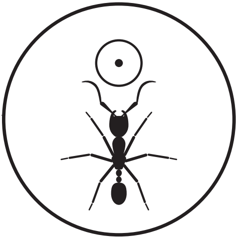


Myrmikan Research

January 14, 2025

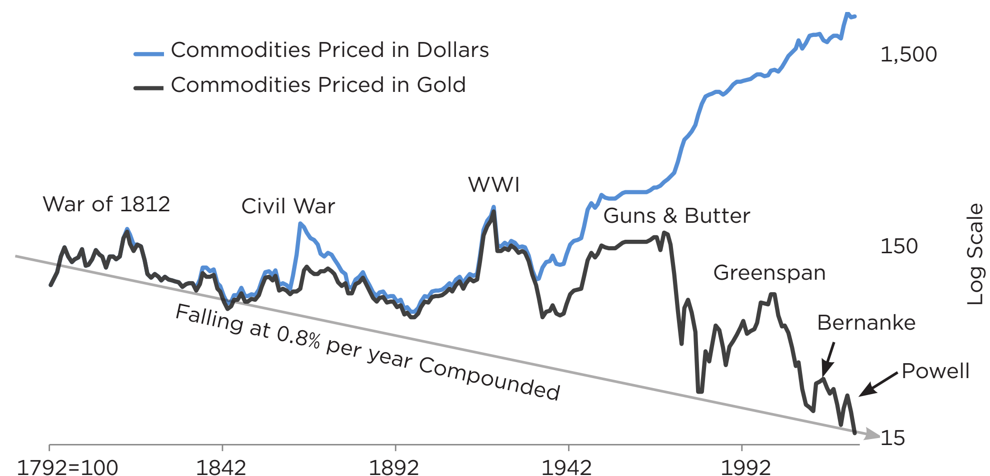
Daniel Oliver
Myrmikan Capital, LLC
doliver@myrmikan.com
(646) 797-3134

Liquidity Reversing

Junior gold mining companies are a special case. Their assets are rarely world class, management can be suboptimal, access to capital is often tenuous and expensive; when money comes rushing suddenly into the sector, there are no ETFs funneling money into their stocks, making them lag sharp moves. It's a tough sector to navigate.

BUT, they do excel at one thing: leverage. Not financial leverage—for they rarely carry debt—but operational leverage. When the gold price increases, the net present values of their projects rise the fastest; and in bull markets, the tiny multiples applied to their cash flows and NPVs converge toward the majors' (the valuation multiples of which also increase substantially), applying multiple leverage on top of operational leverage. They generally move last and then the most.

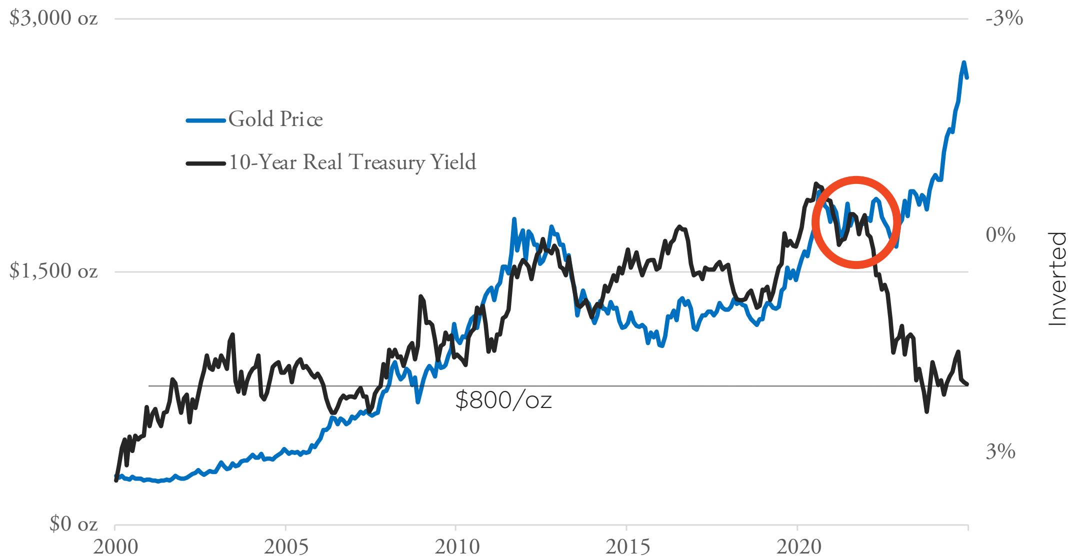
This is the reason why 2024 was such a frustrating year for the juniors. The macro economics evolved as we anticipated: high interest rates led to higher gold prices (not lower, as bank analysts predicted); and commodities fell in terms of gold to a new 212-year low, which should lead to higher real margins for gold mining over time.



