an attempt to shore up confidence. John D. Rockefeller, the nation's wealthiest man, deposited $10 million with the Union Trust and phoned the Associated Press to announce that he would pledge half of his wealth to maintain U.S. credit. Morgan also had the city's clergy preaching calm and forbearance.

Despite these measures, the crisis of confidence persisted with problems surfacing in unexpected places. On Sunday, October 27, Morgan learned that the City of New York's inability to raise sufficient money through bond issuance meant that it would soon go bankrupt. To avert this potentially disastrous outcome, Morgan had to purchase $30 million worth of city bonds. Then came the news that Moore & Schley, one of the largest brokerage firms, was teetering on the brink of collapse due to the precipitous share price decline of the Tennessee Coal, Iron, and Railroad Company (TC&I), which Moore & Schley had used as collateral and was at risk of getting margin calls.

On Saturday, November 2, Morgan brokered a deal to have TC&I's larger rival, the U.S. Steel Corporation, acquire the company at a sufficiently high price to save Moore & Schley. He then invited executives from various bank and trust companies to his library to discuss financing plans to bail out their weaker brethren. By 3 am Sunday, these 120 executives realized that Morgan had locked the library door and forbade anyone from leaving until the bankers come up with a $25 million bailout fund. After much arm-twisting, the $25 million target was finally reached at 4:45 am and the bankers were allowed to go home.

By Sunday evening, there remained one more obstacle to Morgan's rescue plan – President Theodore Roosevelt, who had crafted a trust buster image, was unlikely to approve U.S. Steel's acquisition of TC&I. U.S. Steel's

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executives rushed to Washington D.C. overnight and asked to meet with the President in the morning. Roosevelt reluctantly took the emergency meeting and started to review the proposed takeover an hour before market opening. While he was personally opposed to the deal, he realized that his resistance would sink the U.S. banking system. Finally, right before the market opened on Monday morning, news broke that Roosevelt had agreed to the takeover. The headlines sent the market soaring and confidence was restored at last.

The Panic of 1907 exacerbated the recession that had already started in May of that year. Morgan was lionized for rescuing the financial system, and Senator Nelson Aldrich of Rhode Island summed up the then prevailing sentiment that, "Something has got to be done; we may not always have Pierpont Morgan with us to meet a banking crisis." In 1908, the Aldrich-Vreeland Act established the National Monetary Commission to investigate the Panic and recommend legislation to regulate banking. In 1910, Senator Aldrich unsuccessfully introduced a bill to establish a U.S. central bank. After several years of revisions, Congress finally passed the Federal Reserve Act of 1913. The landmark legislation created the Federal Reserve System consisting of twelve regional Federal Reserve Banks and the Federal Reserve Board of Governors to provide oversight to banks, manage the nation's money supply, and most importantly, serve as the lender of last resort.

THE MYTHIFICATION OF SBF

Despite being perhaps the greatest banker in U.S. history and the savior of the financial system in 1907 (and also during the Panic of 1893), J.P. Morgan was often viewed in a negative light by America's left. He was investigated by Congress in 1912 for the concentration of power on Wall Street. The media turned against him with scathing coverage even after he passed away in March 1913. School children were taught that he was one of the ruthless robber barons from the Gilded Age. Well, more than a century after Morgan's passing, progressives finally found a "financial tycoon" that embodied their ideals: a frizzy-haired wunderkind with an unkempt appearance – wearing baggy shorts and oversized T-shirts – known to the world by the moniker SBF, or Samuel Bankman-Fried. Some have hailed SBF as the modern-day J.P. Morgan, though much kinder and gentler.

