

INVESTMENT CHRONICLES

AN EXCLUSIVE PUBLICATION from **PORTER & CO.**

PORTER & CO. INVESTMENT CHRONICLES

Welcome to *Porter & Co. Investment Chronicles*, our guide to the most important and interesting stories from the worlds of investing, finance, and economics that's available exclusively to Partners and Porter & Co. Select members.

Each month, my team and I share the most valuable insights we come across from the hundreds of sources we regularly read and review – hedge-fund letters, annual reports, Securities and Exchange Commission (“SEC”) filings, investment newsletters, newspapers, X (Twitter) threads, conferences, podcasts, and more – and digest them into one carefully curated, easy-to-read resource.

With *Investment Chronicles*, you'll have your finger on the pulse of the markets without having to spend hours scouring the internet each day.

You can navigate each issue using the hyperlinked **Table of Contents** below. All content also includes links back to the original source when possible, so you can easily dig in for more details, to see a larger version of a chart or image, or to learn more about accessing paid content.

We hope you'll come to think of *Investment Chronicles* as a highlight of your subscription with Porter & Co. We think it is the most comprehensive expression of our goal as a business: to give you the information we'd most want if our roles were reversed.

Porter Stansberry
Stevenson, MD
April 2024

Note: Quotes, transcripts, and excerpts are generally reproduced as they appear in the original.

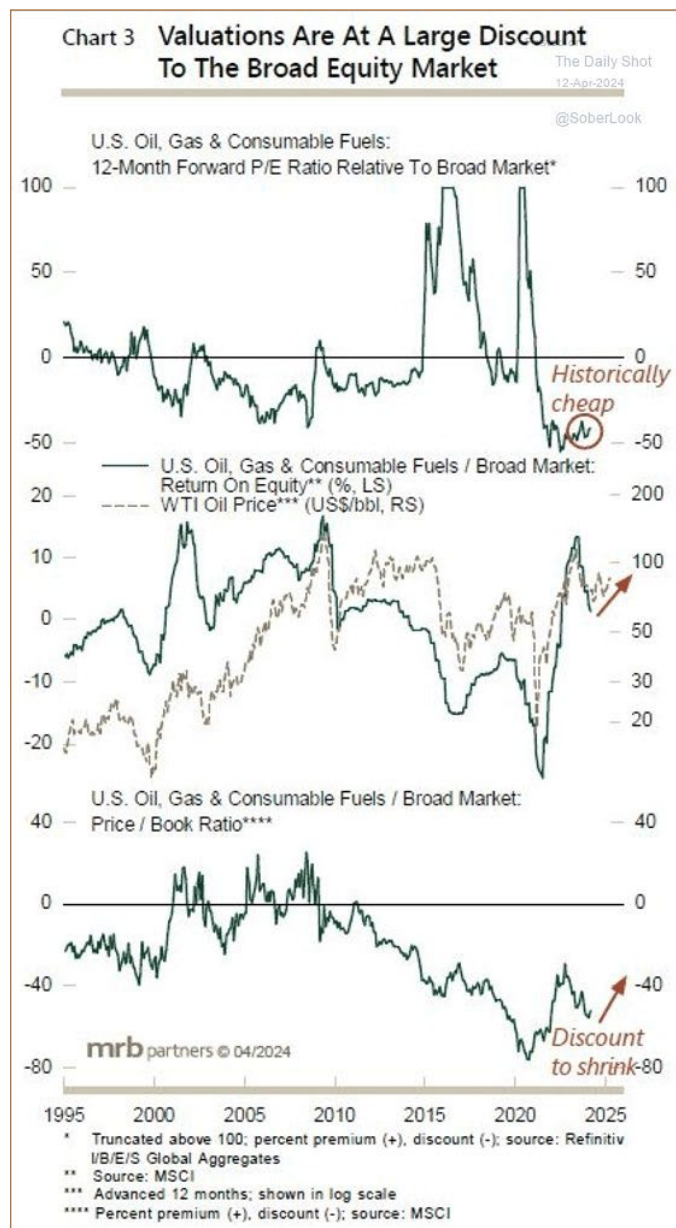
TABLE OF CONTENTS

The Five	3
Economics and Markets	8
The Legends Speak	76
Investment Ideas	98
Sovereign/Government Bonds and Credit	139
Corporate Bonds and Credit	147
Consumer Credit	156
Real Estate	161
Special Situations	170
Precious Metals	192
Energy	210
Other Commodities	233
Bitcoin and Crypto	249
Notable Institutional Buying	271
Notable Insider Buying	273

THE FIVE

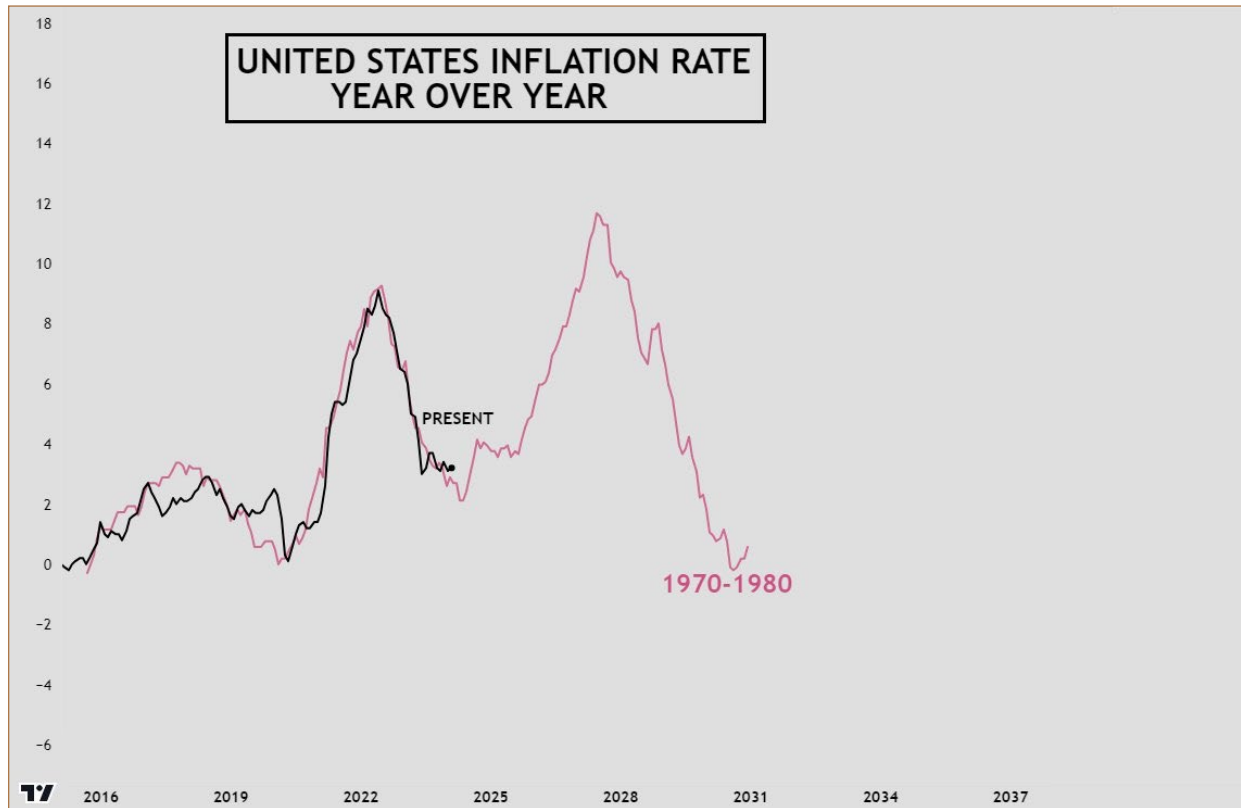
The Most Important Charts We're Watching This Month

The recent decline in inflation has stalled well above the Federal Reserve's official target (from [The Daily Shot](#))...

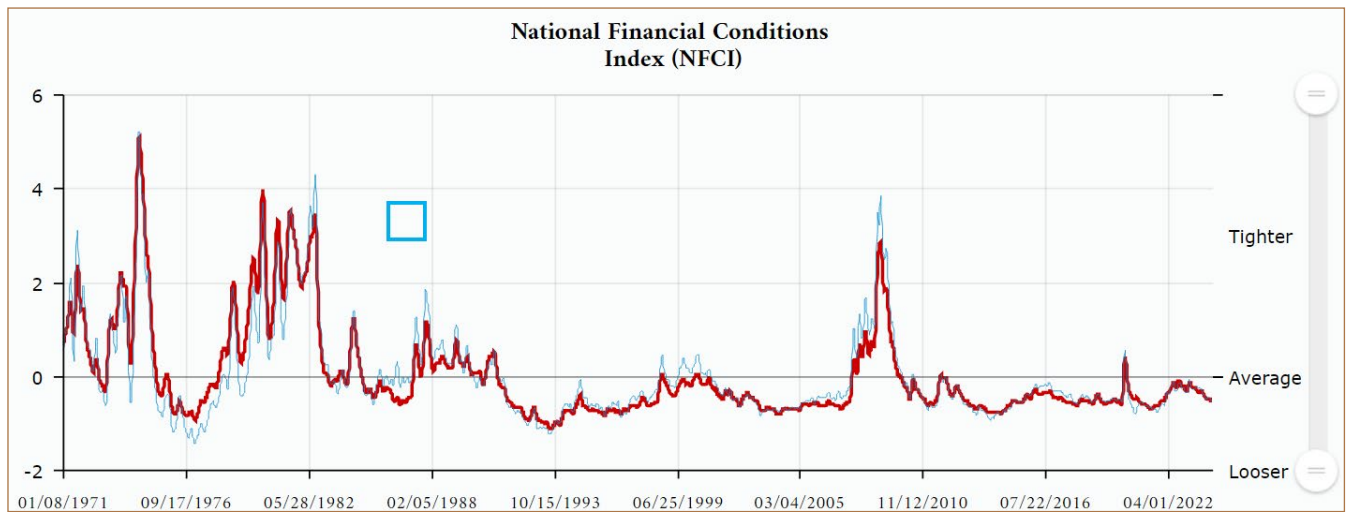


INVESTMENT CHRONICLES

If inflation continues to follow the 1970s roadmap, consumer prices could be headed much higher (from HZ via X)...

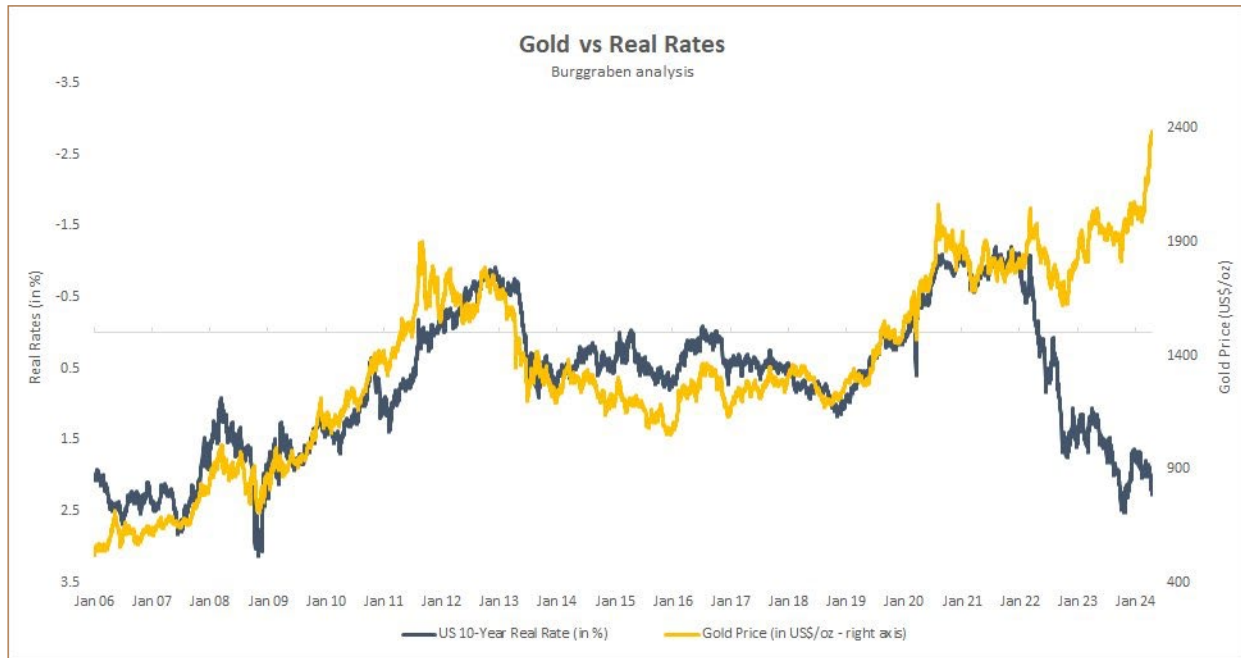


Financial conditions are now looser – as measured by the Chicago Fed’s own metric – than they were at the beginning of 2022, when rates were near zero and the Fed was still insisting that inflation was “transitory” ([from Bloomberg](#))...



INVESTMENT CHRONICLES

The price of gold is diverging massively from real interest rates, breaking one of the most consistent correlations in finance ([from Alexander Stahel via X](#))...



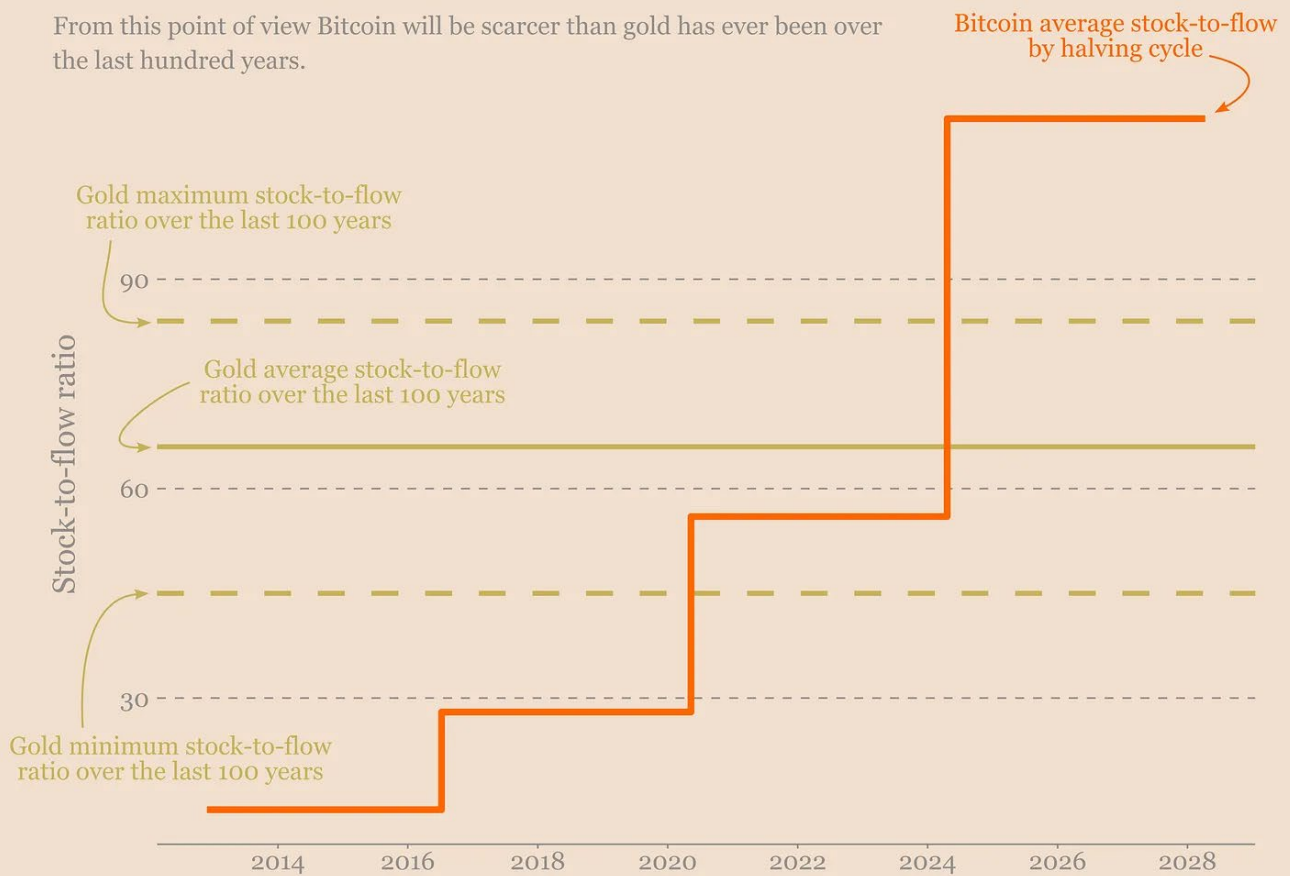
As of its fourth “halving” event – which occurred on Saturday, April 20, 2024 – Bitcoin is officially “harder” (scarcer) money than gold. **Bitcoin’s stock-to-flow ratio** is now roughly double that of the precious metal (**from Ecoinometrics**)...

After the halving **Bitcoin** will be scarcer than **gold**

The average stock-to-flow ratio of gold is around 66.

After the fourth halving Bitcoin’s stock-to-flow ratio will be twice as much.

From this point of view Bitcoin will be scarcer than gold has ever been over the last hundred years.



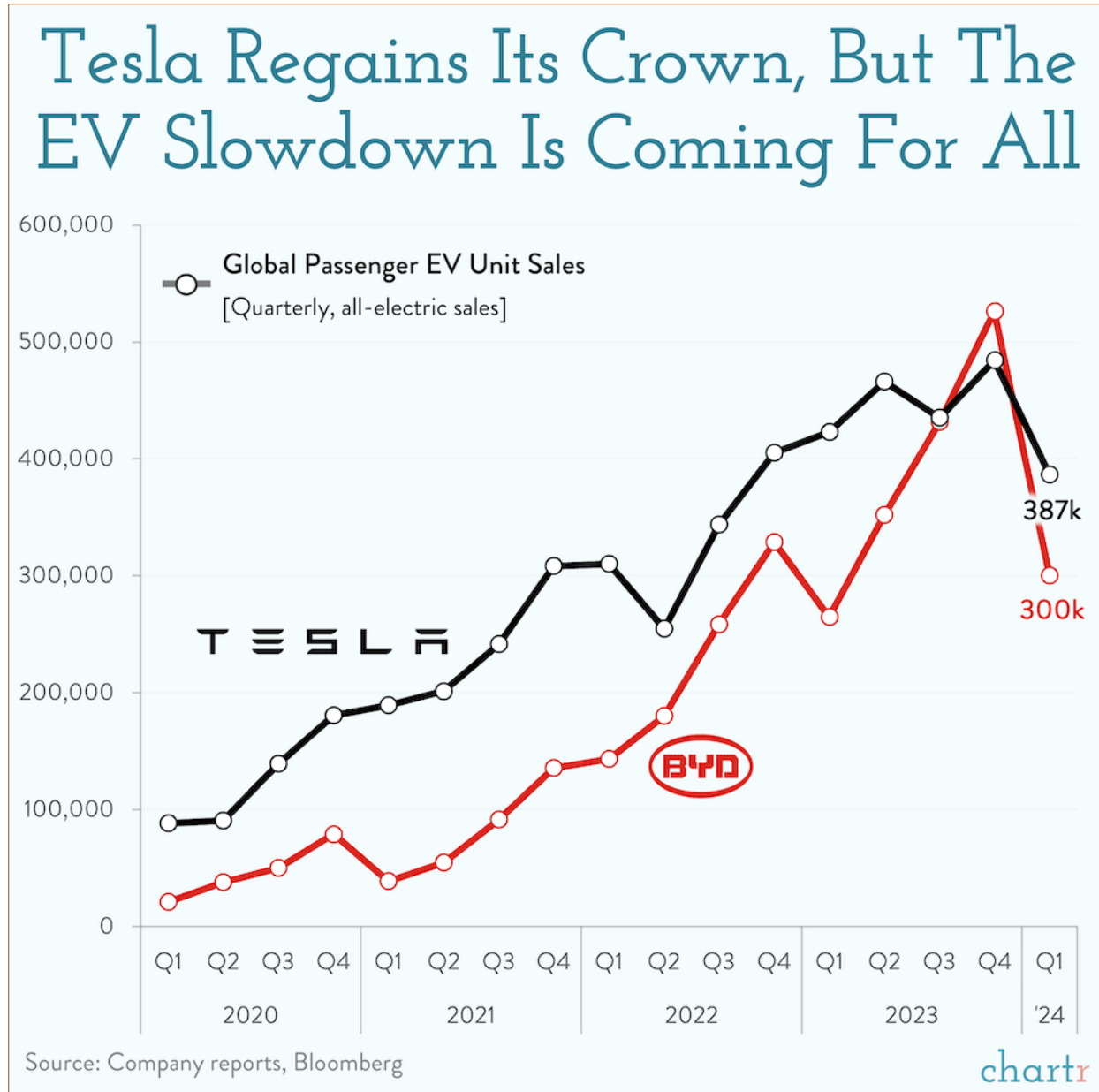
Notes: updated April 19, 2024
Source: World Gold Council and US Geological Survey
By: @ecoinometrics, ecoinometrics.substack.com

Ecoinometrics

INVESTMENT CHRONICLES

ECONOMICS AND MARKETS

The electric-vehicle (“EV”) slowdown has officially arrived ([from charttr](#))...



Out of Juice

Tesla delivered ~9% fewer vehicles in Q1 of this year than it managed a year prior — the first time its quarterly sales have fallen since the pandemic-induced drop of 2020. The company still shipped some 387,000 cars, giving Tesla back the “world’s largest EV producer” title — a boast it had previously lost to the Chinese battery-producer-turned-automaker BYD, which posted an even more dramatic 42% fall in its deliveries.

The news sent Tesla shares down 5% yesterday, capping a tough start to the year that saw TSLA notch the worst Q1 performance of any stock in the S&P 500 index.

Having been the industry trailblazer for so long, Tesla is now facing increased competition, relying on its aging Model Y and Model 3 to keep its sales engine ticking over — all while battling factory fires, shipping delays, and labor disputes in the Nordics. To jumpstart demand, the company has turned to price cuts (many of them) and even embraced advertising for the first time, after years of resisting.

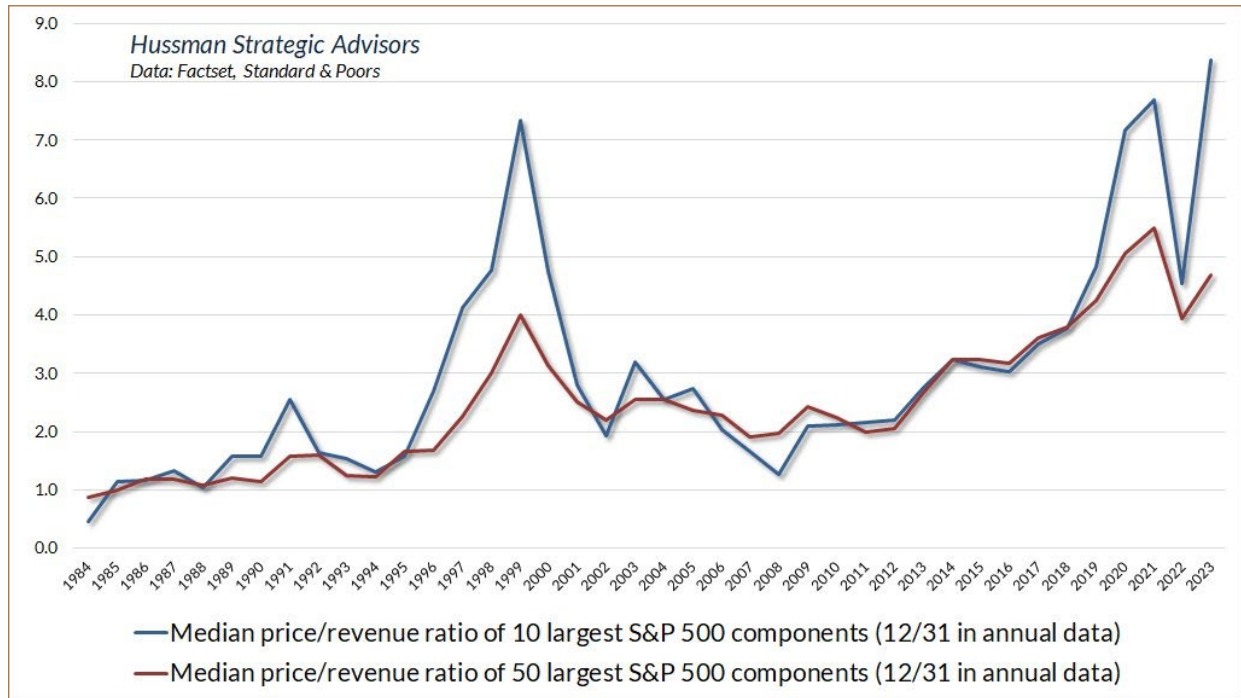
Somewhere in the middle

Ultimately, however, both Tesla and BYD are battling gravity, as the market for all-electric vehicles softens. Indeed, a recent YouGov survey suggests that the problem might be more deep-rooted, with Americans increasingly skeptical about the true environmental impact of going electric, while the common worries of range anxiety (particularly in cold weather) and cost haven’t gone anywhere.

Ironically, sales of hybrid vehicles (+65% in 2023) are now rising faster than their all-electric counterparts (+46%) — Toyota has reported soaring sales of its iconic hybrid Prius series.

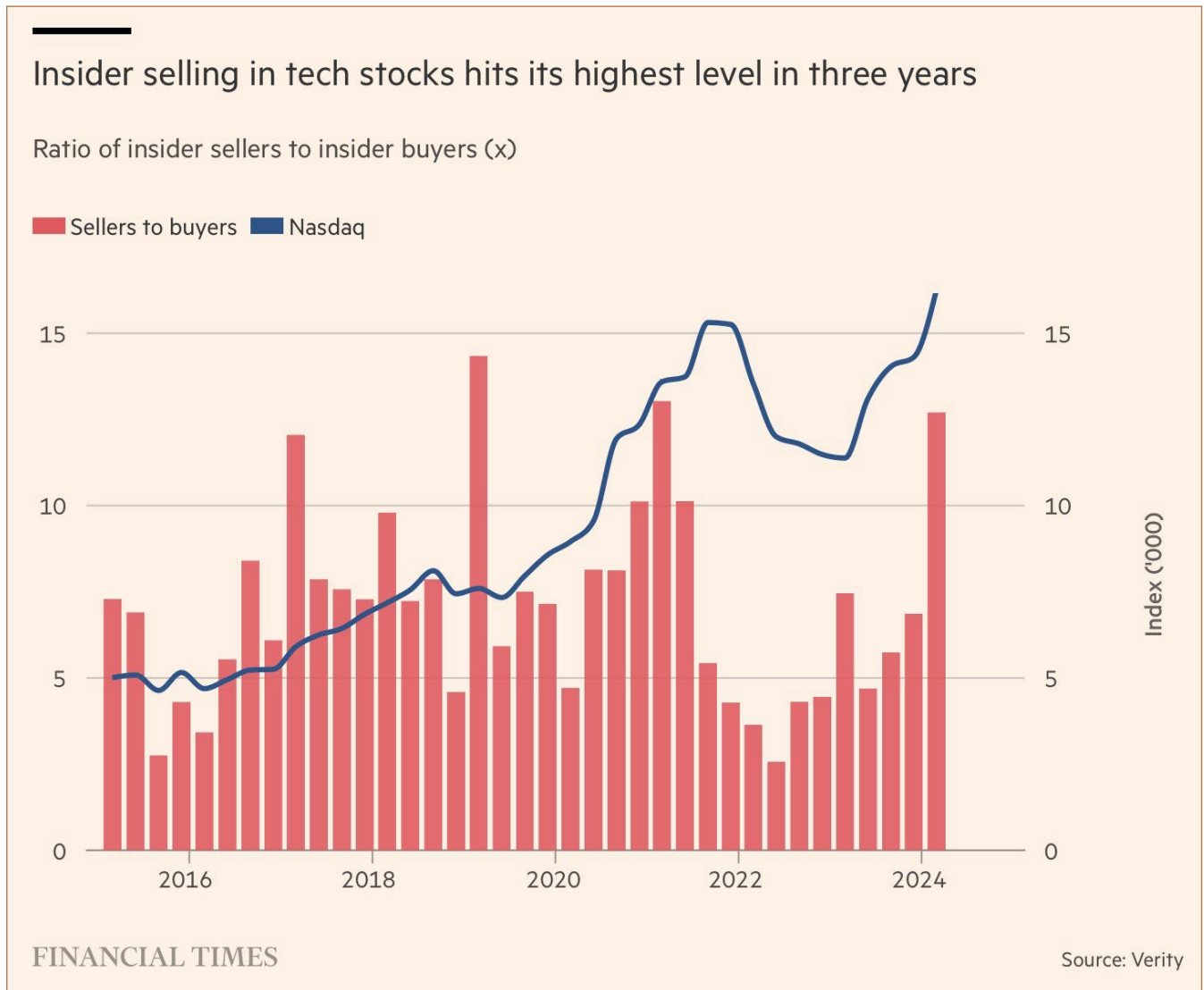
[Continue reading here](#)

“The combination of a high growth rate and a high profit margin has never proved to be permanent. The current crop of 'glamour stocks' increasingly relies on both here.”
(from Hussman Funds)...



Big tech insiders are selling shares at the fastest pace in years (from Jesse Felder via X)...

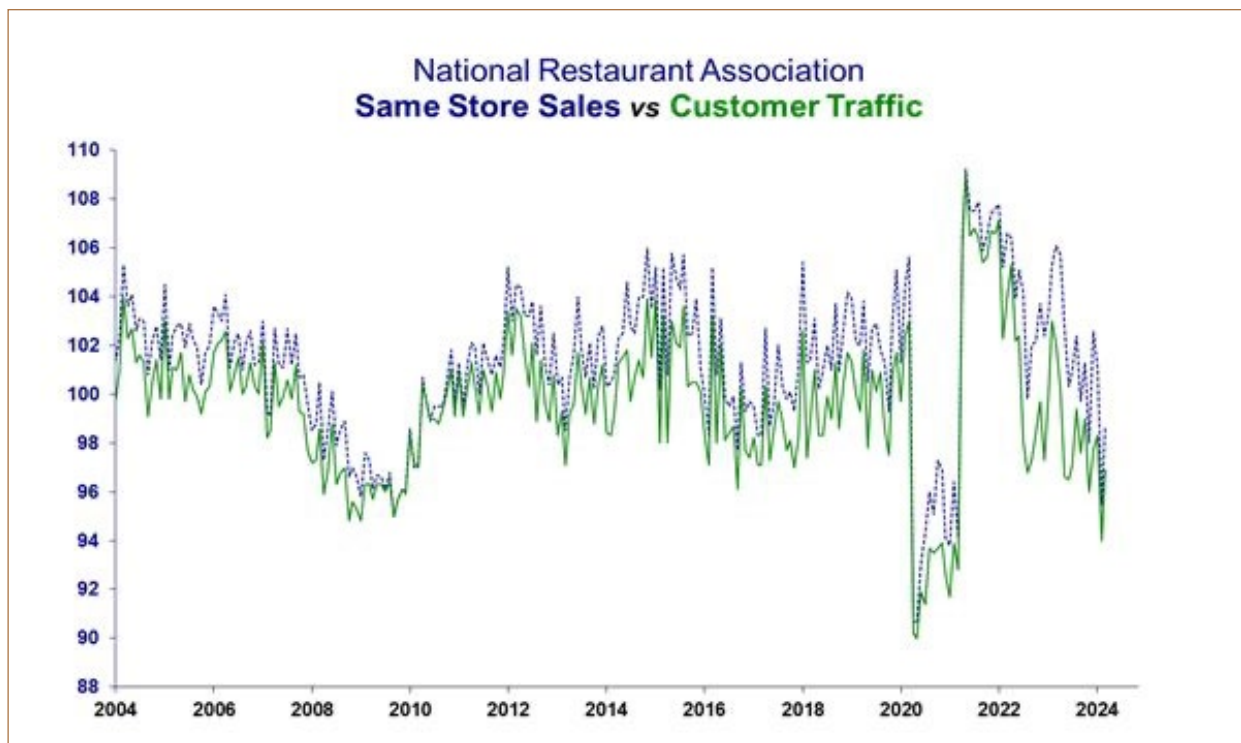
“Peter Thiel, Jeff Bezos, and Mark Zuckerberg are leading a parade of corporate insiders who have sold hundreds of millions of dollars of their companies' shares this quarter, in a signal that recent stock market exuberance could be peaking.”



INVESTMENT CHRONICLES

Restaurant sales and customer traffic have been slowing dramatically (from steph pomboy via X)...

For the life of me I can't figure why this hasn't gotten more attention. I've been routinely chided that consumers are spending on services/experiences instead of stuff. But restaurant sales and traffic are the weakest since they were CLOSED during covid, and the GFC before that, these last 2 months!! Hellooooo....



The White House has had a big “change of heart” about China ([from The Wall Street Journal](#))...

The first time Janet Yellen went to China, she was impressed.

Then the top economist in Bill Clinton’s White House, she saw an economy booming with the support of Western-style market changes. The growth was lifting millions out of poverty, and Yellen was eager to nurture closer ties in the run-up to Clinton’s state visit to China in 1998.

Now, as Yellen prepares to travel to China this week as President Biden’s Treasury secretary, that optimism has given way to a sense of alarm. A cascade of inexpensive Chinese clean-energy goods is driving down prices on global markets, threatening to snuff out American efforts to nurture a domestic clean-energy industry. In meetings in Guangzhou and Beijing, Yellen is expected to tell her Chinese counterparts to stop relying on exports to prop up their underperforming economy and instead boost their own consumer market.

“We don’t want to be overly dependent and they want to dominate the market,” she said in an interview. “We’re not going to let that happen.”

The warning from Yellen is a sign that the Biden administration is moving toward raising Trump-era tariffs on some Chinese products, including electric vehicles. Such a move could reignite tensions between the world’s two largest economies, which have tried to stabilize relations in recent months.

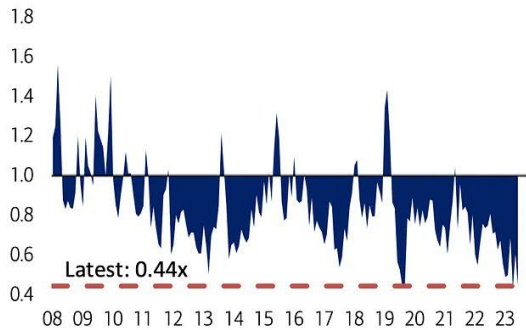
The message will also mark an evolution for Yellen—and the end of a bygone era in U.S. economic thinking about China. Like other economists of her generation, Yellen, 77 years old, said the surge in Chinese exports at the start of the 21st century had seemed like a positive development, providing low-cost goods to global consumers. But the inexpensive exports also helped hollow out the U.S. manufacturing base in what became known as the China shock, leaving Americans out of work and fueling a political backlash to globalization.

“People like me grew up with the view: If people send you cheap goods, you should send a thank-you note. That’s what standard economics basically says,” she said. “I would never ever again say, ‘Send a thank-you note.’”

[Continue reading here](#) (subscription may be required)

There are no more deep-value equity investors left (from Daily Chartbook)...

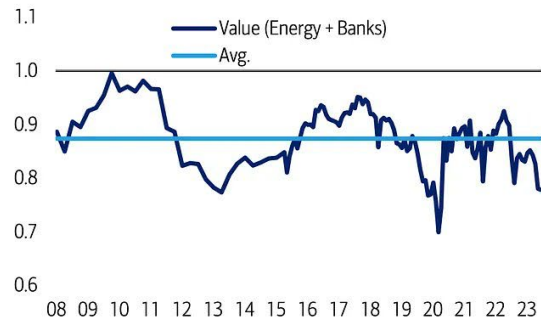
Exhibit 12: Value (low PE) is now 56% underweight vs. 3m Momentum
 Long only positioning in Trailing P/E vs 3m Momentum of S&P 500 (9/2008-present)



Source: FactSet, BofA US Equity & Quant Strategy

BofA GLOBAL RESEARCH

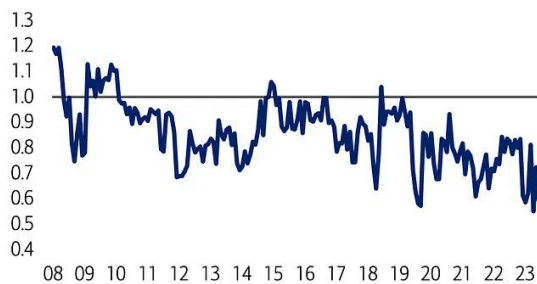
Exhibit 13: Relative exposure to Energy + Banks (Value) below average
 Long-only funds' relative weight vs. S&P 500 in Value (Energy + Banks)



Source: FactSet Ownership, BofA US Equity & Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 14: Low P/E is neglected close to max underweight by LOs
 LO relative weight in high trailing EPS yield factor (2008-2/24)



Source: BofA US Equity & Quant Strategy, FactSet Ownership

BofA GLOBAL RESEARCH

Exhibit 15: ...and is cheap relative to history
 Fwd P/E of high trailing EPS yield factor relative to the equal-weighted S&P 500 (2001-2/24)



Source: FactSet, BofA US Equity & Quant Strategy

BofA GLOBAL RESEARCH

The service sector is weakening as manufacturing strengthens (from Liz Ann Sonders via X)...

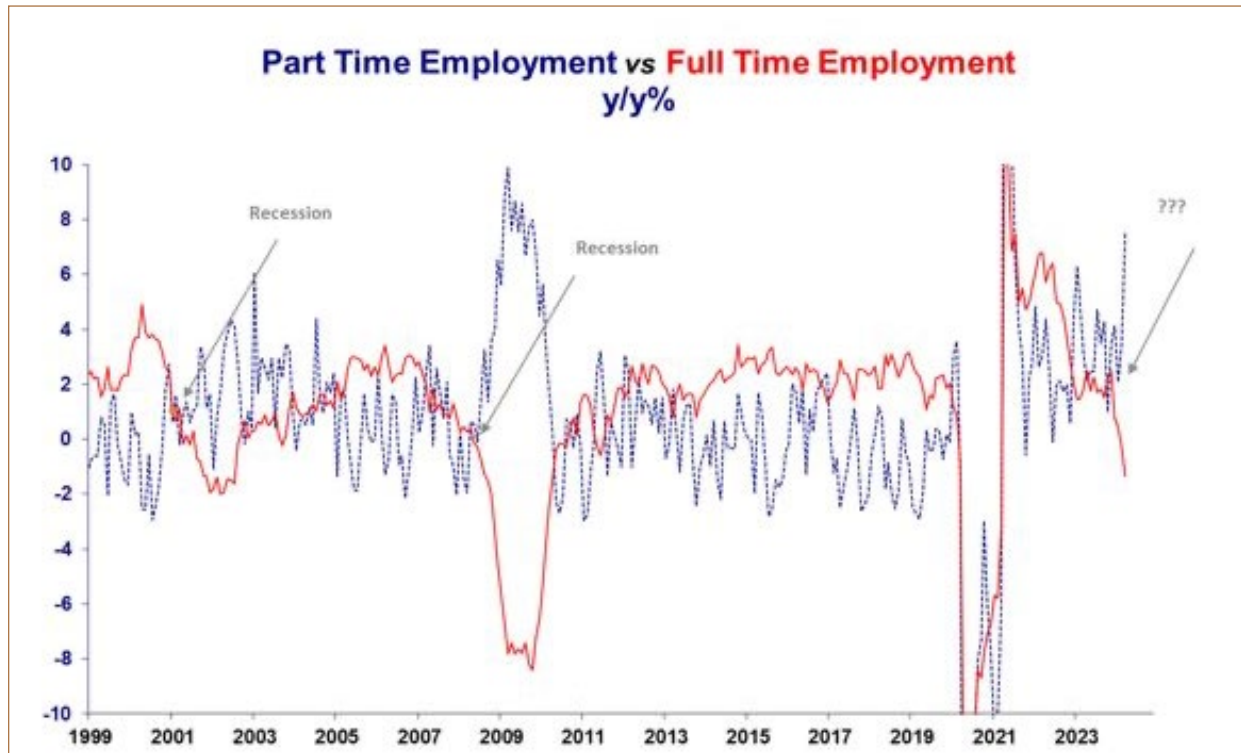
Trading places? As ISM Manufacturing PMI (blue) has improved over the past year, ISM Services PMI (orange) has weakened ... fits with our rolling recessions/recoveries thesis (manufacturing hit first, now improving; with services now getting bumpy).



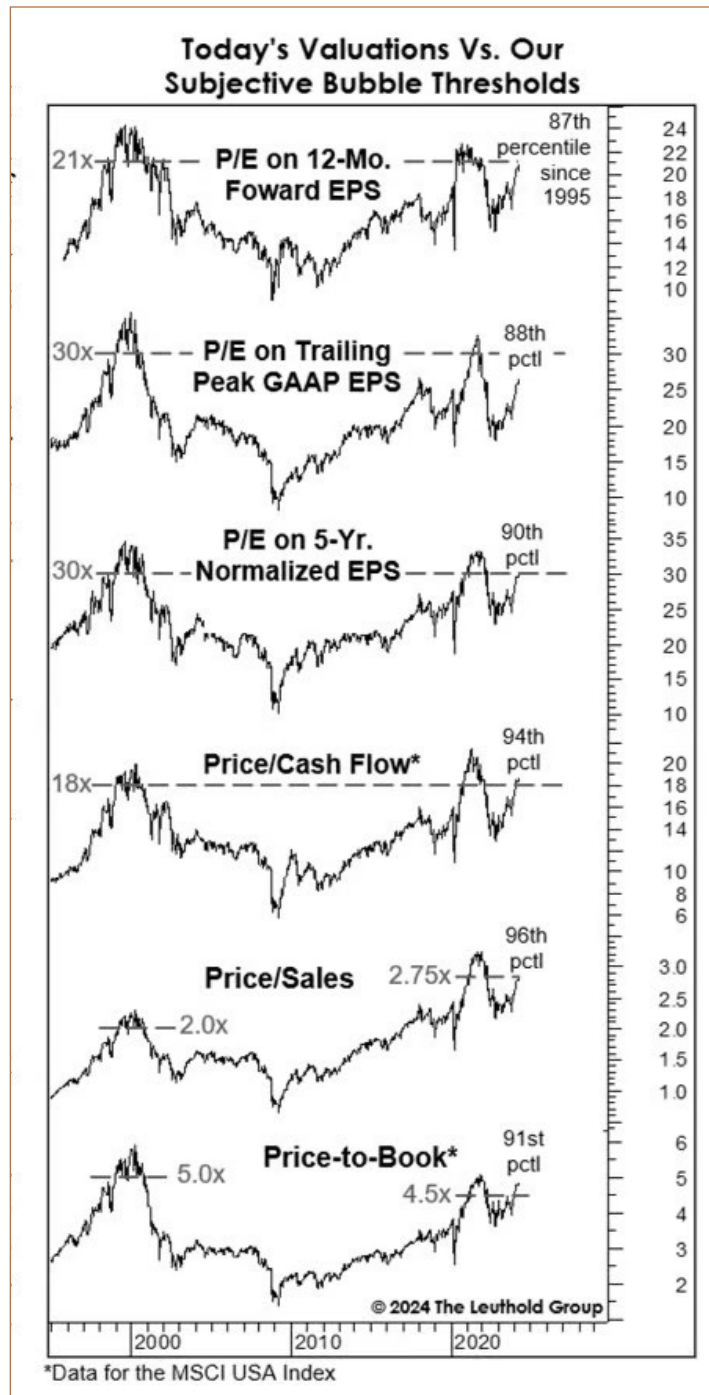
INVESTMENT CHRONICLES

The jobs market may be weaker than it appears ([from steph pomboy via X](#))...

Nothing about this chart suggests we have a 'strong' labor market. Far from it. FT jobs down -1.3% yy... PT jobs up 7.5%/y



The Leuthold Group looks at today's valuations vs. "bubble thresholds" ([from Research. LeutholdGroup](#))...



INVESTMENT CHRONICLES

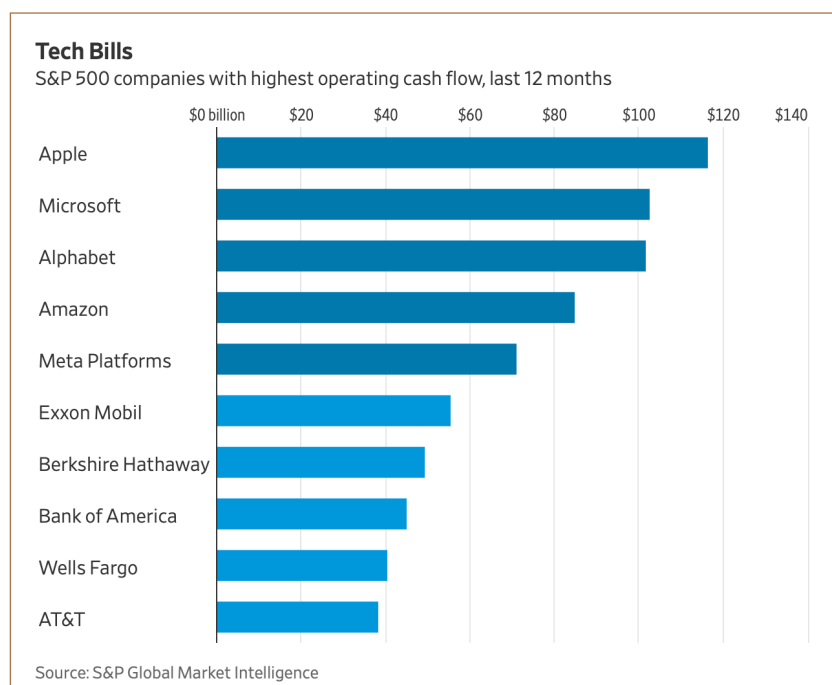
Big Tech has a big cash problem (from The Wall Street Journal)...

Having more money than you know what to do with used to be a high-quality problem. Now it is just a problem.