The capital market for gold mining is distinct from the bullion market, however. Various analysts write that the voracious demand for gold is coming not from domestic sources but instead from international buyers who have begun to prefer the marginal gold ounce to the marginal treasury bond. We do not have specific knowledge of precisely which international parties are buying gold, but we would note that the inverted relationship between the dollar price of gold and U.S. real interest rates broke

NOTE: This material is for discussion purposes only. This is not an offer to buy or sell or subscribe or invest in securities. The information contained herein has been prepared for informational purposes using sources considered reliable and accurate, however, it is subject to change and we cannot guarantee the accurateness of the information.

radically in February 2022, when the U.S. froze Russian dollar reserves in response to Russia's military engagement in Ukraine.



As discussed in previous letters, Biden/Blinken's freezing Russia's reserves was monumentally stupid. The Eurodollar system (that is, the system whereby the whole world denominates its debt in U.S. dollars) was inaugurated in the 1950s when the Soviet Union found itself with U.S. dollars and arranged to deposit them in European banks, which then lent them out on a fractional reserve basis—what an incredible asset to have even your archenemy using your currency! The power was not that the U.S. exerted direct control over the dollars; rather, as Putin himself noted, the system meant that when the U.S. printed money, much of the new issuance leaked overseas, exporting inflation and allowing the Fed to charge seigniorage on the rest of the world to support the U.S. empire. Biden's confiscation—his grasping of hard control—has made international investors more concerned about return of capital with regards to the dollar than about return on capital, jeopardizing America's seigniorage power.

Gold miners offer a different kind of exposure than bullion: miners often operate on thin margins, creating substantial leverage to the gold price. Leverage works both ways, of course, but unlike a levered financial bet, gold mining companies rarely go bust. When the timing is wrong on a macro basis, miners suffer equity dilution, in the same way that an option suffers decay in its value over time, but the investment can still succeed, making the positions surprisingly resilient.

The problem for the miners is that risk capital has been shunted into bubble trades. The S&P 500 increased 25% in 2024—somehow, under Biden's regulatory oppression, and with the 10-year rate going from 3.7% to 4.6%, we are to believe that corporate America increased its value by a *quarter* in just twelve months.

To be fair, S&P 500 returns were wildly skewed towards "the magnificent seven," which includes Alphabet (Google), Meta (Facebook), Nvidia, Amazon, Apple, Microsoft, and Tesla. These stocks represent one third of the S&P500 (double the ratio of five years ago), and they increased by an average of 69% in 2024. Nvidia, which makes the microchips that power "artificial intelligence" engines, ended the year worth $3.5 trillion, or 13% of U.S. GDP.

NOTE: This material is for discussion purposes only. This is not an offer to buy or sell or subscribe or invest in securities. The information contained herein has been prepared for informational purposes using sources considered reliable and accurate, however, it is subject to change and we cannot guarantee the accurateness of the information.

As impressive as the magnificent seven were, investors could have more than doubled their 2024 return if they had instead loaded up on bitcoin, which jumped 164% during the year. And for those also not satisfied with that rate of return, there was Michael Saylor's MicroStrategy Incorporated (MSTR) which soared 358% to reach a market capitalization of $73 billion.