SBF's meteoric rise was a quintessential Silicon Valley story that featured unbridled ambition, innovation, and a bold vision. Upon graduating from MIT in 2014, SBF cut his teeth in trading by working for Jane Street Capital. In 2017, he founded Alameda Research, a hedge fund, to start trading cryptocurrency. He somehow overcame regulatory hurdles in wire transfer and currency conversion related to crypto trading among various countries and started to arbitrage Bitcoin's large price discrepancies in countries like Korea and Japan. In 2019, he parlayed his success with Alameda into founding an exchange for trading crypto assets. He named his firm FTX, or "Futures Exchange," and issued its own virtual currency called FTT (the FTX Token). FTX customers who purchased FTT were offered VIP status, trading discounts, and the ability to use FTT as collateral for leverage. FTX also held a large amount of FTT on its balance sheet, which instantly created billions of dollars of capital out of thin air.

As FTX became a powerhouse in the crypto space, SBF embarked on one of modern history's most impressive and effective campaigns to buy fame, influence, and allies. SBF positioned himself as an altruistic billionaire who went into finance to maximize his "earn-to-give" philosophy. He was exceedingly generous with political contributions – $5.2 million to Biden's presidential campaign in 2020, $40 million to mostly Democratic candidates in 2022 – and promised to give out as much as $1 billion for the 2024 elections. He showered media companies with big ad spending and even grants – his charitable foundation pledged millions of dollars to ProPublica and VOX. He hobnobbed with paid celebrity endorsers as well as politicians – there is a widely circulated photo showing SBF appearing on stage in his signature outfit of a T-shirt and shorts with Bill Clinton and Tony Blair. FTX even signed a $130 million deal to put its name and logo on the Miami-Dade County sports arena.

These efforts paid off big time for SBF. Venerable venture capitalists and sophisticated institutional investors readily bought into SBF's vision that FTX would grow into a paradigm-changing financial powerhouse that may one day acquire Goldman Sachs. They rushed to invest billions of dollars in FTX seemingly based on faith as standard due diligence appeared to have been bypassed. No one seemed concerned that FTX did not have a board of directors, and no one bothered to ask why FTX was still raising money while it was launching its own $2 billion venture fund. At one point, FTX was valued at $32 billion, giving SBF a paper wealth of $26 billion. During the crypto market's meltdown in the summer of 2022, SBF became a white knight by acquiring failing digital asset lender BlockFi and bailing out a few other entities in the crypto

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ecosystem. Many pundits praised SBF as the new J.P. Morgan for doling out credit lines to save crypto institutions; other sycophants called him the next Warren Buffett, even though the comparison seemed far-fetched. Importantly, SBF's lobbying efforts, with the help of Washington insiders and former regulators, were quickly gaining traction. Eight House members – four from each side of the aisle – challenged the Security Exchange Commission's (SEC) authority to make informal inquiries of crypto companies, including FTX. A bi-partisan bill was introduced in the Senate to have the Commodity Futures Trading Commission (CFTC) regulate the crypto industry, a move favored by SBF to bypass the SEC's more onerous scrutiny. The CFTC was also considering a request from FTX to modify the agency's derivatives clearing organization license for crypto margin trading by U.S. retail customers, a move vehemently opposed by industry heavyweights such as the CME Group and ICE due to their concerns about potential risks to market stability and retail investors. Ironically, instead of focusing on the issues raised by the CME Group's outspoken CEO Terry Duffy at a House hearing last May, the congressman representing Silicon Valley publicly berated and intimidated Duffy for his audacity to criticize FTX.

FTX'S DEMISE & CONSEQUENCES

On November 2, *CoinDesk,* a digital asset news site, reported that a significant portion of Alameda Research's assets were held in FTT, and there were rumors that SBF was frenetically trying to raise money for FTX. On November 6, Changpeng Zhao (aka CZ), the CEO of Binance, FTX's rival and the world's largest crypto exchange, tweeted that Binance intended to liquidate all of its holdings of FTT, which it had received from FTX when FTX bought out Binance's equity stake in the company in 2021 (yes, these firms transacted in virtual currencies rather than using real money). This tweet sent FTT's price plunging, inflicting a serious blow to Alameda and FTX's finances. On November 8, FTX's troubles became public after CZ tweeted that Binance had entered into a non-binding agreement to purchase FTX, which was facing a "liquidity crisis." The following day, CZ backed out of the deal and sealed FTX's fate – panicked customers rushed to withdraw their assets from FTX, forcing the company to file for bankruptcy on November 11. In short, SBF's carefully cultivated myth and business empire, which included 130 affiliated companies around the globe, died a sudden death in less than a fortnight.