The largest tech companies in the world are also the richest. Apple AAPL -1.64% decrease; red down pointing triangle, Amazon AMZN 0.18% increase; green up pointing triangle, Microsoft MSFT 0.75% increase; green up pointing triangle and the parent companies of Google and Facebook META 0.33% increase; green up pointing triangle now collectively sit on a little more than \$570 billion in cash, short-term and long-term investments. That is more than double the collective pile of the next five richest nonfinancial companies on the S&P 500 index, according to data from S&P Global Market Intelligence.

This is mostly attributable to business models that sell widely used products and services without the sky-high fixed costs common to other industries. Apple, Microsoft and Alphabet GOOGL 0.15% increase; green up pointing triangle each produced more than \$100 billion in cash from operations last year. Oil giant Exxon Mobil's operating cash flow was a little past \$55 billion for the same period.

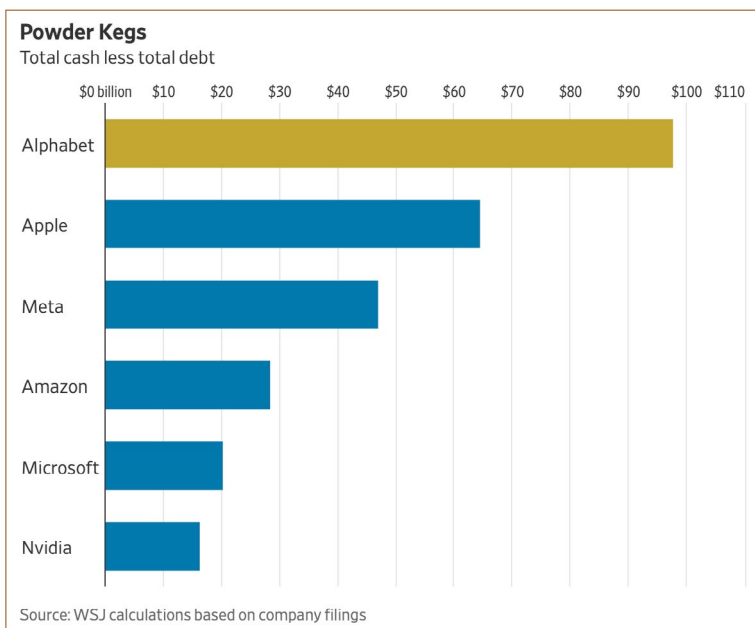
That is an awful lot of capital to have to put to work. And doing so effectively has become an even bigger challenge over the past couple of years, as regulators in the U.S. and around the world have zeroed in on Big Tech, with the determination to keep it from getting bigger. Amazon, Adobe and Intel have had to spike acquisition



attempts over the past year because of resistance from global regulators. And the deals that do get through are taking longer and require costly lobbying efforts. Microsoft’s acquisition of Activision Blizzard took nearly two full years to close. Its next largest deal—the 2016 acquisition of LinkedIn—took a little under six months.

Still, piles of unused cash might be burning a hole in some pockets. Google is reportedly considering a bid for HubSpot, a provider of cloud-based software used for email marketing and other advertising-related functions. The price of such a deal would likely come to more than \$40 billion—a 30% premium to HubSpot’s market value from before Reuters reported Google’s interest in the company on Thursday. That would be more than three times the size of the company’s largest deal to date—the \$12.5 billion acquisition of Motorola Mobility in 2012.

Such a move seems foolhardy, particularly because it could be seen as Google further buttressing a \$238-billion-a-year advertising empire that the U.S. government already feels is too dominant. But Google also has the most dry powder—even compared with the other superfluous tech companies—with nearly \$98 billion in cash net of debt on its books as of its latest quarter. That is double the net cash of archrival Meta Platforms and well above Apple’s net cash balance of \$64.5 billion.



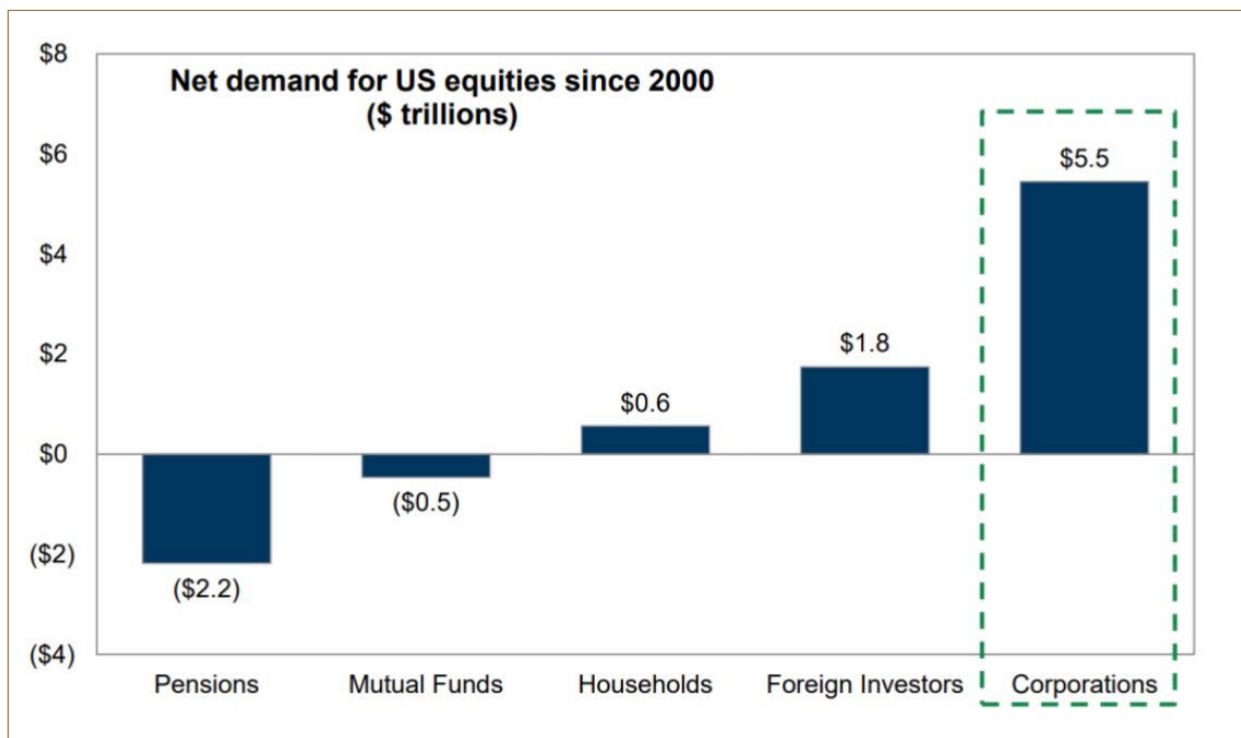
[Continue reading here](#) (subscription may be required)

INVESTMENT CHRONICLES

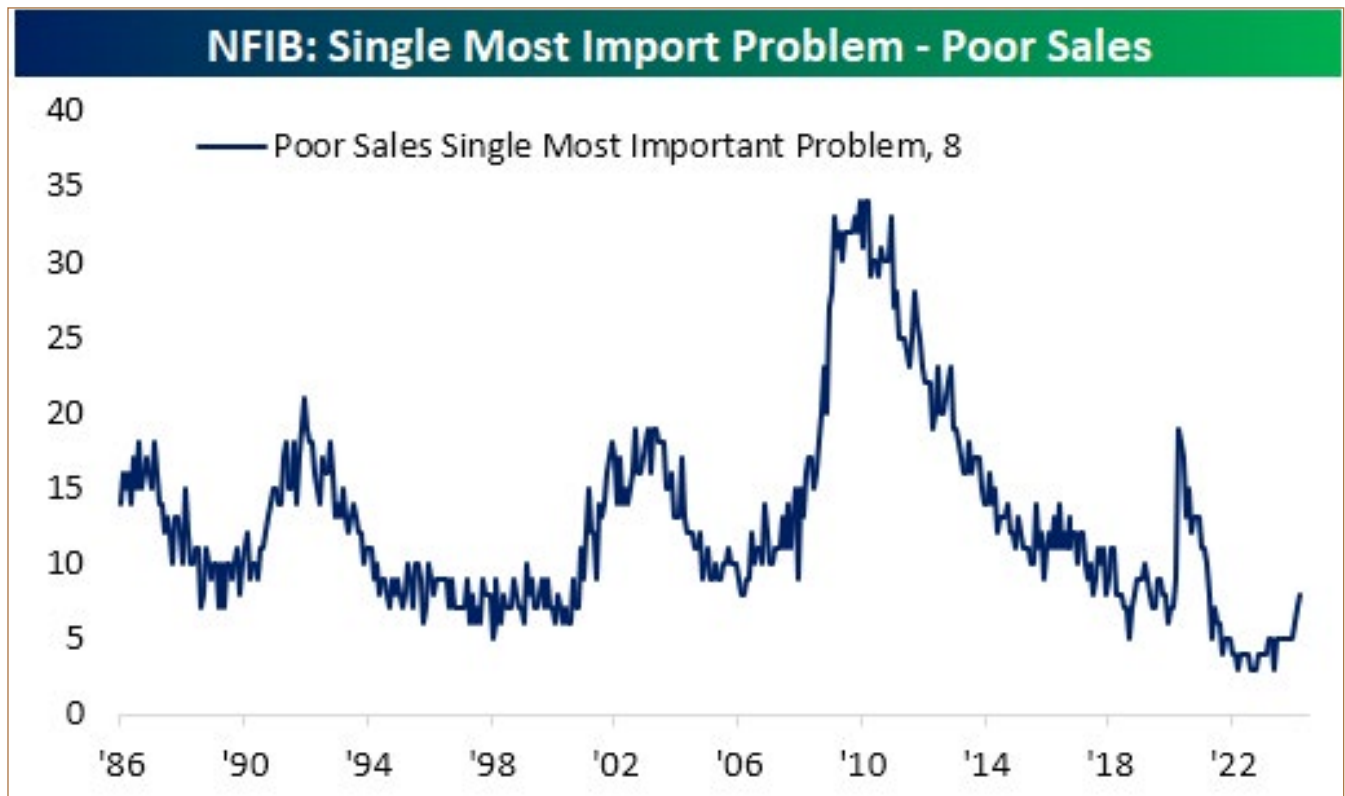
U.S. corporations have been the single largest buyer of U.S. equities over the past 20 years (from David Marlin via X)...

We are currently in the corporate buyback blackout period for most of the \$SPX.

Since 2000, US corporations have bought back \$5.5T of stock. This has amounted to more demand than any other market participant, and it's not even close.



You don't want to see "poor sales" as the #1 problem ticking higher in the monthly NFIB small business survey. But that's what appears to be happening ([from Bespoke via X](#))...



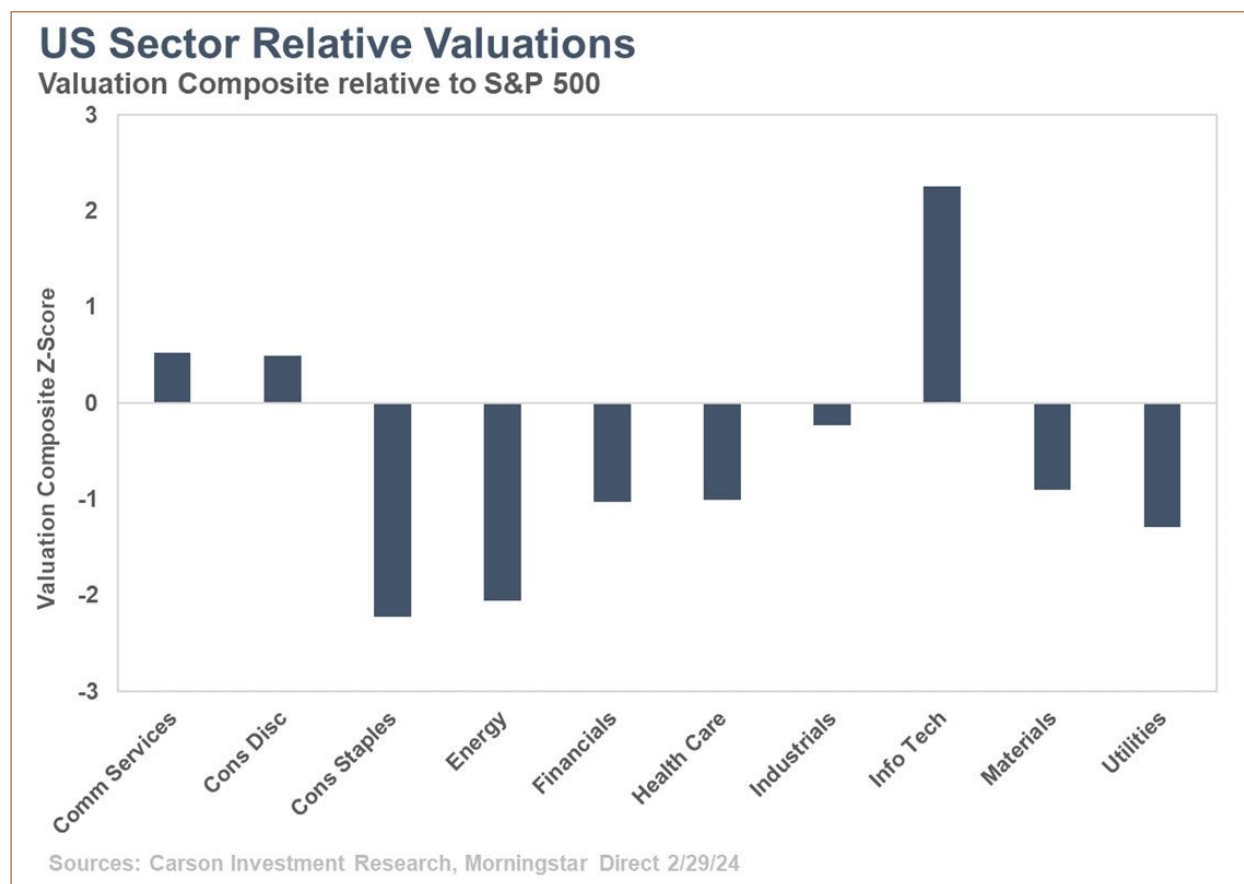
INVESTMENT CHRONICLES

Not all sectors of the market are expensive ([from Ryan Detrick, CMT via X](#))...

US stocks are expensive, they tell us.

That is true, but it is mainly due to tech.

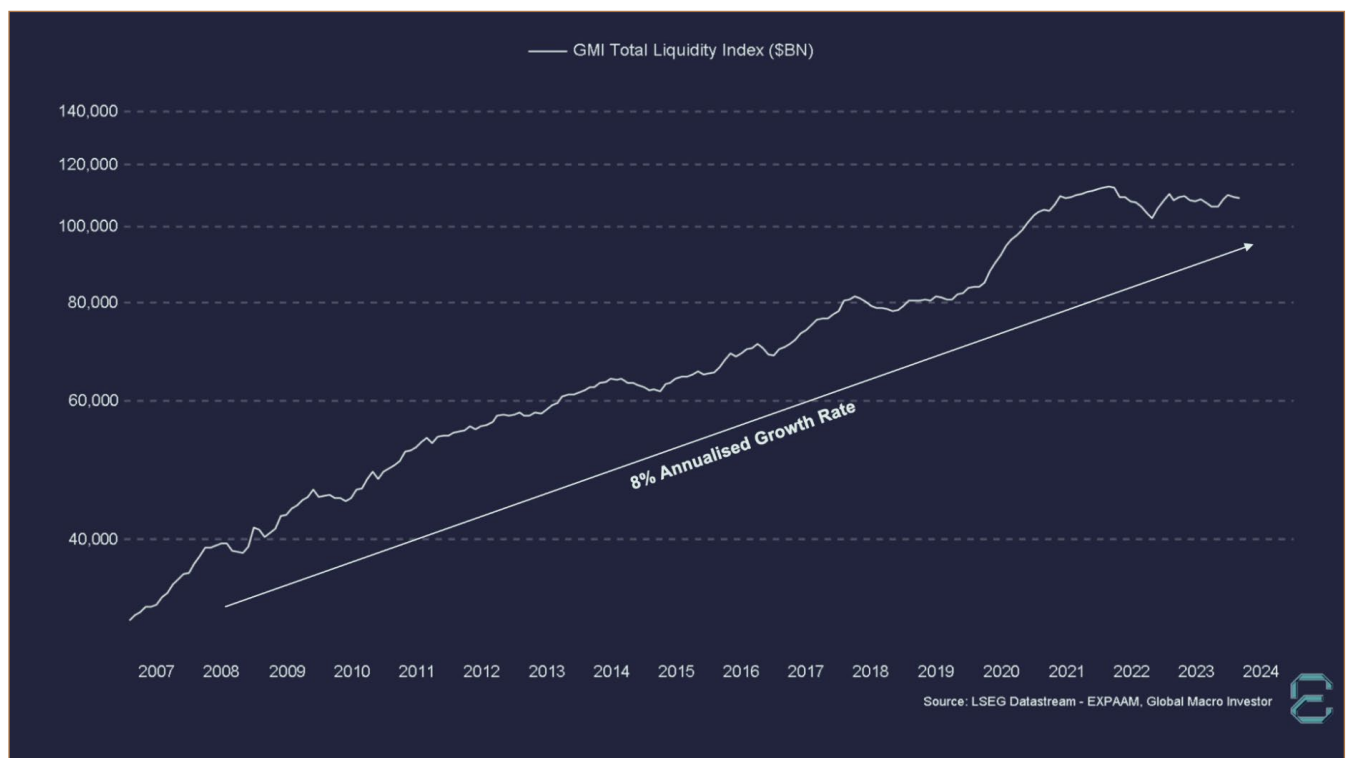
If you look around you'll notice that areas like the cyclicals (energy, financials, materials, and industrials) are all fairly valued and in some cases outright cheap.



Inflation isn't the biggest hurdle for investors today ([from Raoul Pal via X](#))...

While everyone is worried about 3.5% inflation, the real issue is the ongoing 8% per annum debasement of currency, on top of inflation.

Your hurdle rate to break even is around 12%, which is the 10-year average returns of the S&P 500...just to keep your purchasing power.



INVESTMENT CHRONICLES

This may be the real reason the Federal Reserve is so eager to cut rates (from Otavio (Tavi) Costa via X)...

Forget about inflation, the labor market, or maybe even politics:

The chart below is likely the primary reason prompting the Fed to consider cutting interest rates.

Assuming current rates remain steady, the cost of servicing the Federal debt alone will approach 6% of GDP by year-end.

On the other hand:

If the Fed reduces rates by 150 basis points, the interest payment would decrease by 33%.

Severe debt imbalances will inevitably lead central banks to resort to financial repression, compelling policymakers to let inflation rates remain higher for longer.

I cannot stress enough how favorable this environment is likely to be for hard assets.



Today's market shares some unsettling similarities with 1987 (from Ruffer Quarterly Investment Review)...

We can now see that, when we began, markets had enjoyed the first decade of an unprecedented 40 year bull market, during which there were, for sure, opportunities to lose money, but nothing which can be described as a conventional bear market. Although it did not feel like it (for it suffered crevasse-like setbacks), it was a perpetually rising market – an equatorial climate of everlasting sunshine. How wonderful it must have been, we might think, not to have to endure the depressing cold, dark days of winter! But one has only to look at equatorial climates to see what a distorted world nature delivers when there is no winter. Either nothing grows, or – as in the Amazon – everything grows.

This absence of a cycle, the forest without fire, contrasts with the great economic leaps forward in history, which have always been cyclical in character. Kitchin, Juglar and Kondratieff recognised this truth a long time ago: the readily detectable Great Waves of human progress and prosperity.

The alarming conclusion we draw from the natural world is that the markets face, sooner or later, something unpleasant. The economist Hyman Minsky made this exact point about chaos, likening it to the sand which passes through the narrow point of an egg timer, creating mounds which collapse as more sand falls onto them. He observed that every now and again the collapse would be long-delayed, pointing perhaps to a powerful prior equilibrium – but that, when the collapse did come, it was more than usually powerful. In the 440 or so years of stock market history, we have seen every condition under the sun – except today's decades-long stability.

Why should stability end this way? Here is a single example of a wonderful idea, beneficently conceived, which is as toxic as Sir Noël Coward's chocolate-covered hand grenade. John Bogle launched his first index-tracking fund in the mid-1970s, right at the bottom of the bear market. It promised effortlessly average performance: the investor would never come first or last, but would always come forty-somethingth out of a hundred investors, as the fund delivered index returns minus (ever-shrinking) fees. Over a long period, as individual manager genius waxed and waned, the end result would be distinctly creditable. So powerful was this idea, and so effective were the equity markets in making money, that the index fund tail now wags the dog, and the dog is no longer dog-shaped. The top performers – the Magnificent Seven – now attract waves of investment simply because they represent such a high percentage of the market. Conceived as a free ride on the combined skills of the analysts and asset-allocators, so-called passive

investments have become more than 40% of the market – the tipping point at which investor flows exert a greater influence on stock prices than the underlying investment fundamentals. Here is the law of unintended consequences writ large: a great idea – democratising investment – has become a force for potential destabilisation.

I remember a young investor who was on a winning streak, giving me a tip how to optimise returns: 'Don't buy the equity – buy the warrants!' What might be regarded as a classic beginner's mistake is alive and thriving today: use borrowing to maximise returns! To be fair, its general application is that it allows effective investment in anomalies which give too small a positive return to be worth trading. A single whitebait doesn't fill the stomach, but catch a shoal of them, and you have a family meal. A chance of a 1.5% gain, leveraged up five times, gives 7.5%; if you are sure of the gain, it becomes an opportunity. In yesteryears, leverage was the means by which the less well-off became rich; once rich, you de-levered, and future generations could live off the income. It didn't always work out like that, but it acknowledged a basic truth: that leveraging is inherently dangerous. To put it into the language which has relevance in this debate: leverage is an amplifier and thus destabilising. The shape of the equity market has deteriorated; after a generation of companies issuing bonds to buy back their own stock, the granite solidness of equity has been replaced with debt. This creates two dynamics – it makes the holders of the equity in a successful business much more valuable, but it sinks a struggling business much more quickly. That alone should give pause for thought. But, to us, the public equity markets are no longer the riskiest part of financial markets. Sure, the derivative and options market are priced off them, but that doesn't necessarily make them important, any more than Greenwich is the centre of the geographical world because it is the situs for Greenwich Mean Time. The baton has passed to the private markets – for a generation led by the private equity markets, and now giving way to private credit, more properly called private debt.

The commercial opportunities for private debt arise from a deep understanding of the pathology of each unquoted business, and the knowledge that the banks, once dominant in corporate lending, are so tied up in the Sargasso Sea of legislative constraints, that this newcomers lender, unfettered, can control the debt market. The private debt operators lend at punitive rates, feasting on the high coupons, but increasingly they now end up with equity ownership, as businesses are driven to default by those same interest payments. There is nothing new in this – it is a reversion to the days before the quoted

exchanges became the 'market'; in the 19th century, businesses were owned by the controlling family, who used the exchanges in the same rodeo fashion in which the off-exchange markets operate today.

The effect of these various initiatives is that a great deal of debt is now layered into the investment universe – and, where there is debt, there is not just risk, but amplified risk.

The unbroken upward trend of the markets reveals that there hasn't been as much risk around as the facts would suggest. The reason for this is that central banks have always been there to bail out the system, time and again medicating the wounds caused by speculation. Whatever the weather – be it pandemonium or pandemic – the Federal Reserve (Fed) has piped on. The mood of many in the market is: we rather agree with this Ruffer chap's worrisome analysis; but while the music continues, we'll make money in the momentum and, when it stops, we'll hold our nerve, and the Fed will bail us out.

Our co-CIO Henry Maxey has identified two flies which will likely make the Fed's ointment ineffective. The first is that the conditions are there for a liquidity crisis. Liquidity is the upmarket word for not having enough ready cash to meet a commitment on a due day – quite different from a solvency problem, where you haven't the resources to do so. In many situations, illiquidity is an inconvenience, but when it is systemic, it can act like a forest fire and spread its flames throughout a financial system. But surely (will ask Socrates' friend), the Fed is alert to the danger, and will provide emergency funds? It has done so again and again in the last 40 years which, parenthetically, is a good part of the reason why the United States has been the best-performing market, and is also the reason it is the epicentre of the leverage danger.

The second fly is that in such a swift crisis, the Fed will not be able to provide the funds in time. Markets are driven by algorithms, which recognise opportunities through patterns – the speed of dealing is, in effect, instantaneous. Once those patterns signal a reversing dynamic, they will be activated, and that will trigger margin calls: borrowers will have to stump up more collateral immediately to keep their borrowing in place. Easier said than done, of course – Christopher Fildes once described an emerging market as one from which it is difficult to emerge in an emergency. It might just be that this is the fate, too, of the traditional markets. Is this outlook unprecedented? No – it's what happened in 1987, when the crash was both unstoppable and speedy; back then it happened in a fairly valued market, in a bull phase, because the portfolio insurance protections in place didn't work, at a point when they were absolutely required to.

'Will it happen soon?' Well, if the markets were a taxicab, I wouldn't want to get into it, even if it was raining. A computer-driven market is passionless, and rapid. Trouble becomes chaos in a jiffy – five minutes before the hurricane, the market can give every appearance of calm. That adds up to a 'when', rather than an 'if'. If we thought it a mere possibility, we would hold a different portfolio. We already believe that we must have a portfolio which can benefit from an extended period of tranquillity. That gives us an each way bet – but the market's current supreme confidence in untrammelled upside means the most powerful portfolio returns will come from the onset of the storm.

In conclusion, the market is dominated by quantitative trading, grabbing pennies in front of the steamroller. This is now the dynamic driving the market, and so long as it continues, it will make money. We are invested with the steamroller, preparing for the substantial gain which will accompany the rupture of this dynamic. This is reflected in our core assets: the yen, credit default swaps, volatility plays and the inflation-linking of the portfolio's bonds. The fragility in these core assets can be encapsulated in a single word: when?

I qualified as a stockbroker over 50 years ago, and I have spent my career peering into the future. I have found it rather easy to see the next big thing over the horizon, and the collapse of the predicated alliance between the central authorities and investors is merely the most recent of them. If the tooth fairy were to grant a second gift, it would be knowledge of the 'when?' Ruffer's investment strategy has always been to claim indifference as to market direction. I would put that differently in today's extreme tensions. We are – we need to be – indifferent to the 'when?'. I am confident enough to believe the asymmetry of risk in our core holdings will serve us as well as in previous crevasses in the market. Our offsets – those investments held to play the current Weltanschauung – have to play their part until the core assets come alive. I cannot say we achieved that nirvana in 2023: it was our own winter. But, as in nature, nothing is forever and today's portfolio shows greater fluency and balance. Now, it is the market's endless summer that is to be tested.

JPMorgan, BlackRock, and others have been getting insider information about U.S. inflation numbers from the Bureau of Labor Statistics ([from Yahoo Finance](#))...

An economist from the Bureau of Labor Statistics corresponded on data related to a key US inflation gauge with major Wall Street firms like JPMorgan Chase & Co. and BlackRock Inc., raising questions about equitable access to economic information.

The BLS economist answered numerous inquiries about details within the consumer price index in recent months, mostly related to computations in key categories within shelter as well as used cars, according to records requested by Bloomberg.

The back and forth between the financial firms and the economist, who has been with the BLS for many years, was first reported by the New York Times. He sent several emails to a broader group, which he called “my super users” in one of the emails obtained by Bloomberg. The BLS has said it doesn’t maintain a list of “super users.”

In mid-February, one user asked if they could be added to the “super user email list,” to which the BLS economist replied minutes later, “Yes I can add you to the list.”

While the recipients’ names were redacted from the request, email signature details or disclosures from their employers were visible in some of the provided records.

In addition to BlackRock and JPMorgan, other banks, hedge funds and research firms — Brevan Howard, Millennium Capital Partners LLP, Citadel, Moore Capital Management, High Frequency Economics, Nomura Securities International and BNP Paribas — appeared in the exchanges and declined to comment. Pharo Management and Wolfe Research also came up in the emails but didn’t provide comment.

Email ‘Mistake’

Economists have been clamoring to find out more about these “super users” after the BLS staffer addressed an email to those people in February, suggesting that a change to the weights of underlying data within a key measure of rental inflation was behind its surge in January’s CPI. The BLS told recipients to disregard its contents, and subsequently tried to clear the confusion with a notice on its website. The agency also said that the email was “a mistake.”

[Continue reading here](#)

Equity market positioning is quite extended, which is bearish from a contrarian perspective ([from Barchart via X](#))...

Asset Managers have built the largest equity futures position in history.



Rising earnings-per-share (“EPS”) forecasts remain a strong tailwind for stocks (from Bloomberg)...

A hotter-than-expected inflation print Wednesday morning all but removed the possibility of interest rate cuts in the near future. That leaves earnings as a last leg of support for the resilient stock market rally that began last year.

And Corporate America could very well deliver on that promise.

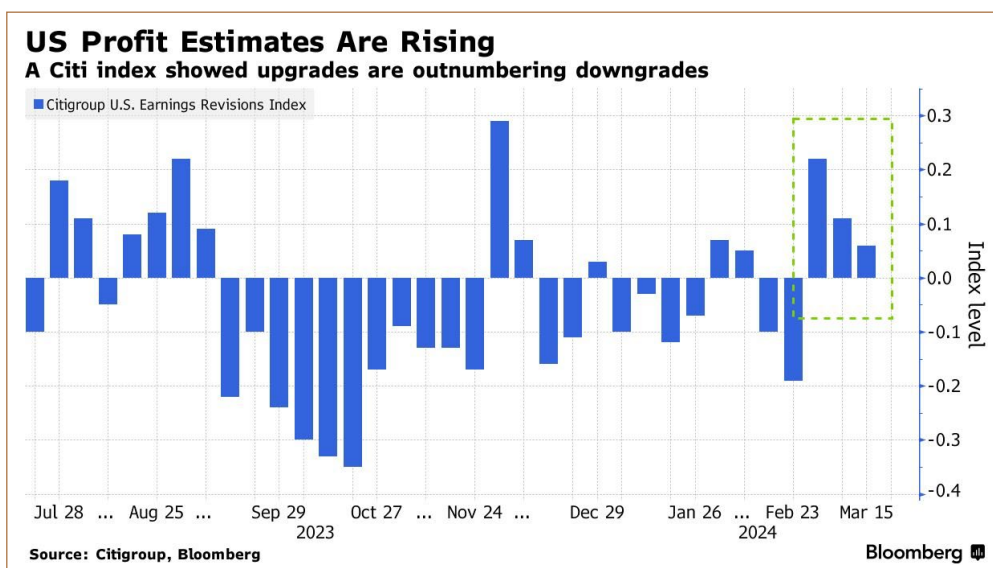
Wall Street strategists are optimistic about another bumper earnings season as global economic growth picks up. Even pricey technology stocks — the primary profit engine in the previous quarter — are again expected to be supported by solid results. So while the S&P 500 Index is struggling in April after its best first quarter in five years, few experts are eager to bet against this market.

“It’s way too early to apply the brakes on the US stock rally,” said Manish Kabra, head of US equity strategy at Societe Generale SA. “The momentum has been backed up by the earnings outlook, and I expect that to continue for at least one more quarter.”

Kabra is among a slate of Wall Street strategists who have boosted their year-end forecasts for the S&P 500 in recent weeks.

Earnings for S&P 500 companies are expected to post a “healthy” 10% gain in the first quarter in headline numbers from a year ago, according to Deutsche Bank AG strategists led by Parag Thatte. And earnings upgrades from analysts have outnumbered downgrades in the first quarter, according to a Citigroup Inc. index.

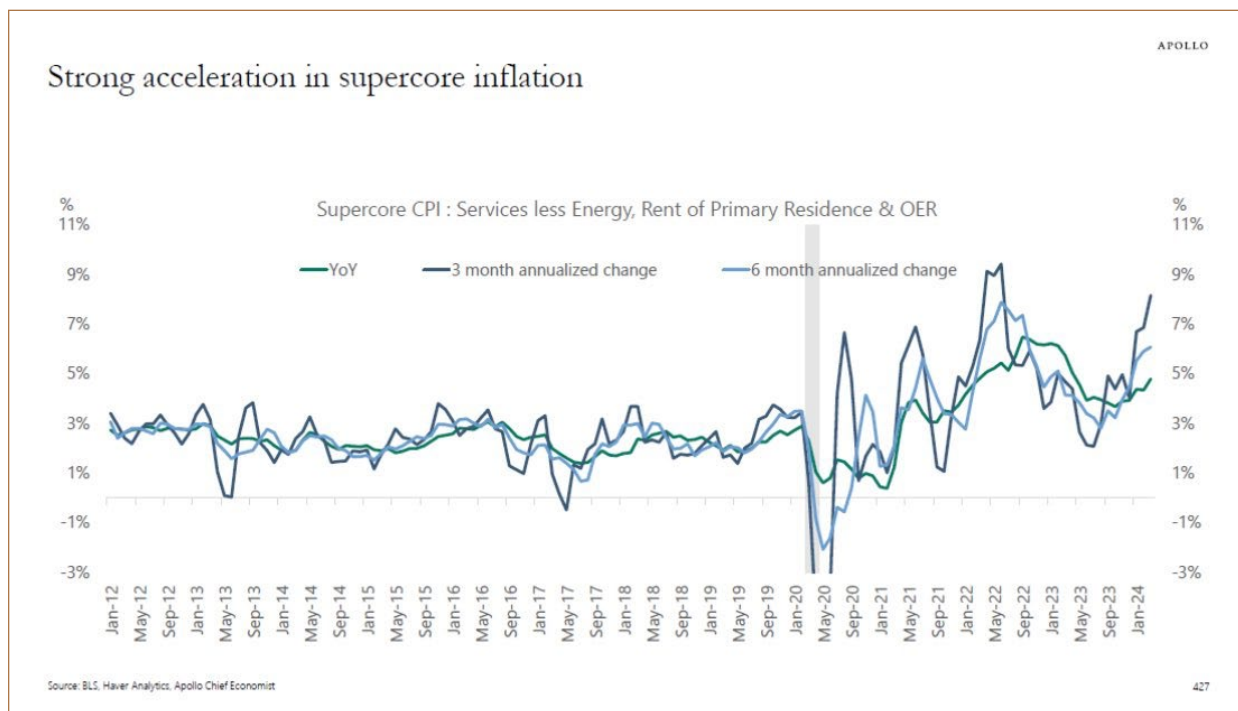
INVESTMENT CHRONICLES



[Continue reading here](#) (subscription may be required)

“Supercore inflation” – a measure of the inflation rate in services excluding food, energy, and housing that the Fed has been watching closely – is rising strongly again (from Carl Quintanilla via X)...

APOLLO: “.. The 3-month annualized change in supercore inflation is now over 8% and accelerating .. the Fed is not done fighting inflation and rates will stay higher for longer. .. We are sticking to our view that the Fed will not cut rates in 2024.” [Slok] #CPI



Forget “gamification”... “gambification” is taking over the markets now ([from Peter Atwater via LinkedIn](#))...

Investor behavior mirrors their mood. As their confidence changes so, too, do their trades. Three years ago, with retail investor confidence soaring, the crowd pick was meme stocks. Shares in companies, like GameStop and AMC, soared as on-line communities descended all-at-once using popular trading apps, like Robinhood. Gamification, as it was called, was in the air. With each successful trade, digital confetti showered trader’s phone screens. The only thing missing was the soundtrack from a Super Mario Brothers video game.

As quickly as that party began, though, it ended. Like other retail frenzies, gamification was followed by a sudden balloon burst. With that, the crowd’s interest in – and the prices of – meme stocks collapsed.

With chip stocks, like Nvidia, soaring on the promise of AI, the retail crowd is back. Today’s pick, though, is different. Rather than meme stocks satisfying the crowd’s urgent want for risk, it’s now ODTE (zero-day until expiration) options. Gamification has been pushed aside for what might better be called “gambification.” For today’s crowd, everything is a far more leveraged bet.

For those looking for the potential of instant gratification, ODTEs are the perfect means, too. Like scratch-off lottery tickets, single-stock ODTEs enable buyers to commit small amounts of capital in exchange for an enormous, albeit woefully unlikely, immediate reward. Because of their especially limited life, ODTEs are extremely sensitive to changes in the underlying price of a stock. To borrow from Billy Joel, with ODTEs, it’s either sadness or euphoria.

Where meme stock buyers three years ago invested in speed, today’s retail buyers are betting on immediate acceleration. And ODTE opportunities don’t stop with single stocks. Investors can now buy ODTEs on cryptocurrency ETFs and other leveraged ETFs. Then, there are ETFs that track the performance of options contracts that expire within the same day as the trade is made. QQQY, the Defiance Nasdaq 100 Enhanced Options Income ETF, for example, seeks to provide monthly income by actively placing bullish bets on the Nasdaq-100 Index through a ODTE put option writing strategy. If that’s not enough, while they don’t expire same day, you can buy and sell options on ODTE ETFs, too.

If your head is swirling, you aren’t alone. As fast as one new ODTE product comes to market another follows – moreover, new entrants typically add more implicit leverage and/or place one options-related product inside another like they are turducks. As always, Wall Street does

nothing better than to cater to the immediate mood-driven demands of the crowd. And today, what the crowd wants most is the most highly leveraged bets available.

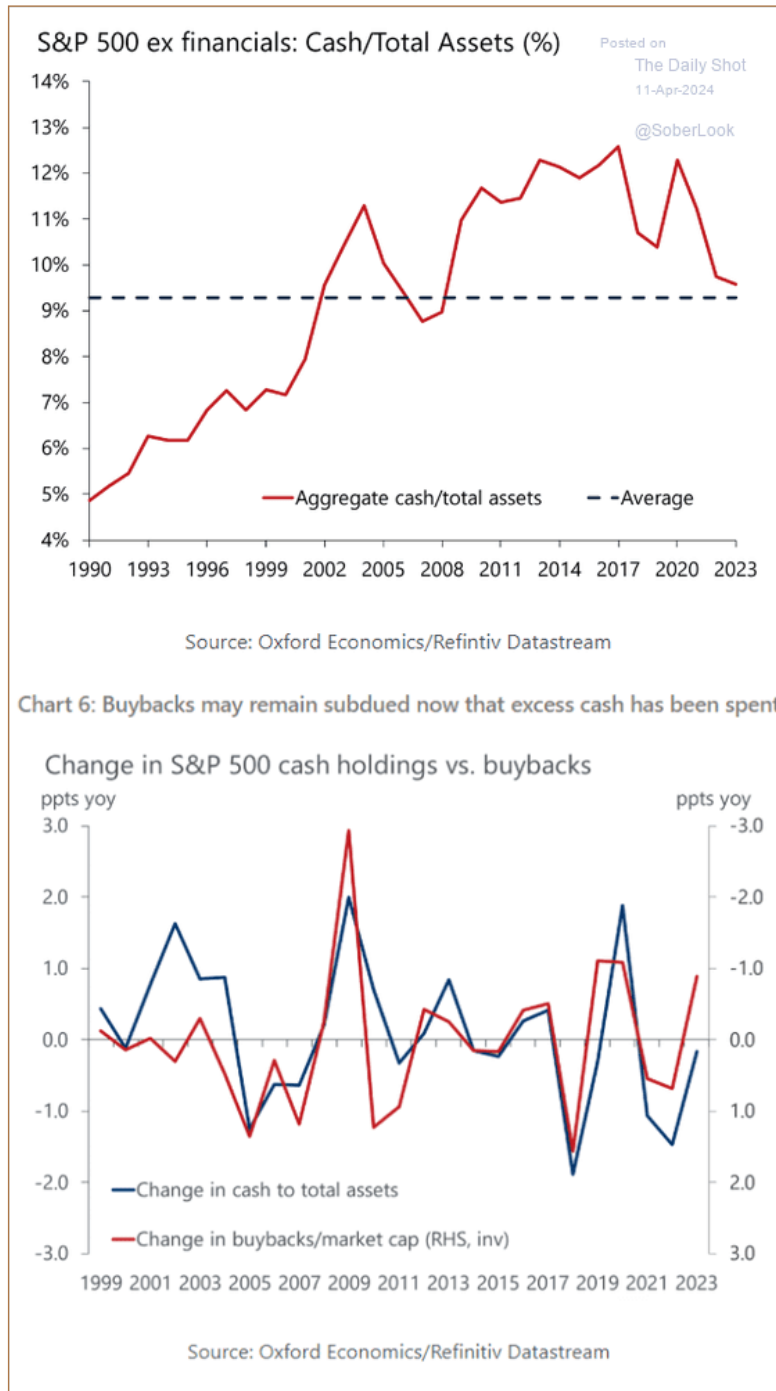
To be fair, the current gamblification craze is hardly contained to the financial markets. Sports betting has invaded popular culture, with shares in companies like DraftKings riding the wave. And major sports leagues are only too happy to help. After decades of resistance, the NFL, for example, fully embraced Las Vegas, hosting this year's Super Bowl in the gaming capital.

Many market analysts suggest that we can't possibly be in a market bubble because the outstanding volume of margin debt isn't sufficient when measured against history. That could be, but the extreme implied leverage of ODTEs and the surge in options activity more broadly caution otherwise. Highly leveraged bets tend to cluster most at extremes in market trends, when the excited crowd believes prices can only accelerate even faster along the current trend. At the top, it is the change in price that matters most.

With retail investors' eyes now focused solely on the next few moments, today's gamblification craze cautions too many are far too certain of the market's current upward trend. With so much leverage involved, a minor market reversal could leave many as empty-handed as unlucky PowerBall ticket holders following the number draw.

Do you feel lucky?

Reduced cash balances (outside of Big Tech) could become a drag on share buybacks going forward (from The Daily Shot)...



INVESTMENT CHRONICLES

The market is dramatically outperforming most election-year markets so far ([from The Kobeissi Letter via X](#))...

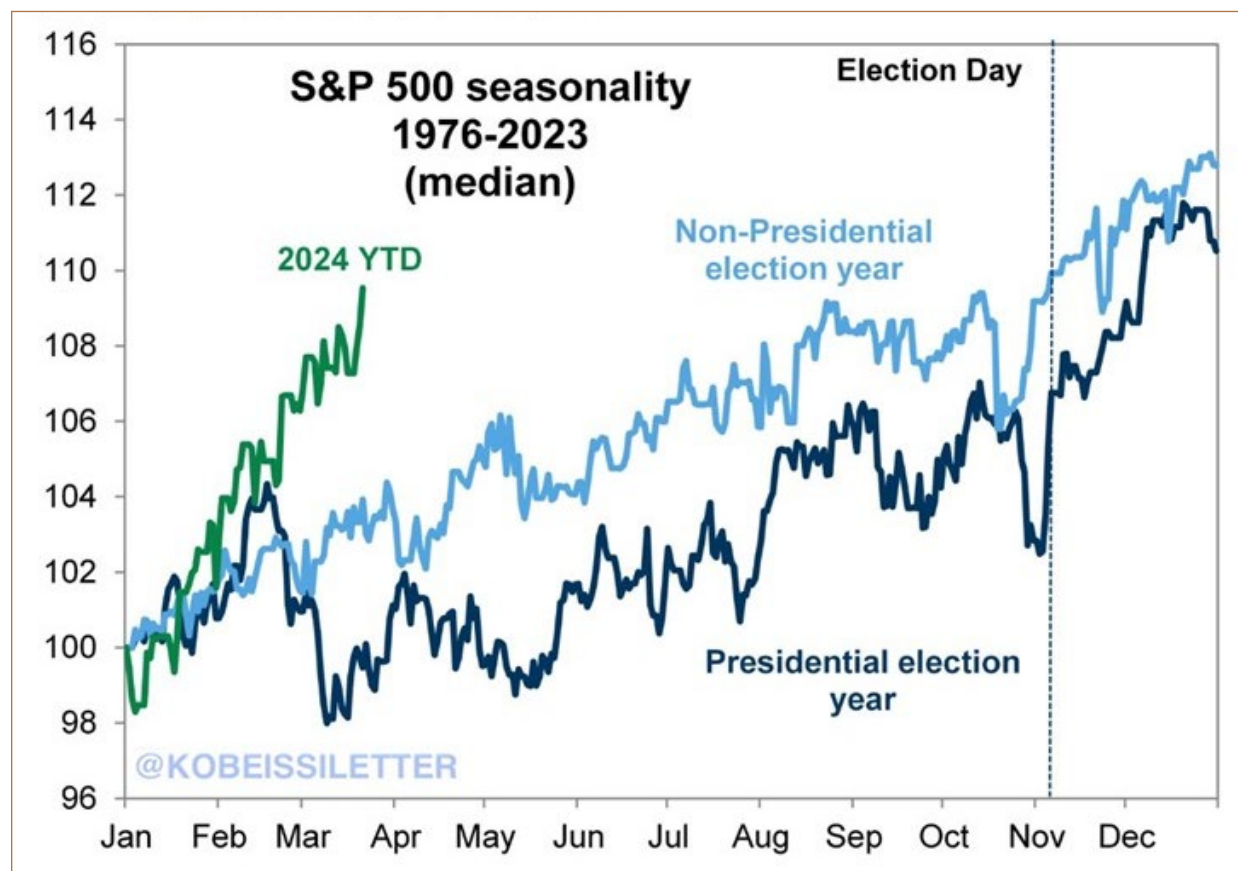
The S&P 500's performance has been truly outstanding this year.

The index is up 9% year to date which is more than DOUBLE the average YTD return in an election year.

In the past, the median return during a US presidential election year was about 11%.

There are still several months until the presidential election but the index is on track to significantly exceed its historical performance.