Saylor's thesis is simple: "Bitcoin is going up 60% a year against the dollar … since MicroStrategy made its first investment four years ago, it's 60%.… The person with a million dollars of cash is going to have a million dollars of cash in a decade. A person with a million dollars of bitcoin is going to double their capital every 18 months if they just hold on to it." So Saylor has transformed his middling software company into a publicly-listed bitcoin proxy, raising capital simply to buy more bitcoin.

And because 60% per year, compounded, isn't fast enough, Saylor has had MSTR issue wave upon wave of convertible debt to finance additional purchases of bitcoin. In September, MSTR placed $1 billion of 4-year convertible notes with an interest rate of 0.625% and a conversion price 40% higher than MSTR's share price at the debt issuance. Two months later, MSTR's share price had doubled along with bitcoin, and Saylor placed $3 billion in 5-year convertible notes, this time with an interest rate of 0.0% and a conversion price 55% above MSTR's share price.

There is a certain logic to the madness: convertible debt contains an embedded call option; under the Black-Scholes model, the more volatile a security, the greater value an option on it has; therefore, the more volatile bitcoin and MSTR stock become, the better financial terms MTSR gets to issue more convertible stock to buy more bitcoin: it is a perpetual motion money machine, assuming Saylor's thesis is correct.[1]

MSTR also recently announced plans to upside its "at-the-money" equity facility (whereby it can issue and sell new shares directly into the market) to $21 billion and also to issue $21 billion in additional debt: "Our proven track record of using intelligent leverage serves as the foundation to execute on our strategic three-year 21/21 Plan. Through our treasury strategy, we increased our bitcoin holdings by 11% in the quarter."

Because MSTR itself is not levered enough, retail investors have been buying it on margin and at a scale sufficient to worry the online brokerages: Interactive Brokers has announced that it is increasing its maintenance margin requirement on MSTR to 50%.

Saylor's bitcoin antics have caused MSTR to jump twenty-fold since 2023, netting him an $8 billion personal fortune. It may be worth noting, however, that on March 20, 2000, Saylor personally lost $6 billion in a single day when he disclosed that MSTR's 1999 revenue was a quarter less than previously claimed (Saylor later settled with the SEC to avoid trial on allegations of fraud and violating federal securities laws).

For those investors not satisfied with the S&P 500, the magnificent seven, Bitcoin, Saylor's extraordinary feats of leverage on bitcoin, or buying MSTR on margin, there also was "Fartcoin," which increased 2,031% in 2024. Whereas Saylor and other proponents press extravagant claims of Bitcoin's being money perfected, Fartcoin's $840 million valuation offers holders absolutely no economic value other than being able to boast sponsorship of a scatalogical joke.

To understand why it actually makes sense to buy Fartcoin, we turn to the wise words of Caroline Ellison, CEO of Sam Bankman-Fried's hedge fund Alameda: "Every week or so something weirder than the previous week would happen.… I managed to get

1 See Myrmikan's letter the Bitcoin Bubble on why Saylor is not correct: https://www.myrmikan.com/pub/Myrmikan_Research_2017_10_26.pdf.

NOTE: This material is for discussion purposes only. This is not an offer to buy or sell or subscribe or invest in securities. The information contained herein has been prepared for informational purposes using sources considered reliable and accurate, however, it is subject to change and we cannot guarantee the accurateness of the information.

away from my initial skepticism and have been embracing the mindset of going out and looking for the weirdest, dumbest thing people are talking about today."

Applying Ellison's logic—which is actually the best strategy during the expansion of a bubble—the best trade was to sell Fartcoin and roll the profits into Butthole Coin, which began trading at $0.0002 per BHOL on December 27 before reaching $0.04 on December 30, a 200x return in three days. This initial spike admittedly occurred with little liquidity, but the first week in 2025 saw BHOL soar 752% with an average volume of over $30 million per day. In the country that less than a century ago banned D. H. Lawrence's *Lady Chatterley's Lover* because it contained obscenities, investors can now make their fortunes betting on Butthole Coin.