SBF was forced to resign as FTX's CEO, leaving his celebrity friends and fawning politicians scrambling to scrub social media posts which displayed their associations with the erstwhile wunderkind. The court appointed veteran restructuring specialist John Jay Ray III as the new CEO of FTX to handle the Chapter 11 process. Ray, who had led high-profile bankruptcy cases such as Enron and Nortel, was shocked at the extent of FTX's mismanagement. In a filing with the Delaware bankruptcy court, Ray stated, "Never in my career have I seen such a complete failure of corporate controls and such a complete absence of trustworthy financial information as occurred here." He pointed to issues such as compromised systems integrity, faulty regulatory oversight abroad, and "the concentration of control in the hands of a very small group of inexperienced, unsophisticated and potentially compromised individuals." Ray estimated that a substantial portion of assets held by FTX may be missing or stolen, and there could be more than one million creditors. It appears that FTX had illegally moved as much as $10 billion of its customers' money to Alameda Research, which had given SBF a $1 billion personal loan. It seemed that SBF's altruistic billionaire modus operandi was conveniently built on other people's money. SBF turned out to be more like F. Augustus Heinze – in chutzpah with buying political influence and taking outsized risks – than the hard-nosed, no-nonsense J.P. Morgan.

As with every financial crisis or fraud, there are interesting takeaways and lessons for investors:

- Given the interwoven nature of the crypto ecosystem where companies invest in and lend to each other, FTX's collapse will likely lead to a long, cold winter for crypto assets due to reduced liquidity and risk appetite, and the spreading financial contagion. For example, many experts have long questioned the integrity of Tether, the world's biggest stablecoin. These issues portend lower prices for various digital assets in the months ahead.
- The collective failure of supposedly sophisticated institutional investors in conducting proper due diligence on FTX will likely discourage new venture money into DeFi and crypto until better regulatory frameworks are put into place.
- Investors should refrain from making emotional investment decisions based on reputation or actions by supposedly sophisticated peers; that is, avoid herd mentality. Markets are constantly changing, so what had worked in the past may not be repeatable. To wit,

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Alameda Research made its name by supposedly arbitraging cryptocurrencies among various countries. However, as more investors got into the game, it had to pivot to other strategies which apparently failed spectacularly, especially as crypto asset prices collapsed in unison. With the benefit of hindsight, SBF's "rescue" of other failing entities during the summer may have been motivated by the need to prop up his own trading positions.

- There were always "Cassandras" who had warned of potential risks but were ignored. Terry Duffy was publicly berated by politicians. A well-known short seller by the name of Marc Cohodes has been tweeting for months on how the SBF fairy tale did not add up. He alleged that he had helped journalists at a financial media company with an exposé on SBF, but the article was shelved as the company feared losing access to SBF (and his ad spending).
- One should not conflate Bitcoin with FTX's collapse. The latter involved the alleged misuse of customers' money that had nothing to do with the former. However, the lack of regulatory oversight is a risk with both, even though many crypto evangelists prefer it that way.
- The FTX saga exposed how Alameda Research manipulated FTT's small float to drive up its price and the paper value of Alameda's non-floating FTT holding, which was used as collateral to borrow money. Similar manipulation could happen with many of the roughly 10,000 active cryptocurrencies in existence today, and most of them will likely wind up being worth zilch. Those who still have the urge to own cryptocurrencies may be better off with "proven" brands like Bitcoin or Ethereum. Another lesson from the collapse of FTX U.S., a regulated crypto exchange, is that it may be safer to keep cryptocurrencies in a "cold wallet," or offline storage, than at a crypto exchange that could quickly go belly up.
- SBF's political influence scheme – generous donations and the hiring of former officials – raises doubt about our elected officials' ability to responsibly legislate on complex emerging industries. Ideally, former regulatory officials should be barred from lobbying for an extended period in the industries they oversaw. Perhaps the SBF saga will prompt politicians with consciences to reflect and reform, but it is money, not idealism or conscience, that makes Washington go round.