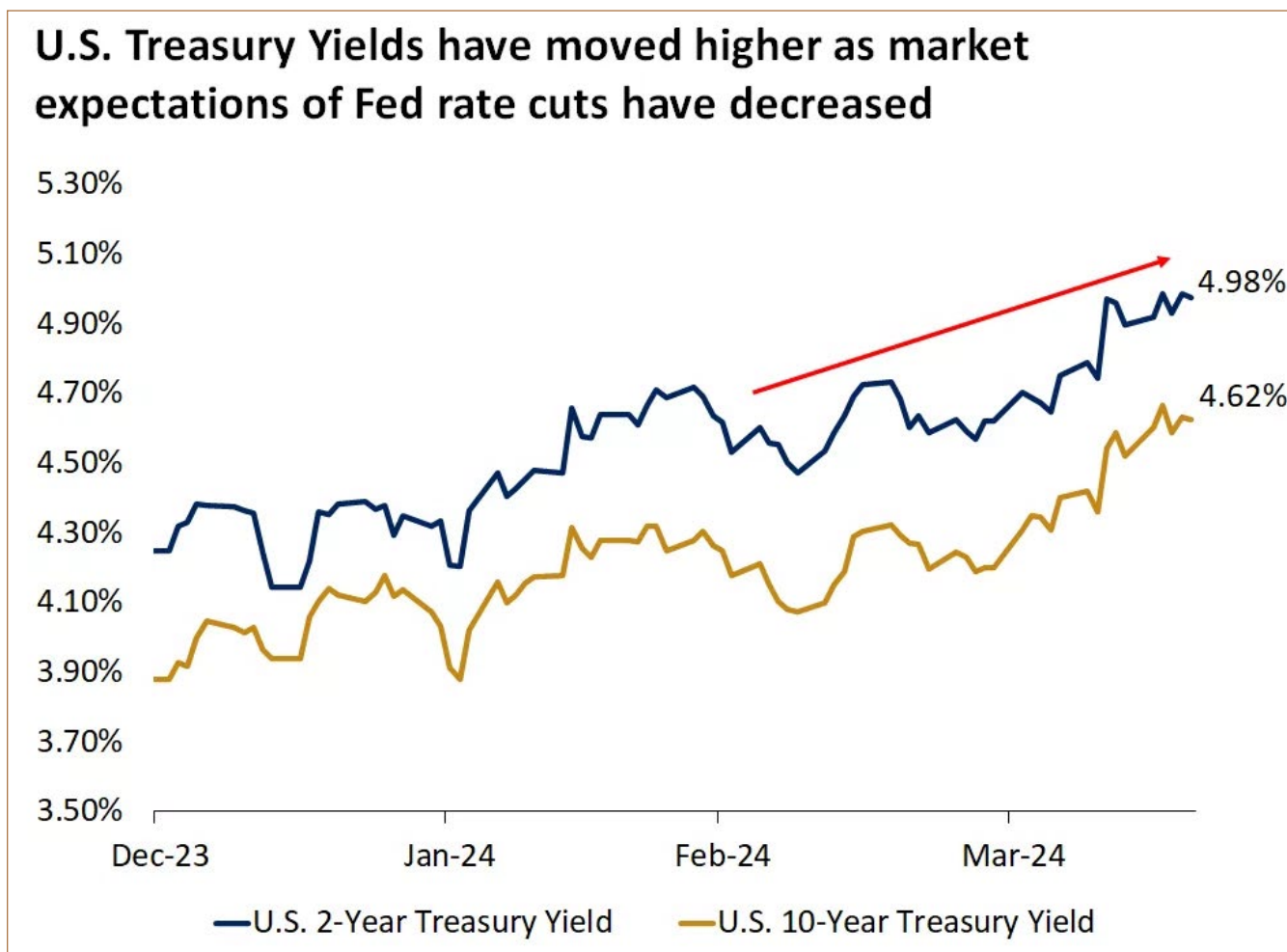
Will this end up as one of the best election years for stocks ever?



Futures markets quickly lowered rate-cut expectations after the consumer price index (“CPI”) report (from Edward Jones)...

In recent weeks, one of the major shifts that markets have had to adjust to is the notion that Fed rate cuts may be delayed this year or may not come at all. In fact, markets now expect just one Fed rate cut in 2024, with the highest probability for the September FOMC meeting. This has been a sizable shift from the six rate cuts that were priced in by markets at the start of this year.

As a result, we have seen interest rates move higher, with the 2-year and 10-year Treasury yields back near the highs of the year, and stock markets move lower. In particular, interest-rate-sensitive parts of the market have underperformed, including small-cap stocks and sectors like real estate, as well as bond markets broadly.



[Continue reading here](#)

INVESTMENT CHRONICLES

Making sense of the “confusing” moves in the markets this year (from Lawrence Lepard via X)...

This excerpt from [Myrmikan Capital founder] Dan Oliver's most recent letter is perfect:

A recent message on Twitter illustrated the confusion most have by not understanding the different effects that changes in interest rates versus printing money have on the economy:

1. Bonds are trading like rate HIKES are coming
2. Gold is trading like rate CUTS are coming
3. Stocks are trading like the “soft landing” is gone
4. Oil prices are trading like the Fed avoided a recession
5. Housing prices are rising like interest rates are at 3%

Nothing adds up here.

A Twitter wit responded:

1. Bonds are trading like Yellen is on the loose, printing \$5.5bn a day
2. Gold is trading like Yellen is on the loose, printing \$5.5bn a day
3. Stocks are trading like Yellen is on the loose, printing \$5.5bn a day
4. Oil prices are trading like Yellen is on the loose, printing \$5.5bn a day
5. Housing prices are rising like Yellen is on the loose, printing \$5.5bn a day

Everything adds up here.

Legendary newsletter writer Jim Grant on “the inflation we choose” (from Grant’s Interest Rate Observer)...

Following is the text of the remarks that the editor of Grant’s prepared for delivery on Wednesday, April 10, to the 17th annual Macro Conference of Strategas Asset Management in New York.

Inflation is inherent in our politics, culture and finances. Sometimes it’s in the foreground, sometimes in the background. We, the voters, seem not to object, because we ultimately get what we want (“good and hard,” said H.L. Mencken). Here’s hoping we change our minds.

Trouble starts with definitions. What is inflation? “Too much money chasing too few goods” is helpful as far as it goes. But it posits only one cause of inflation: money. What about the inflation propellant of unchecked public borrowing? And why, apart from the virtue of brevity, the omission of asset prices from the familiar epigram?

On such critical questions, the economics profession is a house divided. A new generation of scholars denies the relevance of money to what used to be viewed as exclusively a monetary problem. Chairman Jerome Powell himself testified in 2021 that we must “unlearn” what we thought we knew about M-2. Some authorities attribute inflation to an excess of public borrowing, others to the public’s expectations of rising prices—as if thinking could make it so.

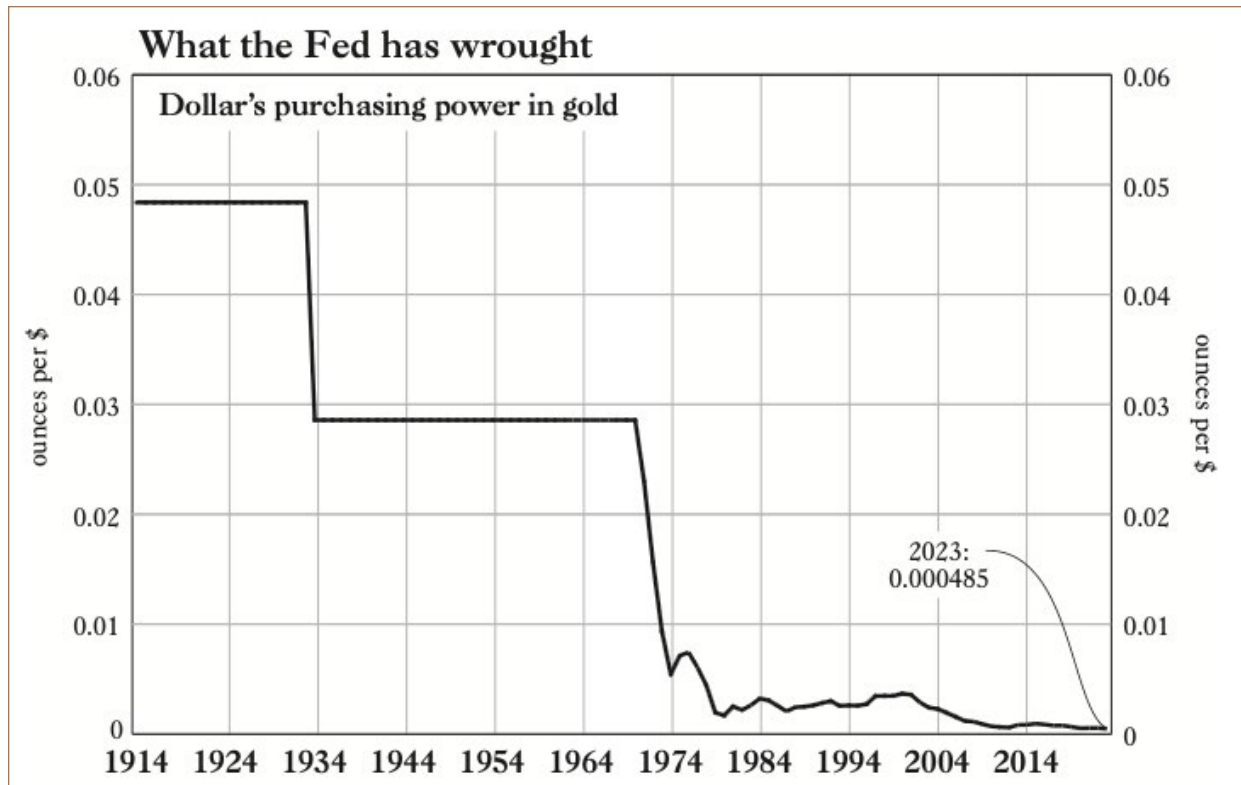
Fortunately, Wilhelm Röpke, a mid-20th-century German economist, provides a definition for all seasons. Inflation, says he, “is the way in which a national economy reacts to a continuous overstraining of its capacity, to demands which are extravagant and insistent, to a tendency towards excess in every and all circles.” It’s a case, then, of government-instigated overdoing it. But society, by suffering in silence, is government’s coconspirator. There’s nothing dogmatic in Röpke’s definition. It wisely allows for multiple causes: fiscal, monetary, political, cultural.

Röpke has more to say in this vein, and he does not shrink from meting out condemnation to the deserving parties. He hates inflation, as we all should, whatever our preferred school of economic thought—Austrian, monetarist, Keynesian or other. The integrity of the currency is a moral question, because money is work and work is heartbeats and heartbeats are finite. If you accept that proposition, you will have scant patience for the Fed’s self-assigned remit of skimming 2% a year from the purchasing power of the dollar. What is it, really, besides monetary shoplifting, tricked out in the econometricians’ algebra?

Yet Americans show no signs of restiveness with the two major political parties that compete with each other to say nothing against overstraining. When did you last hear a contender for high office denounce the sprawling public debt or the ready-made dollars that finance it? Polls must tell them there are no votes in it.

I blame our forebears as much as our fickle selves for the choices that have brought us to this pass. Institutionally and legally, America made its bed of inflation long ago. In sending Woodrow Wilson to the White House in 1912, the voters chose inflation, though little did they suspect it. It was Wilson who signed the Federal Reserve Act of 1913, with four gold pens if you please. He created the central bank that, 99 years later, would get it into its head to redefine “price stability” as a perpetual low-grade inflation, the 2%-ish target at which Jay Powell insists he is still taking aim.

A measure of blame also attaches to the Greatest Generation, which elected President Lyndon Johnson, signer of the Medicare and Medicaid Act of 1965. Our parents failed



to anticipate that entitlement spending would come to devour the federal budget and that the interest cost of carrying the associated debt would finally overtake defense spending.

Wilson and Johnson were Democrats, but the Republicans have plenty to answer for, too. By electing Richard Nixon, they set in motion the chain of events that, in 1971, would snip the final thread that once anchored the dollar to gold.

Now you may object that each of these inflation-facilitating choices was expedient or even essential. You may defend the welfare state to the death and the Federal Reserve and the pure paper dollar along with it. But each turn away from financial orthodoxy allowed for more overstraining. Each played its part in removing the inhibitions that had guarded against overborrowing and overstimulating. They have sped us to this time of monetary improvisation and fiscal overreach.

For simplicity's sake, we can describe today's monetary predicament as the collision between good inflation and the other kind. By good inflation, I mean the Wall Street, up-and-to-the right variety. There has been plenty of that. Not once since the federal funds rate began to hot-foot it higher, in March 2022, has the Federal Reserve Bank of Chicago's Financial Conditions Index registered any reading but accommodative.

Which leaves bad inflation, i.e., the unwanted rise in the prices of butter, eggs, baby formula, debt service and such.

Put yourself in Jay Powell's shoes. How do you stop the bad kind of inflation without threatening the good? How, for instance, to reduce the rate of rise in consumer prices without knocking the slats out from leveraged commercial real estate?

A dozen years of interest rate suppression masked the cost of public borrowing. It facilitated the fad for "paying higher-than-S&P prices for near-distressed credit-quality microcaps with a heavy sector bias toward tech and health care," as the investor Dan Rasmussen cogently described the private equity business a couple of years ago. It made possible the suspension of disbelief about the future value of profitless venture-capital business plans. It facilitated what has turned out to be a years-long sleepwalk to a kind of national leveraged buyout. It breathed life into the nostrils of a dormant CPI.

The savings data open a picture window on America's overstraining. The economist Lacy Hunt reminds us of the three tributaries of national savings: private, foreign and government. Last

year, government savings, at minus \$1,808.7 billion, swamped the other two sources combined, at \$1,737.9 billion. It yielded a negative net value of \$70.8 billion.

“And now,” Hunt recently told the host of the Hidden Forces podcast, Demetri Kofinas, “we have a condition of negative national savings. Without net national savings, we cannot have net physical investment. Without net physical investment, we cannot increase the capital stock.”

But the capital stock fairly cries out for renewal. Artificial intelligence is about to strain the nation’s electrical grid. The planned “energy transition” will make its own substantial electricity demands. The Navy needs ships, Baltimore a bridge, Silicon Valley advanced computer chips. So no net physical investment would seem a nonstarter.

Could the Fed not lend a hand, Hunt asked himself and went on to answer: “You can increase the money supply, but that will just have an inflationary effect. There’s no way to inflate our way out of the problem.” And he added, “What you’re basically doing is, you’re using your depreciation to live on.”

Net negative savings is no everyday occurrence. Prior to 2023, the U.S. Bureau of Economic Analysis identifies only seven prior examples since 1929. Each was a period that most Americans would probably not care to relive: 1931–34 and 2008–10. Last year was the only one of the seven that was not the occasion of, or in close proximity to, a major slump.

Inflation has its cultural and political roots, too. You don’t contract the money disease without letting down your monetary and fiscal hair a little bit. Recall the rigors of the classical gold standard. Base money expanded at something in line with the growth in gold production and world population. By convention, government budgets were balanced. There was no welfare state to unbalance them. There were episodes of inflation and episodes of deflation, but prices were stable over the long run.

Culturally, politically and financially we have evolved, and in our democratically evolved condition we want what we want, and we want it now. In Röpke’s terms, we lay “extravagant and insistent” demands on our national productive capacity. We might call this time of ours the Age of Disinhibition.

Imagine you are strolling along Central Park South when the open-air phone conversation of a fellow pedestrian makes you privy to the details of an ugly divorce. The guy with the

cellphone to his ear can't be unaware that you know what, in the analog age, you would never have been in position to find out. And you think to yourself, Are there no boundaries any more?

Older members of the audience may remember an item of street furniture called the telephone booth. It was a kiosk to accommodate the user of a pay phone. For the sake of discretion it established physical boundaries for a private call. It's a marker of the change in American social mores that so few seem to miss it.

Gone like the phone booth are the founding principles of American finance. The Hamiltons and Adamses set boundaries around the dollar and the public debt. They defined the currency as a weight of gold or silver and made it exchangeable into that value of coin at the option of the currency holder. They established a sinking fund to retire the public debt. Having seen quite enough of inflated paper money and fiscal ruination during the Revolution, they wanted no recidivism. A Congress of saints would require no sinking fund and no silver or gold with which to define and collateralize the currency, but the people elected politicians.

In 1913, the founders of the Federal Reserve likewise established guard rails. The dollar—the new Federal Reserve note—would continue to be defined as, and convertible into, gold at the then customary rate of \$20.67 an ounce. The government would have nothing to do with the integrity of that note. Its value would be supported by a more-than-adequate gold cover and by the strength of American banking institutions.

Carter Glass, a principal legislative author of the Federal Reserve Act, laid emphasis on the double liability of bank stockholders. There was yet no federal deposit insurance. If a bank failed, it was the owners of the stricken institution who got a capital call, not the taxpayers. Congress extinguished such double liability in 1935, shortly after the creation of the Federal Deposit Insurance Corp.

But the holders of shares in the regional Federal Reserve Banks retained their double liability. And who might those investors have been? Why, just who they are today, the member depository institutions. Each, in proportion to the size of its own capital, must subscribe to shares in its district Reserve bank. And they, like the commercial bank stockholders of yore, bear the risk of a capital call in the event of the impairment or insolvency of the Federal Reserve branch bank in which they invested.



Carter Glass, roll over
(Zip Lexing | Alamy Stock Photo)

It's a cinch that Jamie Dimon formerly spent none of his carefully managed time as the CEO of JPMorgan Chase & Co. contemplating the risk of the insolvency of the Federal Reserve Bank of New York. However, because the Fed is paying more than 5% on its liabilities while earning just 2% or so on its assets, it has rung up \$161.3 billion of system-wide operating losses on capital of \$43.1 billion. Of the grand total of loss, \$101.3 billion is apportioned to the New York Fed, which shows only \$14.9 billion in capital.

To emphasize, these are operating losses, not mark-to-market losses in the System Open Market Account. As of Dec. 31, 2023, such cumulative unrealized losses on the consolidated Federal Reserve securities portfolio summed to the immensity of \$948.4 billion.

The central bank, indeed, would be a notorious bankrupt except for the Treasury's interposition and the Fed's DIY accounting. By the central bank's own generous reckoning, its operating losses count not as losses but as deferred assets. Or one might

count them as loans from the Treasury, i.e., the fiscal arm of the government from which the Fed is proud to be perfectly independent. The loans, as far as the reader of the footnotes to the weekly H.4.1. form can tell, come interest free. Nor are they due on any particular date. They are payable at the convenience of the Fed, if, as and when the central bank returns to earning a spread between the funds rate, on the one hand, and the yield on its bills, bonds and mortgages, on the other.

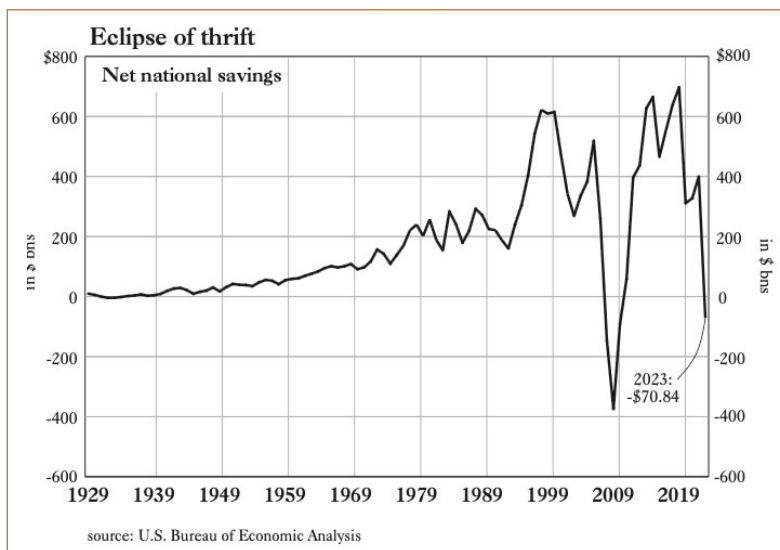
The shambles of the Fed's balance sheet is an open secret, but the chairman and the governors acknowledge no embarrassment, let alone impairment. "The deferred asset," says the press release accompanying the 2023 audited financial statements, "is the net amount of excess earnings the Reserve Banks will need to realize before their remittances to the U.S. Treasury resume. A deferred asset has no implications for the Federal Reserve's conduct of monetary policy or its ability to meet its financial obligations." KPMG, LLP, the auditor, blessed the figures.

A financial history of the United States, published in 1903, looked back on the not-entirely-successful financial management of the previous quarter century. The author, Davis Rich Dewey, did not despair, but rather suggested that the country was economic policy-proof. Not even the government could restrain the enterprising American spirit.

"The natural resources of the country and the opportunities for enterprise," wrote Dewey, "made it possible for the country to press forward by leaps, which no mistakes of taxation, monetary issuance, or treasury borrowing could withstand."

Are we still so armored? A little more than a century after Dewey wrote, the pure paper dollar is the world's reserve currency (as the gold dollar of Dewey's day was not), and the splintered U.S. Treasury remains a port in a storm. And which country doesn't envy the enterprise, ingenuity and even the excesses of Silicon Valley?

But we are talking about inflation, a disease of political and cultural character as much as it is of



INVESTMENT CHRONICLES

monetary and fiscal malpractice. Which brings us to the 2024 presidential election. Sound money and a balanced budget may be the furthest things from the mind of either likely candidate. Former President Trump plumped for negative nominal interest rates during his first term. President Biden is once more pressing for the extrajudicial forgiveness of student loans.

In the testimony that Trump gave in the suit that was brought against him by New York State Attorney General Letitia James for allegedly inflating the value of his encumbered real estate, the defendant spoke for himself. But he said nothing, in substance or in spirit, I am going to speculate, that his presumptive Democratic opponent would not have uttered had Biden, too, made his career in commercial real estate.

Arthur F. Engoron, the presiding judge in the trial, quoted Trump's testimony about the fair value of the Mar-a-Lago Club.

"When confronted with the 2002 deed, in which he signed away, in perpetuity, the right to use or develop Mar-a-Lago as anything other than a social club, in exchange for a conservation easement tax benefit," the judge recounted, "he offered that 'when you say you "intend," intend doesn't mean we will do it.'"

We mean no partisan jibe against the Republican, only against the topsoil of today's national politics. It is the kind of dirt in which the weed of inflation can cast a root.

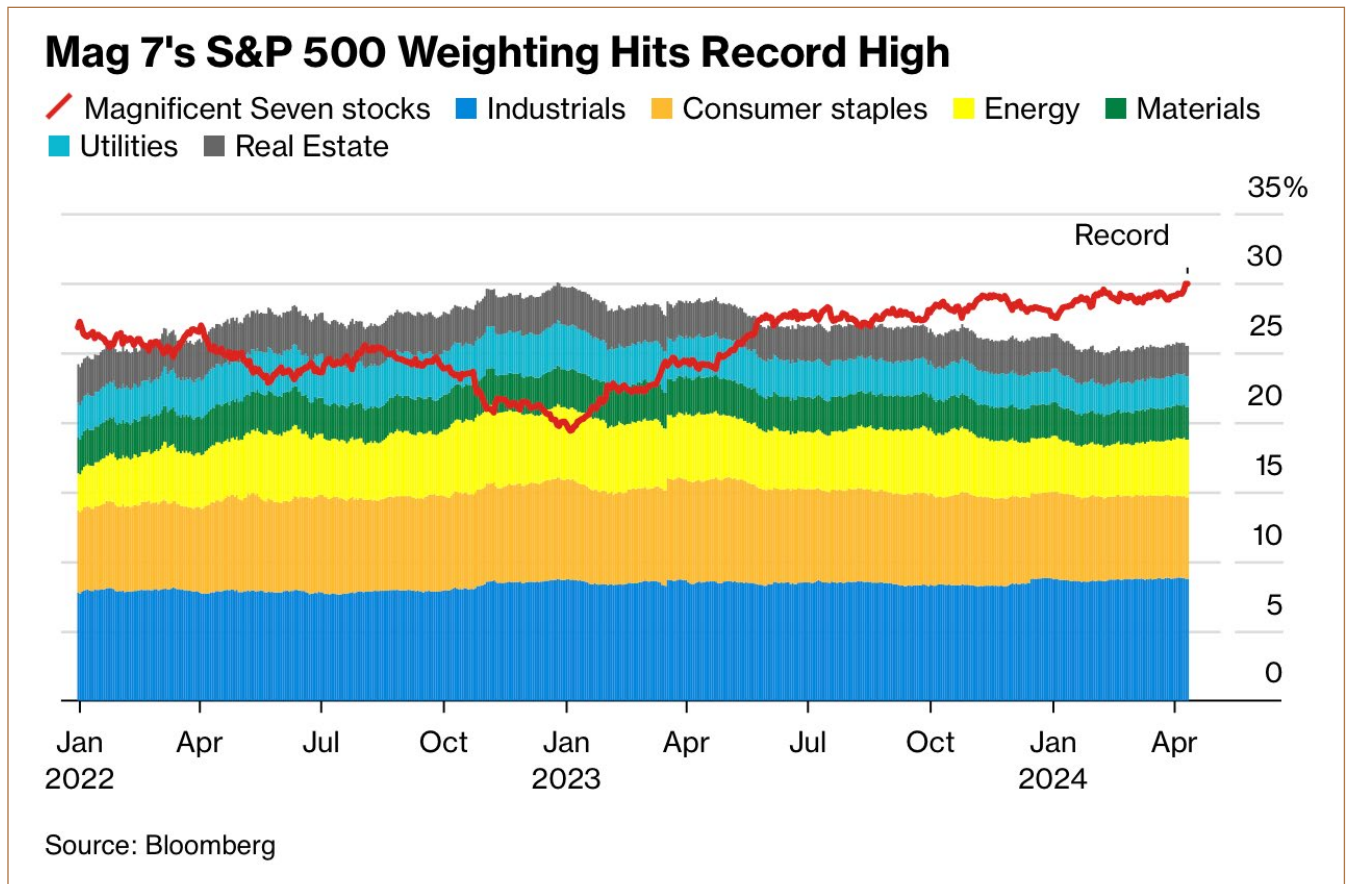
"Anything Goes," is the name of a hit song that Cole Porter wrote in 1934, coincidentally one of the seven years of recorded net negative national saving. It so happens that the CPI rose by 3.5% in 1934. It was the highest rate in 13 years.

The Magnificent 7's influence over the S&P 500 has never been greater ([from Bloomberg](#))...

The Magnificent 7 haven't all lived up to their billing, but that hasn't stopped the tech stocks from becoming even bigger relative to the rest of the S&P 500 Index.

Despite poor performances this year from the likes of Apple Inc. and Tesla Inc., the group hit a record weighting in the benchmark on Thursday amid a broad rally in technology shares.

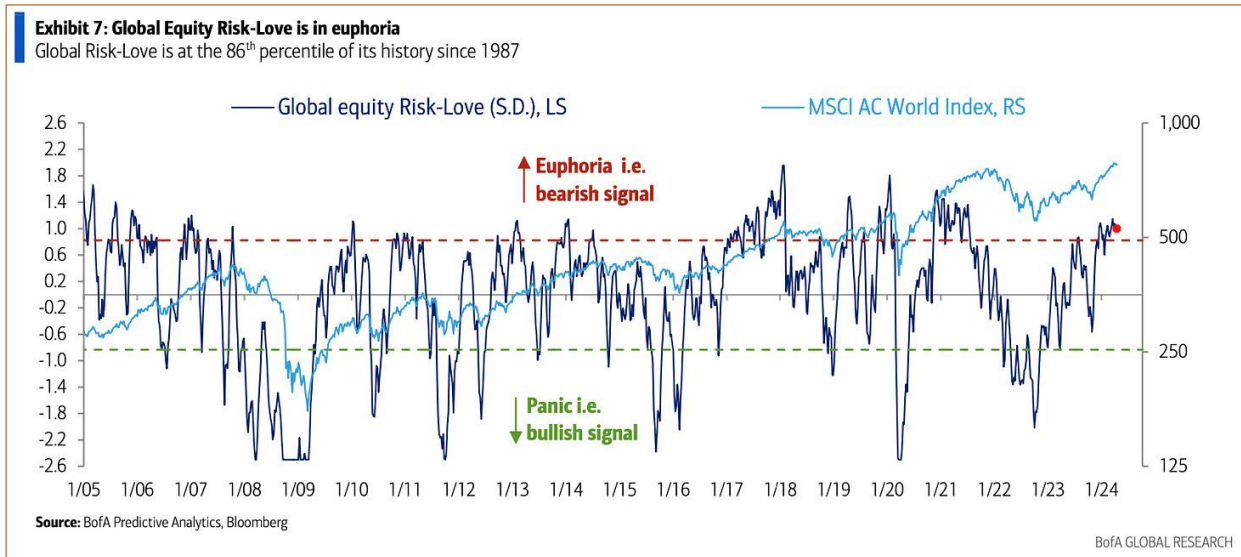
The cohort, which also includes Alphabet Inc., Microsoft Corp., Nvidia Corp., Amazon.com Inc. and Meta Platforms Inc., now accounts for almost 30% of the S&P 500, more than the industrial, consumer staples, energy, materials, utilities and real estate sectors combined.



[Continue reading here](#) (subscription may be required)

INVESTMENT CHRONICLES

Bank of America’s contrarian sentiment indicator for equities stays in euphoria (86th percentile of history since 1987) for the fourth month in a row ([from Daily Chartbook via X](#))...



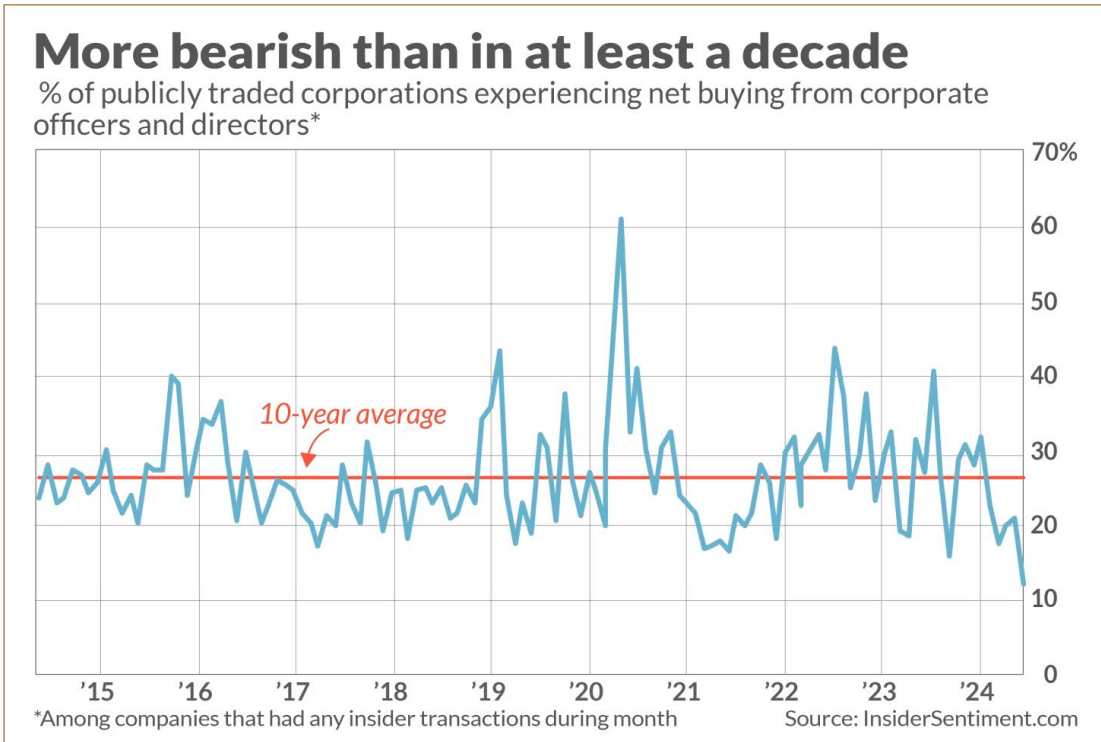
Corporate insiders are more bearish than they've been in at least a decade (from MarketWatch)...

Corporate insiders as a group seem to believe there’s an above-average chance of a major U.S. stock market drop. Consider the proportion of publicly traded U.S. companies in which insiders are buying more shares than they are selling. As a percentage of companies that have had any insider transactions, this proportion for April so far has been just 12.4%, according to InsiderSentiment.com.

The InsiderSentiment.com website is based on the work of Nejat Seyhun, a finance professor at the University of Michigan and a leading analyst of insider behavior. The insider buying percentages reported on the site reflect just two of the three types of insiders that the SEC includes in the “insider” category — corporate officers and directors — since Seyhun’s research has found that following their lead is often a market-beating strategy.

Excluded from the insider buying percentage is the third type — a company’s largest shareholders — since Seyhun’s research shows that they, on average, do not have any privileged insight into their companies’ prospects.

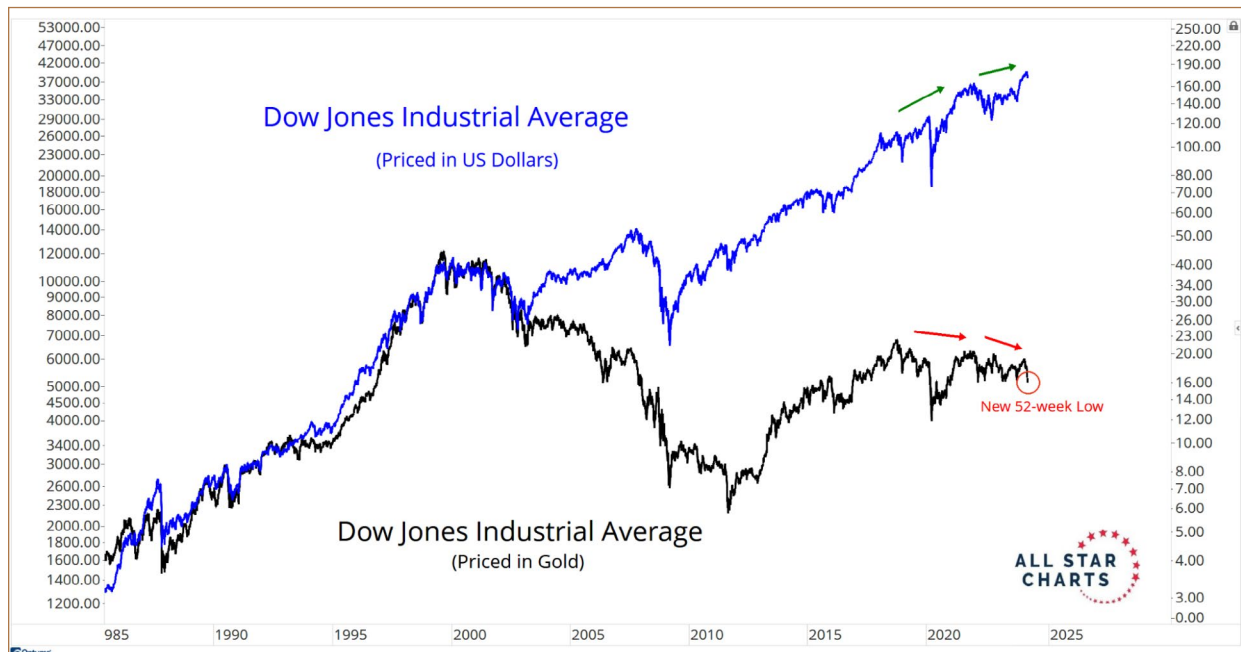
INVESTMENT CHRONICLES



[Continue reading here](#) (subscription may be required)

Debasement of the U.S. dollar was a big driver of stock returns over the last 20 years **(from J.C. Parets via X)...**

If the denominator in the fraction keeps going down, then all things being equal, the line will go up. But when you denominate the asset in a currency that is not losing its value, then the Dow doesn't look so good does it?

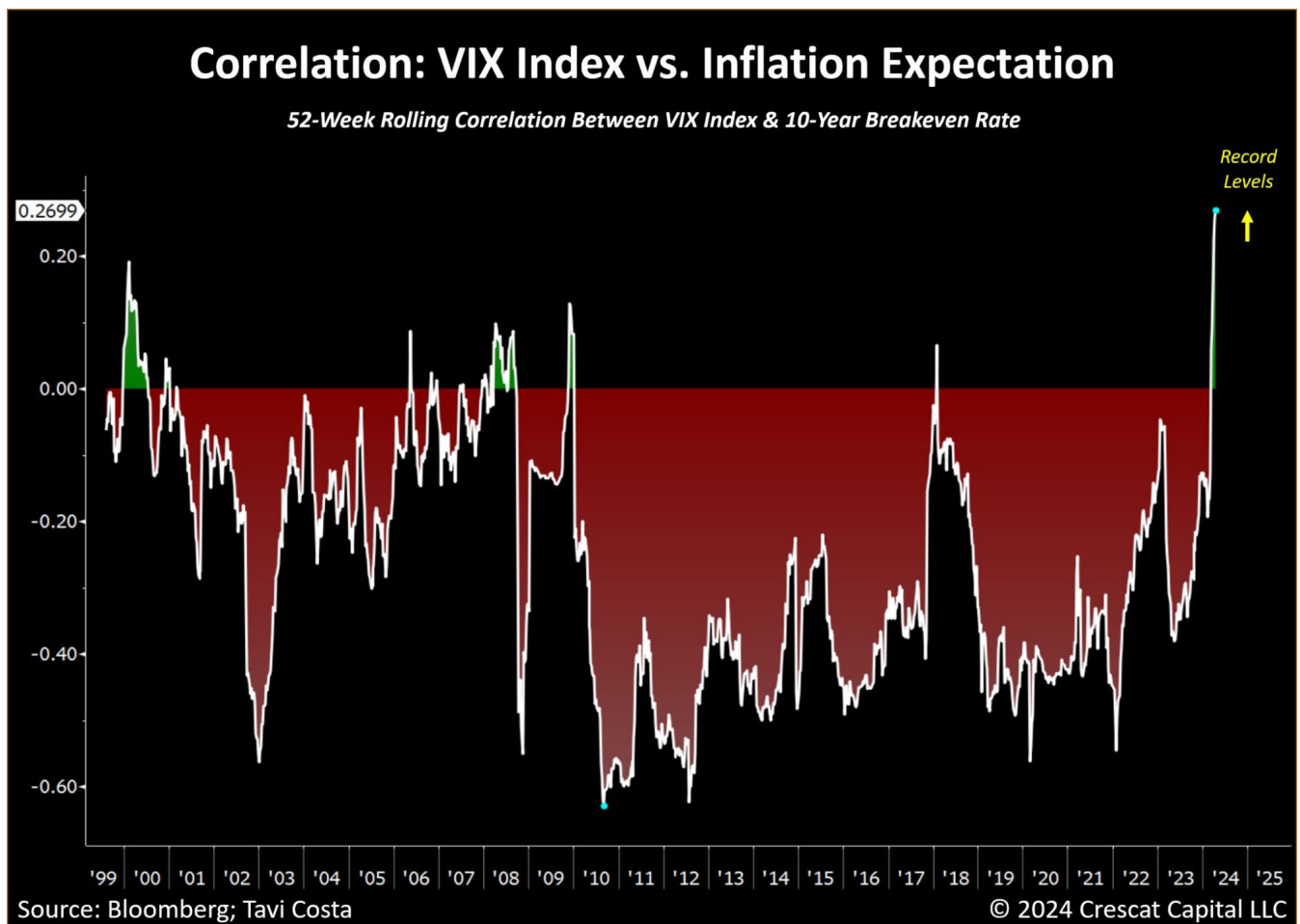


Equity-market volatility and inflation expectations are the most highly correlated in decades (from Otavio (Tavi) Costa via X)...

This is unmistakably stagflationary.

Although the chart below doesn't extend as far back, a similar phenomenon occurred in 1973-1974 as markets faced difficulties whenever inflation reaccelerated.

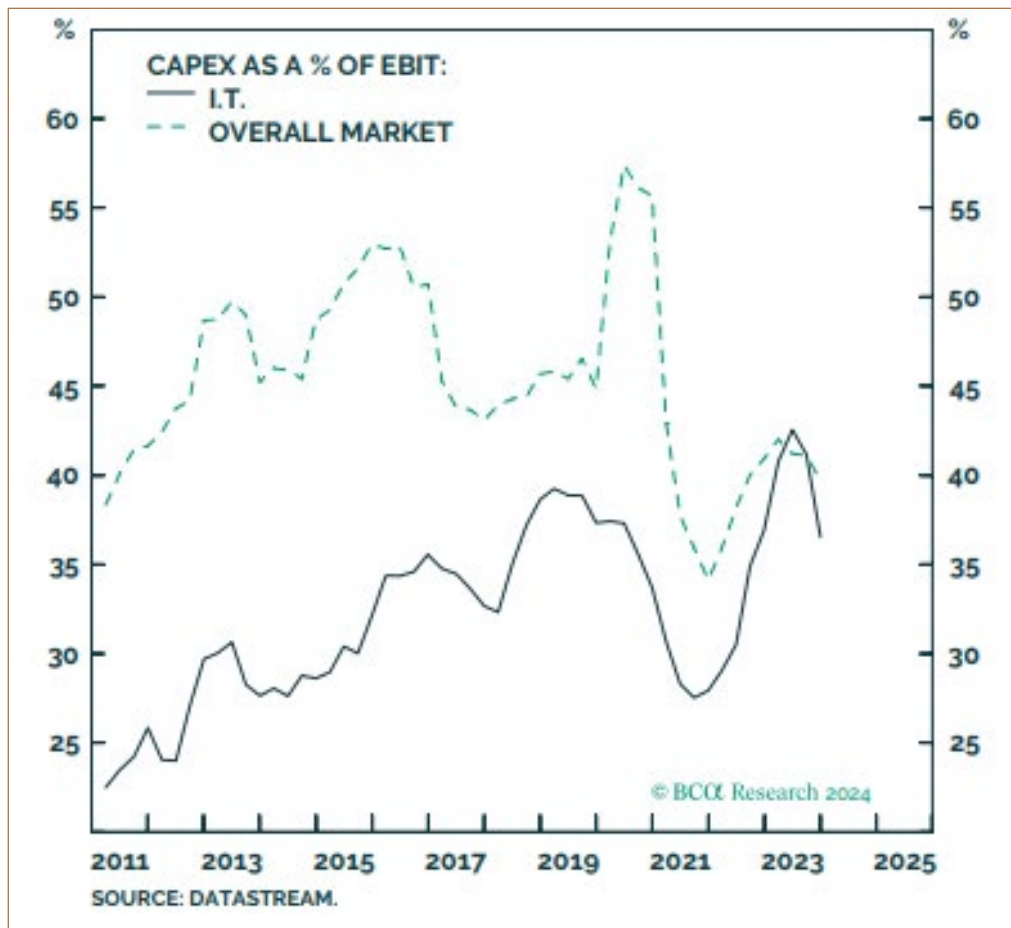
This is especially pertinent now, with energy prices, agricultural commodities, precious metals, copper, global freight costs, and other inflation indicators showing significant resurgence.



INVESTMENT CHRONICLES

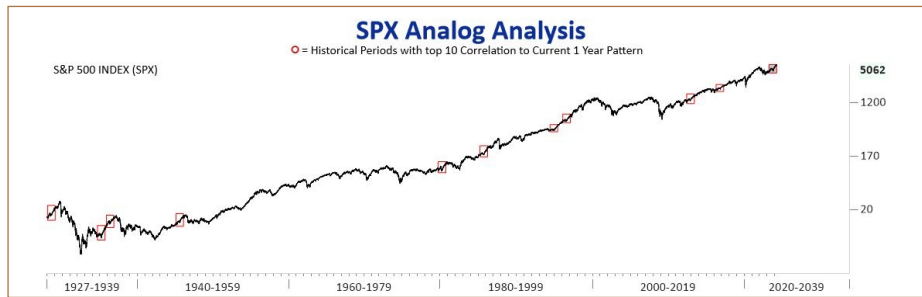
The tech sector has been losing its capital efficiency as competition ramps up (from [Juan Correa-Ossa via X](#))...

The past decade, tech did well partly because it was capital light. Thanks to monopoly power, tech companies could retain most of their profits. But competition and spending in AI is ramping up. Tech now spends a similar amount in capex as the overall market.

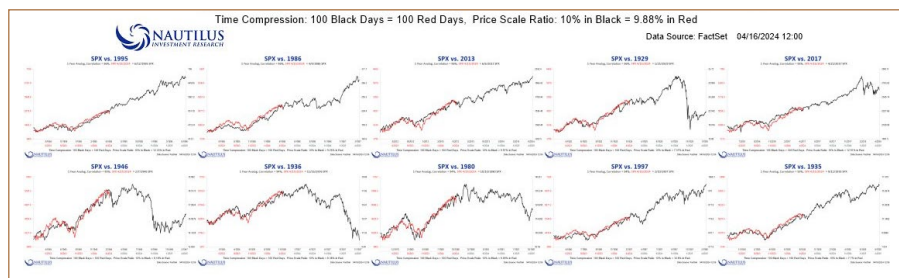
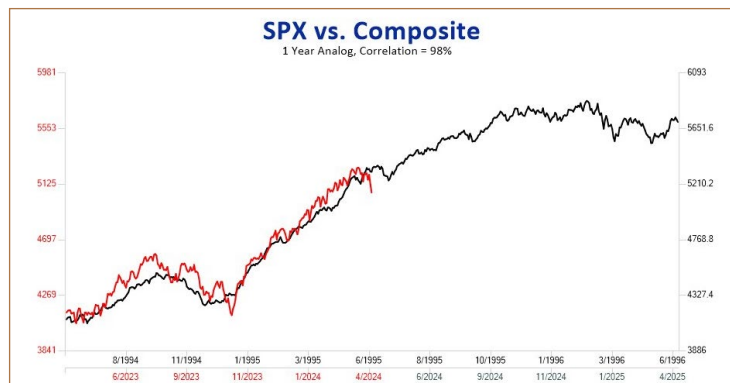


Historical analogs suggest stocks are likely to perform well over the rest of the year (from Nautilus Research via X)...

#spx \$spx FWIW top 10 unique 1-year analog matches.



SPX Forward Returns After 10 Events 1927-Present						
End Date	Correlation To Current Pattern	1Wk	1Mo	3Mo	6Mo	1Yr
01/25/1929	95.5%	1.41%	-0.90%	0.20%	10.60%	-11.81%
09/12/1935	93.5%	-1.70%	-0.25%	9.00%	23.68%	37.18%
11/16/1936	94.2%	-2.93%	-0.63%	4.14%	-8.97%	-39.60%
02/07/1946	94.6%	-0.70%	-6.19%	0.92%	-2.80%	-13.09%
10/10/1980	93.8%	0.94%	0.74%	2.30%	2.20%	-6.97%
04/04/1986	95.7%	3.18%	3.95%	10.10%	2.29%	28.40%
06/12/1995	95.9%	2.70%	5.65%	8.11%	16.31%	26.61%
02/10/1997	93.6%	3.93%	2.40%	6.65%	19.30%	29.74%
06/06/2013	95.7%	0.85%	1.10%	2.00%	10.49%	20.15%
04/21/2017	95.1%	1.51%	1.93%	5.27%	9.09%	13.69%
Avg after Signals		0.92%	0.78%	4.87%	8.22%	8.43%
Average All Periods		0.15%	0.65%	1.95%	3.84%	7.90%
T-Statistic		1.12	0.13	2.63	1.36	0.07
# Events Up/Down		7 / 3	6 / 4	10 / 0	8 / 2	6 / 4
Significance		86%	55%	99%	90%	53%



INVESTMENT CHRONICLES

The Federal Reserve is “damned if they do cut rates and damned if they don’t” ([from Lawrence Lepard in the EMA GARP Fund Q1 2024 Report](#))...