Alan Greenspan once told Congress: "Bubbles generally are perceptible only after the fact. To spot a bubble in advance requires a judgment that hundreds of thousands of informed investors have it all wrong." That anyone with even the faintest acquaintance with economy history could make or believe such a statement strains credulity—equally so that anyone could deny we are currently in a massive bubble, an egregious bubble. The bubble may not be as visible as in 1999, when internet start-ups were all over the news, or 2006, when everyone was watching Flip That House (and their neighbor was watching Flip This House). It is weirder, larger, and worse: normal people are not aware that Butthole Coin and sixteen thousand other cyrpto coins are trading at a collective valuation of $3.3 *trillion,* most have no idea what the real yield on a Treasury bond should be, few have any model to opine on the proper valuation of the U.S. dollar. Yet these latter two markets are wildly mispriced (the first is only a symptom), and when they pop there will be far-reaching social consequences.

The gold miners cannot hope to compete with the bubble trades while financial conditions remain loose and the bubble is still expanding: why spend the time and hassle and expense of building a mine when investors can septuple their money in BHOL overnight: BHOL's peak valuation of $130 million was materially greater than the weighted-average-median of Myrmikan's holdings, companies that typically have at least a million ounces of economic gold in the ground. But we suspect that the bell has already rung for these capital obscenities.

First there is the Federal Reserve's interest rate policy. The market was surprised when the Fed cut the Fed funds rate by 0.50% in September, as there seemed to be no economic turmoil that seemed to justify doubling the standard 0.25% adjustment. Markets roared higher. Two more 0.25% rate cuts swiftly followed, but the last of these has been characterized as a "hawkish cut" because the Fed's projections moved from 1% in cuts for 2025 to only 0.5%. The problem is that instead of heading back towards the 2% target, CPI is ticking higher again, from 2.4% per year in September to 2.6% in October to 2.7% in November. Powell told journalists: "we're going to be cautious about further cuts."

Worse than projections of fewer rate cuts is a constantly shrinking money supply: Powell continues to reduce the Fed's balance sheet by $20 billion per week. Since Silicon Valley Bank was bailed out in early 2023, the Fed's balance sheet has fallen $1.9 trillion, from $8.7 trillion to $6.8 trillion, a reverse QE that should be slaughtering stocks and credit markets. The reason the market is still frothy is that, also in 2023, Janet Yellen discovered that the Treasury could do its own stealth QE to counter balance the Fed.

To explain: Powell printed $5 trillion in response to COVID, but he also offered banks an above-market interest rate for them to deposit funds directly at the Fed's reverse repo facility, attracting $2.3 trillion that remained out of circulation. Yellen figured out

NOTE: This material is for discussion purposes only. This is not an offer to buy or sell or subscribe or invest in securities. The information contained herein has been prepared for informational purposes using sources considered reliable and accurate, however, it is subject to change and we cannot guarantee the accurateness of the information.

that, whereas banks and money-market funds would never withdraw overnight funds from the Fed to buy, say, a 10-year Treasury bond, they would do so to buy 3-month Treasury bills if the yield were slightly more attractive. Normally, the Treasury raises between 15% and 20% of the money required for federal government deficit spending by offering short-term Treasury bills (maturities less than a year), the remainder in longer-term notes and bonds. But in Q4 2023, Yellen financed the deficit with a mix of 60% bills; in Q1 2024 it was 57% bills, and 34% in Q3 2024. This massive bill issuance increased supply well beyond market expectations, lowering prices, and raising short yields enough to draw cash out of the Fed: the reverse repo cash facility plunged from $2.3 trillion in April 2023 to $178 billion on January 10, 2025 or $200 billion more than the Fed's balance sheet runoff.