The FTX saga exposes the Wild West-like nature of the crypto industry. If some of the most sophisticated institutional investors were taken for a ride, what edge do most generalist investors have in this fast evolving and unregulated space? In closing, let me reiterate what I wrote about crypto investments in my September report: *one should either refrain from handing money to unregulated entities or hand over the money with the expectation that it could all be lost, and when the tide of liquidity goes out, they run the risk of going down in unison.*

THE BARBAROUS RELIC

The price collapses of cryptocurrencies have quieted the argument that Bitcoin would someday replace gold as a preferred store of value and inflation hedge. However, to many investors, gold's year-to-date (YTD) performance - down 2% through November - is disappointing in the face of elevated inflation. While gold has been a relative outperformer – YTD, the S&P 500 Index has dropped 14%, the Bloomberg U.S. Aggregate Index was down 13%, and the Bloomberg US Treasury Inflation-Linked Bond Index has lost 11% – it nevertheless failed to keep pace with inflation. The logical question is that if gold fails to shine during periods of elevated inflation, what is it good for?

There are various explanations for gold's disappointing performance in 2022. One can point to the inverse relationship between gold and the U.S. Dollar, which has been on a tear in 2022. Back in the 1970's inflation era, gold had shone brightly because the U.S. dollar was depreciating against other currencies. I would position gold as a vote of confidence on macro-outlook and policymaking, e.g., the Fed's inflation fighting credentials. Gold hit its all-time-high in the summer of 2020 when the Fed was actively stoking inflation and Congress was showering American households with helicopter money. It then came within 0.24% of its all-time-high in March 2022 when the war in Ukraine pushed up the market's inflation expectations. As shown in Chart 1, gold's surge in March 2022 roughly coincided with the market's expected inflation over the coming 5-years, hitting a record high of 3.73% (the record dates back to 2001). Since then, as the Fed embarked on the most aggressive tightening campaign in decades, the expected inflation rate came down steadily along with the price of gold. In other words, while realized inflation was hitting 40-year highs, the market was confident that the Fed would bring inflation down, which helped to explain the lack of urgency to shift money into precious metals.

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Gold has rallied of late as investors expect the Fed to slow down the pace of tightening. It's a repeat of the pattern over the last 18 months whereby gold would trade down in the face of a more hawkish Fed and vice versa. If this pattern holds, as the Fed moves to the long-awaited "pivot mode" in the face of rising recession risk in 2023, gold's price could move a lot higher, especially if investors are not convinced that secular inflation has been tamed.

Chart 1: Gold price vs. 5-year breakeven inflation

Source: Bloomberg

In the long run, gold will likely be positioned as a hedge on the U.S. government's steadily rising debt-to-GDP, a potentially weaker greenback, and the unresolved debate over the longer-term inflation outlook. Chart 1 shows gold's movement with the market's *expected* inflation over the next five years. Given the forces of de-globalization, underinvestment in commodities, skills mismatch in the labor force, and higher costs associated with ESG initiatives, realized and expected inflation in the future may move higher over time, which would be a tailwind for gold.

Lastly, geopolitical risks will likely become more elevated in the face of an ongoing hot war in Europe and a Cold War with China. Who would have predicted that Chinese citizens would rise up across multiple cities to protest against censorship and demand rule of law? Would rising discontent among the Chinese people drive Chairman Xi Jinping to risk more confrontation with the West in order to divert attention and gin up nationalism? How will Xi's political soulmate, Vladimir Putin, handle Russia's string of setbacks on the battlefield? In an increasingly perilous world, I would expect more investors to look to gold as a potential safe haven. Gold may be viewed as a barbarous relic by the enlightened, but human nature has also seemingly remained barbarous – innate aggression, greed, gullibility, insecurity, etc. – regardless of the advancements in science and technology.

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