The Federal Reserve is clearly trapped. In the Fall of 2023, the U.S. 10-Year Bond yield shot up through 5%. This caused the Fed to panic and they jawboned the yield back down to under 4%. They also indicated via their dot plot that most participants saw three rate cuts coming in 2024 (75 bps). In our year-end letter we prematurely called this a pivot. The problem is that the data has not helped their case. A higher stock market, strong employment figures (probably cooked) and solid economic growth combined with worse inflation data mean they now have a predicament. The numbers suggest that they are going to have a hard time attaining their 2% inflation target, and yet the chart of US interest payments on the previous page suggests that if they do not cut short-term rates, interest expense is going to soar.

It truly is a case of damned if they do cut rates and damned if they don’t. So what happens? We thought there was a lot of information in the following AP Release:

April 3 – AP (Christopher Rugaber): “Federal Reserve officials will likely reduce their benchmark interest rate later this year, Chair Jerome Powell said... despite recent reports showing that the U.S. economy is still strong and that U.S. inflation picked up in January and February. ‘The recent data do not ... materially change the overall picture,’ Powell said..., ‘which continues to be one of solid growth, a strong but rebalancing labor market, and inflation moving down toward 2% on a sometimes bumpy path.’ Most Fed officials ‘see it as likely to be appropriate’ to start cutting their key rate ‘at some point this year,’ he added... Powell also sought to dispel any notion that the Fed’s interest-rate decisions might be affected by this year’s presidential election campaign.”

It seems Powell is going to try to “split the baby” and claim that inflation is under control as justification to cut rates. While we could be wrong, we are beginning to think that Fed Policy does NOT matter anymore. If the Fed doesn’t cut rates, something blows up and then we get a massive rate reduction and the big print. If Powell does cut rates, he keeps the game going but at the cost of higher inflation. The markets have taken away the car keys from the reckless teenager: The Fed.

Another forward-looking clue came from the Fed’s Press Conference on March 20, 2024. Powell said that they were prepared to reduce Quantitative Tightening (QT) in order to



make sure there was enough money in the system. He even referred to the 2019 Repo market blow out. We believe he has been listening to Lori Logan, the Dallas Fed Governor who is very familiar with the monetary plumbing and recognizes that the math does not work. Presently, the Fed is reducing its balance sheet by \$60 Billion per month via QT, and the consensus is that they will cut that amount in half soon.

Above we mentioned the big print, and there is one development which occurred during the quarter that we think is a very important signal or clue about what is to come.

On March 5, 2024, the International Swaps and Derivatives Association, Inc. ("ISDA") wrote the Fed, FDIC, and OCC, to implement targeted reforms to the supplementary leverage ratio (the "SLR"). ISDA wrote: "To facilitate participation by banks in U.S. Treasury markets – including clearing U.S. Treasury security transactions for clients—the Agencies should revise the SLR to permanently exclude on balance sheet U.S. Treasuries from total leverage exposure, consistent with the scope of the temporary exclusion for U.S. Treasuries that the Agencies implemented in 2020."

In plain English – the ISDA is recommending a permanent structure for the banks to perpetually fund US Treasury issuance and U.S. Deficits. They did this exact same thing in response to COVID in order to allow the banks to buy Treasuries in unlimited quantities. It is an emergency measure that was implemented when the U.S. Treasury market became illiquid in March, 2020. This is a huge deal because it basically amounts to QE infinity. The Banks would have unlimited ability to purchase Treasury debt. Complete debt monetization "Banana Republic" style. Remember, it has not happened yet, but the ISDA is owned and controlled by the banks. It is pretty clear that this letter is a trial balloon.

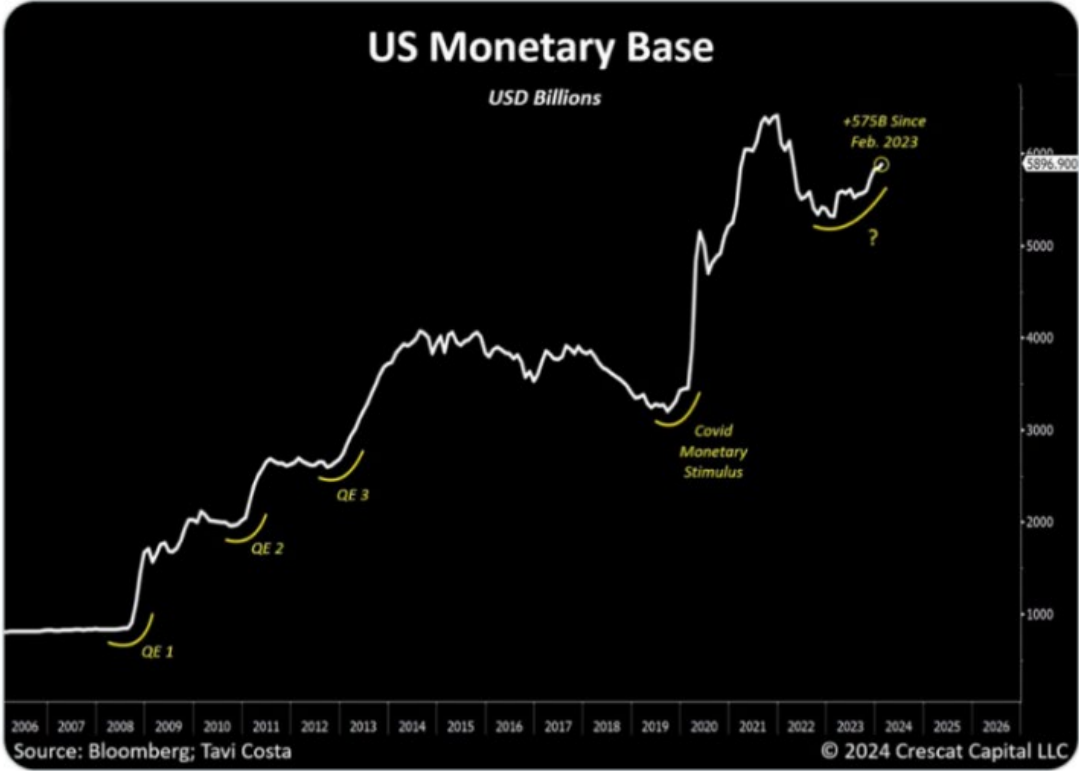
Despite the Fed's so-called hawkish stance, the supply of base money is still growing. (as our friend Lyn Alden educated us, this is due to the draw-down on the Fed's reverse repo facility). Our friend, and excellent Macro Analyst Tavi Costa highlighted this issue in the following Tweet.

 **Otavio (Tavi) Costa**  @TaviCosta · Apr 1

The US monetary base just increased again by \$53 billion.

That is now up \$575 Billion since February 2023.

A reminder that this is happening during what is supposed to be one of the most restrictive monetary policies in history.



Year	Approximate Value (USD Billions)
2006	1000
2007	1000
2008	1000
2009	1500
2010	2000
2011	2500
2012	2800
2013	3200
2014	3500
2015	3800
2016	3800
2017	3800
2018	3800
2019	3800
2020	4500
2021	5000
2022	4500
2023	4800
2024	5000
2025	5000
2026	5000

Our conclusion: the Fed and its banks, sooner or later, will provide more monetary accommodation or the entire debt structure will collapse. That is just math. Now, they will do everything they can to mask it, deny it, or create programs that they claim are not “money printing” (as they claimed that the 2023 Bank Term Funding Program was not money printing (it was)). But, they will have to print money or else the system will collapse. The gold and bitcoin prices demonstrate that the markets know this.

U.S. debt interest payments reach \$1 trillion (from Visual Capitalist)...



What if Fed rate hikes are actually sparking a U.S. economic boom? (from Bloomberg)...

As the US economy hums along month after month, minting hundreds of thousands of new jobs and confounding experts who had warned of an imminent downturn, some on Wall Street are starting to entertain a fringe economic theory.

What if, they ask, all those interest-rate hikes the past two years are actually boosting the economy? In other words, maybe the economy isn't booming despite higher rates but rather because of them.

It's an idea so radical that in mainstream academic and financial circles, it borders on heresy — the sort of thing that in the past only Turkey's populist president, Recep Tayyip Erdogan, or the most zealous disciples of Modern Monetary Theory would dare utter publicly.

But the new converts — along with a handful who confess to being at least curious about the idea — say the economic evidence is becoming impossible to ignore. By some key gauges — GDP, unemployment, corporate profits — the expansion now is as strong or even stronger than it was when the Federal Reserve first began lifting rates.

This is, the contrarians argue, because the jump in benchmark rates from 0% to over 5% is providing Americans with a significant stream of income from their bond investments and savings accounts for the first time in two decades. "The reality is people have more money," says Kevin Muir, a former derivatives trader at RBC Capital Markets who now writes an investing newsletter called The MacroTourist.

Economy Keeps Going Strong

	Start of Hikes	Latest
*GDP	2.5%	4.2%
Unemployment	3.8%	3.8%
Corporate profits	\$3.0 trillion	\$3.4 trillion
S&P 500	4,358	5,062

These people — and companies — are in turn spending a big enough chunk of that new-found cash, the theory goes, to drive up demand and goose growth.

In a typical rate-hiking cycle, the additional spending from this group isn't nearly enough to match the drop in demand from those who stop borrowing money. That's what causes the classic Fed-induced downturn (and corresponding decline in inflation). Everyone was expecting the economy to follow that pattern and "slow precipitously," Muir says. "I'm like no, it's probably more balanced and might even be slightly stimulative."

Muir and the rest of the contrarians — Greenlight Capital's David Einhorn is the most high profile of them — say it's different this time for a few reasons. Principal among them is the impact of exploding US budget deficits. The government's debt has ballooned to \$35 trillion, double what it was just a decade ago. That means those higher interest rates it's now paying on the debt translate into an additional \$50 billion or so flowing into the pockets of American (and foreign) bond investors each month.

That this phenomenon made rising rates stimulative, not restrictive, became obvious to the economist Warren Mosler many years ago. But as one of the most vocal advocates of Modern Monetary Theory, or MMT, his interpretation was long dismissed as the preachings of an eccentric crusader. So there's a little sense of vindication for Mosler as he watches some of the mainstream crowd come around now. "I've been certainly talking about this for a very long time," he says.

Muir readily admits to being one of those who had snickered at Mosler years ago. "I was like, you're insane. That makes no sense." But when the economy took off after the pandemic, he decided to take a closer look at the numbers and, to his surprise, concluded Mosler was right.

[Continue reading here](#) *(subscription may be required)*

Don't be surprised if the U.S. dollar weakens significantly in the months ahead (from Luke Gromen in FTTT Tree Rings)...

El-Erian Says World "Frozen" by Strong USD, High US Rates – 4/16/24

El-Erian Says World 'Frozen' by Strong Dollar, High US Rates – Bloomberg

Policymakers around the world are struggling to confront a surging greenback and lofty US interest rates, according to Mohamed El-Erian.

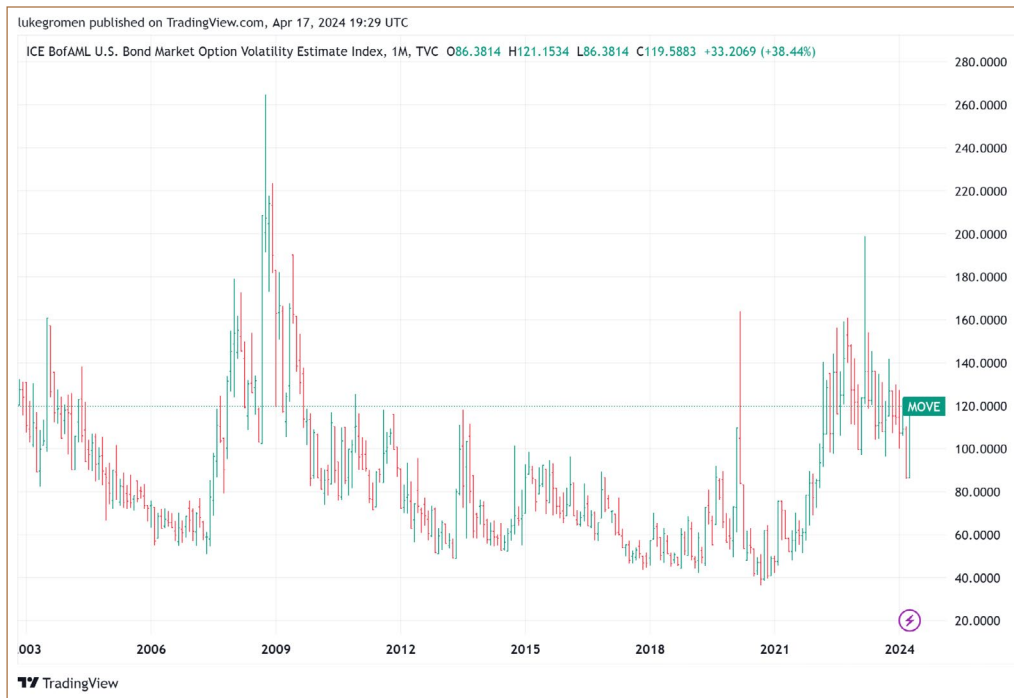
"Authorities are a little bit frozen around the world as to how do you react to a generalized dollar strengthening?" El-Erian, the president of Queens' College, Cambridge and a Bloomberg Opinion columnist, told Bloomberg Television Tuesday. "How do you react to a generalized increase in interest rates in the US?"

"Unfortunately in the past, when those two things go too far they break something elsewhere," he added.

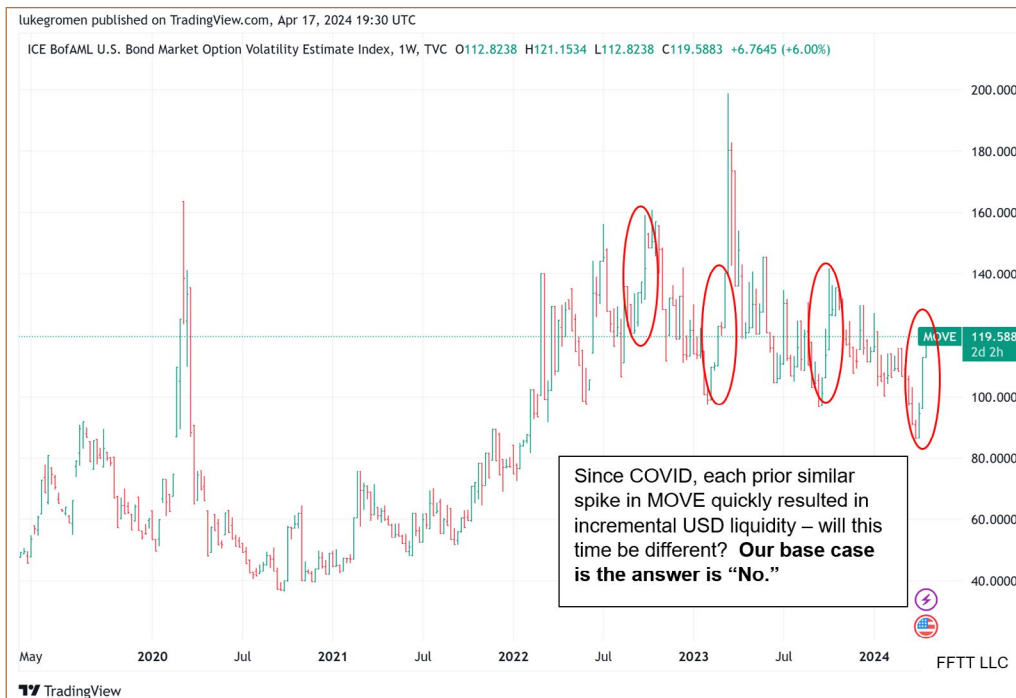
El-Erian said that a prime example of inaction has been the yen's plunge below the 154 per dollar mark this year, a move that has yet to trigger official currency intervention from Japanese policymakers.

Tree Ring: We have seen this movie repeatedly for the past five years. The USD gets too high, foreigners who owe some \$13 trillion in offshore USD-denominated debt begin to get squeezed, and they sell what they can, not necessarily what they want to in order to raise USD liquidity...so foreigners begin selling some of the \$7.5T in USTs they own in aggregate.

The pattern has begun playing out yet again, and earlier this week, the UST MOVE Volatility Index spiked sharply above 120, levels only seen on the upside at the beginning of crises (Oct-07, Mar-20, 3q22, 1q23, 3q23, and now):



This 5-year chart of the MOVE Index shows the violence of the spike in the MOVE over the last couple weeks was reminiscent of the spikes in the MOVE index seen in 3q22, 1q23, and 3q23 (red circles)...all of which led to near-immediate application of USD liquidity from the Fed and/or Treasury:



INVESTMENT CHRONICLES

We do not think it will be different this time...especially with the IMF Spring meeting set to begin in Washington this weekend, which will focus on International Monetary and Financial Committee events...

The 2024 Spring Meetings of the World Bank Group (WBG) and the International Monetary Fund (IMF) and related ancillary events will take place from 19-21 April in Washington, D.C., US.

The Spring Meetings are comprised of the joint World Bank-IMF Development Committee and the IMF's International Monetary and Financial Committee events. Ancillary meetings will be scheduled throughout the week, beginning Monday through Sunday.

Source: Event: [2024 World Bank Group/International Monetary Fund Spring Meetings | SDG Knowledge Hub | IISD](#)

...and especially as the US, its biggest trading partners, and the US Treasury Secretary continue to make gestures heading into these meetings of a willingness/desire to weaken the USD:

US, Japan, Korea agree to consult on FX as yen, won slide – 4/17/24

[US, Japan, Korea agree to consult on FX as yen, won slide | Reuters](#)

Finance leaders from the United States, Japan and South Korea agreed to “consult closely” on foreign exchange markets in their first trilateral meeting on Wednesday, nodding to concern by Tokyo and Seoul over their currencies’ recent sharp declines.

The agreement in their first trilateral meeting came as receding expectations of a near-term U.S. interest rate cut pushed the yen to 34-year lows, keeping markets on alert on the chance of yen-buying intervention by Japanese authorities.

***CHINA AND US FINANCIAL WORK GROUP DISCUSSED MONETARY POLICY – BBG, 4/16/24 (via DC)**

[Remarks by Secretary of the Treasury Janet L. Yellen Ahead of Meeting with the U.S.-China Economic and Financial Working Groups | U.S. Department of the Treasury](#)



One last thought: 77-year-old Janet Yellen flew to Beijing just two weeks ago, to discuss these same issues, when she knew the IMF meeting was coming up this weekend, in Washington DC.

China is NOT an easy short-term round-trip flight for anyone, let alone a 77-year-old... especially when that 77-year-old knew the IMF was coming up in her hometown.

In our view, whatever Yellen and the Chinese talked about in Beijing two weeks ago was both VERY important and VERY acute.

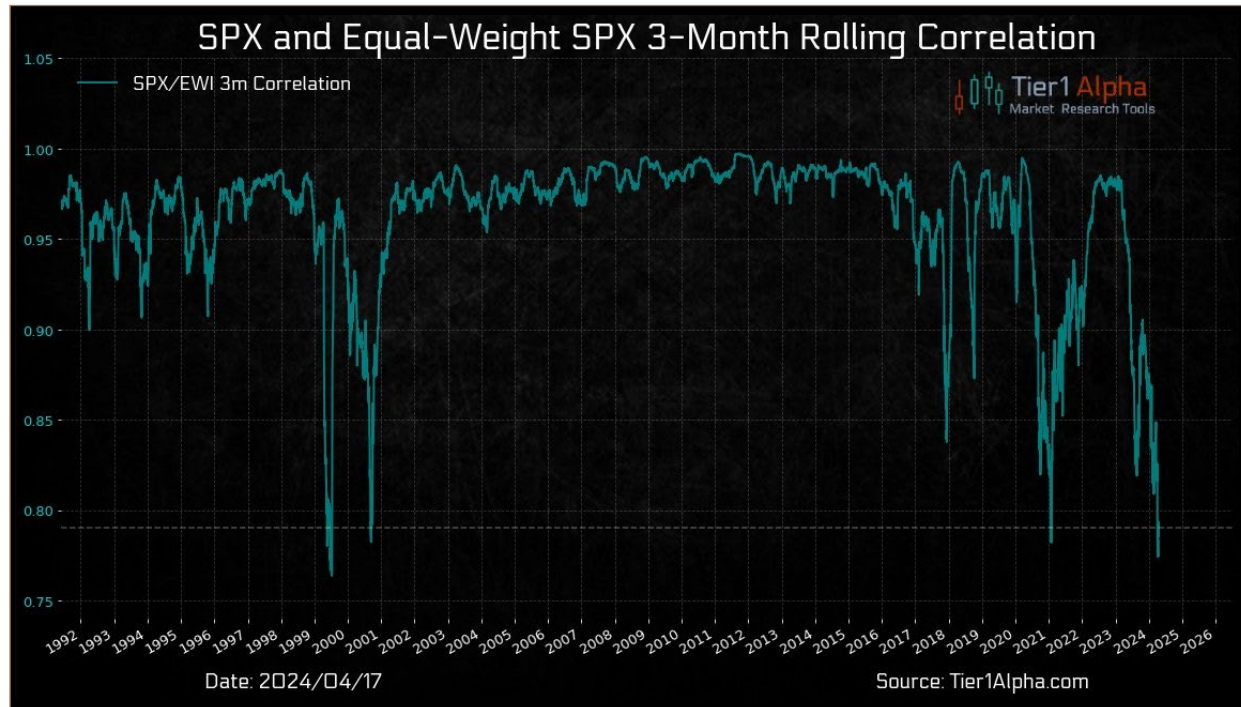
We are on high alert for USD weakness following this weekend's IMF meeting, in the same way that USD weakness followed the October 2022 IMF meeting in Washington.

If such USD weakness manifests in coming weeks/months as it did then, it will likely be good for all assets, but most so for gold, BTC, industrial stocks, and equity indices.

[Continue reading here](#) (subscription required)

Index concentration continues to distort the markets in a big way (from Tier1 Alpha via X)...

The 3-month correlation between \$SPX and its equal-weight counterpart (\$EWI) is still trading near a 25-year low.



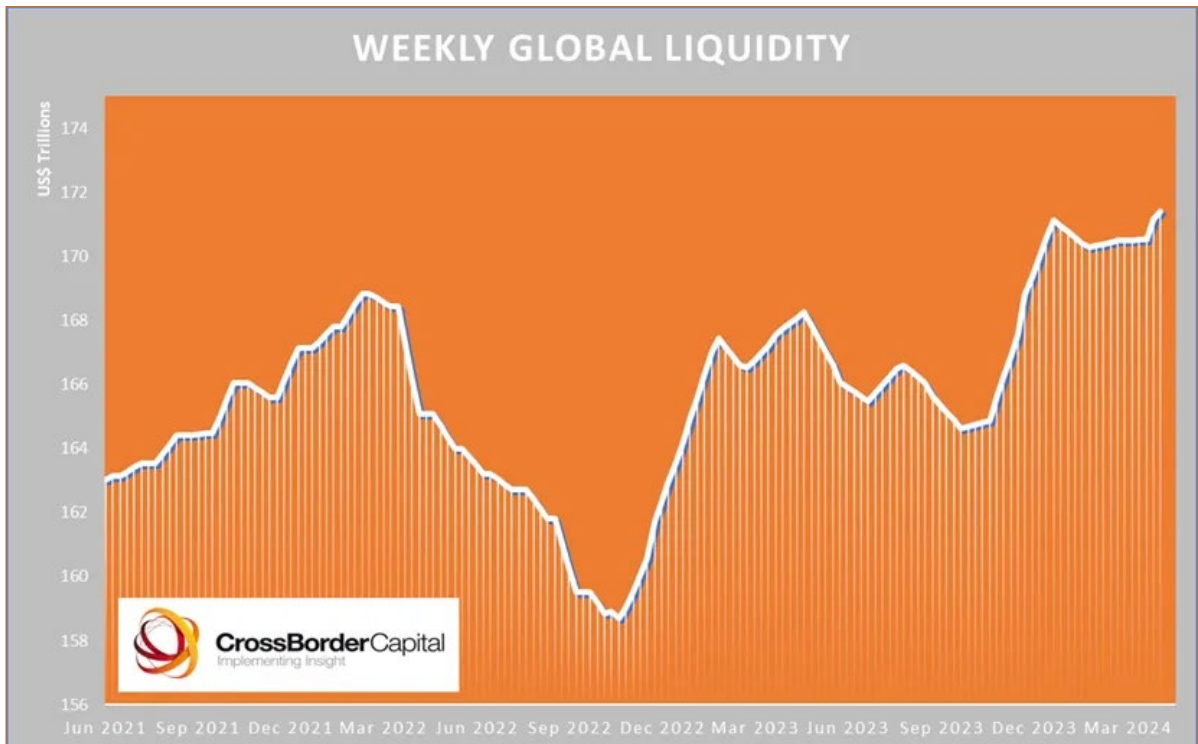
A “liquidity air pocket” – a temporary reduction in liquidity – could cause some short-term volatility for markets (from Michael Howell in Capital Wars)...

For several weeks we have been projecting an air pocket in Global Liquidity around now for three key reasons:

- Large expected jump in tax receipts post-April 15th tax filing deadline could push TGA (Treasury General Account) to test US\$1 trillion and so reduce Fed Liquidity
- Restart of more active US coupon issuance could force up bond term premia and cause MOVE volatility to increase. This hits the collateral multiplier
- Pressure on Chinese Yuan from ‘weaponized’ weak Japanese Yen could curtail near-term liquidity injections by China’s People’s Bank (PBoC)

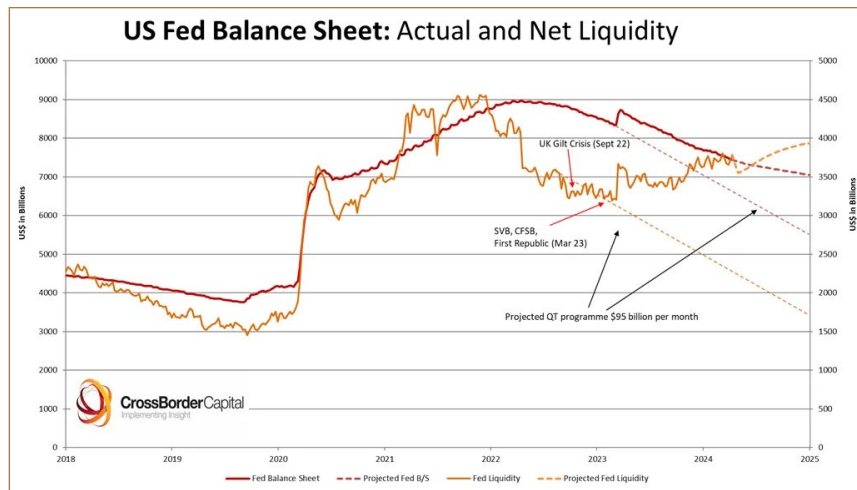
These bullets spell out why Global Liquidity could edge lower from recent highs – the World monetary base is being hit by weaker Central Bank liquidity and the multiplier on this overall pool of Central Bank money and collateral pool is getting smaller.

Already latest data evidence a topping in Global Liquidity according to our weekly tracking shown in the chart below. We fear more pain in the short-term. Thereafter Global Liquidity should revive. Hopefully it is a pause that refreshes?

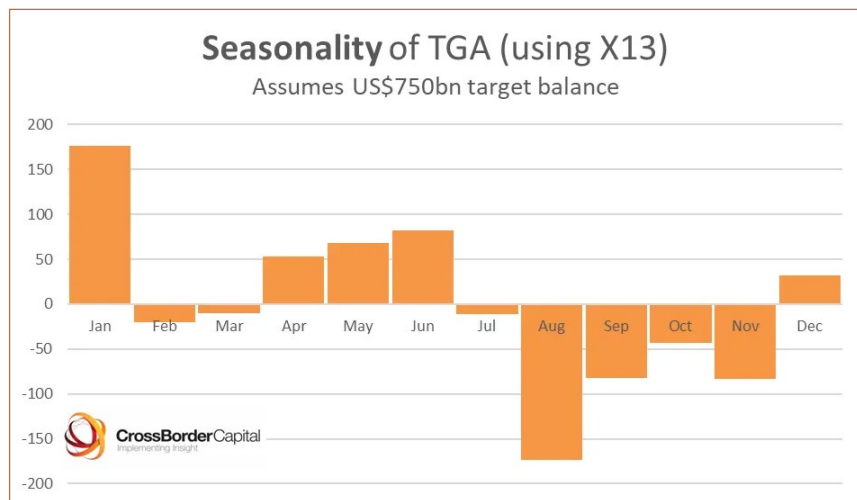


INVESTMENT CHRONICLES

The latest Fed balance sheet and underlying Fed Liquidity is reported in the next chart. The chart shows forward projections, including the short-lived step down in Fed Liquidity caused by the coming surge in the TGA from tax inflows.



Many cite the potential offset from the recent US\$70 billion fall in the Reverse Repo facility (RRP) as a reason to be hopeful. Unfortunately this is part of the same tax story. The RRP was drawn-down to fund tax payments, which so far have jumped by US\$120 billion (using latest data). However, the TGA



is highly seasonal as the chart below highlights. The bars show how much the actual lies (below) above the 'true' underlying trend. This suggests that through the next few months we could see a US\$300-400 billion swing of liquidity coming back into markets as the TGA seasonally falls. On top, Treasury Secretary Janet Yellen may quicken the pace of outlays.

[**Continue reading here**](#) (subscription required)



China is moving toward full monetary independence (from Russell Napier in *The Financial Times*)...

The writer advises financial institutions on asset allocation and is founder of The Practical History of Financial Markets course.

The world's second-largest economy is about to move to monetary independence and in so doing it will destroy the current international monetary system. China needs to not just reflate its economy but to inflate away its debts. The country has one of the highest total non-financial debt-to-GDP ratios of any major economy, at 311 per cent of gross domestic product. While the debt burdens of most countries are shrinking relative to output, thanks to high nominal GDP growth and the falling price of debt securities, China continues to report rising debt-to-GDP.

On the eve of the global financial crisis in December 2007, China's total non-financial debts amounted to just 142 per cent of GDP. The exchange rate targeting regime, by restricting the growth in money relative to the growth in total debt, pushed China to ever-higher debt-to-GDP levels that have finally brought it to the verge of a debt deflation. The time has come for the Chinese authorities to take the monetary levers to generate higher nominal GDP growth. This means allowing the exchange rate to adjust to the level of broad money growth necessary to reduce China's burden. The current international monetary system ends when China assumes this full monetary independence.

Recent comments by President Xi Jinping that the People's Bank of China (PBoC) should launch a bond-buying programme to create more domestic liquidity may be the first sign that exchange rate targeting is slipping down the policy agenda. PBoC action to accelerate the growth rate of broad money and generate higher growth in nominal GDP is not compatible with a stable exchange rate, especially in an era when trade and capital flows are shifting away from China as part of US "friendshoring". It is time for China to find a different and fully autonomous monetary policy.

Since 1994, China has intervened to prevent the appreciation of its exchange rate particularly in relation to the US dollar. It was joined in this monetary policy approach by most of Asia in 1998. This intervention funded the purchase of developed world government debt securities, primarily US Treasuries, through the creation of local currency bank reserves. This forced buying, regardless of price, effectively decoupled the risk-free rate from the nominal growth rate in the developed world.

China's currency has weakened significantly

Renminbi per dollar



Source: LSEG
© FT

The global monetary system created a persistent and artificially large gap between nominal growth rates and the discount rate, thus inflating asset prices and facilitating a rise in gearing. Developed world savers were partially freed from funding their own governments and turned instead to funding the private sector and pushing asset prices higher. The valuation of US equities, as measured by the Shiller price/earnings ratio, moved to a higher plateau under this monetary system and both private and public sector gearing rose to new highs relative to GDP.

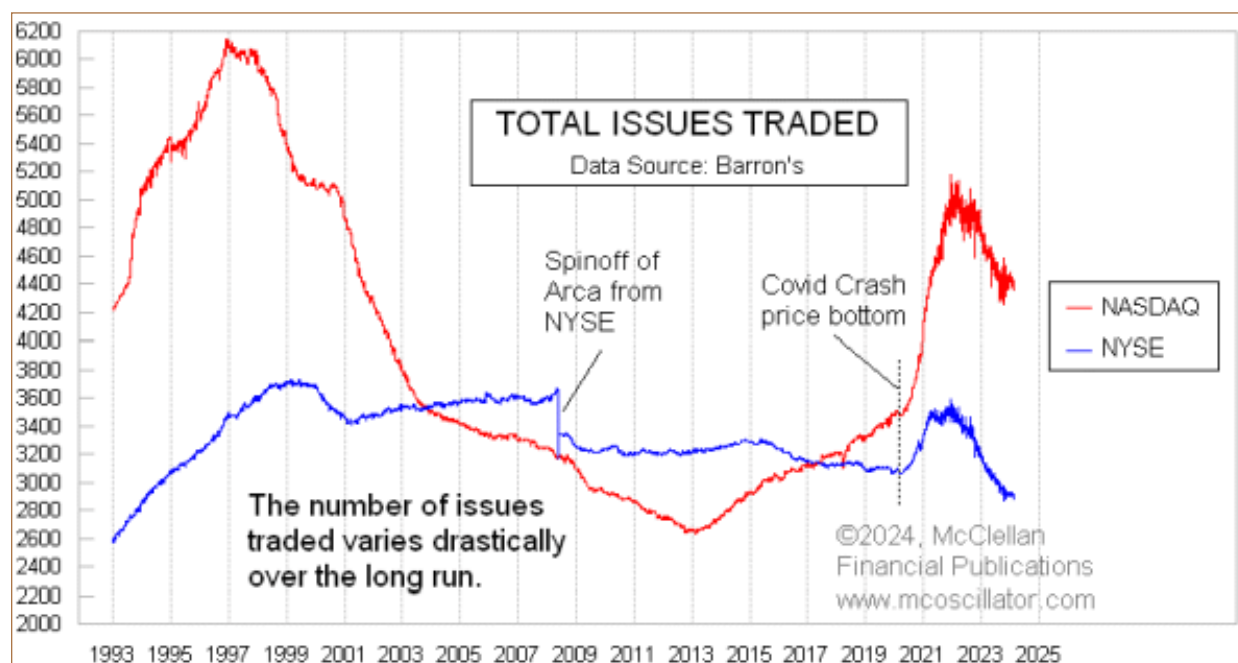
The excess domestic liquidity created by PBoC foreign exchange intervention was channelled by the Chinese state banking system to fund investment and higher production at the expense of consumption. This state capitalism reduced the role that excess liquidity played in pushing up domestic prices and making China less globally competitive. In this way, China's external surplus endured for much longer than it would

have in a market system. Developed world central bankers adjusted their own monetary policy to fit the global inflation dynamics increasingly determined by China. The Chinese Communist party created a fulcrum, and inflation-targeting central bankers created a “lever long enough”, through interest rate policy and the extension of their own balance sheets, to “move the world”.

While the decline in the renminbi exchange rate, in reaction to much higher growth in currency supply, raises the spectre of exported deflation, the rest of the world is very unlikely to permit China to take an even larger share of global trade. The most likely reaction is the imposition of tariffs and a clearer drawing of a line between countries aligned with China and those who see their allegiances elsewhere. The loss of access to Chinese productive capacity brings with it higher global inflation.

[Continue reading here](#) *(subscription may be required)*

The total number of stocks is shrinking (from McClellan Financial Publications Chart in Focus)...



The major averages may still be trending higher, but the total numbers of issues traded on the NYSE and Nasdaq peaked back in January 2022 and have been declining since then. This is not a bullish sign for the financial markets.

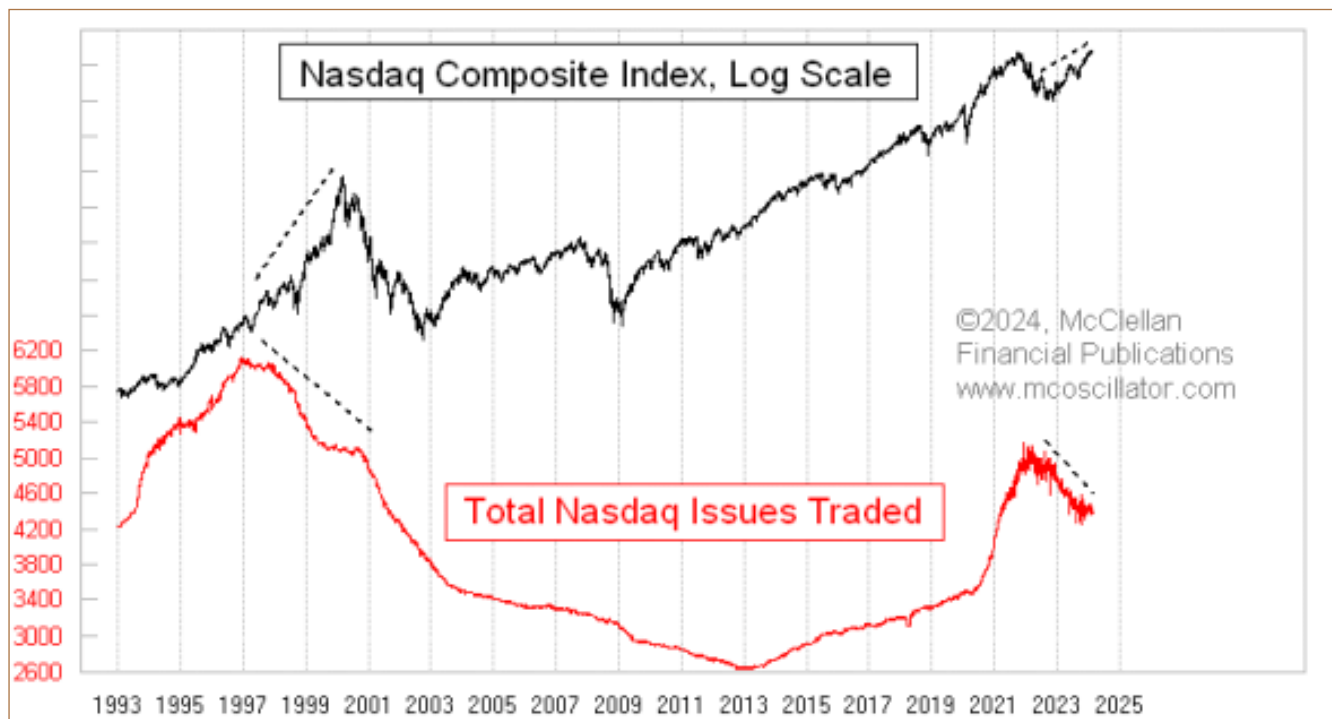
The Nasdaq market has looser listing standards than the NYSE, and so it attracts a larger number of total listings. But ease of doing an IPO on the Nasdaq sometimes means marginal companies which should not come public do so anyway, and then struggle afterward. For that reason, the Advance-Decline statistics for the Nasdaq have always had a bearish bias. In fact, the cumulative daily A-D Line for the Nasdaq has NEVER made a new all time high. It started going down from the beginning of the data in 1972, and it has never gotten back to that level, despite having more issues traded.

Having more IPOs can be a sign of an expanding economy. Perhaps it is better to say that expanding IPOs is a sign of easy money, such that even the marginal companies can still attract the capital to have a successful IPO. That increases the number of listed issues.

When the Fed started QE4 during Covid, and Congress threw its own pile of money at the economy, there was so much money sloshing around that the Nasdaq listings grew from around 3500 issues traded around the time of the Covid low in March 2020 to a high of 5175 in January 2022. The NYSE's total number of listed issues grew at that time too, although not by quite as much.

Now both are shrinking, as the marginal companies have revealed themselves and gotten delisted. Mergers and acquisitions also play a smaller part in the shrinkage.

One reason why this is meaningful is that a similar shrinkage in listed issues occurred leading up to the Internet bubble top in 2000. The high point for Nasdaq issues traded was actually back in December 1996, at 6136. By the time prices peaked for the Nasdaq Composite Index in March 2000, that number of Nasdaq issues traded was down to 5100, and it kept heading down.



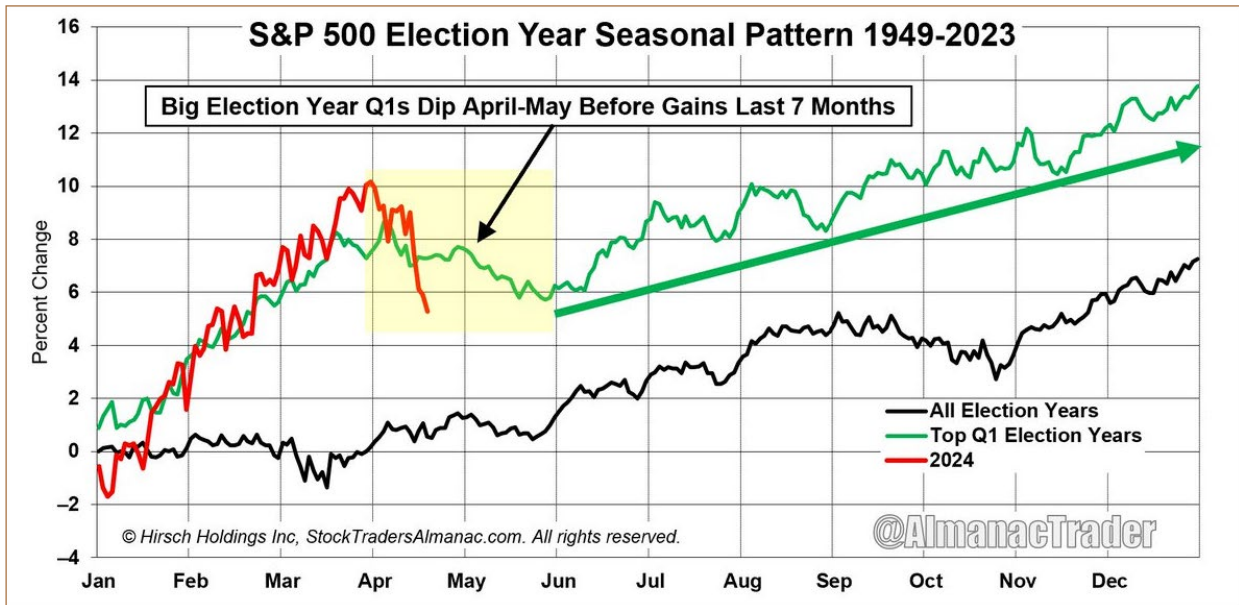
One hard point about divergences is that they can last for a while, and they won't tell us when they are finally going to matter. But it cannot be seen as good news that money to invest is drying up, and the weak are getting picked off. In the stock market, illiquidity conditions initially come after the weak. But those same illiquidity conditions have a tendency of eventually mattering to even the biggest and supposedly most well-capitalized companies.

INVESTMENT CHRONICLES

History suggests stocks could pull back through May before rallying into year-end **(from Jeffrey A. Hirsch via X)...**

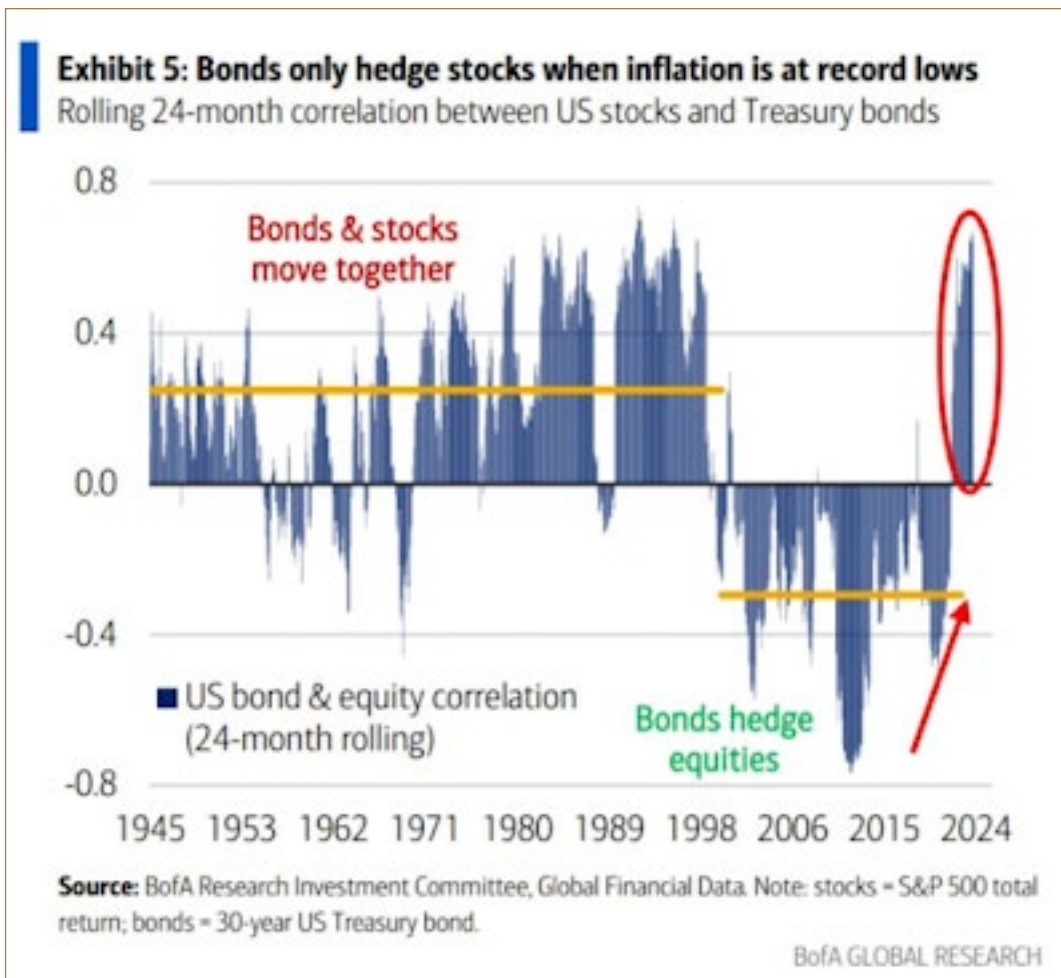
Big Election Year Q1s Dip April-May Before Gains Last 7 Months.