Yellen's policy also had the effect of issuing fewer long-term bonds than expected, which supported their prices, creating artificially lower rates in the 10-year bond, which is the reference point for mortgages and other long-term credit. Now Trump's anointed Treasury Secretary Scott Bessent must decide how to roll the $6.7 trillion in Treasury bonds coming due in 2025. He is well aware of the problem, having written about it in his investor letter dated January 31, 2024:

> We believe that the Treasury had become uncomfortable with the bond market sell-off to date and the tightening of financial conditions that resulted. As such, even though it would be more expensive to fund via Treasury bills given the deeply inverted yield curve, the Treasury decided it was a price worth paying. Over the short-term, this change in issuance strategy has had the desired effect, with financial conditions easing materially since the November 1 announcement. However, over a medium-term horizon, we believe this is a risky strategy, and it comes with significant costs. In addition to a higher interest expense, concentrating issuance in short tenors exposes the Treasury to greater volatility via refinancing risks and creates the potential for a financial accident.

If Bessent reverts to standard Treasury practice, issuing only 15%-20% in bills, the 10-year financing reference rate will drift higher, and a falling short-term rate risks enticing money back into the Fed's reverse repo facility, sending a tightening shock through markets and the economy. Even if he were to continue Yellen's policy, she has timed it such that the reverse repo facility is drained—the Treasury no longer has much ability to neuter the Fed's balance sheet shrinkage.

Yellen also left this stink bomb for the new administration—in a letter to Congress dated December 27, she wrote:

> As you know, the debt limit is the total amount of money that the United States government is authorized to borrow to meet its existing legal obligations, including Social Security and Medicare benefits, military salaries, interest on the national debt, tax refunds, and other payments. In June 2023, the Fiscal Responsibility Act of 2023 was enacted, suspending the debt limit through January 1, 2025.
>
> On January 2, 2025, the new debt limit will be established at the amount of outstanding debt subject to the statutory limit at the end of the previous day. However, on January 2, the outstanding debt subject to the limit is projected to decrease by approximately $54 billion, mostly due to a scheduled redemption of nonmarketable securities held by a federal trust fund associated with Medicare payments. As a result, the debt is

NOTE: This material is for discussion purposes only. This is not an offer to buy or sell or subscribe or invest in securities. The information contained herein has been prepared for informational purposes using sources considered reliable and accurate, however, it is subject to change and we cannot guarantee the accurateness of the information.

> currently projected to temporarily decrease, and accordingly, Treasury does not expect that it will be necessary to start taking extraordinary measures on January 2 to prevent the United States from defaulting on its obligations. Treasury currently expects to reach the new limit between January 14 and January 23, at which time it will be necessary for Treasury to start taking extraordinary measures.

As a reminder, the Trump administration begins on January 20. And, just to make it more fun for Bessent, Yellen is spending down the Treasury's cash account at the Fed, which has fallen from $842 billion on November 6 to $652 billion as of January 10.

Just as Trump takes office, the main sources of liquidity are going into reverse: short rates will be higher than expected as Powell turns hawkish, long rates will rise due to federal financing needs and also because of the need to address Yellen's abnormal maturity mix, the money supply will shrink because there is no more ability for the Treasury to undo Powell's balance sheet runoff, the money supply will shrink faster if funds start moving back into the Fed's reverse repo facility.

It appears that the Trump / Vance team knew that the establishment would try to "Hoover" the new administration: cause an enormous market crash and blame Trump. J.D. Vance told Tucker Carlson two months before the election:

> The other thing I really worry about is bond markets because the country is deeply in debt. We have, call it, $1.6 to $2 trillion in debt every single year in this country getting added to the national debt, and the only thing that makes that serviceable is that interest rates are still pretty low—they're about 4.5% right now. If interest rates go to 8% then you're actually spending way more to service the debt than you are on actual goods, services, and infrastructure for your country—that can become a huge spiral that could take down the finances of this country. We've never had that in two hundred plus years of being an American republic. We've never had a true debt spiral in this country. So I really worry about, do the bond markets, do the international investors, the people who are getting rich off of globalization, the people who have gotten rich from shipping our manufacturing base to China, the people who've gotten rich from a lot of wars, do they try to take down the Trump presidency by spiking bond rates.
>
> You saw this by the way with Liz Truss in Britain... she came in, she had a plan, and the Bank of England, I think made a lot of mistakes, maybe intentional, interest rates shot through the roof, and it took down her government in a matter of days. Of course, we don't have the same style of government, but it would be devastating to the president if you had this bond market death spiral. And that's one of the things we're going to have to fight against when we win.