2024 3rd best Election Q1 since 1950 tracking. Chop continues up ~2.5% April-Oct. Only 2 losses in the last 7 months of election years since 1950, 2000 & 2008 (2024 Almanac page 80).



Historical data show the 60/40 (60% stocks/40% bonds) portfolio only works when inflation is low (from Disciplined Systematic Global Macro Views)...

I always come back to this key chart, the correlation between stock and bonds. We have ended the great period of diversification, the 60/40 era. This correlation switch is the ultimate diversification regime shift. From this relationship comes all other diversification decisions. You don't have as great a need for alternatives when the stock bond correlation is negative. Investor search for diversification should be at a heightened level. This correlation is not going back to negative anytime soon.



INVESTMENT CHRONICLES

Pensions funds are pulling hundreds of billions of dollars from stocks (from *The Wall Street Journal*)...

Stock portfolios at large pension funds had a blockbuster run. Now, managers are cashing out.

Corporate pension funds are shifting money into bonds. State and local government funds are swapping stocks for alternative investments. The nation's largest public pension, the California Public Employees' Retirement System, is planning to move close to \$25 billion out of equities and into private equity and private debt.

Like investors of all kinds, the funds are slowly adapting to a world of yield, where they can get sizable returns on risk-free assets. That is rippling throughout markets, as investors assess how much risk they want to take on. Moving out of stocks could mean surrendering some potential gains. Hold too much, for too long, and prices might fall.

For pension funds, which target specific investment returns to fund future obligations, this is a welcome change: It means they can take less risk and stay on track toward those goals. They can sell stocks, lock in price gains and move the money into bonds without sacrificing too much return. Or they can continue to push for higher returns without taking on much more risk.

While stocks have slumped recently, the S&P 500 remains just 4.6% below its record close. The index's 10% gain through the end of March marked its best first-quarter performance since 2019. Meanwhile, a persistently strong economy has pushed interest rates to multidecade highs.

The combination is leading large retirement funds to rotate their positions. Goldman Sachs analysts estimate that pensions will unload \$325 billion in stocks this year, up from \$191 billion in 2023.

"You don't want to give away all of those hard-earned gains," said Zorast Wadia, a principal and consulting actuary at Milliman. "You don't want to give it back if stocks fall."

Pension funds for workers at companies and state and local governments together held about \$9 trillion at the end of 2023, according to Federal Reserve data. Many have been trying for years to come up with enough money to cover promised future benefits.

Big companies have mostly switched new hires to 401(k)-style retirement options, and have built up pension savings over the past two decades. Last year, they reported having enough to cover their liabilities for the first time since the 2008-09 financial crisis, Milliman found. As a result, corporate pension managers are investing less aggressively, with stocks making up less than one-quarter of investments.

[Continue reading here](#) *(subscription may be required)*

THE LEGENDS SPEAK

Wisdom and Insight From the World's Greatest Investors

Excellence is overrated in investing (from Market Sentiment)...

There's a popular urban legend known as the Sports Illustrated cover jinx, which suggests that when an athlete makes the cover of Sports Illustrated, he or she will be "jinxed" and not perform up to the expectations. While there is a long list of examples showcasing the jinx, the rational explanation would be that the added press and distractions from the feature might be distracting the athletes.

Michelle Clayman had a similar concept for businesses. In his 1987 article "In Search of Excellence: The Investor's Viewpoint," he examined the stock market performance of companies identified as "excellent" based on financial characteristics¹ and compared them with 39 "unexcellent" (*again, chosen based on the same financial characteristics*) companies.

The study had two striking results:

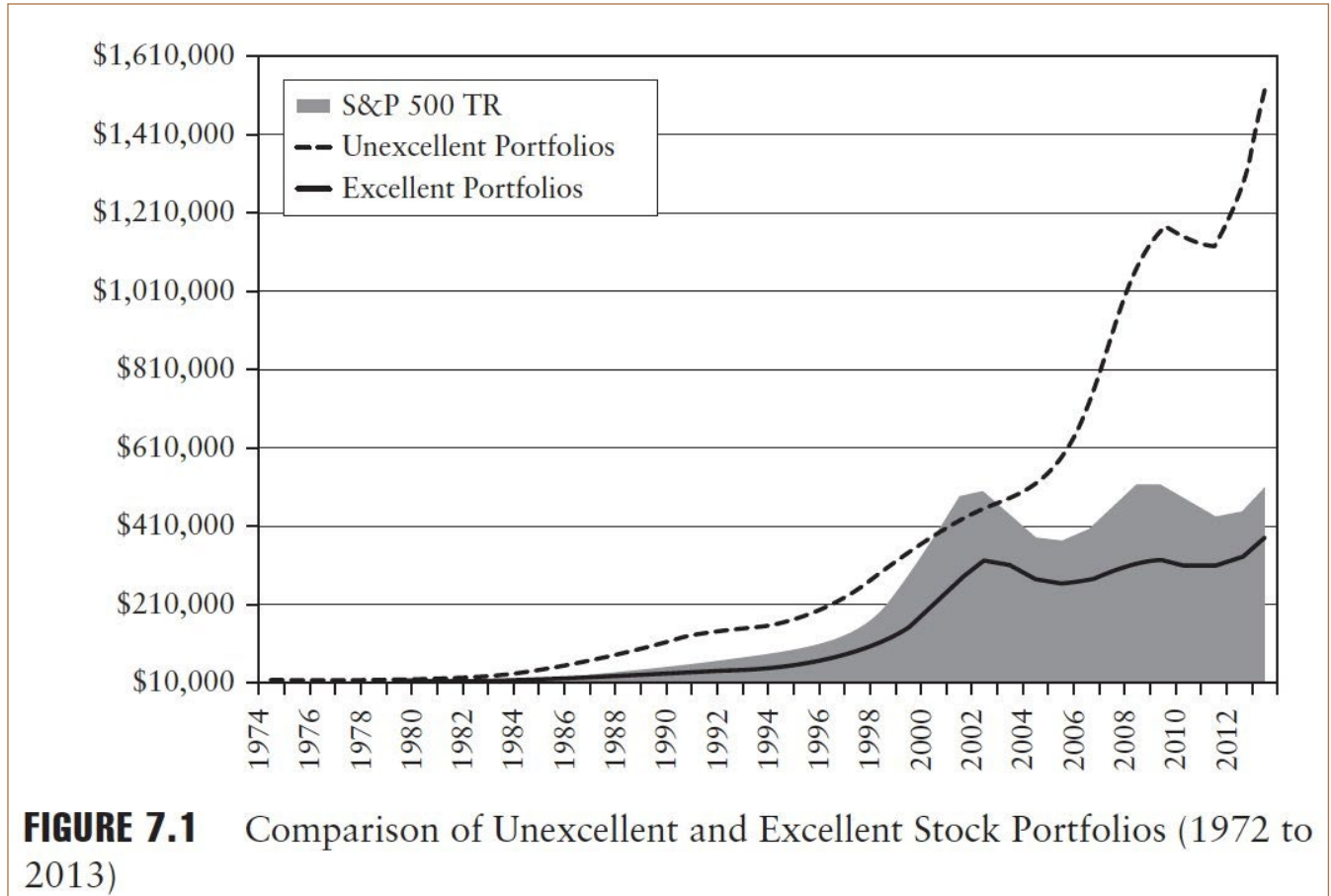
1. There was significant evidence of reversion to the mean, with the growth and profitability of the excellent companies slowing over time.
2. The unexcellent companies as a portfolio outperformed both the excellent companies and the S&P 500.

Over time, company results have a tendency to regress to the mean as underlying economic forces attract new entrants to attractive markets and encourage participants to leave low-return businesses.

*Because of this tendency, companies that have been "good" performers in the past may prove to be inferior investments, while "poor" companies frequently provide superior investment returns in the future. The "good" companies underperform because the market overestimates their future growth and future return on equity and, as a result, accords the stocks overvalued price-to-book ratios; the converse is true of the "poor" companies. — **Michelle Clayman***

Barry Bannister rechecked Clayman's theory in 2013, expanding the time period of the study to 41 years from 1972 to 2013. Again, the results were consistent.

\$1000 invested at the end of every June beginning 1972 (cumulative outlay of \$41,000) appreciated to \$1.6 million as of June 2013 in the unexcellent portfolios, compared to \$502K in the excellent portfolios and \$637K in the S&P 500.



INVESTMENT CHRONICLES

[Continue reading here](#)

What every investor should know about luck versus “repeatability” (from Morgan Housel at Collab Fund)...

Luck plays such a big role in the world. But it’s hard to talk about. If I say you got lucky, I look jealous. If I tell myself that I got lucky, I feel diminished.

Maybe a better way to frame luck is by asking: what isn’t repeatable?

Lucky implies random events you could not see coming. What isn’t repeatable is different. Did Jeff Bezos get lucky creating Amazon? Not in the same way a lottery winner is lucky, of course. He was visionary and ambitious and savvy to a degree you only see a few times per century.

But could he, starting today, without any money or name recognition, create a new multi-trillion dollar business from scratch?

Maybe, but probably not. There are so many things that helped Amazon become what it is that can’t be replicated – growth of the internet, market conditions, old competitors, politics, regulations, etc. Bezos is enormously skilled in a way that is not luck. But a lot of what he did was not repeatable. Those points are not contradictory.

It’s so important to know the difference between the two when attempting to learn from someone. You want to try to emulate skills that are repeatable. Attempting to copy the parts of someone’s success that aren’t repeatable is equivalent to a 56-year-old dressing like a teenager and expecting to be cool.

There’s a law in evolution called Dollo’s Law of Irreversibility that says once a species loses a trait, it will never gain that trait back because the path that gave it the trait in the first place was so complicated that it can’t be replicated. Say an animal has horns, and then it evolves to lose its horns. The odds that it will ever evolve to regain its horns are nil, because the path that originally gave it horns was so complex – millions of years of selection under specific environmental and competitive conditions that won’t repeat in the future. You can’t call evolutionary traits luck – they came about because of very specific forces. You just can’t ever rely on those forces repeating themselves exactly as they did in the past.

A lot of things work like that.

In business and investing, you want to learn the big lessons about why things behave the way they do without assuming the past is a direct guide to the future, because it's not – most of the details are not repeatable. History is the study of change, ironically used as a map of the future.

Jason Zweig of the *Wall Street Journal* once talked about what happens when you try to learn a very specific, non-repeatable lesson when a broader, very repeatable lesson is what you needed to pay attention to:

[After the dot-com crash], the lesson people learned from that was not, "I should never speculate on overvalued financial assets." The lesson they learned was, "I should never speculate on internet stocks." And so the same people who lost 90% or more of their money day-trading internet stocks ended up flipping homes in the mid 2000s, and getting wiped out doing that. It's dangerous to learn narrow lessons.

The great thing when you ask, "is this repeatable?" is that you start to focus on things that you and I – ordinary lay people – have a chance of repeating ourselves.

You can learn a lot from Warren Buffett's patience. But you can't replicate the market environment he had in the 1950s, so be careful copying the specific strategies he used back then.

You can learn so much from John D. Rockefeller about the importance of controlling distribution. But you cannot replicate the 20th century legal system that allowed him to destroy competitors, so don't get carried away there.

Elon Musk can teach you a lot about risk-taking and branding, but much less about competing in the auto business.

Jeff Bezos can teach you so much about management and long-term thinking, but much less about e-commerce and cloud computing.

The way to get luckier is to find what's repeatable.

Five important questions ahead of the annual Berkshire Hathaway Shareholders Meeting ([from The Rational Walk](#))...

Berkshire Hathaway will hold its [2024 Annual Shareholders Meeting](#) on Saturday, May 4 at 4:00 pm in Omaha. The real action will start hours earlier when the doors of the CHI Health Center Arena open at 7:00 am and thousands of shareholders rush in to secure their seats. [Events](#) related to the annual meeting begin on Friday and continue through the end of the weekend. In addition to events sponsored by Berkshire, there are numerous other gatherings such as the [Markel Omaha Brunch](#).

The highlight for many shareholders will be the question and answer session that begins at 9:15 am. Since Berkshire does not hold quarterly earnings calls, this is the only opportunity to ask Warren Buffett and Greg Abel questions about the company. During the morning session, Ajit Jain will also be on stage.

This will be the first annual meeting since Charlie Munger died. His presence on stage simply cannot be replaced. He is certain to be honored in some way during the meeting, perhaps in the movie that precedes the Q&A session.

The Q&A session lasts for close to five hours. Questions will alternate between shareholders at the meeting and Becky Quick who curates questions submitted to berkshirequestions@cnbc.com. The Q&A will be [webcast](#) for those of us who are not going to Omaha. I expect that there will be time for at least fifty questions. I plan to submit one or two questions to Becky Quick. This article is a listing of five questions that I am considering for submission. Although the chance of having a question selected is very low, I have found in the past that well written questions can sometimes attract attention. My questions appear in bold italics and I have provided some additional commentary and context below each question.

Berkshire Hathaway Energy

The Berkshire Hathaway Energy 10-K includes the following risk factor: "In the event of default due to the bankruptcy, insolvency, or reorganization of a significant subsidiary, all of BHE's debt will become immediately due." Given Mr. Buffett's concerns about the long-term stability of the regulatory and legal climate expressed in the annual letter, should shareholders be concerned about problems at one of BHE's subsidiaries causing contagion for BHE as a whole?

I brought up the question of contagion in [**Berkshire Hathaway Energy's Uncertain Future**](#). PacifiCorp is a wholly owned subsidiary of BHE. PacifiCorp is a separate and distinct legal entity which issues its own debt secured by its properties. While BHE has no obligation to satisfy the demands of PacifiCorp's creditors, I noted with some concern that in the event of "any default due to the bankruptcy, insolvency, or reorganization of a significant subsidiary, all of BHE's debt will become immediately due."

BHE has no legal obligation to inject capital into PacifiCorp to satisfy legal liabilities or for any other purpose and it is very likely that BHE would be able to renegotiate its \$13.1 billion of senior debt rather than having to actually pay it off, although perhaps at higher interest rates. Given this situation, I wonder whether BHE might elect to bail out PacifiCorp, if needed, to avoid triggering any covenants related to BHE senior debt or possibly for reputational reasons.

Just as BHE has no obligation to inject capital into PacifiCorp, Berkshire Hathaway has no obligation to inject capital into BHE. However, Berkshire Hathaway has been permitting BHE to retain all of its earnings and has never taken a distribution from BHE. Although not part of my question, it will be interesting to see whether Berkshire continues this policy or begins to take distributions from BHE in the future.

Skin in the Game

Berkshire's proxy states that "any recommended candidate [for the board] should own Berkshire stock that has represented a substantial portion of the candidate's investment portfolio for at least three years." Is there a numeric threshold that must be satisfied, or does Mr. Buffett and the board approach this on a case by case basis? Should shareholders be confident that current members of the board all own Berkshire stock that is a substantial portion of the director's net worth?

I've written several articles about "skin in the game" at Berkshire. My most recent comments are in an article about Berkshire's 2024 proxy. While Berkshire's board, in aggregate, clearly has a major economic interest in the business, it is not necessarily clear that every director has a stake that is a "substantial portion" of net worth.

I will refrain from singling out directors, but will note that a holding measured in the single digit millions might seem large in absolute terms but could still be a small holding relative to the director's net worth if he or she spent many decades in high level executive positions. Here is the exhibit that I presented in my recent article:

As of 3/15/2024											
Price of Class A common stock											
Price of Class B common stock											
Director	Personal "Skin in the Game" (D+T)			(D) Direct Holdings		(T) Trust Holdings		(O) Other Holdings		Total (D+T+O)	
	Class A	Class B	Value (\$)	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B
Warren E. Buffett	216,637	344	133,910,770,764	216,637	344	-	-	-	-	216,637	344
Gregory E. Abel	228	2,363	141,898,895	-	-	228	2,363	-	-	228	2,363
Howard G. Buffett	10	2,450	7,181,256	10	2,450	-	-	650	-	660	2,450
Susan A. Buffett	24	450	15,018,867	24	450	-	-	56	4,884,795	80	4,885,245
Stephen B. Burke	28	-	17,307,744	28	-	-	-	-	-	28	-
Kenneth I. Chenault	3	1,855	2,611,482	3	1,855	-	-	-	-	3	1,855
Christopher C. Davis	36	2,666	23,340,888	36	2,666	-	-	-	-	36	2,666
Susan L. Decker	-	3,125	1,275,406	-	3,125	-	-	-	-	-	3,125
Charlotte Guyman	58	955	36,241,519	58	955	-	-	-	-	58	955
Ajit Jain	316	491	195,530,641	165	491	151	-	50	124,308	366	124,799
Thomas S. Murphy, Jr.	96	2,125	60,208,111	96	2,125	-	-	-	-	96	2,125
Ronald L. Olson	120	25,384	84,536,016	116	24,930	4	454	-	1,515	120	26,899
Wallace R. Weitz	20	-	12,362,674	20	-	-	-	154	-	174	-
Meryl B. Witmer	11	2,000	7,615,731	3	2,000	8	-	-	-	11	2,000
Directors & Officers as a group	217,587	44,208	134,515,899,993	217,196	41,391	391	2,817	910	5,010,618	218,497	5,054,826

Source: Berkshire Hathaway's 2024 proxy, author's calculations

Future CEO Compensation

Berkshire's proxy states the following: "... neither the profitability of Berkshire nor the market value of its stock are to be considered in the compensation of any executive officer. Under the Committee's compensation policy, Berkshire never intends to use Berkshire stock in compensating employees."

The wording about not using stock as compensation is stronger than in past years. Last year's proxy stated: "Berkshire does not grant stock options to executive officers" but did not use the word "never."

If future CEOs will not be compensated based on the profitability or the market value of Berkshire and if stock is not to be used as compensation, what kind of pay structure will be used to tie long-term performance with pay?

I noted the change in language in my recent article on the 2024 proxy statement. It might seem like splitting hairs, but I don't think that the inclusion of the word "never" should be brushed aside without further explanation.

I have no issue with the \$20 million in cash compensation paid to Ajit Jain and Greg Abel in 2023 because I trust Warren Buffett's judgment when it comes to evaluating performance and setting the pay of his top executives. However, it is notable that all of this pay was base salary and the pay was identical for both Vice Chairmen.

In the future, it is not at all clear how the board will approach compensating the CEO. Presumably Warren Buffett has privately given guidance to the board on this matter. He may or may not be willing to share his thinking in response to this question.

BNSF Ownership

On September 30, 2023, ownership of BNSF was transferred from National Indemnity to Berkshire Hathaway, making BNSF a direct subsidiary of Berkshire. Prior to September 30, 2023, BNSF's cash distributions were paid to National Indemnity. Now they will be paid directly to Berkshire.

Presumably, National Indemnity is overcapitalized and there is no regulatory need for the railroad to be owned by the insurance company. Were there any other reasons to shift ownership? I have read some speculation that it would be easier to spin off BNSF in the future now that it is a direct subsidiary of Berkshire, but assume that this is not on the table given Warren Buffett's comments in the latest shareholder letter which stated: "A century from now, BNSF will continue to be a major asset of the country and of Berkshire."

I am on the fence regarding submitting this question because I am certain that Warren Buffett will throw cold water on the idea of a BNSF spin-off, now or in the future. I am not necessarily in favor of such a spin-off, but the thought did cross my mind when I read about moving the ownership to Berkshire from National Indemnity.

It is likely that BNSF simply was not needed within the insurance business in terms of regulatory capital. Therefore, it is a good practice to remove the railroad from the insurance business, thereby putting it outside the reach of policyholder claims.

Dividend and Repurchase Policy

Berkshire's policy is to only repurchase stock when it is available below intrinsic value, conservatively determined. From 2018 to 2023, Berkshire used \$75 billion to repurchase stock. Shareholders have historically been against dividends and repurchases below intrinsic value make a great deal of sense since ongoing owners bear no tax consequences, aside from the 1% repurchase tax.

If Berkshire trades at or above intrinsic value in the future and management builds up cash balances that cannot be redeployed internally or used for buying back stock, will dividends

make sense? Would it be appropriate for Berkshire to adopt a policy of paying out special dividends when this circumstance occurs, or will regular dividends be initiated? If a regular dividend is initiated, would that potentially reduce flexibility since most companies hesitate to cut or eliminate regular dividends once they are instituted?

I brought up the dividend question in a [recent article](#). I am personally opposed to a dividend as long as repurchases are possible below intrinsic value and, since I trust Warren Buffett's judgment, I have no worries about recent repurchases. In the future, the board and the CEO will need to make this decision. Presumably, Mr. Buffett has given guidance in private to the board regarding how he thinks about intrinsic value. He is not likely to share this in a public setting, but perhaps he will shed some light on whether regular or special dividends represent his preferred policy in the future if the stock trades above intrinsic value and there's too much cash on the balance sheet.

Once instituted, a regular dividend usually becomes sacrosanct and takes on meaning for many investors beyond the cash paid out. Cutting or eliminating a dividend, or even failing to increase it every year, can be a "signal" of supposed problems. In reality, it might make good sense to stop paying dividends if the stock declines below intrinsic value and can be repurchased. Regular dividends could tie the hands of future managements in a way that special dividends do not.

Perhaps a combination of a small regular dividend and irregular larger special dividends will become the preferred policy. There is some evidence to support this approach. Costco pays a very small regular dividend and has, on several occasions, paid large special dividends. Charlie Munger served on Costco's board for decades and no doubt had an influence on capital allocation. Of course, Costco cannot redeploy cash in the way that Berkshire can, so the situation is not exactly comparable.

Renowned value investor Seth Klarman on what it takes to be successful ([from Investment Books \(Dhaval\) via X](#))...

Traits of successful investors

“Successful investors tend to be unemotional, allowing the greed and fear of others to play into their hands. By having confidence in their own analysis and judgment, they respond to market forces not with blind emotion but with calculated reason. Indeed, the very way an investor views the market and its price fluctuations is a key factor in his or her ultimate investment success or failure”.

Successful investors:

- Demonstrate caution in frothy markets and steadfast conviction in panicky ones.
- Know how to take advantage of Mr Market.
- Look beyond security prices to underlying business value, always comparing the two as part of the investment process.
- Look to Mr Market as a creator of investment opportunities.
- Understand that a stock price rises does not ensure that the underlying business is doing well or that the price increase is justified by a corresponding increase in underlying value.

Source: Investment Talk Newsletter

@investmentbook1

Warren Buffett's four filters for finding great investments (from The Investing for Beginners Podcast via X)...

"Charlie and I look for companies that have a) a business we understand; b) favorable long-term economics; c) able and trustworthy management; and d) a sensible price tag."

Simple, but not easy rules to follow.

Warren Buffett's Four Filters



Filter 1: Business Understanding
"Is the business simple and understandable?"

Filter 2: Competitive Advantage
"Does the business have a consistent competitive advantage?"

Filter 3: Management Quality
"Is the management rational and candid?"

Filter 4: Valuation
"Is the company available at an attractive price?"

[in](#) Dave Ahern  @IFB_podcast 

Timeless wisdom from "the Lou Gehrig of investing" ([from Kingswell](#))...

[This month], a total solar eclipse traced a narrow path across North America — from Mexico down south, through thirteen U.S. states, and all the way up to Newfoundland in eastern Canada.

And, speaking as someone lucky enough to live smack dab in the middle of the eclipse's "path of totality", it totally lived up to the hype.

Solar eclipses always make me think of the late Philip Carret. The legendary investor had a most unusual hobby: he never missed an eclipse. Carret (which rhymes with hurray) traveled all over the world to watch every one that he could. In all, he saw twenty of them — including one that took him to Siberia.

"It's awe-inspiring," he explained. "The moon takes a bite out of the sun. There's the diamond ring effect as the sun shines between mountains on the moon. The corona goes for millions of miles around the moon. It's like a religious experience."

Carret was a buy-and-hold investor way back before it was cool. He wrote for Barron's when it was still run by Clarence Barron himself and started one of the first mutual funds with his Fidelity Investment Trust (later renamed Pioneer Fund) in 1928. An initial \$10,000 investment with Pioneer would have grown into more than \$8 million by the time Carret hung up his hat.

And he did it all with an uber-patient approach to the market.

If that sounds a bit like Warren Buffett's preferred holding period of forever, you probably won't be surprised to learn that Buffett and Carret formed something of a mutual admiration society over the years.

"Phil has the best long-term investment record of anyone in America," Buffett once said. "If there ever was a hall of fame for investment advisors, he'd be among the first ten in it."

Carret's connection with the Buffett family actually began with a couple of stock tips from Warren's father, Howard, who ran a small brokerage firm in Omaha. On one visit, the elder Buffett recommended Greif Bros., a Cleveland-based coopeage, to Carret — and that turned into a fifty-bagger.

One thing that Warren Buffett particularly admired was Carret's longevity. (He remained an active player of the money game right up until his death at age 101.) "He's the Lou Gehrig of

investing,” Buffett said. “I’d love to go after his record.”

No doubt about it: Philip Carret ranks near the top of the “eminent dead” that I hope to befriend and learn from. And, like so many of the great investors of yesteryear, he had an inimitable way with words that allowed him to distill complex ideas — on both investing and life in general — into snappy sayings.

I’ve gathered together 50 of my favorite Carret-isms as (hopefully) a launchpad for further study into his life and example...

(1) *“Common sense is quite uncommon.”*

(2) *“The most important thing in investing is to use common sense. If it’s not a simple concept, I leave it alone.”*

(3) *“I haven’t the faintest idea [where the stock market is going]. But I can promise you that someday there will be a big bear market — and a lot of people will lose money.”*

A brave warning from Carret during the go-go 1990s bull market.

(4) *“To make 10% consistently is a great achievement. Very few people achieve it.”*

(5) *“I don’t think people [should] buy stock on the basis of complicated mathematical equations. If your research is accurate and you have a good gut feeling about it, you should go with that decision.”*

(6) *“If it’s a good product and the figures look good, it will usually be a good investment.”*

(7) *“I’ve never known anyone who’s invested based on a mathematical formula and succeeded over time.”*

(8) *“More fortunes are made by sitting on good securities for years at a time than by active trading.”*

(9) *“Trading in and out of the market is the absolute pinnacle of stupidity. [Some investors] buy at 10:15 a.m. and sell at 3:45 p.m. Crazy.”*

(10) *“I buy stocks for the long haul. Some I’ve had for 40 years.”*

When he died in 1998, Carret still owned his position in Greif Bros. — purchased on Howard Buffett's recommendation decades earlier. For more info on Greif Bros... I highly recommend [this recent case](#) study by Dirtcheapstocks.

(11) *"I enjoyed 63 years of perfection [with my late wife Betty]. I used to tell people that she was 99.99% perfect, but I really thought it was 100%."*

(12) *"My #1 rule is never borrow money. I violated it two or three times. I had a margin call in 1924 and I swore I'd never have another. I came close two or three times."*

(13) *"I never borrow money. If you don't borrow money, you can't go broke."*

(14) *"I had a margin call in 1924 and I swore I never would buy on margin again. That's one of the main reasons I got through the 1930s."*

(15) *"Have reasonable humility. Don't go way out on a limb. Theoretically, you make money by leverage — but, long-term, that's bad. Only borrow long-term on mortgages."*

(16) *"[Investing overseas] is more difficult because often foreign standards of financial reporting are less rigorous than they are here. So if you want to invest abroad, buy Coca-Cola."*

Reminiscent of how Warren Buffett always emphasized the international sales of Coca-Cola and Gillette when asked about Berkshire Hathaway's lack of overseas investments in the 1990s.

(17) *"What is the simplest company in the market? Coca-Cola. It takes — from my standpoint — a terrible-tasting substance and sells it by billions of gallons and is one of the most successful companies in the world."*

I wish I could agree with Carret here that Coke tastes terrible. Dieting, for one thing, would be a whole lot easier...

(18) *"I'm not a trader. I buy things to hold them — not forever as Warren Buffett says he does, but for a long time."*

(19) *"Be quick to take losses [and] reluctant to take profits."*

(20) *"I have a very simple strategy: I buy good companies at attractive prices. Then I sit on them."*

One company that Carret "sat on" was Berkshire Hathaway. He received his shares through the Blue Chip Stamps merger (at a cost basis of just \$235) and held on tight. By coffee-canning

his Berkshire position, Carret patiently allowed the magic of compounding — and the benevolent dictatorship of Warren Buffett (see Quote #38) — to do its thing. Smart man.

(21) "I don't have any rigid yardsticks. It's a gut feeling. I like a stock better if it's selling at 12x earnings than if it's selling at 20x earnings, naturally. But if it's growing fast enough, maybe 20x is cheap."

(22) "I think the United States, like all great empires, will probably collapse — but that's at least 100, probably 200 years away. In the meantime, there's great opportunity."

(23) "I don't like to invest in insolvent organizations."

Carret's acid-tongued response to why he doesn't buy Treasury Bonds.

(24) "Invest in companies whose managements seem to know what they are doing. There are two tests any stockholder may apply. He need not be a security analyst, dissecting balance sheets and income statements. Rather, let him read the chairman's or president's letter to the stockholders. Is it optimistic in tone? More optimistic than the figures would seem to justify? This is a bad sign! A competent executive will mention problems as well as results. He is paid to solve problems, not to wrap himself in a cloak of euphoria."

(25) "A second criterion for appraising management is the stake that officers and directors have in the business ... It cannot be emphasized too strongly that a key individual should have holdings worth a year's salary."

(26) "One thing I always look at is if they believe in what they are doing. If a key executive doesn't have at least a year's salary invested in his own company, I wonder what's wrong."

(27) "You can determine something by the tone of the annual report. If the management is always much more optimistic than the results would justify, leave it alone. If the managers sound mildly pessimistic and the results are better than management seems to indicate, it's a good buy."

(28) "One thing I like to see in an annual report is emphasis on the negative if the results are good. If the management is cheering for itself in a big way and the results aren't quite that good, I don't want any part of it."

Going back to Greif Bros. for a moment, Carret later said that he was impressed by its annual report — which emphasized the negatives of the business even though it was “growing like weeds”.

(29) *“Diligently seek facts. Advice, never.”*

(30) *“I don’t give a damn what [analysts] say. They’re frequently wrong.”*

(31) *“I consider a security to be good if it’s in a good industry. For example, I don’t think the automobile industry is a good industry. It’s subject to peaks and valleys. I’d rather have something that grows more or less consistently.”*

(32) *“Don’t speculate. Buy for the long pull.”*

(33) *“I bought Neutrogena at 80 cents and I could have sold it at \$2. But I held onto it for eight to ten years and it’s at \$40.”*

Carret also practiced Lynchian “buy what you know” investing. On one trip to Boston, he was so impressed with the soap in his hotel room (Neutrogena) that he researched the company, visited its management, and ended up buying shares. Other lucrative investments in Neptune Meter Co. and North American Van Lines started in much the same way.

(34) *“Turnover usually indicates a failure of judgment.”*

(35) *“It’s extremely difficult to figure out when to sell anything. So I’d rather have the stock taken away from me in a merger or a buyout. It’s much easier.”*

(36) *“The market always surprises me. Always stay fully invested.”*

(37) *“I don’t believe in holding cash. Of course, I don’t believe in not having any, either.”*

(38) *“Management shouldn’t be subjected to proxy fights and that sort of nonsense. A benevolent dictatorship is the ideal arrangement.”*

Left unsaid is that if you’re not comfortable with a particular company’s “dictator” and not 100% sure of his or her benevolence, don’t invest.

(39) *“[Calvin Coolidge] had the common sense to take a nap every afternoon and let the country run itself.”*

(40) *"Don't worry too much [about your stocks]. If you buy them cheap enough, they watch themselves."*

(41) *"Three words should be pounded into people's heads at childhood: Never borrow money. You're sticking your head in a noose, otherwise."*

(42) *"I managed to lose quite a bit of money in the Bank of New England. I figured that while other banks had made some bad foreign loans, the Bank of New England hadn't. Unfortunately, they just specialized in making very bad domestic loans."*

Another costly mistake was the time Carret bought an oil company on his bookkeeper's advice. "He gave us a great song and dance," Carret said. "That was a disaster." He eventually pulled the ripcord on this busted tip when the stock languished at just 12 cents per share. (And, to add insult to injury, the bookkeeper turned out to be embezzling money, too. When it rains, it pours...)

(43) *"I've been involved in the market too long to get excited [about something like interest rate changes]."*

(44) *"It's probably not good investing to look for turnaround situations. I would rather see some sign that they are over their trouble — like earnings for a change."*

(45) *"[Big institutional investors] are trying to be sure they don't do anything that would appear offbeat to a competitor or the boss."*

(46) *"Even twenty years ago, who had ever heard of primes, scores, index options, the triple witching hour? These gimmicks have nothing to do with the ... investment possibilities of sound, out-of-favor stocks."*

(47) *"RV stocks were all the rage [in the late 1960s] and one would have thought that half the population would abandon homes and wander around in RVs and go live in trailer parks. That, of course, didn't happen — and these stocks have been in the doldrums ever since."*

(48) *When he wasn't globetrotting in search of the next solar eclipse, Carret also enjoyed "mountain climbing": "But only the kind where you put one foot in front of the other and walk. I have never hung off the edge of cliffs."*

(49) *"Pick your ancestors carefully, don't smoke, eat and drink in moderation, and never worry."*

Carret's tips on how to live a long life.

(50) *"I like to work, so I have no plans to retire. I expect they'll carry me out feet first."*

Highlights from distressed-debt legend Howard Marks' latest memo (from Kevin Carpenter via X)...

The Indispensability of Risk.

I love how Marks cuts through jargon and legalese to write about complex subjects in an easy-to-understand way. (h/t @david_perell)

Here are a few of the best lines from his latest...

(1) "You shouldn't expect to make money without bearing risk, but you shouldn't expect to make money just for taking risk. You have to sacrifice certainty, but it has to be done skillfully and intelligently — and with emotion under control."

(2) "Investors must accept that success is likely to stem from making a large number of investments, all of which you make because you expect them to succeed, but some portion of which you know won't.

You have to put it all out there.

You have to take a shot.

Not every effort will be rewarded with high returns, but hopefully enough will do so to produce success over the long term."

(3) "Refusal to take risk in this process is unlikely to get you where you want to go."



Two types of mistakes to avoid – from the late Berkshire Hathaway Vice Chair Charlie Munger (from [Investment Wisdom via X](#))...

“The most extreme mistakes in Berkshire’s history have been mistakes of omission: We saw it, but didn’t act on it. They’re huge mistakes—we’ve lost billions. And we keep doing it. We’re getting better at it. We never get over it.

“There are two types of mistakes [of omission]:

1. Doing nothing. What Warren calls 'sucking my thumb.'
2. Buying with an eyedropper things we should be buying a lot of.

“Since mistakes of omission don’t appear in the financial statements, most people don’t pay attention to them.”

Mistakes of omission are just as important as mistakes of commission. It's not just what we do, but what we don't do, that we can learn from.

Howard Marks on Buffett and Munger's secret ingredients for investing success ([from Thomas Chua via X](#))...

How to Think About Risk-Taking

The paradox of risk-taking is inescapable. You have to take it to be successful in competitive, high-aspiration arenas. But taking it doesn't mean you'll be successful; that's why they call it risk.

Equally paradoxical, earning a high rate of return over a long time period doesn't have to – and usually doesn't – connote a record of consistent success. More often it results from having made a lot of well-reasoned investments, some subset of which worked out well. Here's how I described the basis for the success of Berkshire Hathaway in *Fewer Losers, or More Winners?*:

I believe the ingredients of Warren [Buffett]'s and Charlie [Munger]'s great performance are simple: (a) a lot of investments in which they did decently, (b) a relatively small number of big winners that they invested in heavily and held for decades, and (c) relatively few big losers. No one should expect to have – or expect their money managers to have – all big winners and no losers.

Investors must accept that success is likely to stem from making a large number of investments, all of which you make because you expect them to succeed, but some portion of which you know won't. You have to put it all out there. **You have to take a shot. Not every effort will be rewarded with high returns, but hopefully enough will do so to produce success over the long term.** That success will ultimately be a function of the ratio of winners to losers, and of the magnitude of the losses relative to the gains. But refusal to take risk in this process is unlikely to get you where you want to go.

Renowned Canadian portfolio manager Francois Rochon has outperformed the market by about 5% annually for 30 years using this simple strategy ([from Invest in Assets via X](#))...

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- We avoid risky companies: non-profitable businesses, with too much debt, with a lot of cyclicality and/or run by people motivated by ego instead of genuine stewardship.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

INVESTMENT IDEAS

The UK's "staggeringly cheap" stocks trade at a record discount to the U.S. (from *The Financial Times*)...

UK stocks are trading close to a record discount relative to their Wall Street counterparts, luring some bargain-hunting investors back to the country's battered stock market.

London-listed equities have lagged behind peers in recent years as heavyweight sectors like banking and energy have failed to keep pace with the rapid growth of technology stocks, and political uncertainty following the 2016 vote to leave the EU weighed on the market.

While US and European indices have chalked up a succession of record highs this year, the FTSE 100 has yet to eclipse its February 2023 peak, despite enjoying its best week since September as investors have become more confident that the Bank of England will deliver multiple interest rate cuts this year.

UK stocks have long traded at lower valuations than US markets, but recent underperformance has left the UK market looking particularly cheap. Forward price-to-earnings ratios — a commonly used valuation metric — of stocks on the MSCI UK index are 47 percent lower than those on the US equivalent, according to asset manager Schroders. The 48 percent discount in January was the largest in data going back to 1988.



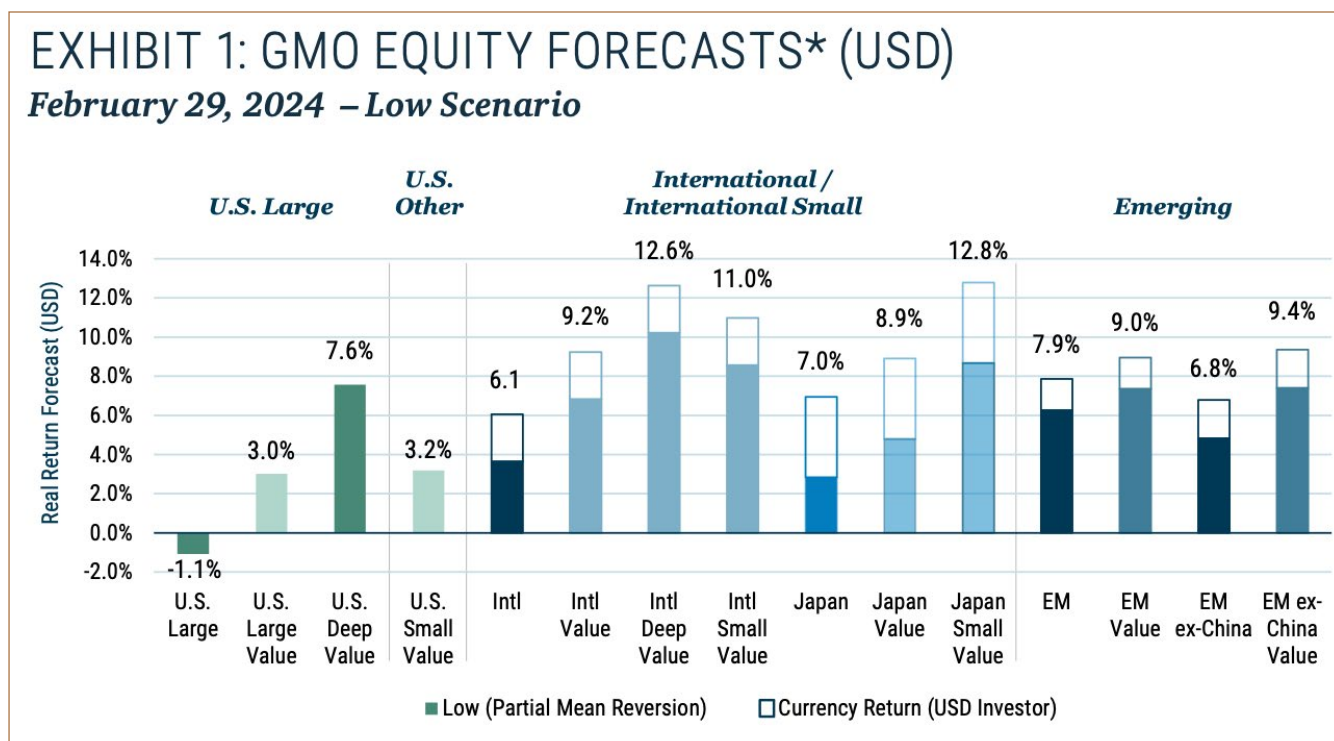
[Continue reading here](#) (subscription may be required)

Three reasons asset manager GMO is “extremely excited about the investment landscape” despite record high stock prices ([from GMO Asset Allocation Insights](#))...

Despite strong gains in equity markets last year and year-to-date as well as indexes sitting at all-time highs, we are extremely excited about the investing landscape from an asset allocation perspective. An abundance of cheap assets underpins this enthusiasm from an absolute return standpoint, while appealing valuation spreads within asset classes present us with the best relative asset allocation opportunity we’ve seen in 35 years.

We use a valuation-centric, dynamic asset allocation approach, consistently rotating toward the most attractive areas. By dialing into three current market dynamics, we are building portfolios with some of the highest forecasted relative and absolute returns we’ve ever seen.

- 1. Compelling forecasted returns across asset classes.** We are currently able to find attractively priced assets across stocks, bonds, credit, and alternative strategies. For example, Exhibit 1 below shows that several equity groups have a high single-digit, or in some cases double-digit, expected return in excess of inflation under our most likely "low" interest rate scenario.



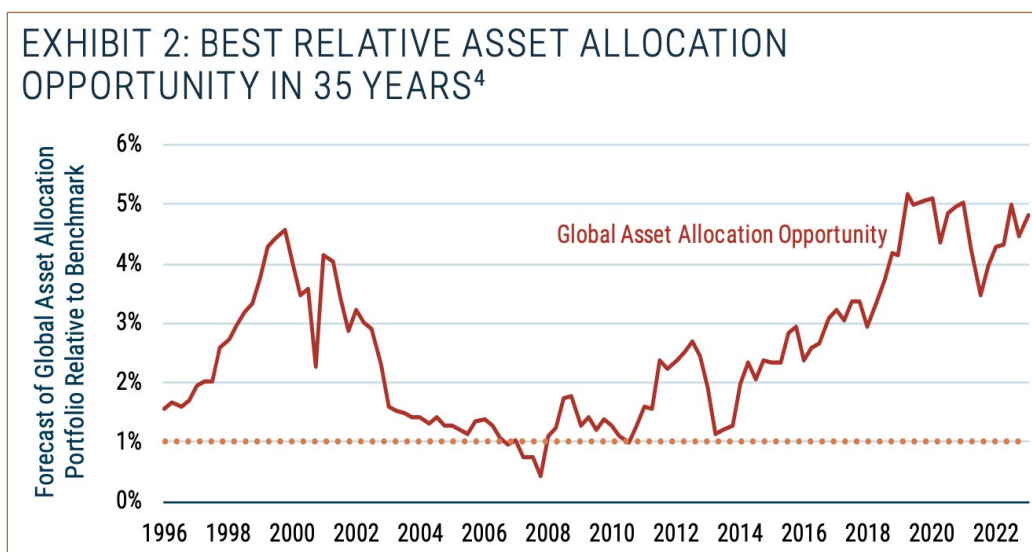
INVESTMENT CHRONICLES

*The chart represents real return forecasts for several asset classes and not for any GMO fund or strategy. These forecasts are forward-looking statements based upon the reasonable beliefs of GMO and are not a guarantee of future performance. Forward-looking statements speak only as of the date they are made, and GMO assumes no duty to and does not undertake to update forward-looking statements. Forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Actual results may differ materially from those anticipated in forward-looking statements.

- 2. Extraordinary relative opportunities.** The cheapest 20% of markets, which we refer to as deep value, are severely dislocated, trading at 3rd and 5th percentile discounts compared to history in the U.S. and developed ex-US markets, respectively. We are heavily leaning into this compelling opportunity across our portfolios.

- 3. Non-U.S. equities are cheap relative to the U.S. and cheap currencies add a tailwind.** Not only do non-U.S. stocks benefit from attractive valuations,³ but they also stand to profit handsomely from cheap currencies. Equity investors can capture the benefit of cheap currencies in two ways: either the currencies can appreciate back toward fair value, or the companies can exploit the competitive advantage of lower relative costs to boost earnings growth.

Exhibit 2 below indicates that, by taking advantage of the differential pricing across assets, we can build a portfolio – albeit a moderately unconventional one – that has the potential to beat a traditional balanced stock/bond portfolio by an incredible 5% per annum over the medium term.



Opportunity is difference between forecast return of portfolio and benchmark given GMO forecasts at the time. 10-year forecasts are translated to '7-year equivalent' by multiplying by 10/7. Dotted lines are our long-term expectations of likely achievable alpha from asset allocation. MSCI data may not be reproduced or used for any other purpose. MSCI provides no warranties, has not prepared or approved this report, and has no liability hereunder. Please visit <https://www.gmo.com/americas/benchmark-disclaimers/> to review the complete benchmark disclaimer notice.

Putting all of this together, we believe that there has never been a better time to shift portfolios – whether in whole or in part – to take advantage of these opportunities, and as our regular readers know, we don't make such statements lightly.

Bank of America's "Top 10 U.S. Ideas for Q2" ([from Hedge Vision via X](#))...

Alphabet (NASDAQ: [GOOGL](#)): BofA's positive near-term view on the stock stems from multiple catalysts, including upcoming company events to showcase AI capabilities, potential acceleration in the online media sector, the potential for Gemini image relaunch that could help with the sentiment on Google's AI capabilities and the potential for further evidence of expense efficiencies.

Citigroup (NYSE: [C](#)): "Despite the 13% of year-to-date outperformance vs. the S&P 500, BofA believes Citi shares offer a compelling risk/reward.

FIS (NYSE: [FIS](#)): BofA expects the "new" FIS to have significant recurring revenue, a simplified business model, and a significant return of cash to shareholders in the form of both share buybacks and dividends.

Intuitive Surgical (NASDAQ: [ISRG](#)): The company remains one of BofA's top picks for 2024. Its new surgical robotics system, da Vinci 5, is "just getting started," and the firm thinks it could drive upside to 2025 and 2026 estimates.

Kraft Heinz (NASDAQ: [KHC](#)): The firm sees demand potentially inflecting positively during 2Q as the company laps headwinds related to Supplemental Nutrition Assistance Program (SNAP) benefits in April/May 2024.

Progressive Corp. (NYSE: [PGR](#)): "Progressive, with its omnivorous distribution appetite, ubiquitous brand recognition and better expense-driven value for customers, has been and will continue to be a multi-year market share gainer from increased shopping activity," stated BofA.

Spotify (NYSE: [SPOT](#)): The company "now appears to be well on its way, with a positive trajectory on gross margins, operating income and free cash flow," according to the firm.

Tapestry (NYSE: [TPR](#)): BofA thinks "the strong margin profile and cash flow generation warrant a higher multiple versus the current 7x EV/EBITDA.

TopBuild (NYSE: [BLD](#)): "We believe a higher target multiple is justified given the continued strength in new home starts, increasing insulation prices, and improved margin profile," the firm said.

The stock Underperform idea is:

Dollar General (NYSE: [DG](#)): For Dollar General, the investment bank sees continued risks to DG's long-term algorithm.

By Sam Boughedda

Occidental Petroleum (OXY) – one of Warren Buffett’s biggest energy investments – appears to be on the verge of a massive long-term breakout ([from Guilherme Tavares via X](#))...



INVESTMENT CHRONICLES

“Small-cap stocks are now hated more than ever” (from the Kobeissi Letter via X)...

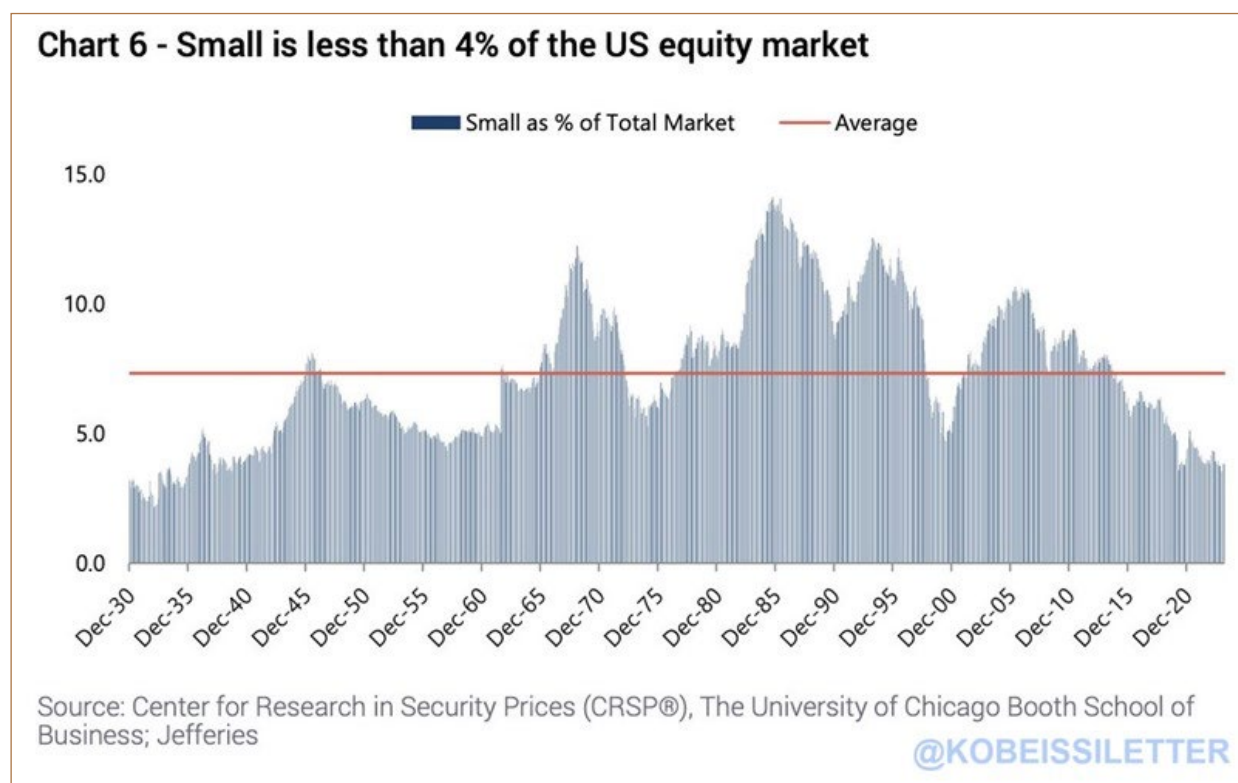
Small-cap stocks now account for less than 4% of the entire US equity market.

They now reflect the same percentage of the market as 1930 before the Great Depression.

As AI-hype spreads, small cap stocks have significantly underperformed large caps.

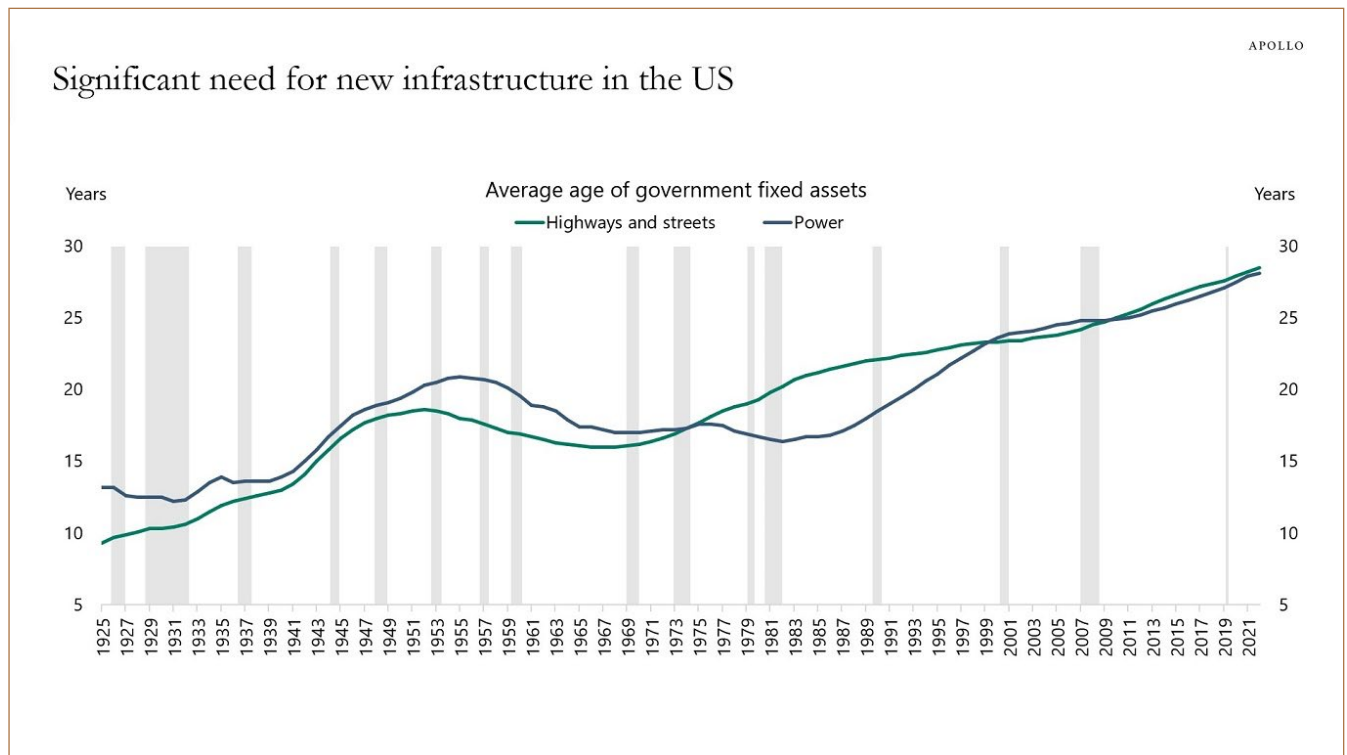
Currently, more than one-third of the Russell 2000 index has negative earnings, down from ~45% in 2020.

Small-cap stocks are now hated more than ever.




Significant U.S. infrastructure spending is virtually guaranteed in the years ahead (from Torsten Sløk in The Daily Spark)...

Looking at the average age of highways, streets, and power facilities, US infrastructure has never been in worse shape than it is at the moment, see chart below.



RBC Capital Markets' top 30 global ideas for 2024 (from Kourosh via X)...



Top 30 Global Ideas for 2024

Company	Pricing Symbol	Analyst
Alimentation Couche-Tard Inc.	ATD CN	Irene
Alnylam Pharmaceuticals, Inc.	ALNY US	Lucy
Amazon.com, Inc.	AMZN US	Brian
American Homes 4 Rent	AMH US	Brian
Anheuser-Busch InBev SA/NV	ABI BB	Jarrod
Bank of America Corporation	BAC US	George
Biogen Inc.	BIIB US	Brian
Boston Scientific Corporation	BSX US	Sheila
Canadian Natural Resources Limited	CNQ CN	Greg
Chubb Limited	CB US	Scott
Constellation Software Inc.	CSU CN	Patrick
CrowdStrike Holdings, Inc.	CRWD US	Ma
Diamondback Energy, Inc.	FANG US	Scott
Element Fleet Management Corp.	EFN CN	George
Ferrari N V	RACE IM	Tor
GFL Environmental Inc. ¹	GFL US	Sat
HEICO Corporation	HEI US	Ker
HubSpot, Inc.	HUBS US	Ris
Illumina, Inc. ²	ILMN US	Co
London Stock Exchange Group plc	LSEG LN	Be
Marks and Spencer Group P.L.C.	MKS LN	Ric
Mastercard Incorporated	MA US	Da
PayPal Holdings, Inc.	PYPL US	Da
PG&E Corporation	PCG US	She
Restaurant Brands International Inc.	QSR US	Log
S&P Global Inc.	SPGI US	As
Siemens Aktiengesellschaft	SIE GR	Ma
TELUS Corporation	T CN	Dre
Veeva Systems Inc.	VEEV US	Ris
Xylem Inc.	XYL US	De

April 8, 2024



Berkshire Hathaway is preparing to make more investments in Japan ([from Kingswell](#))...

JAPAN UPDATE (PART ONE): According to a new filing, Berkshire Hathaway plans to issue more yen-denominated bonds in the near future. Some see this as an indication that Buffett will increase his investments in the five leading Japanese trading companies even further. (Berkshire currently owns about 9% of each of them.) “Berkshire’s plan to sell a yen bond is spurring speculation that the company may buy more trading-house shares,” a Daiwa Securities strategist told *Bloomberg*.

- Buffett was full of praise for the sogo shosha in his latest annual letter: “In certain important ways, all five companies follow shareholder-friendly policies that are much superior to those customarily practiced in the U.S. Since we began our Japanese purchases, each of the five has reduced the number of its outstanding shares at attractive prices. Meanwhile, the managements of all five companies have been far less aggressive about their own compensation than is typical in the United States.”
- And, last year, Charlie Munger called this trade a “no brainer” and likened it to “God opening a chest and just pouring [in] money”.

JAPAN UPDATE (PART TWO): If Buffett is planning to use the proceeds from this bond sale to gobble up more shares of the five trading companies, he will be paying a higher price per share than in the past. All five Berkshire-backed sogo shosha are off to very hot starts in 2024...

- Itochu: +17.8%
- Marubeni: +20.6%
- Mitsubishi: +59.6%
- Mitsui: +38.9%
- Sumitomo: +23.5%

[Continue reading here](#)

Piper Sandler releases its spring 2024 Taking Stock With Teens survey results ([from Piper Sandler](#))...

The Piper Sandler Taking Stock With Teens® survey is a semi-annual research project that gathers input from 6,020 teens with an average age of 16.1 years. Discretionary spending patterns, fashion trends, technology, brand and media preferences are assessed through surveying a geographically diverse subset of high schools across the U.S. Since the project began in 2001, Piper Sandler has surveyed more than 254,303 teens and collected over 61 million data points on teen spending.

KEY FINDINGS

- Teen “self-reported” spending was down -6% Y/Y to \$2,263, and up 1% vs. last fall; parent contribution was 62% in-line with last fall.
- Teen footwear spend was down -1% Y/Y, led by average income teens footwear spend decreasing -3% Y/Y, partially offset by upper-income teens footwear spend increasing 5% Y/Y.
- Upper-income female fashion spend was down -12% Y/Y with lower spend across apparel (-13% Y/Y), shoes (-3% Y/Y), and accessories spend (-21% Y/Y).
- Nike remains the No. 1 favorite footwear brand, but mindshare decreased 190 bps Y/Y and 230 bps from fall 2023.
- New Balance gained the most footwear mindshare Y/Y, while Converse lost the most footwear mindshare Y/Y.
- Among upper-income teens, HOKA remained the No. 3 athletic footwear brand, increasing mindshare by 280 bps Y/Y, and On Running remained the No. 5 athletic footwear brand, increasing mindshare by 120 bps Y/Y. Nike lost 510 bps of mindshare Y/Y in athletic footwear among upper-income teens.
- Lululemon remains the No. 2 athletic apparel brand among upper-income teens (No. 1 among female upper-income teens), but we note that Alo Yoga was the No. 11 favorite brand and Vuori was the No. 15 favorite brand compared to No. 35 and No. 24 respectively in the fall.
- Beauty remains a heightened priority, with the core beauty wallet reaching the highest level seen since spring 2018 at \$339 (+8% Y/Y), driven by growth in all categories.

- Cosmetics still holds the highest share of total beauty spend, but fragrance is experiencing the greatest growth at +23% Y/Y.
- e.l.f. continued its dominance as the No. 1 cosmetics brand, and grew its share by 16 points Y/Y to 38%. The brand also continues to rank in the top 10 skincare brands and beauty destinations.
- Beauty consumers still prefer to shop in-store vs. online at 85% preference for in-store. Ulta is ceding some mindshare to Sephora, but with both retailers having ~60% loyalty membership penetration, our viewpoint remains that both retailers can successfully coexist.
- Instagram made a big improvement from fall '23 (+700 bps) & is now the No. 2 favorite app with 30% of teens. TikTok remained No. 1 but declined ~300bps to ~35%. SNAP fell ~600bps to the No. 3 favorite at ~22%.
- Weekly usage of VR devices improved to ~13% from ~10% in fall '23. 33% of teens now own a VR device, up from 31% in fall '23.
- Roblox active usage improved to ~34% in spring '24 from ~31% in fall '23. ~22% of teens have never played Roblox, down from ~24% in fall '23.
- 66% of teens have used Spotify over the last six months (down from 68% last spring), with 45% of teens opting to subscribe/pay for Spotify (up from 44%).
- Teens spend 29% of daily video consumption on Netflix (-210 bps vs. spring '23) and 27% on YouTube (-130 bps vs. spring '23).
- Chick-fil-A remains the No. 1 favorite restaurant at 16% share, McDonald's (10%) moves up to No. 2 (from No. 3 in the fall), and Chipotle (9%) moves up to No. 3 (from No. 4 in the fall).
- Raising Cane's (No. 4 at 4%) is rapidly gaining share from the fall (No. 5) where they first made it into Top 5 Restaurants.
- In our new category measuring coffee, tea and beverage places, SBUX holds the overwhelming majority of share at 37%.
- Celsius over-indexes with teens, with 17% citing it as their favorite energy drink brand (vs. ~12% market share); Monster and Red Bull under-index.
- Teens that consume or are willing to try plant-based meat hits all time low with 32% in spring '24 vs. 49% in spring '21.

- Teens report highest intentions to eat more or the same amount of MDLZ's Clif Bar and HSY's Hershey; CPB's Goldfish still most preferred snack brand.
- Phone remains the No.1 preferred method for customer service interactions (~50% share); Text/SMS showing best secular growth trends.
- Preferred orthodontic treatment shifts more in favor of clear aligners (57% vs. 55% last survey), Invisalign dominance as top clear aligner choice grows further (88% vs. 86% last survey).

[Continue reading here](#)

Two high-quality international stocks “with economic moats led by talented stewards of shareholder capital” ([from Flyover Stocks](#))...

I wanted to share a few non-US companies on my watchlist for those interested in global markets.

Rotork plc

- **UK; \$3.5 billion market cap**

Rotork sells and services mission-critical flow control instruments and systems to three major end markets: oil & gas (46% of 2023 revenue), water & power (24%), and chemical, process, and industrial (30%).

Approximately 75% of Rotork’s sales come from orders below £100,000; 25% are below £10,000. These tickets are a low percentage of the cost of a massive energy or industrial project where the cost of failure is high. Once installed, it’s unlikely that customers would switch out a Rotork actuator on price alone when it came time for a replacement.

At first glance, you may be reasonably concerned about Rotork’s oil and gas exposure, but it has several secular tailwinds. Among these are water and wastewater infrastructure investments and helping oil and gas customers reduce methane emissions by switching from pneumatic to electric actuators.

Encouragingly, management’s long-term bonus metrics include rolling three-year ROICs. The company targets high-single-digit revenue growth along with mid-20s operating margins. It has a net cash balance sheet and has grown its dividend yearly for over twenty years. All told, it’s a solid operator that isn’t a well-known name among quality investors outside the U.K.



Thule Group AB

- **Sweden; \$3.1 billion market cap**

A few years ago, my wife and I were in the market for a roof rack for our car to more comfortably take long road trips with two kids and a dog aboard. A roof rack was one product I did not want to go cheap on. Watching in the rear-view mirror with horror as our luggage spilled across the highway because I wanted to save \$100 was not a risk I was willing to take.





The Thule ("too-lee") roof rack we purchased was the most premium-priced option, but the aerodynamic design (read: less MPG drag versus competitors), ease of installation, and security features made it money well spent. When it came time to buy a hitch to carry the family's bicycles, we didn't think twice about paying up for a Thule option.

Results surged during the pandemic when consumers in Europe and the U.S. preferred local road trip vacations to exotic ones requiring extended time crammed into an airplane. The bullwhip effect from that period appears to be moderating, with Q4 sales declining at a slower year-over-year pace than earlier in 2023. The company is also moving into new markets like juvenile and pet carriers.

Mid-cycle ROIC is in the low double digits, which could indicate a narrow moat supported by brand advantages. Its reputation for quality appeals to consumers with active lifestyles who are not only engaged in those activities later in life than previous generations but are also investing more in products (bicycles, kayaks, etc.) that need to be secured to automobiles.

The business is run conservatively, with the board targeting a dividend payout of 75% of net income. Per its 2022 capital markets day, it aims to grow its topline by around 7% annualized from 2020-2030 and targets 20% operating profit margins, which it achieved during a period of strong demand during COVID.

2023 FY: Despite better second half, all product categories decline full year

	Sport&Cargo Carriers		RV Products		Packs, Bags & Luggage		Juvenile & Pet	
								
Share of Thule Group Sales 2023/FY (2022/FY)	59% (62%)		19% (18%)		10% (9%)		12% (11%)	
Share of Regional Sales 2023/FY (2022/FY)	Europe&RoW 55% (57%)	Americas 69% (70%)	Europe&RoW 26% (24%)	Americas 2% (5%)	Europe&RoW 6% (6%)	Americas 19% (17%)	Europe&RoW 13% (13%)	Americas 10% (8%)
Sales Growth 23/FY vs 22/FY (Constant Currency)	-19% -16% -24%		-11% -6% -69%		-9% -7% -11%		-8% -7% -14%	

9

2024-02-09

Thule Group Q4 Report 2023 Investor- and analyst presentation

Thule Group>>

[Continue reading here](#) (subscription required)

INVESTMENT CHRONICLES

A boring, cash-rich business that has earned an operating profit for 20 consecutive years trades at just 2x EV/EBIT ([from Dirtcheapstocks Substack](#))...

My favorite net-net trades at 2x EV/EBIT and has booked profits for 20 consecutive years.

Net-nets are one of the most tried and true forms of investing. Ben Graham, Warren Buffett and Joel Greenblatt all outperformed the market owning them. There is no standardized process in investing that is as time-tested and as logically sound as owning net-nets.

With that being said, I rarely find myself buying them. Mainly because I don't like owning money-losing businesses. Most net-nets I see nowadays are either inventory heavy or cash burning biotech companies. They're not serious businesses. They trade beneath liquidation value, and generally for good reason. Either liquidation value is overstated, or future cash burn will ensure that liquidation value works its way lower and lower in time.

My rules for net-net ownership are simple:

- Consistently profitable business
- Honest management
- Low multiple on earnings
- Massive cash buffer
- Low/no debt

95% of net-nets won't meet the above criteria. When I find one that does meet my rules, I simply add it to the portfolio. Today's stock meets each of the above criteria. **The business has booked an operating profit for 20 consecutive years** and looks poised to continue earning profits well into the future. **This company trades at only 2x EBIT, net of cash.** Cash/securities are in excess of all liabilities. Debt is virtually zero.

Mestek, Inc. (Ticker: MCCK)

Mestek, Inc. operates primarily in two business segments: HVAC and metal forming equipment. The Company manufactures its HVAC and metal forming equipment at twelve factory locations and sells through established distributors in the United States and Canada.

Mestek was formed when the Reed family merged its Reed National with post-bankruptcy Mesta Machine Company in 1986. Since 1986, the Reed family has completed dozens of acquisitions for Mestek. Today Mestek represents a roll up of ~50 separate HVAC, architecture, and machinery companies.

The business has earned an operating profit in each of the last 20 years.

Valuation		NCAV Breakdown	
Share Price	23.10	Cash/Securities	126,611
Shares out	7,544	Receivables	72,991
		Inventory	106,329
		LIFO Reserve	26,000
Market cap	174,266	Other Current Assets	12,240
Cash/Securities	(126,611)	Total Current Assets	344,171
Debt	8,260		
EV	55,915	Total Liabilities	108,977
EBIT	25,112	NCAV	235,194
EV/EBIT	2.23	P/NCAV	74%

I used 9 months ended 9/30/23 for my EBIT calculation. The 4th quarter usually isn't significantly profitable. But the stock may be a bit cheaper than 2.2x EV/EBIT if Q4 comes in strong. For my purposes, it doesn't really matter. This is a business that screams safe and cheap. There's really not much more to understand. The stock is priced as if it's dead, yet the business keeps cranking out earnings with each passing year.

Capital Allocation

I've heard folks mention capital allocation in the past at MCKK. I view capital allocation as a mixed bag. On one hand the majority owner is a gold bug. You can read some of his prior annual letters (he stopped writing them in 2019) and see he was worried about inflation. At 9/30/2023

commodity investments in gold and other precious metals represented ~\$81MM of value on Mestek's balance sheet.

I'd rather not have management speculate with shareholder funds on gold. One could argue that holding gold is a greater expected return than holding cash, but I'd still prefer my companies to not speculate on commodities.

The good thing is, if all commodity investments on the balance sheet went to \$0 tomorrow, the stock would be trading at ~5.4x EV/EBIT – still a cheap price. So it's not like this commodity investment presents any kind of catastrophic risk.

There is another consideration in capital allocation, however. Management has purchased ~50 companies since Mestek was formed. Some of these businesses have worked well, some haven't. One worked remarkably well. In 2005, MCCK spun off a company called Omega Flex. At the time of the spin, Mestek owned 86% of Omega Flex. Today, Omega Flex trades under the ticker OFLX and has a market cap of \$715MM. If you add in OFLX share performance to MCCK, you have a much nicer outcome than is reflected by just looking at MCCK performance.

Risks

Mestek has been party to a number of asbestos related class action lawsuits since the early 2000's. The lawsuits relate to successor entities that MCCK bought over the years. Without getting too deep into the weeds, I think these claims are without merit. MCCK is party to 61 lawsuits at present. In the early 2000's, MCCK was involved in hundreds of asbestos related lawsuits. Every prior suit has been settled for a de minimis sum or dismissed entirely. Basically, in the early 2000's the entire industry was sued in these class action claims by lawyers seeking a big pay day. I think it's incredibly unlikely that MCCK owes a material sum for these claims. At this point, we're talking about 20 years of litigation that has resulted in nothing for plaintiffs. Interested readers can do more digging on this particular risk, but I view it to be quite low.

How to Think About Mestek

I think MCCK is a stable business selling for a cheap price. There may be a little bit of hair around capital allocation, but I view this as a very low risk investment. The way

to play the MCKK's of the world, is to buy them at an egregiously cheap price. The business doesn't deserve a premium valuation. Why should it? It's a sleepy business in a sleepy industry. But I don't think it should be priced in the low \$20's per share. At present, Mestek is priced as if it were dead. But in reality this is a stable, profitable business.

I think there is money to be made by patiently buying MCKK when it trades below NCAV. From there, hold the stock for a year to attain long term capital gains treatment. If, after a year, the stock is still a net-net then you can continue to hold. If the stock is no longer a net-net, then sell and move onto the next idea.

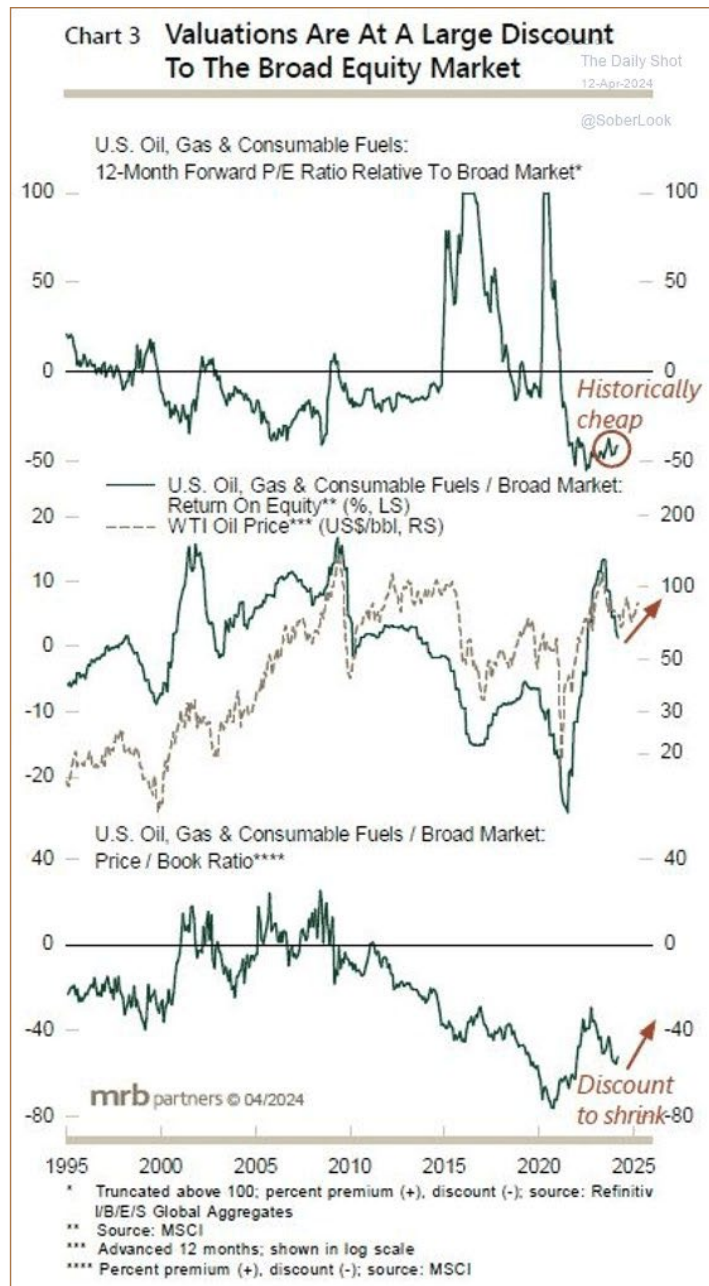
I'm not interested in making MCKK a 20% position in my portfolio. But if I had 5-10 MCKK-like stocks, I'd be happy to have them represent the majority of my investments.

I don't know what my track record has been in owning net-nets. But I am quite certain it has outperformed the S&P 500. If you own consistently profitable, cash-rich businesses that are priced as if they're dead, you will make money in the long run. Consider the value of Mestek to a private buyer. There is no way this business would change hands at \$23/share. Maybe shares would be worth more like \$40-50 to a private buyer.

Will I hold my shares until a private buyer shows up? I doubt it. There is no real catalyst here. But the stock is just too cheap. I'd wager that sometime in the next 5 years the stock won't be a net-net. When that time comes I'll probably sell my shares.

[Continue reading here](#) *(subscription required)*

U.S. oil and gas stocks still trade at a significant discount relative to the broad market **(from The Daily Shot)**...



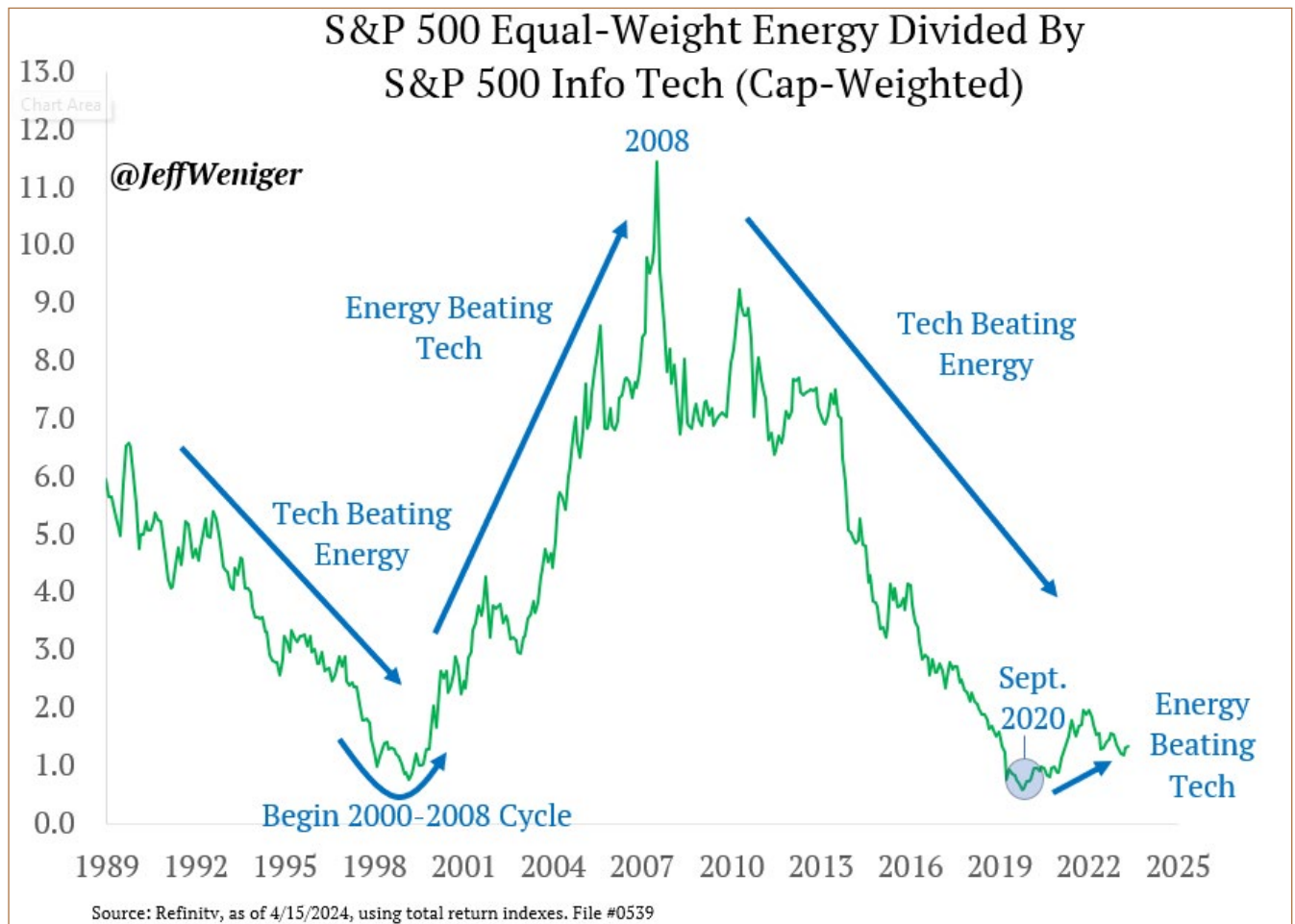
Energy stocks appear set to dramatically outperform tech stocks over the next several years (from Jeff Weniger via X)...

1990-2000: Tech stocks

2000-2008: Energy stocks

2008-2020: Tech stocks

Since Sept. 2020: Energy stocks

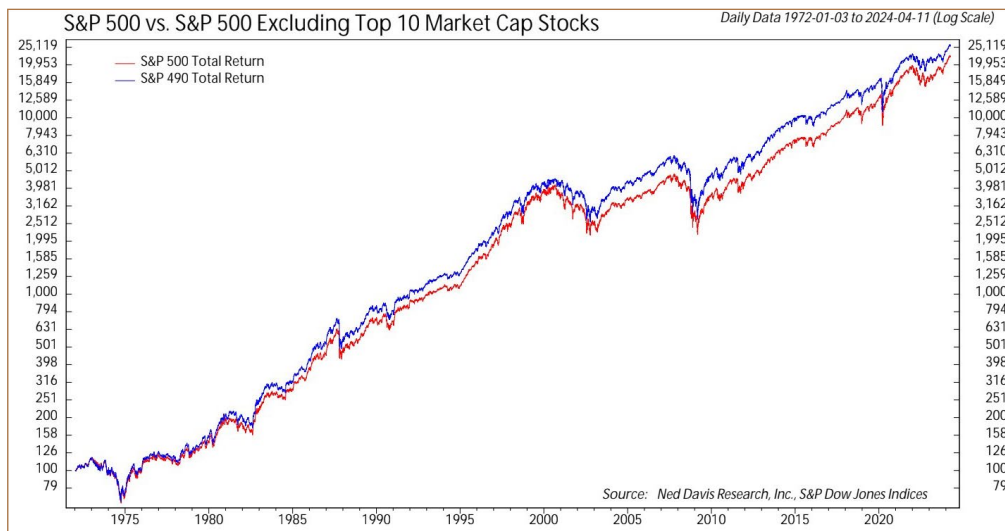
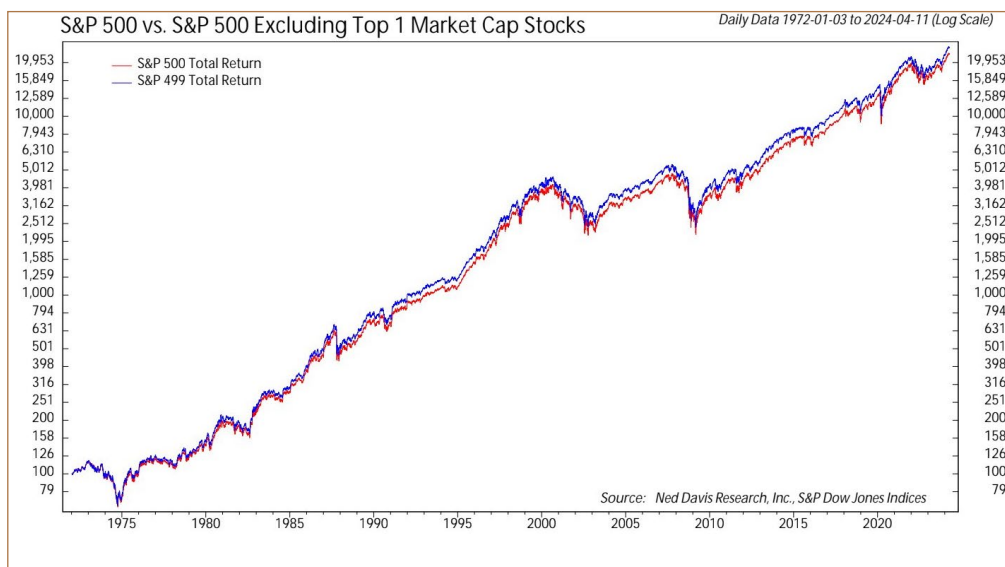


INVESTMENT CHRONICLES

A super-simple strategy to beat the market (from Meb Faber via X)...

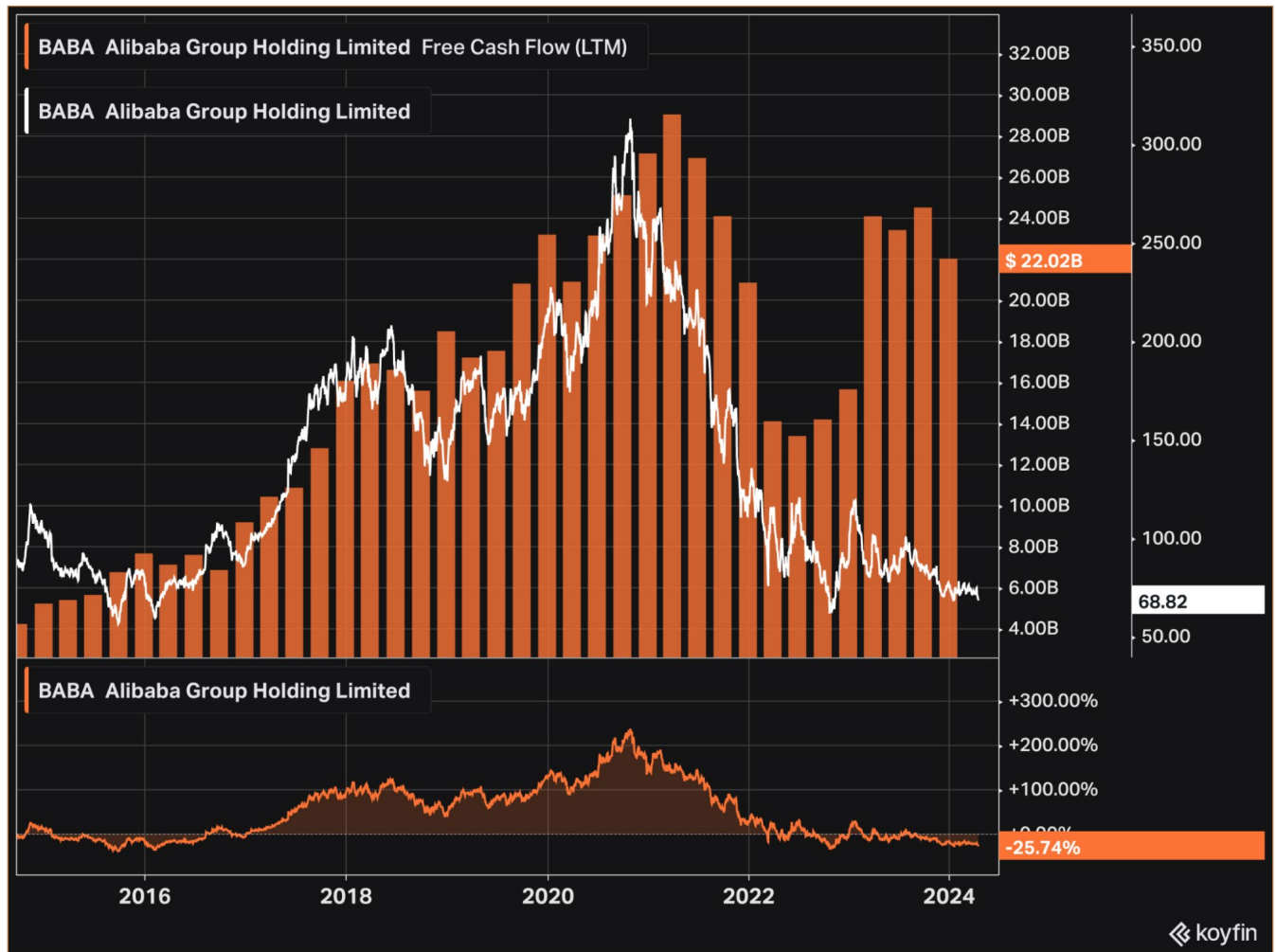
Want a simple way to beat the S&P 500 by 0.2% - 0.3% per year and outperform in about 57% of all years? Just exclude the top stock. Or, better yet, exclude the top 10! #magnificent7

via @NDR_Research



Alibaba (BABA) is extremely cheap relative to free cash flow ("FCF") (from Koyfin via X)...

\$BABA Alibaba free cash flow vs share price



INVESTMENT CHRONICLES

A frictionless flywheel with no debt, significant insider ownership, and multiple upside catalysts ([from Special Situation Investing](#))...

The book *Good to Great* explores why some businesses achieve greatness. Within its pages, the author, Jim Collins, popularized the concept of the Flywheel Effect. He draws a connection between turning a flywheel—a heavy disc-like structure that stores rotational energy—and successful companies in the following way:

The flywheel image captures the overall feel of what it was like inside the companies as they went from good to great. No matter how dramatic the end result, the good-to-great transformations never happened in one fell swoop. There was no single defining action, no grand program, no one killer innovation, no solitary lucky break, no wrenching revolution. Good to great comes about by a cumulative process—step by step, action by action, decision by decision, turn by turn of the flywheel—that adds up to sustained and spectacular results.

A flywheel, and better yet, a frictionless one, comes to mind when we think of FRMO Corporation.

To be frank, we've owned this company for a while but avoided writing it up until now. This is not because we wanted to keep a good thing to ourselves but because it's such a unique company with disparate parts and an odd history that creating a coherent write-up was challenging. But because we like the company, and because we do want to share a good thing, we have done our best to overcome the challenge.

The Company History

FRMO Corp (FRMO), which stands for Financial Risk Management Organization, is a low-volume, \$325 million market cap investment holding company that trades on the OTC Pink Sheet market. It was founded by Murray Stahl and Steven Bregman of Horizon Kinetics along with a few partners in 2001.

The original thesis for the business was as a holding company which would buy revenue interests in investment products created at the then Horizon Asset Management, a company also run by Stahl and Bregman. Stahl explained the intent behind FRMO at the 2012 annual shareholder meeting:

We were founded as what we called at the time an “intellectual capital company.” The idea was that, given our positions in then-Horizon Asset Management, we would occasionally find an interesting investment idea that was at its inception stage and had virtually no revenue. Horizon would sell FRMO Corporation a revenue interest in that product and, if it was successful, the corporation would collect a certain amount of revenue from it with very little associated expenses.

During a conference call, a year later, he added further details:

You should not forget the objective of FRMO...The idea is to use our research capability and use our so-called intellectual capital...to create revenues without the requirement of commensurate large capital investments. The difference between the cost of the products we create and the revenues that we receive, if we’re right, should result in a reasonably robust return on equity. A lot of seedlings have been planted in the last year and in the next couple of months we will see whether or not they actually bear fruit.

The investment products of Horizon Asset Management proved successful and FRMO’s revenue streams materialized and grew. These in turn were reinvested, sometimes in more Horizon products, sometimes in separate investments.

In 2011, Horizon Asset Management LLC and Kinetics Asset Management LLC combined into Horizon Kinetics LLC. Along the way, the revenue streams from multiple separate investment products were sold back to Horizon Kinetics in exchange for an equity interest in the combined company and a gross revenue share. Today, FRMO owns a 4.95% equity stake and a 4.199% of gross revenue interest in Horizon Kinetics. Horizon Kinetics is one of FRMO’s most lucrative investments but is not its only one. Other top holdings will be discussed shortly.

At this point, it’s natural to ask, why FRMO was created in the first place and why couldn’t Stahl and Bregman do everything through Horizon Kinetics. It’s a great question, one the two gentlemen have been asked in numerous earnings calls.

One reason is the founders were looking ahead and building a vehicle through which their heirs could access liquidity, largely for charitable purposes. In 2012, Stahl said the following:

For me, the ultimate destiny of FRMO is that I don’t intend to sell my stock. I intend to build up the market value and place ... all my shares [in] ... a family foundation, and I want my kids to basically run the family foundation and give money to charity.

Because Horizon Kinetics is a private company, it is difficult to extract liquidity for any owner of substance. A liquid, publicly traded company would fix this issue.

Another reason is taxes. If you study Murray Stahl's track record of investments over the decades, it's impressive how much he thinks about minimizing the negative effect of taxes, and how effective he is at legally doing so. FRMO provided a more efficient vehicle for revenue streams. Stahl clarifies:

Now, for tax purposes, Horizon Kinetics is a Subchapter S corporation. If you're a Subchapter S corporation based in the city of New York, they hit you with every tax you can possibly imagine. If you're a C Corp, you're advantaged in taxes, at least from that point of view. And you can judge the rest of it. It's better to have more of your cash flow in a C Corp than it is an S Corp.

Another reason is FRMO provides a source of permanent capital. Stahl notes that the business of Horizon Kinetics is largely comprised of funds—closed funds, mutual funds, ETFs, and the like—and thus the flow of capital in and out is subject to the whims of those invested in the funds. Often flows come in at the worst times—after a large runup in NAV, for example—and often flow out at the worst times as well—during bear markets when assets are cheap. FRMO would not suffer the same drawback.

A final reason for FRMO's existence is it provides a vehicle for raising capital through the issuance of shares, a task more tedious to accomplish within a private company.

With that summary of the how and why of FRMO's creation out of the way, we'll next look at details of the company as it exists today, before looking at what the company is becoming.

The Company Today

FRMO is unique. It has no debt, other than a small mortgage of less than one million. It has only three employees, Stahl and Bregman, and the company's secretary. Neither Stahl nor Bregman take any compensation, either cash or stock for their work in FRMO. It has an odd name, one that when typed will likely autocorrect to the word "from." It has a confusing interconnectedness with its founders' other businesses and investment vehicles, one that reminds us of Buffett and Munger's early spaghetti-like network of investments prior to consolidating everything within Berkshire. And finally, it has a \$325 million market cap, but still lists on the OTC Pink Sheet market.

But unlike many pink sheet companies, FRMO provides detailed disclosure including: annual letters, annual shareholder meeting transcripts, quarterly reports and quarterly conference call transcripts. All of these can be found at the company's website frmocorp.com.

In addition, the company provides a quarterly summary of its top five holdings and its crypto holdings.

These summaries give a good feel for the current makeup of FRMO.