Vance's comments may seem unhinged until one rereads William Dudley's August 27, 2019 Bloomberg opinion column. Dudley, as a reminder, is not some fringe blogger but was a partner and chief economist at Goldman Sachs, then become the trading manager of the Federal Reserve's securities portfolio, then was president of the New York Fed from 2009 to 2018:

> U.S. President Donald Trump's trade war with China keeps undermining the confidence of businesses and consumers, worsening the economic outlook. This manufactured disaster-in-the-making presents the Federal Reserve with a dilemma: Should it mitigate the damage by

NOTE: This material is for discussion purposes only. This is not an offer to buy or sell or subscribe or invest in securities. The information contained herein has been prepared for informational purposes using sources considered reliable and accurate, however, it is subject to change and we cannot guarantee the accurateness of the information.

> providing offsetting stimulus, or refuse to play along? … Officials could state explicitly that the central bank won't bail out an administration that keeps making bad choices on trade policy, making it abundantly clear that Trump will own the consequences of his actions.… There's even an argument that the election itself falls within the Fed's purview. After all, Trump's reelection arguably presents a threat to the U.S. and global economy, to the Fed's independence and its ability to achieve its employment and inflation objectives.

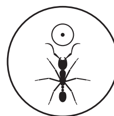
Indeed, if one hypothesized that Powell was purely political, would it not make sense that he slashed rates going into the election to help Harris and is now tightening to hurt Trump? In his recent press conference, Powell admitted to following Dudley's advice: "some people did take a very preliminary step and start to incorporate highly conditional estimates of economic effects of policies into their forecasts at this meeting."

Trump is politically cunning and senses what is coming. On December 29, he tweeted: "I call it '1929' because the Democrats don't care what our Country may be forced into. In fact, they would prefer 'Depression' as long as it hurt the Republican Party." If a crash is going to happen, best for Trump that it happens as quickly as possible to pin the blame on Biden: perhaps it serves his interest to have a large debt ceiling fight, to allow the government to shut down, to force markets to liquefy.

The Fed will then face a real choice: does it allow the credit system to unwind to spite Trump? Who will buy U.S. federal debt to fund ongoing expenditures? Or does Powell submit to printing massively to support hedge funds and the banks and the government, the way he did in 2020? Which is worse for the dollar and, therefore, better for the gold price?

Gold and gold miners always perform best in the bust, not in the bubble: the 1930s and the 1970s being sustained examples; the housing crisis and COVID were short-term episodes that were cut short by the Fed's ability to blow even bigger bubbles. As international investors turn to gold, and the Fed begins to lose the ability to export U.S. inflation, it will also lose the ability to support U.S. asset markets in the next crash.

Alexander Pope wrote of the popping of the South Sea Bubble: "Most people thought the time would come, but no man prepared for it; no man considered it would come like a Thief in the Night.… They have dreamed out their dream, and awakening have found nothing in their hands." Fartcoin has no economic value; MSTR is a monstrosity; Nvidia should not be worth 13% of U.S. GDP; wildly insolvent entities should not be able to issue 10-year debt at a 4.6% nominal yield; the dollar is greatly overvalued at 1/2,660th of an ounce gold. When these markets correct, they will do so quickly—Saylor blew up in a single day last time—and whatever capital is left will be squeezing into very few lifeboats. It would not take much of that flow to send the gold miners up 1970s style, especially from current oversold levels.



MYRMIKAN CAPITAL LLC

The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and delete the material from your computer.

The material contained herein is for discussion purposes only and is not an offer to buy or sell securities. It has been prepared using sources considered reliable and accurate, however, it is subject to change and the accurateness of the material cannot be guaranteed.