FRMO Corp/Fromex Equity Corp Top Five Holdings + CMSC 11/30/2023		FRMO Corp/Fromex Equity Corp Top Five Holdings + CMSC 2/29/2024	
Holdings¹	# Shares	Holdings¹	# Shares
TPL	61,515	TPL	62,560
GBTC	621,222	GBTC	625,839
MIH	1,823,791	MIH	1,829,014
WELX (Winland)	1,593,132	WELX (Winland)	1,655,557
CXBTF	6,253	CXBTF	6,289
Consensus Mining and Seigniorage Corporation (CMSC)	11,827	Consensus Mining and Seigniorage Corporation (CMSC)	11,846

FRMO Top 5 Holdings | frmocorp.com

The first holding should come as no surprise to anyone familiar with Murray Stahl. Texas Pacific Land Corporation has been discussed in depth by us in previous pieces. A couple of comments about the TPL shares owned by FRMO listed above. First, it's worth noting that FRMO is acquiring shares even after Stahl recently lost a court battle with the company. And secondly, the number of shares listed in the image above does not take into account the recent 3-for-1 split. Next quarter, these numbers should increase by three times.

The second top holding is Greyscale Bitcoin Trust, GBTC. We wrote a piece on GBTC back in November, when it was still a trust trading as a considerable discount to NAV. Stahl and

Horizon Kinetics have been large holders of GBTC for years. They made their first bitcoin investments back in 2015. At the time the amounts invested were extremely small to mitigate the uncertainty of the bitcoin experiment. Since then, it has appreciated so much that it rivals TPL as Horizon Kinetics' largest position. As shown above, FRMO holds 625,839 units of GBTC, worth over \$34 million, and it is still buying more shares.

MIAX Options Exchange is FRMO's third major holding. This investment is the result of long-term holdings of separate stock exchanges that were merged into MIAX, specifically investments in the Minneapolis Grain Exchange and the Bermuda Stock Exchange. Today, MIAX is privately held, but is in the process of pursuing a public listing.

Next on the list is Winland Holdings (WELX). On the surface, the company is a small manufacturer of a portfolio of environmental sensors. But over the last few years, while keeping its sensor business intact, under the surface, Winland transformed itself into a crypto mining business. As we understand it, a while back, one of Horizon Kinetics' employees, Matthew Houk, bought a large stake in Winland with the intent of turning the business around and creating value. Stahl took notice of the company and realized it was a good platform on which to build a crypto business. He approached Houk and the transformation began with FRMO assisting Winland. In the process, FRMO bought a large, and soon-to-be controlling, stake in the company.

The fifth place on FRMO's top five list is CXBTC which is a bitcoin tracker ETF.

Although not in the top five, Consensus Mining and Seigniorage Company is also listed in the quarterly summary because of how often investors ask for details on FRMO's stake in this company. In short, this is a private crypto mining company that Stahl and Horizon Kinetics have built from the ground up and are in the process of bringing public.

The top five list captures the big hitters but not the totality of FRMO's investments. Others of note include: the aforementioned equity interest and revenue share in Horizon Kinetics, \$38 million of cash and cash equivalents, a position in the Canadian Stock Exchange Markets, and small positions in a private crypto mining equipment repair business and Digital Currency Group. FRMO also owns its own crypto mining equipment—valued at \$1.3 million in its latest report—with which it directly mines crypto currencies.

Below is a list of cryptocurrencies held by FRMO both directly and indirectly.

	Held Directly ⁽¹⁾	Held Indirectly Through Public and Private Companies ⁽²⁾
Grayscale Bitcoin Trust (GBTC) shares	9,168	616,671
Grayscale Ethereum Classic Trust (ETCG) shares	233	4,572
Grayscale Bitcoin Cash Trust (BCHG) shares	2,382	63,017
Grayscale Litecoin Trust (LTCN) shares	348	21,360
Grayscale Zcash Trust (ZCSH) shares		641
Bitcoin (BTC)	155.69	25.23
Litecoin (LTC)	1,968.67	23.42
Ethereum (ETH)	34.97	-
Ethereum Classic (ETC)	661.70	3.19
Bitcoin Cash (BCH)	6.74	0.33
Zcash (ZEC)	61.95	18.18
Bitcoin Gold (BTG)	-	235.39
Dogecoin (DOGE)	-	4,079.39
Bitcoin Tracker One (COINXBT SS) shares	-	6,289
iSHARES Bitcoin Trust (IBIT) shares	105	7

FRMO's Crypto Currency Holdings | frmocorp.com

If this seems to you like a disparate and eclectic collection of investments, you're not alone. It's apparent from the questions Stahl and Bregman get on earnings calls that many investors struggle to understand what FRMO does and where it's going. One major reason for the current confusion is because FRMO is transitioning to becoming an operating company. In fact, that was Stahl and Bregman's intent from the start.

The Company Future

Since its founding, the intention for FRMO was for it to become an operating company. Initially Stahl and Bregman thought they would purchase another operating company but they failed to find a company that met their strict criteria. As a result, the team decided to build their own. What type of business to build became the question. Enter cryptocurrency. Stahl explains:

So, what do we do in FRMO? We want to establish a business, and we wanted to buy something. There are certain opportunities that we looked at. They were interesting. We just don't know enough about those businesses. Other businesses, you could argue, we knew a lot about those, but interest rates were very low, and they were unduly expensive—not because the businesses themselves were expensive, it's that the ultra-low interest rates make

them expensive, and we could never have earned a justifiable return on capital. Then, lo and behold, some years ago, cryptocurrency makes an appearance. Cryptocurrency is interesting. Of course, we had no experience in cryptocurrency, and no expertise in it. But neither did anybody else, so we were all starting at the same level. One of the benefits of cryptocurrency was that we didn't have to buy a business, because no one had a business to sell. We just gradually expanded.

Stahl got involved with bitcoin in 2015. With an extensive background in computer science and cryptography, he immediately recognized the merits of the bitcoin network and soon invested \$700,000 of his personal money in bitcoin. He followed that with buying his own mining equipment to learn about that aspect of the industry.

Over the ensuing nine years, Stahl, Horizon Kinetics and FRMO have employed a step-wise approach to building positions in cryptocurrencies and a network of mining operations. These efforts resulted in Horizon Kinetics developing crypto mining-based funds, immense holdings of GBTC, the creation of Consensus Mining, direct mining in both HK and FRMO, and FRMO's growing position in Winland Holdings, among other crypto investments.

Stahl recently stated:

So far, the crypto is getting to be pretty considerable, and we keep buying crypto-related assets. Eventually, it's all going to coalesce, and some day you are going to see regular operating earnings from it when the cryptocurrency business is something that's really much better understood by the public. Right now, I don't think it's very well understood by the public. Eventually, people will get it. In the meantime, we're just going to keep growing it.

The first step in the coalesce appears to be buying 51% or more of Winland Holdings. At that point FRMO would have reportable earnings for the first time. As of the latest quarter, FRMO owned 35% of Winland, and Stahl said the company plans to continue buying more starting May 1st.

How the rest of the crypto assets get consolidated, or not, is yet to be seen. But the trajectory is clear: FRMO is becoming a crypto mining company.

For those wary of investments in crypto because of the messy history of the industry,

we don't have the space or time here to impress upon you just how differently Stahl has approached the sector. Because of certain peculiarities of bitcoin economics, specifically the four-year halving and mining equipment pricing, Stahl has taken a measured, conservative, step-wise, and uniquely successful approach. This has allowed his investments to weather the multiple "crypto winters" that bankrupted so many other mining companies.

For more information on Stahl's approach to crypto, check out the piece by RV titled: [**FRMO Corp: The 2022 Crypto Winter and FRMO's vertically modular crypto conglomerate.**](#)

The Flywheel

As we prepare to wrap up this episode, let's circle back to the concept of the flywheel with another quote from Jim Collins.

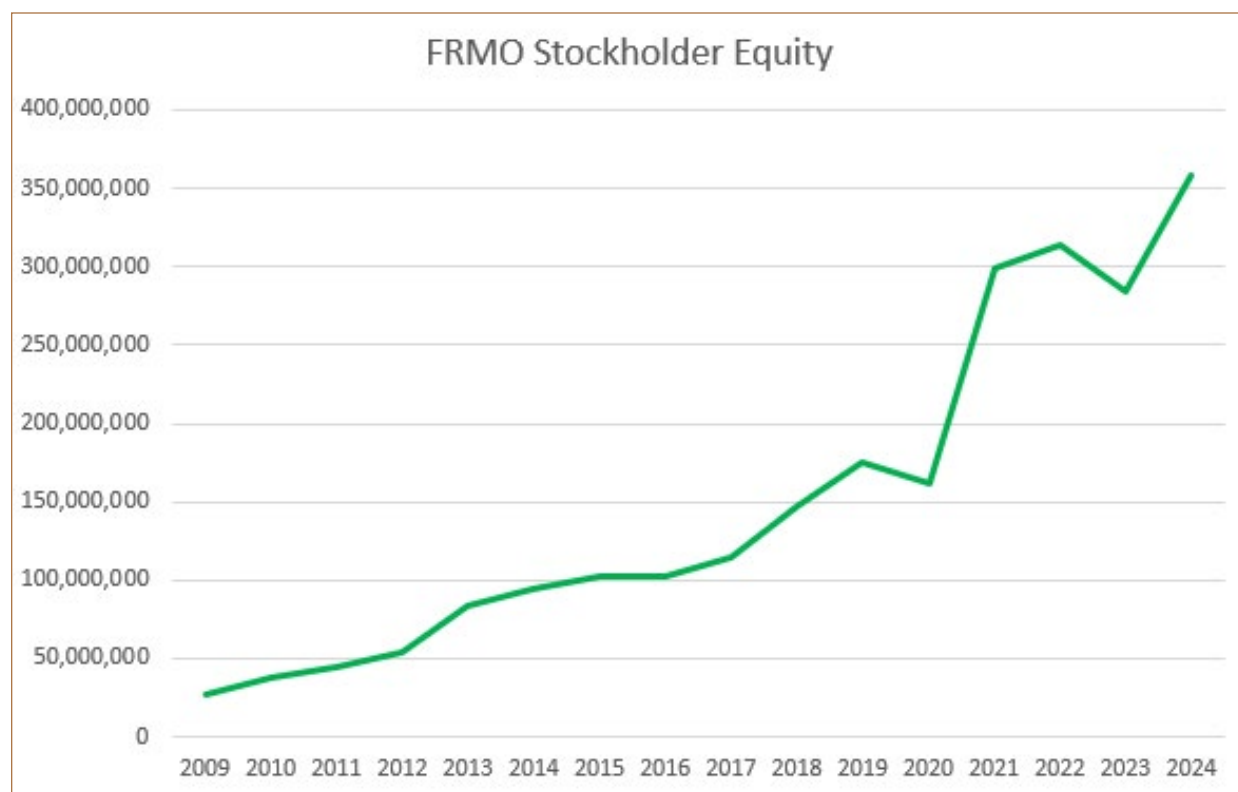
Each turn [of the flywheel] builds upon previous work as you make a series of good decisions, supremely well executed, that compound one upon another. This is how you build greatness.

This describes how we feel about FRMO, its history and its future.

Take a look at the first sentence in FRMO's earliest disclosure listed on its website. The sentence—written while the world was still reeling from the Great Financial Crisis— reads:

During the past year, much has occurred in the financial markets. Fortunately, none of this has occurred at our firm. FRMO has undertaken no debt. It has not accumulated liabilities. It has merely continued to develop its own resources internally, albeit from a very low base.

FRMO's approach in 2002 is still its approach today—the slow, conservative, step-wise creation of shareholder value. What has changed is that FRMO is no longer starting from "a very low base." Shareholder equity, that was approximately \$10,000 in 2002, is now north of \$350 million. The chart below shows shareholder equity growth starting in 2009 to the present.



This increase came from, as Collins puts it, “no single defining action, no grand program, no killer innovation, no solitary lucky break, no wrenching revolution” but instead “a cumulative process, step by step, action by action, decision by decision.”

That said, we believe FRMO is approaching an inflection point for two reasons.

Firstly, as FRMO becomes a crypto mining company the confusion investors currently suffer about whether the company is a portfolio of investments or an operating company will vanish. FRMO will likely then trade at a premium to its NAV based on its operating performance.

The second reason is because a number of private holdings within FRMO’s portfolio are in the process of coming public. These holdings include: Horizon Kinetics, MIAX, and Consensus Mining. (Canadian Stock Exchange is another likely candidate but is not yet in the process.)

Horizon Kinetics has a planned IPO for sometime this summer and it provides an example of how a private holding going public can affect FRMO shareholder equity. Running some

numbers that Stahl laid out in the latest earnings call, we calculated that FRMO’s equity stake in Horizon Kinetics should be worth \$30 million, not the \$10 million at which it’s currently held on the books. While not earth-shattering, this will be yet another step-wise increase in shareholder value.

The magnitude of the effect of each entity coming public will vary but we expect each to have a positive effect on FRMO’s shareholder value.

As these catalysts take place, we expect FRMO’s share price—which to date has largely kept up with the S&P 500 since inception—to begin to outperform.



Source: dividendchannel.com

As we patiently watch this flywheel spin ever faster, we’re in good company, as FRMO’s directors and executives own 75% of the company. They aren’t selling. We think we’ll sit tight too.

Name of Beneficial Owner	Shares Beneficially Owned or Controlled	Approximate Percentage of Shares outstanding
Murray Stahl	7,165,528	16.3%
John C. Meditz	7,139,851	16.2%
Steven Bregman	6,659,566	15.1%
Thomas C. Ewing	4,605,858	10.5%
Peter B. Doyle	4,226,140	9.6%
Lawrence J. Goldstein	1,863,974	4.2%
Santa Monica Partners, L.P.(1)	1,011,857	2.3%
Allan Kornfeld	33,500	*
Jay P. Hirschson	3,000	*
Dov Glickman	4,420	*
Alice C. Brennan	500	*
Herbert M. Chain	1,000	*
Directors and executive officers as a group	32,715,194	74.3%

* Less than 1%
 (1) Controlled by Mr. Goldstein

Finding businesses with asymmetric risk/reward ratios ([from Kyle Grieve via X](#))...

[H]ave a look at BioRem (\$BRM.V \$BIRMF)

They sell air abatement technologies primarily in North America. They address problems like odor, volatile organic compounds (VOCs), and hazardous air pollutants. Engineering solutions for the lowest life cycle cost of any technology.

But the simple hypothesis for this business is the predictable revenue resulting from their backlog. (See figure below)

So, the backlog converts to revenue at around 85% historically.

My assumption for Net Income in the next 12 months is \$3.3m, and I'm using conservative net margins here (8%).

Their newest product, dry scrubbers, drives new business and promises higher margins. If the product remains in demand, this indicates a potential for sustained elevated net margins.

Net margins during Q3 were 9%, and Q4 was 19%.

Remember, this is a contract-based business, so I'm not expecting SaaS-like multiples. **Now, here is the million-dollar question: what is a company likely to grow earnings by 150% in the next year worth?**

I'll let you decide, but here are a couple of possibilities if you think they can convert backlog into revenue in the next 12 months at that 85% mark (current market cap is \$32m):

20x Earnings: \$68m

30x Earnings \$101m

If we use a PEG of .25, we get a PE of 39, resulting in a \$130m valuation. While that looks ridiculously high, BioRem has had periods where it traded at these valuations for shorter periods. So, while I give this a lower probability than the ones above, remember there is some excellent upside. If you mess around with net margins, you get an even rosier number, and I wouldn't be surprised if they can deliver 10%+ net margins.

Project delays, which have previously hampered revenue recognition, are a significant risk to the hypothesis. However, they are also causing the pent-up demand we are seeing now.

Year	RFP/Bookings For Year	Backlog	Revenue	Net Income	Net Margin	% of Revenues Realized as Previous Years Backlog
2018	\$25,500,000.00	\$21,800,000.00	\$24,000,000.00	\$4,700,000.00	19.58%	NA
2019	\$32,900,000.00	\$30,922,200.00	\$20,649,000.00	-\$1,302,000.00	-6.31%	94.72%
2020	\$27,000,000.00	\$31,000,000.00	\$24,375,000.00	\$2,089,000.00	8.57%	78.83%
2021	\$17,000,000.00	\$24,930,000.00	\$24,478,000.00	\$1,297,337.00	5.30%	78.96%
2022	\$37,700,000.00	\$38,000,000.00	\$28,863,000.00	\$1,613,000.00	5.59%	115.78%
2023	\$36,500,000.00	\$50,100,000.00	\$25,165,000.00	\$2,179,000.00	8.66%	66.22%
Totals	\$176,600,000.00	\$146,652,200.00	\$123,530,000.00			84.23%
Averages					6.90%	86.90%
			Revenue	Net Income		
2024 Projections			\$42,200,887.54	\$3,376,071.00		

Two stocks that top investor Terry Smith believes will outperform the market in 2024 (from Invest in Assets via X)...

#1 Mettler-Toledo International

\$MTD is the market leader in weighing instruments and controls more than 50% of the market for lab balances.

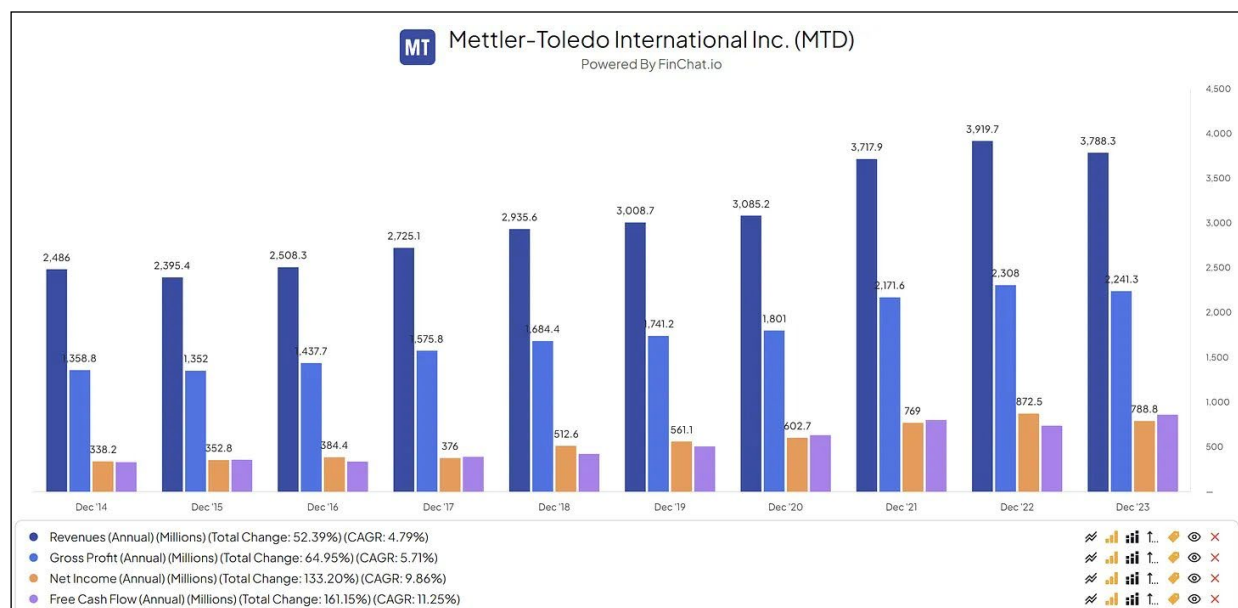
Mettler is an international business with 30% of sales coming from the US, 30% from EU, 20% from China, and 20% from ROW.

Terry Smith has previously discussed the secular trend and the need for weighing and precision instruments in the next decades.

MTD is well-positioned to capitalize on this trend.

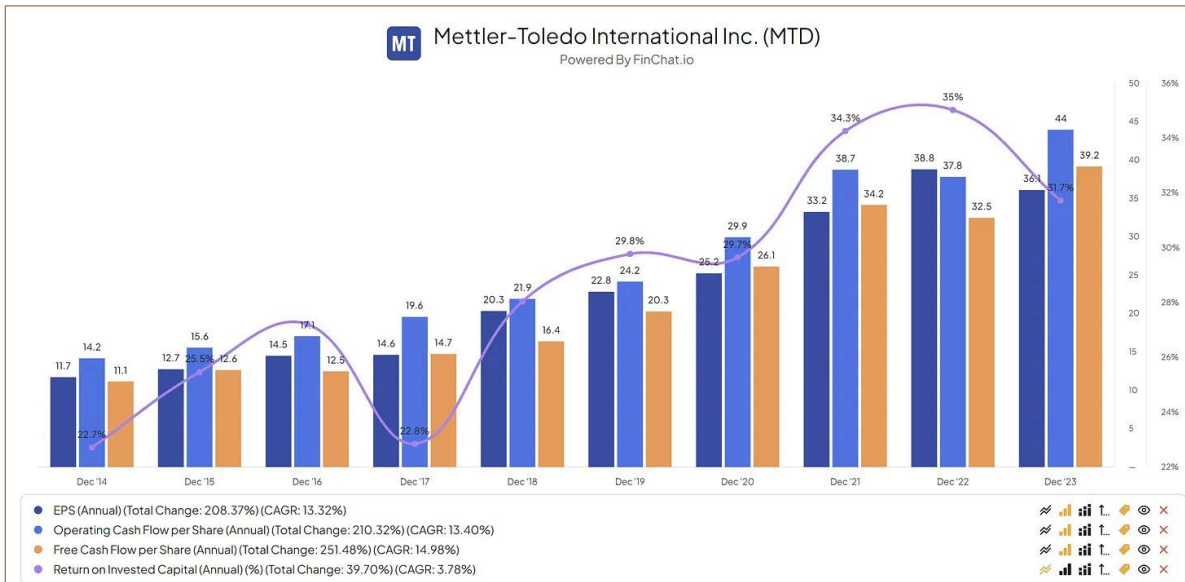
10-Year Compounded Annual Growth Rates

- Revenue +4.76%
- Gross Profit +5.7%
- Net Income +9.86%
- Free Cash Flow +11.25%

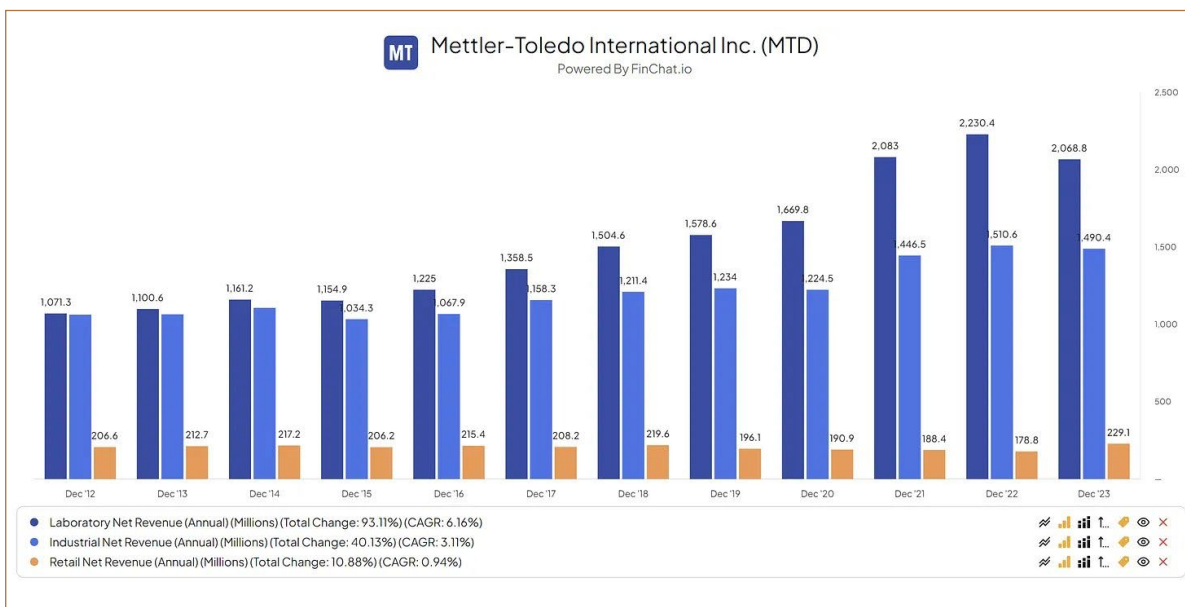


10-Year Per-Share Growth

- EPS +13.3%
- Operating cash flow per share +13.4%
- Free cash flow per share +15%
- ROIC 32%



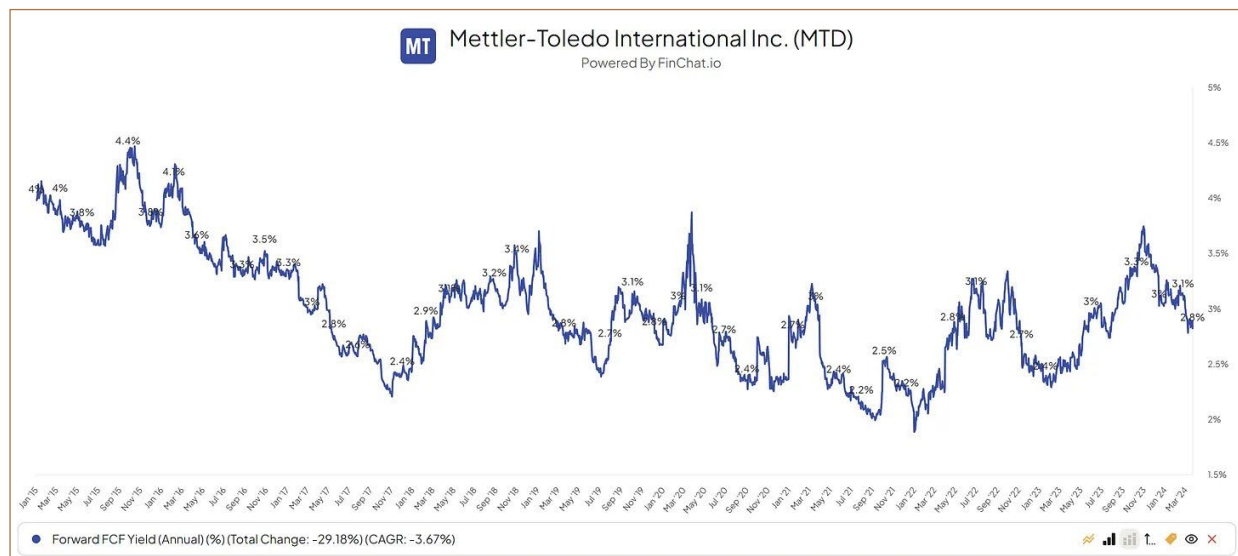
Product segmentation & Growth rates:



INVESTMENT CHRONICLES

Historic Free Cash Flow Yield

With improved margins & capital efficiencies, we can assume that Mettler-Toledo is a slightly better business today than 10 years ago.



#2 Unilever PLC

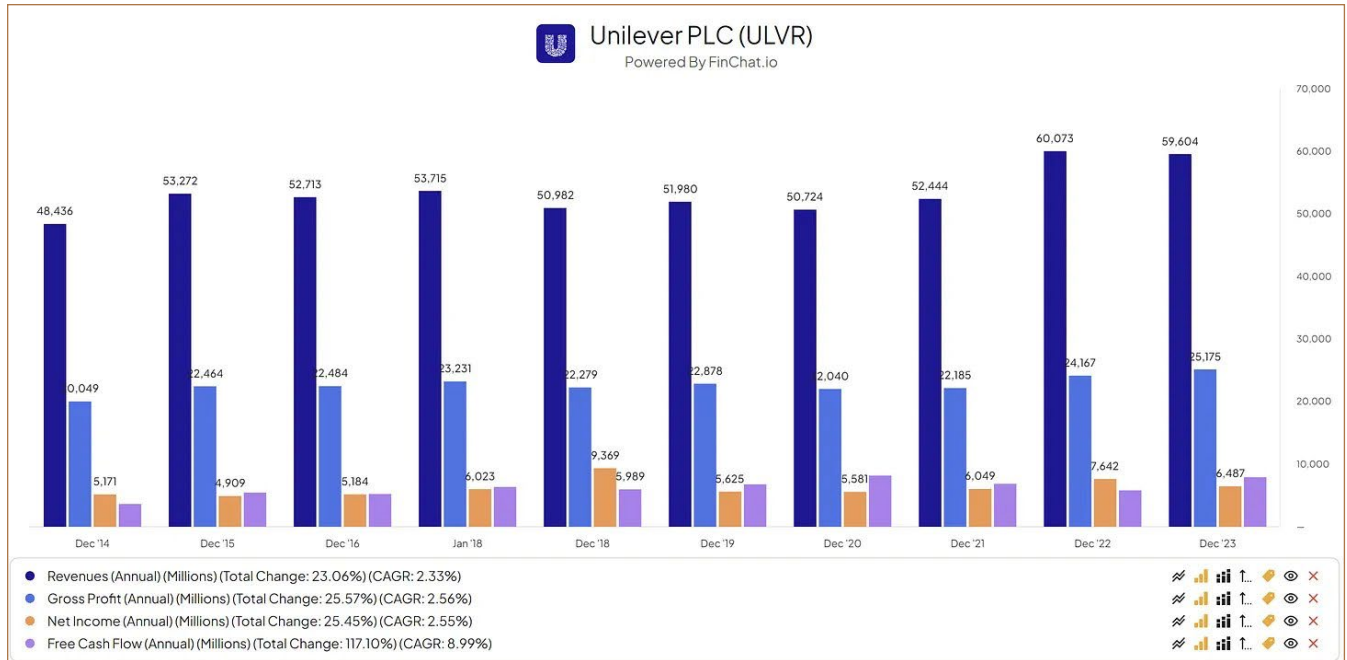
Unilever is a diversified business that operates in the personal care, home care, and packaged foods sectors.

They own several high-value brands, such as Knorr soups & sauces, Hellmann’s mayonnaise, Axe and Dove, and the TRESemmé haircare brand.

10-Year Compounded Annual Growth Rates

- Revenue +2.33%
- Gross Profit +2.56%
- Net Income +2.55%
- Free Cash Flow +9%

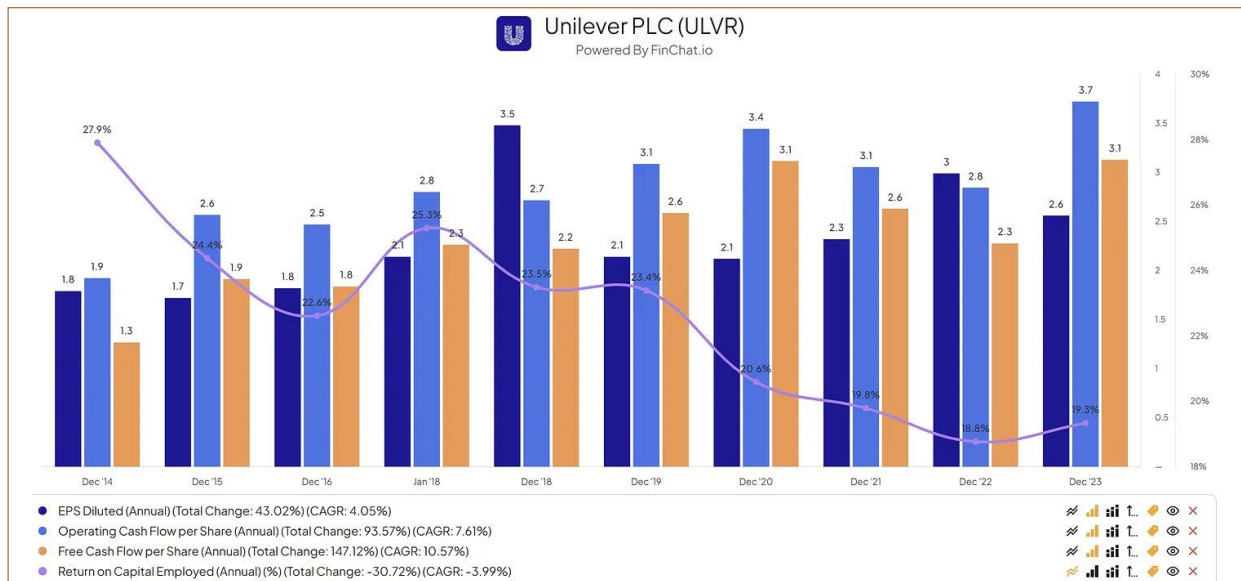




10-Year Per-Share Growth

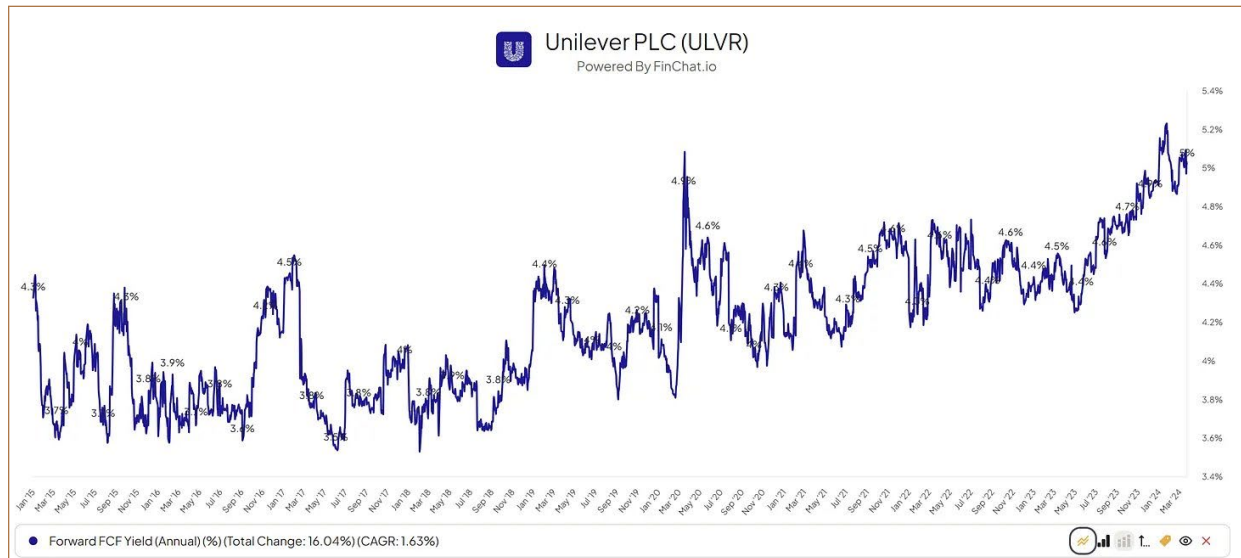
- EPS +4.05%
- Operating cash flow per share +7.61%
- Free cash flow per share +10.57%
- ROIC +19.3%

INVESTMENT CHRONICLES



• **Historic Free Cash Flow Yield**

Unilever is trading at its best valuation in a decade judging by its free cash flow yield.



SOVEREIGN/GOVERNMENT BONDS AND CREDIT

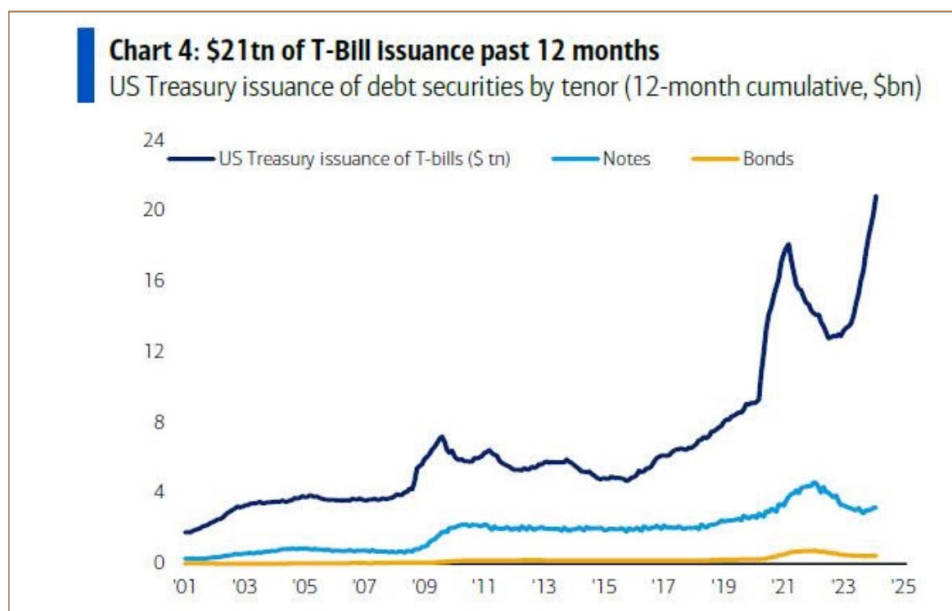
The U.S. Treasury’s recent massive issuance of short-term debt is a worrisome sign ([from Craig Shapiro via X](#))...

Issuing more t-bills at an accelerating pace is a precondition to becoming a banana republic. This is the type of thing you see emerging markets do, not the issuer of the world's reserve currency and neutral reserve asset.

If you believe that the Fed's primary goal is smooth market functioning for the UST market rather than their dual mandate of maximum employment and price stability, you can begin to understand why Powell is so keen on starting a rate cutting cycle soon despite the fact that the data we are seeing suggests current monetary policy is not restrictive enough to return inflation to 2%.

In a fiscal dominance regime, the central bank is forced to lower rates to help fund the government deficits. Given the dysfunction in DC where both tax increases and spending cuts are off the table as the CBO projects 5-7% deficits for the next couple decades, the only real lever to pull is to lower interest rates on government borrowings as the government continues to shift borrowings to the front end.

It seems like Gold is already starting to sniff out this dynamic as a cutting of interest rates to support government borrowings will lead to currency weakness and higher inflation over time.



A million simulations, one verdict for the U.S. economy: debt danger ahead ([from Bloomberg](#))...

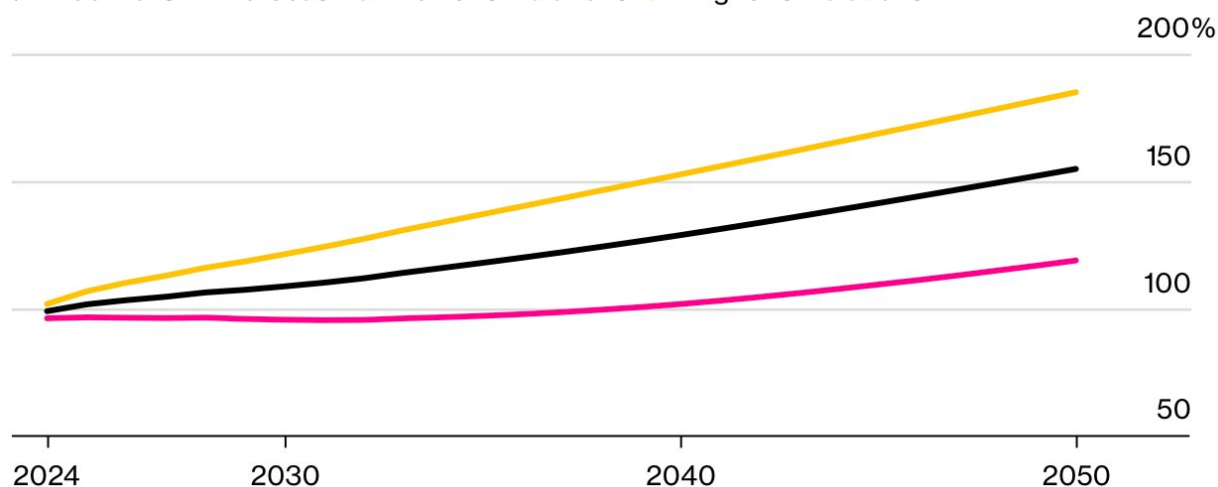
The Congressional Budget Office warned in its latest projections that US federal government debt is on a path from 97% of GDP last year to 116% by 2034 — higher even than in World War II. The actual outlook is likely worse.

From tax revenue to defense spending and interest rates, the CBO forecasts released earlier this year are underpinned by rosy assumptions. Plug in the market's current view on interest rates, and the debt-to-GDP ratio rises to 123% in 2034. Then assume — as most in Washington do — that ex-President Donald Trump's tax cuts mainly stay in place, and the burden gets even higher.

Simulations Show Range of Uncertainty Around CBO's Forecasts

10th and 90th percentile results of a million scenarios

▬ Debt-to-GDP Forecast ▬ Lower simulations ▬ Higher simulations



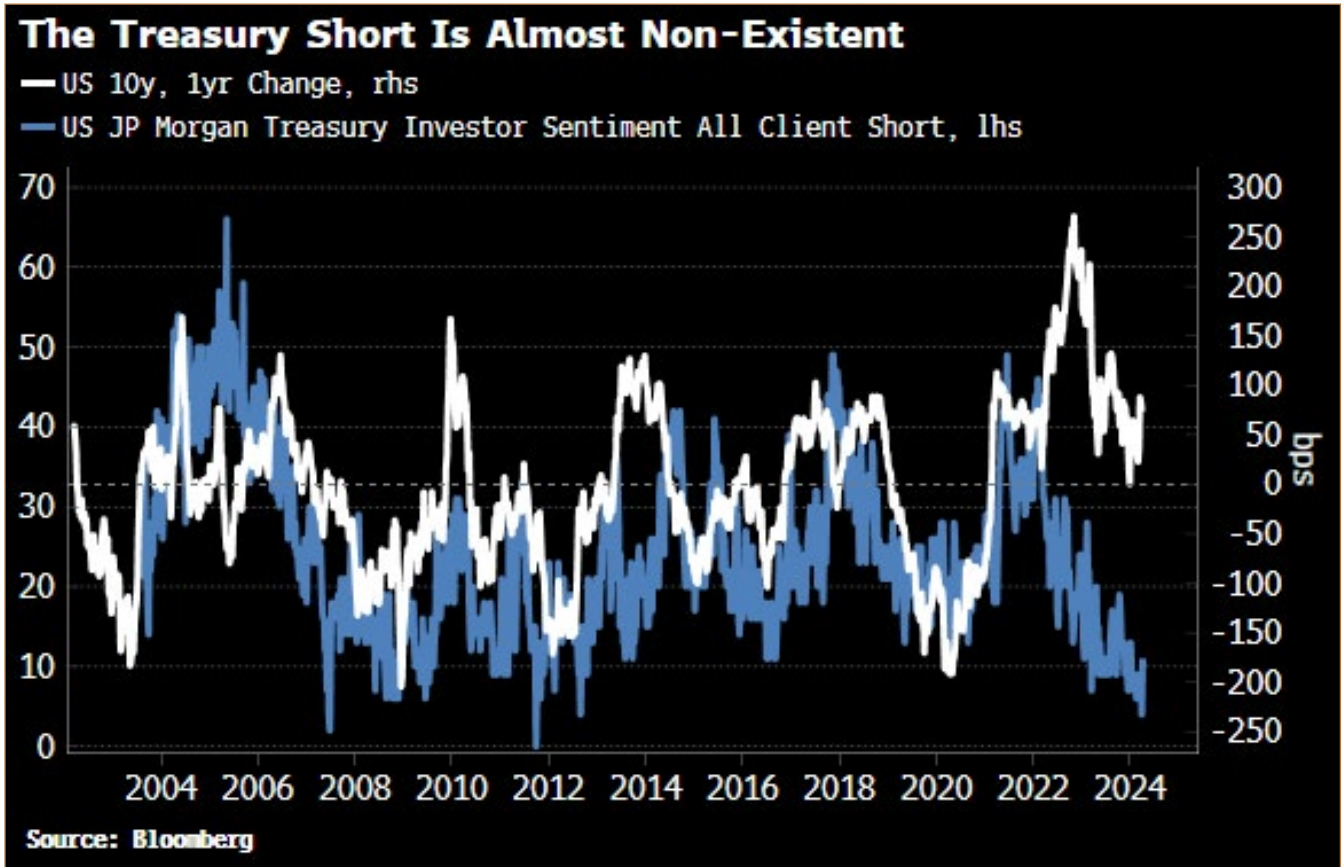
With uncertainty about so many of the variables, Bloomberg Economics has run a million simulations to assess the fragility of the debt outlook. In 88% of the simulations, the results show the debt-to-GDP ratio is on an unsustainable path — defined as an increase over the next decade.

[Continue reading here](#) (subscription may be required)



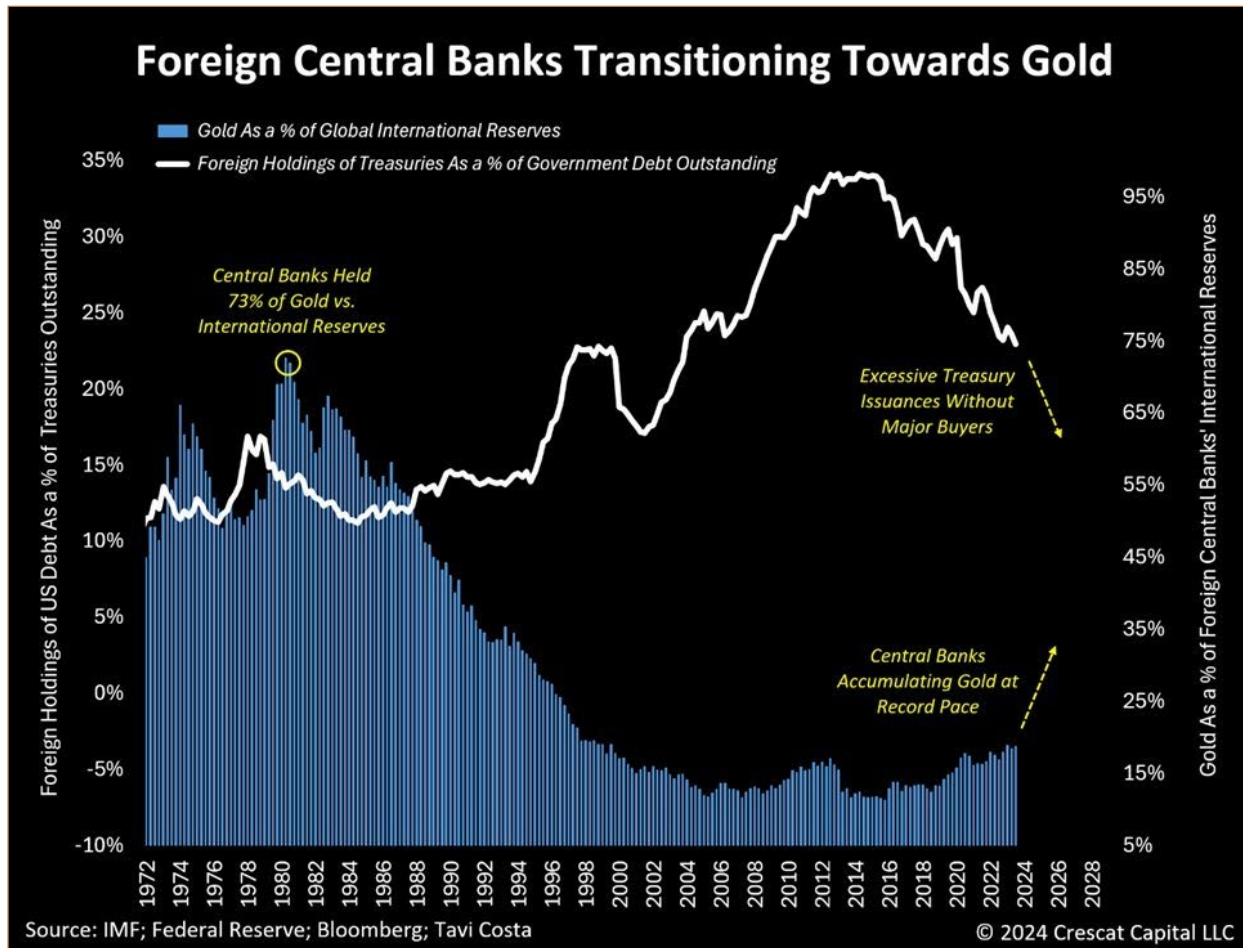
Virtually no one is short Treasury bonds (from Jesse Felder via X)...

“Treasury shorts are unusually low with the number of clients saying they are positioned that way near the nadir for the 20-year history of the survey.”



INVESTMENT CHRONICLES

Foreign holdings of U.S. Treasury debt continue to decline ([from Otavio \(Tavi\) Costa via X](#))...

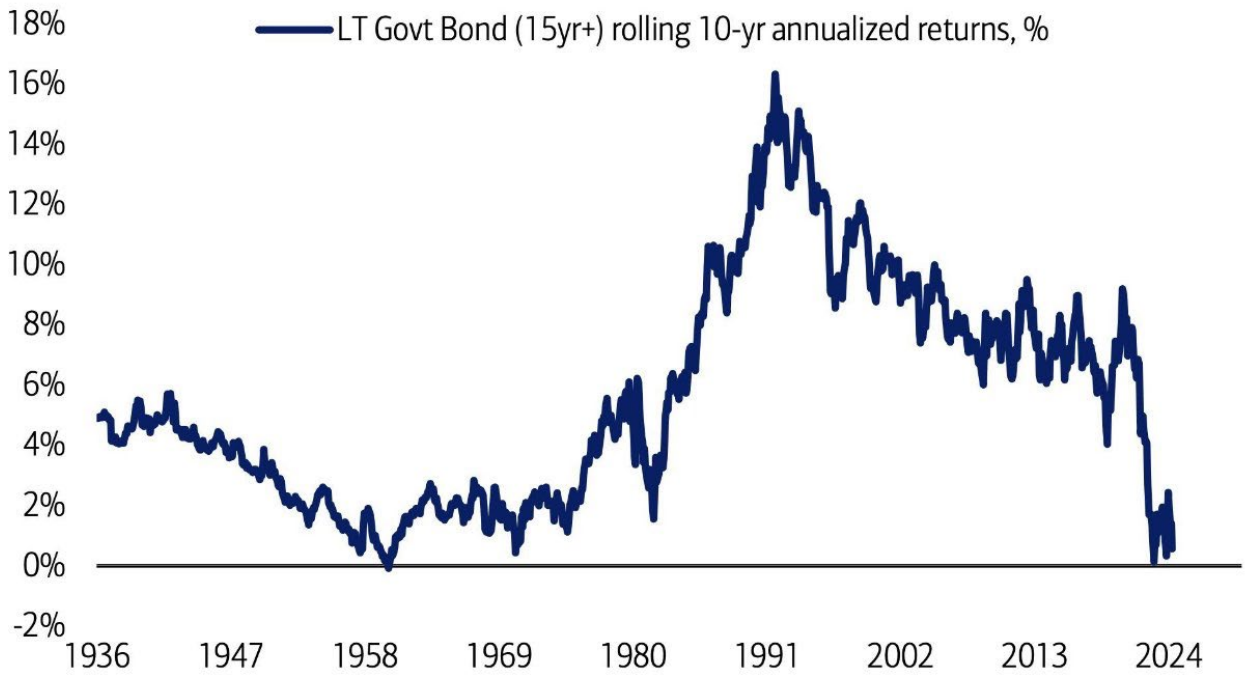


The 10-year annualized return of U.S. Treasuries has plummeted to a 65-year low of 0.6% (from Sean Gibson via X)...

The 2020s era of war, protectionism, fiscal excess, scarce energy/housing/labor killed the 4 decades-long bond bull market.

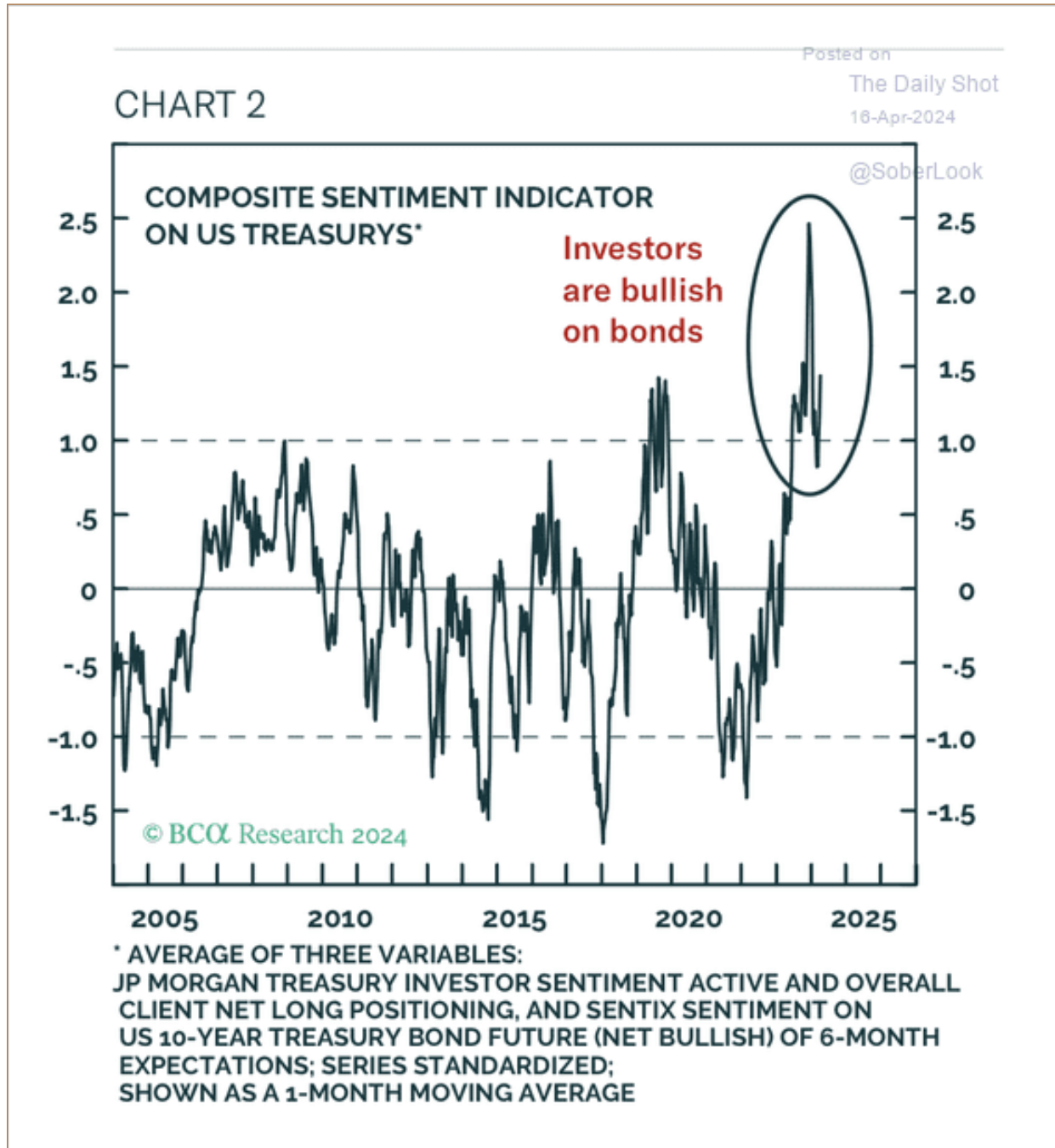
Chart 2: Biggest Story of 2020s...Ugly End of 40-year Bond Bull

Long-term US government bond (15+ year) rolling 10-year annualized returns, %



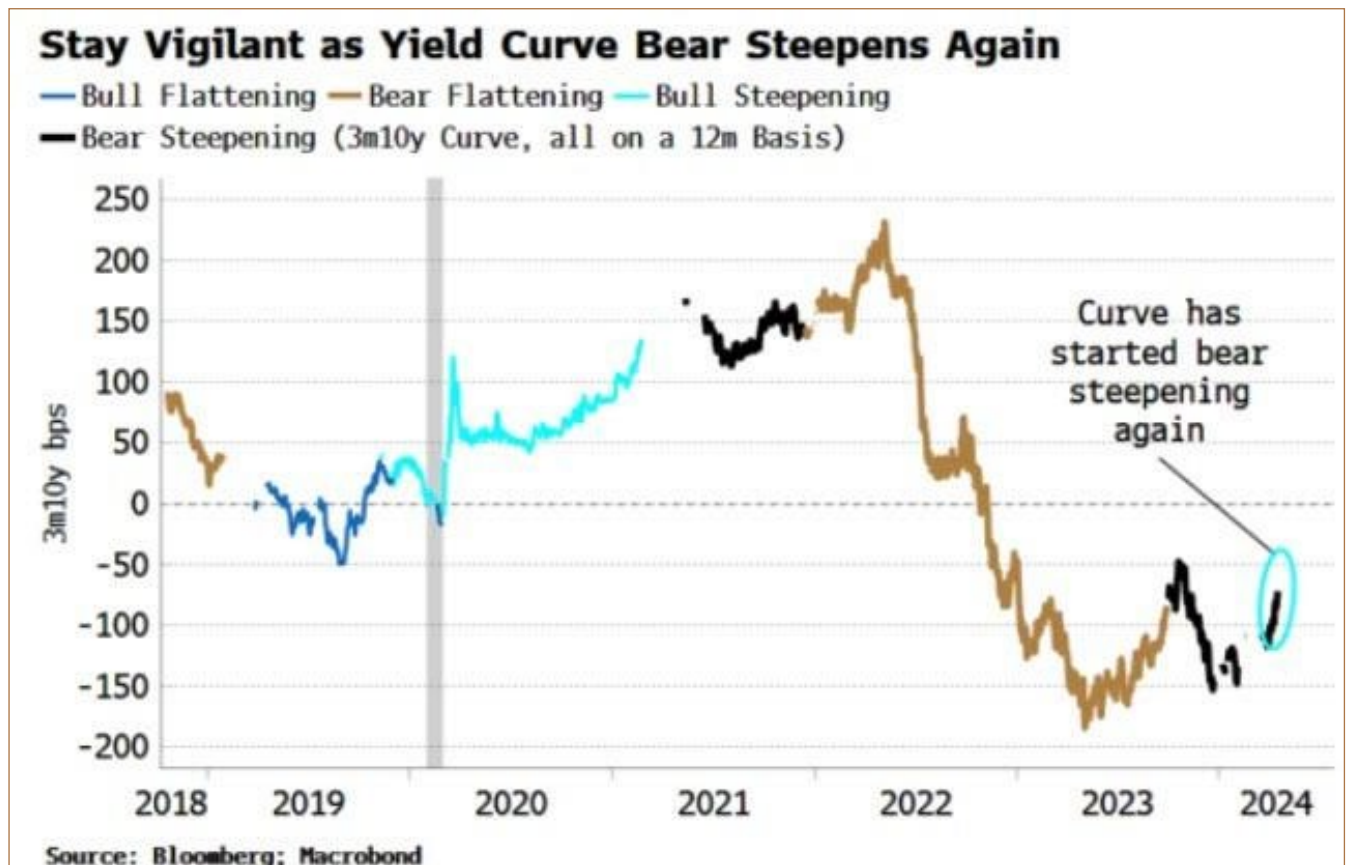
Source: BofA Global Investment Strategy, Ibbotson, Bloomberg, Refinitiv Datastream

Investors are extremely bullish on Treasury bonds (from The Daily Shot)...



The U.S. Treasury yield curve is experiencing a “bear steepener,” as long-end rates rise faster than short-end rates ([from Markets & Mayhem via X](#))...

We believe that this trend is set to continue as the lack of a term premium on the long-end provides buyers with few reasons to want to commit capital for such a duration.



INVESTMENT CHRONICLES

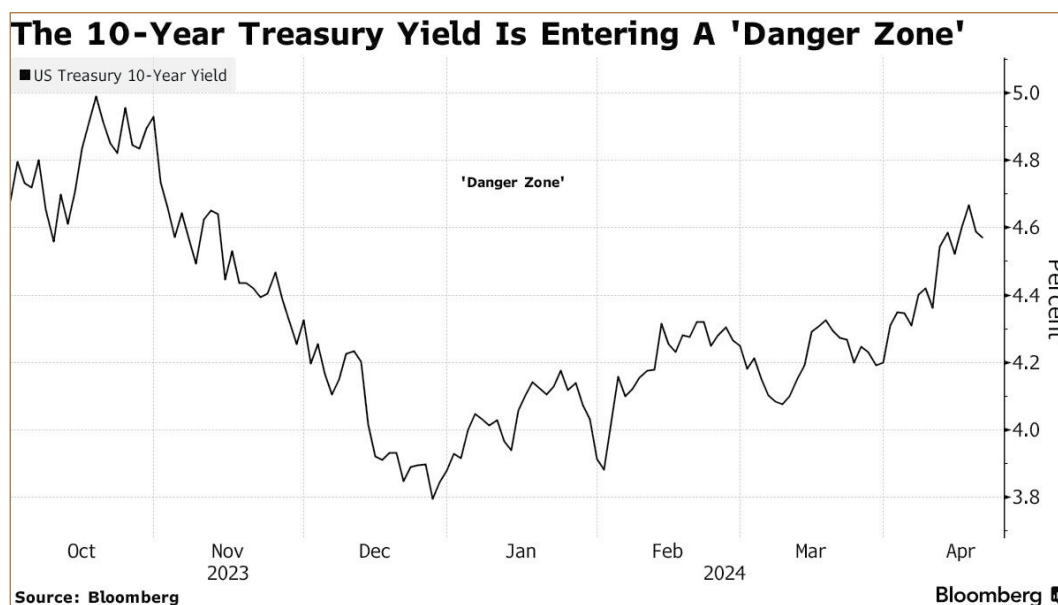
Vanguard warns 10-year Treasury yields are entering a “danger zone” ([from Bloomberg](#))...

The Treasury market is nearing levels that risk triggering a large selloff, pushing yields on 10-year bonds back to 5%, according to Vanguard.

“We are in a danger zone right now,” Ales Koutny, head of international rates at Vanguard, said in an interview. Even a small move higher — past the critical 4.75% level — could force investors to abandon their bets on a rally, giving way to a wave of selling that could push yields toward the highs of 2007, he said.

Investors had piled into Treasuries late last year, betting on a swift easing cycle from the Federal Reserve. Still, as incoming data has pointed to persistent strength in the US economy, the market has turned against them.

Many are being forced to sell off their holdings to limit losses, said Koutny, who helps manage Vanguard’s \$1.7 trillion in active assets.



“We still think that there’s a residual long position left over,” Koutny said. “If that doesn’t manage to be orderly squared away, that disorderly move could be what takes us eventually to 5%.”

[Continue reading here](#) (subscription may be required)

CORPORATE BONDS AND CREDIT

Companies are rushing to issue bonds ahead of the upcoming election ([from The Financial Times](#))...

Corporate borrowers have issued \$606bn worth of dollar bonds so far this year, according to LSEG data, up by two-fifths compared with the same period in 2023 and the highest total since at least 1990.

Bankers and investors said companies were being motivated to borrow by the lowest spreads in years — referring to the difference between US corporate debt yields and those of equivalent government bonds.

But they added that the prospect of a close election had pushed companies to bring forward their plans, rather than risk running into potentially more expensive markets later in the year.

“We’re running circa two months ahead of what I would consider a normal type schedule for investment-grade issuance,” said Teddy Hodgson, co-head of Morgan Stanley’s global investment-grade debt syndicate. “I certainly think the election is a driving force for all of this supply.”

The rush to corporate bond issues mirrors moves by traders betting on futures contracts tied to the value of the Vix index — the “fear gauge” that measures expectations of near-term swings in the S&P 500 benchmark.

Though unable to trade the Vix directly, investors can purchase futures contracts at prices reflecting where they expect the Vix to be trading at different points in the months ahead. Analysts say traders are pricing in a rise in market stress months earlier than normal ahead of an election. The spreads on bond yields are often an indication of risk.

US credit spreads have tightened significantly since early January, helped by “technical” forces including strong demand for new paper among yield-hungry investors, after a lull in debt issuance in 2022 and 2023.

The average investment-grade bond spread now sits at just 0.93 percentage points, according to Ice BofA index data. That is around its tightest level since November 2021 and just 0.14 percentage points from the narrowest level in 19 years. The average high-yield or “junk” spread is hovering at 3.12 percentage points, around its narrowest level since December 2021.

[Continue reading here](#) *(subscription may be required)*

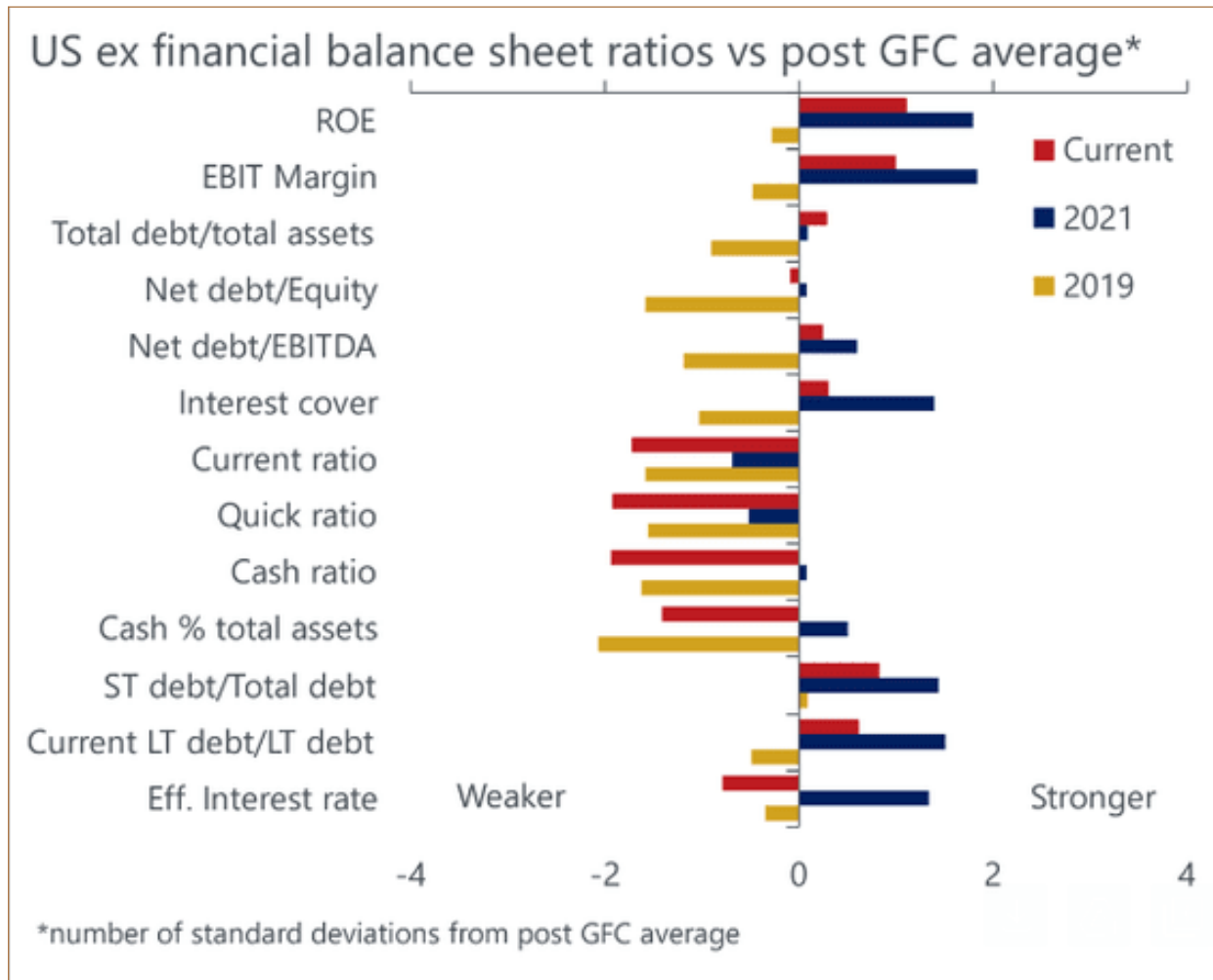
U.S. investment-grade credit fundamentals remain “broadly stable” ([from Breckinridge Capital Advisors](#))...

Summary:

- The Bloomberg (BBG) U.S. Corporate Investment Grade (IG) Bond Index (the Index) option-adjusted spread (OAS) narrowed by 9 basis points (bps) during the quarter, ending March at 90bps. Corporate credit valuations are approaching twenty-year tights.
- Fixed-rate, gross investment grade bond supply was a record \$658 billion in 1Q24, up from \$508 billion in 1Q23. EPFR Global reported that a net \$73 billion flowed into IG bond funds and exchange-traded funds (ETFs) in 1Q24.
- IG issuer credit fundamentals are still broadly stable. IG mean earnings before interest, taxes, depreciation, and amortization (EBITDA) margins, on a Generally Accepted Accounting Principles (GAAP) basis, were 28 percent at 4Q23, up 300bps since bottoming in 4Q20, per Bloomberg. Margins are hovering near their highest level in 10 years.
- Commercial real estate (CRE) is an area of increased focus as interest rates have risen, occupancy rates remain low and valuations have declined, particularly in the Office sector. U.S. Bank CRE non-performing loan rates are rising.

[Continue reading here](#)

U.S. corporate balance sheets remain relatively healthy (from [The Daily Shot](#))...

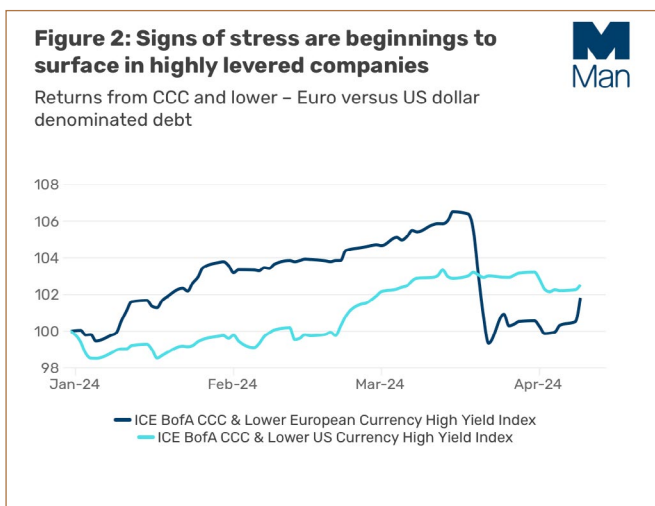
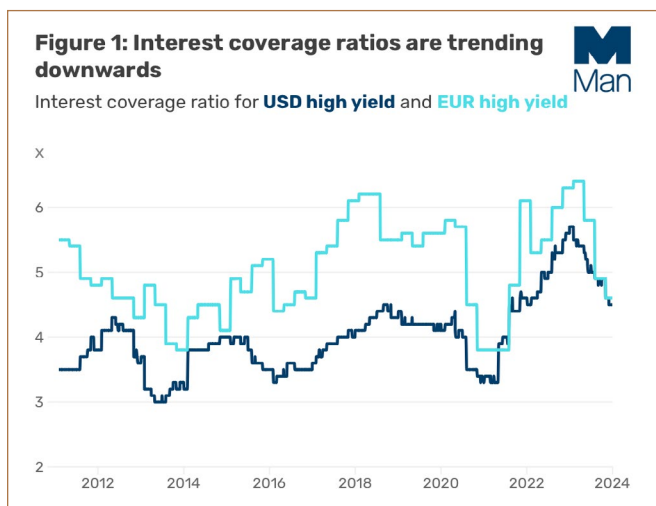


The first small cracks are starting to appear in credit driven by the “higher for longer” rates environment (from Man Institute)...

After one of the most aggressive interest rate hiking rate cycles in decades, today’s market is awash with commentary and debate on whether the Federal Reserve (Fed) has pulled off an elusive soft landing and swerved recession. While the US economy has shown resilience thus far in the face of higher rates, arguably bolstered by massive monetary stimulus and fiscal largesse, as we outlined in a recent paper, we remain on guard for global growth to slow with credit valuations largely pricing near certainty of a soft landing. The pressures we are witnessing in some sectors are likely to broaden and create further challenges from here. While this environment, characterised by increased dispersion, may be hazardous for indiscriminate investors, it presents opportunities for investors who have the flexibility to be selective.

First small cracks

From a fundamentals perspective, we are beginning to see a slight weakening, with some companies having less cushion to pay down their outstanding debts (as shown in Figure 1 below), though notably this has not yet translated into a significant rise in defaults. With that said, defaults are a backward-looking indicator and signs of stress are beginning to surface in over-levered companies struggling to refinance in a higher for longer rates environment. As a case in point, European credit felt the impact of three large capital structures coming under pressure at the end of March, leading CCC and lower credit in European high yield to give back the majority of their gains year to date (Figure 2).



INVESTMENT CHRONICLES

Liability management transactions provide an outlet for companies to deal with the higher-for-longer rate environment

The low level of defaults and distressed ratios shown in Figure 3 fail to accurately reflect the increased burden being placed on capital structures in an environment of higher-for-longer interest rates. Where this is more visible is in the rapid increase in liability management transactions (LMTs), as shown in Figure 4.

LMTs include any effort taken by a borrower to shore up their balance sheet. Typical forms of LMT include tender offers, exchange offers, buybacks, uptiering and drop downs. Ultimately, the purpose of these transactions is to reduce debt, extend maturities and to lower interest payments. This can be preferable to going through a more thorough bankruptcy procedure as it is much less costly and can have a smaller impact on the underlying businesses.

However, it is important to understand what the motivation behind these transactions is for the borrower or lender as there are often constraints on either side, which lead to more LMTs rather than full-scale restructurings. In essence, we are seeing several companies kicking the can down the road and lenders are jostling for the best position should an ultimate restructuring occur.

Looking at it from this perspective, we are arguably already in a distressed cycle. This presents opportunities for nimble investors, not only in terms of profiting from LMTs but also pursuing more aggressive restructurings. Positioning oneself within the fulcrum security (the most senior security which has the greatest likelihood of conversion into equity ownership after restructuring) and understanding the motivations of lenders and borrowers is critical for those pursuing a full-blown restructuring.

Figure 3. Low distress ratios fail to accurately reflect the increased burden of higher for longer rates

Distress ratio, loans versus bonds (by count)

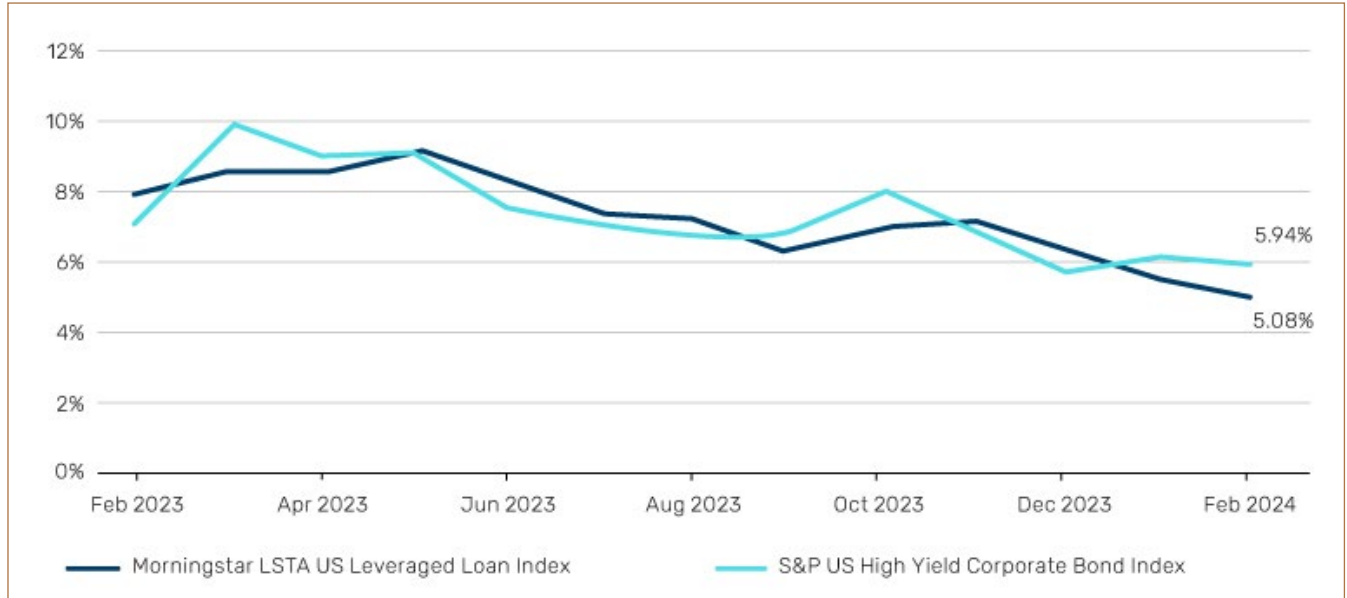
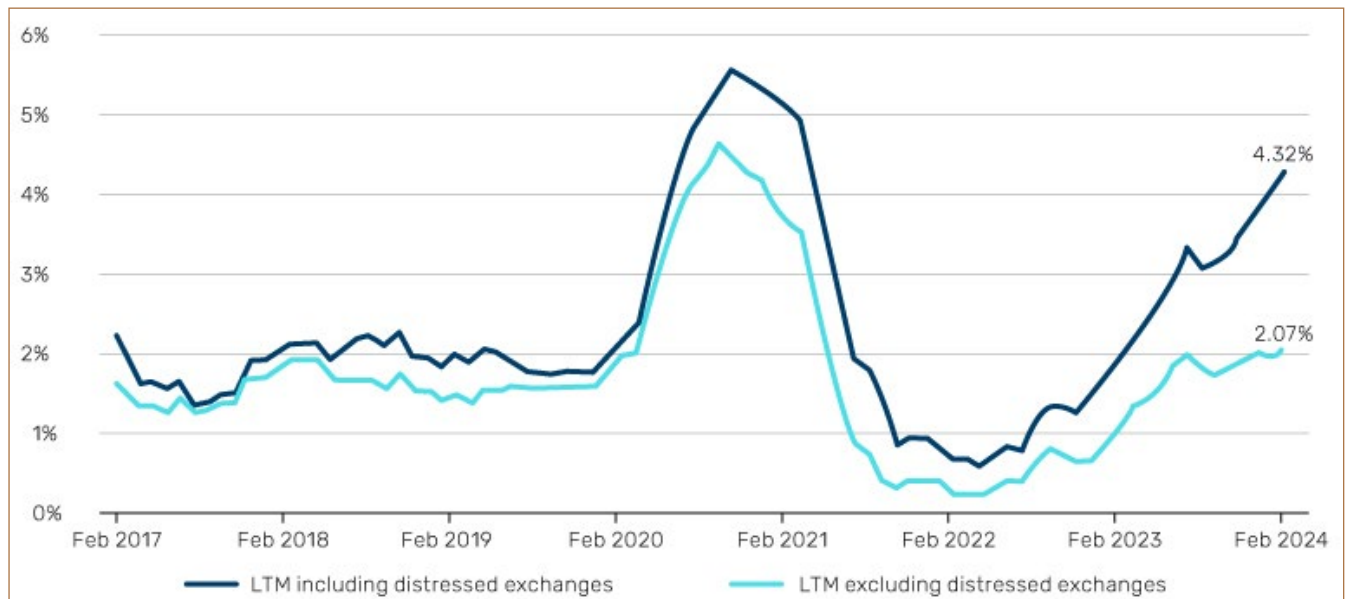


Figure 4. Traditional payment defaults are understating the reality

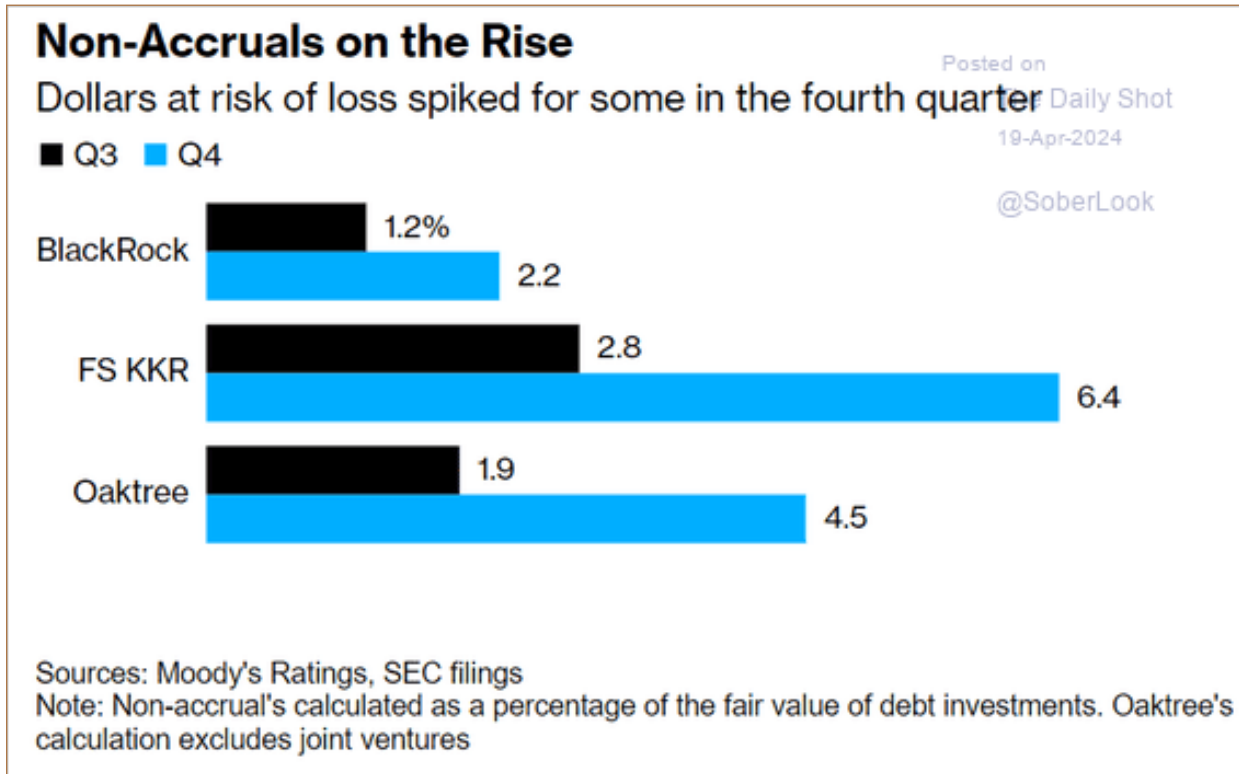
Dual-track US loan default rate: issuer count



[Continue reading here](#)

INVESTMENT CHRONICLES

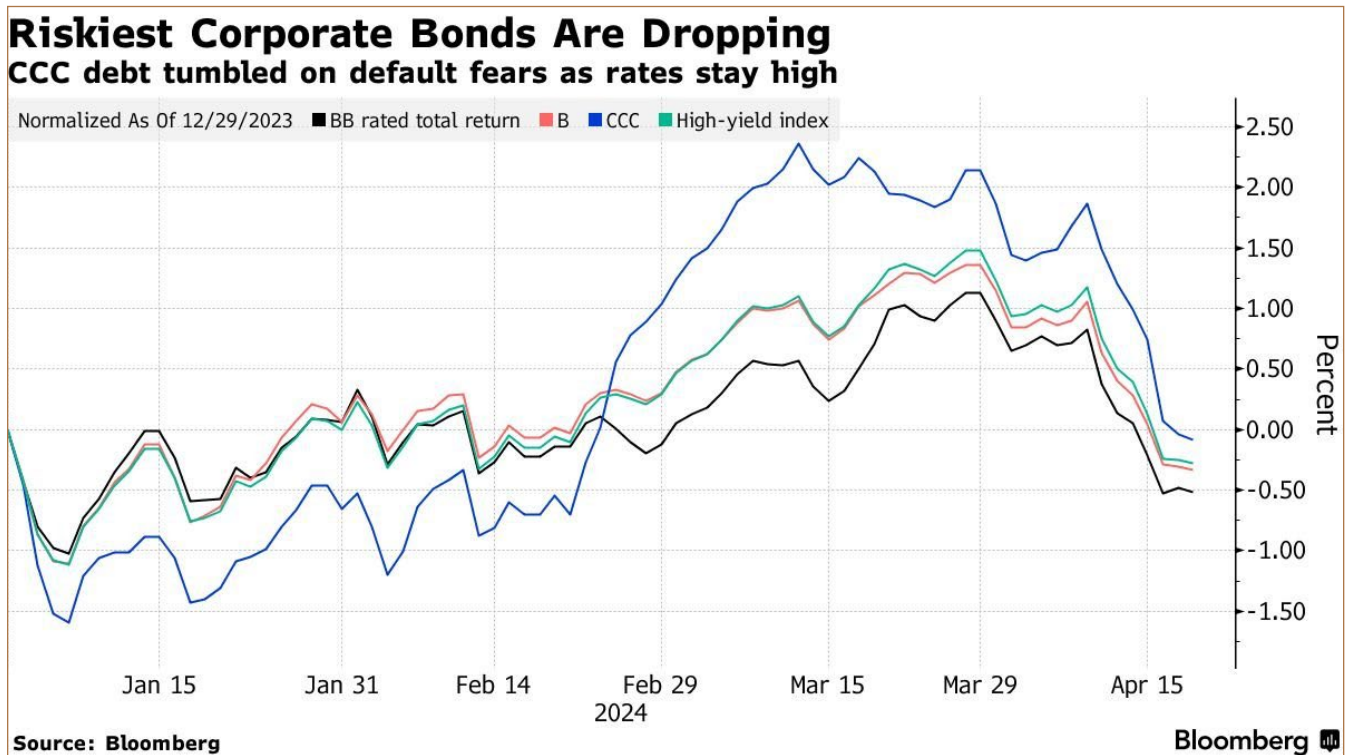
Direct lending funds, including business development companies (“BDC”), are reporting an increase in distressed names within their portfolios ([from The Daily Shot](#))...



The riskiest corporate debt has been weakening recently ([from Markets & Mayhem via X](#))...

Credit spreads are widening as low quality corporate debt tumbles.

The appreciation of risk in credit markets is starting to return, which is altogether a healthy sign given how underappreciated it had been up until recently.



CONSUMER CREDIT

Pawn shops know something about the U.S. economy that President Joe Biden doesn't: Times are still tough ([from USA Today](#))...

Clay Baron has everything in his pawn shop from gold rings and pearl necklaces to vintage cowboy boots, silver belt buckles, stereos and ticking clocks.

The only thing he's short on is space. "Right now we have a glut of inventory," Baron said, "which tells me that our clientele doesn't necessarily have money."

Accumulating pawnshop inventory means fewer buyers than sellers – a sign that for the lowest-income Americans, times remain tough.

President Joe Biden is trying to persuade Americans that the economy is on the upswing, and he has been touting economic indicators that he says prove it: easing inflation, rising job growth and wages, unemployment near record lows, a surging stock market.

But the president's rosy economic picture hasn't reached everyone.

[Continue reading here](#)

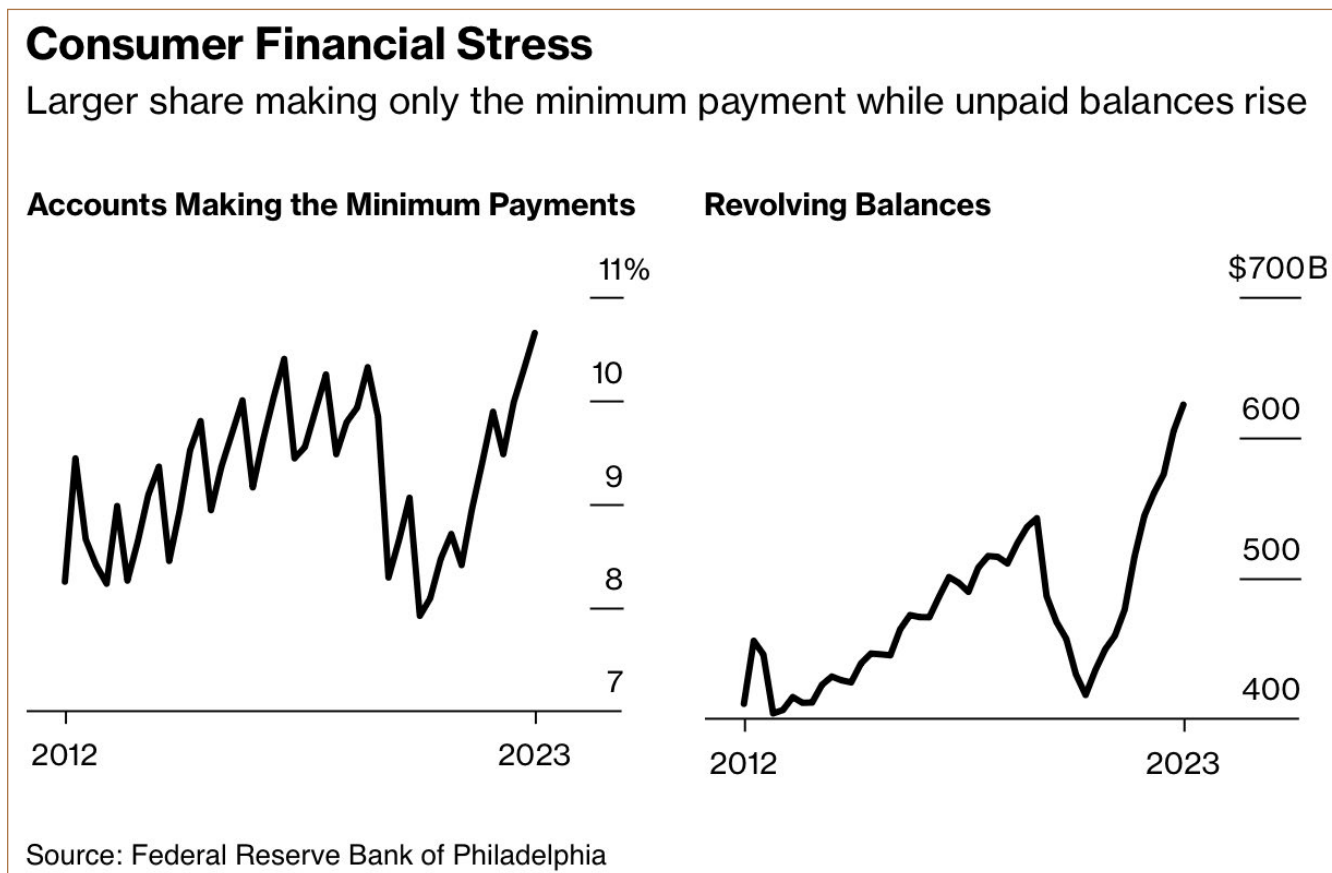
Credit-card delinquencies rise to the highest levels on record ([from Bloomberg](#))...

US credit-card delinquency rates were the highest on record in the fourth quarter, according to a Federal Reserve Bank of Philadelphia report.

Almost 3.5% of card balances were at least 30 days past due as of the end of December, the Philadelphia Fed said. That’s the highest figure in the data series going back to 2012, and up by about 30 basis points from the previous quarter. The share of debts that are 60 and 90 days late also climbed.

“Stress among cardholders was further underscored in payment behavior, as the share of accounts making minimum payments rose 34 basis points to a series high,” according to the report.

Nominal credit card balances set a new series high and card utilization also rose, as consumers stretched credit lines further. Inflation-adjusted credit card balances remained below fourth-quarter 2019 levels.



[Continue reading here](#) (subscription may be required)

INVESTMENT CHRONICLES

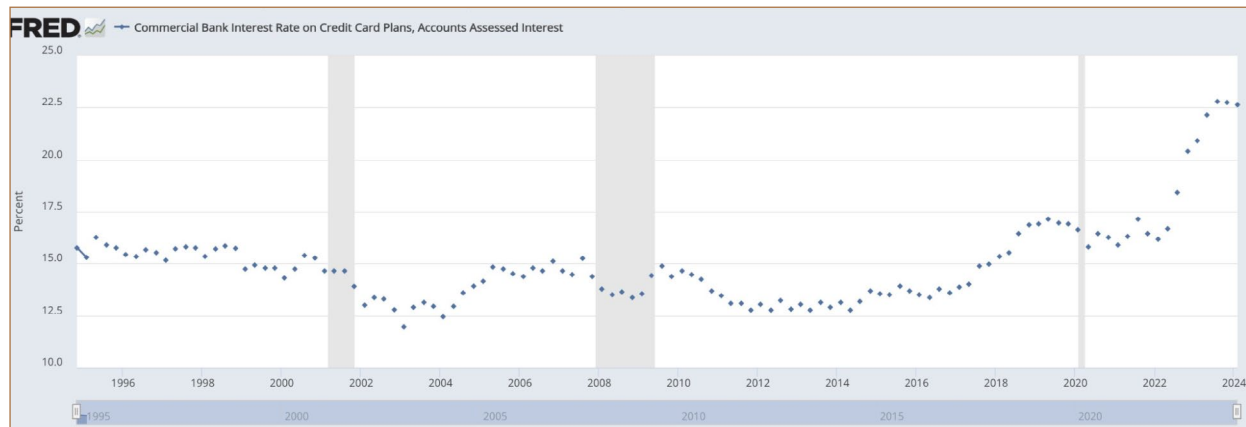
Meanwhile, credit-card interest rates have risen to 30-year highs (from The Great Martis via X)...

Credit card interest rates at 22%.

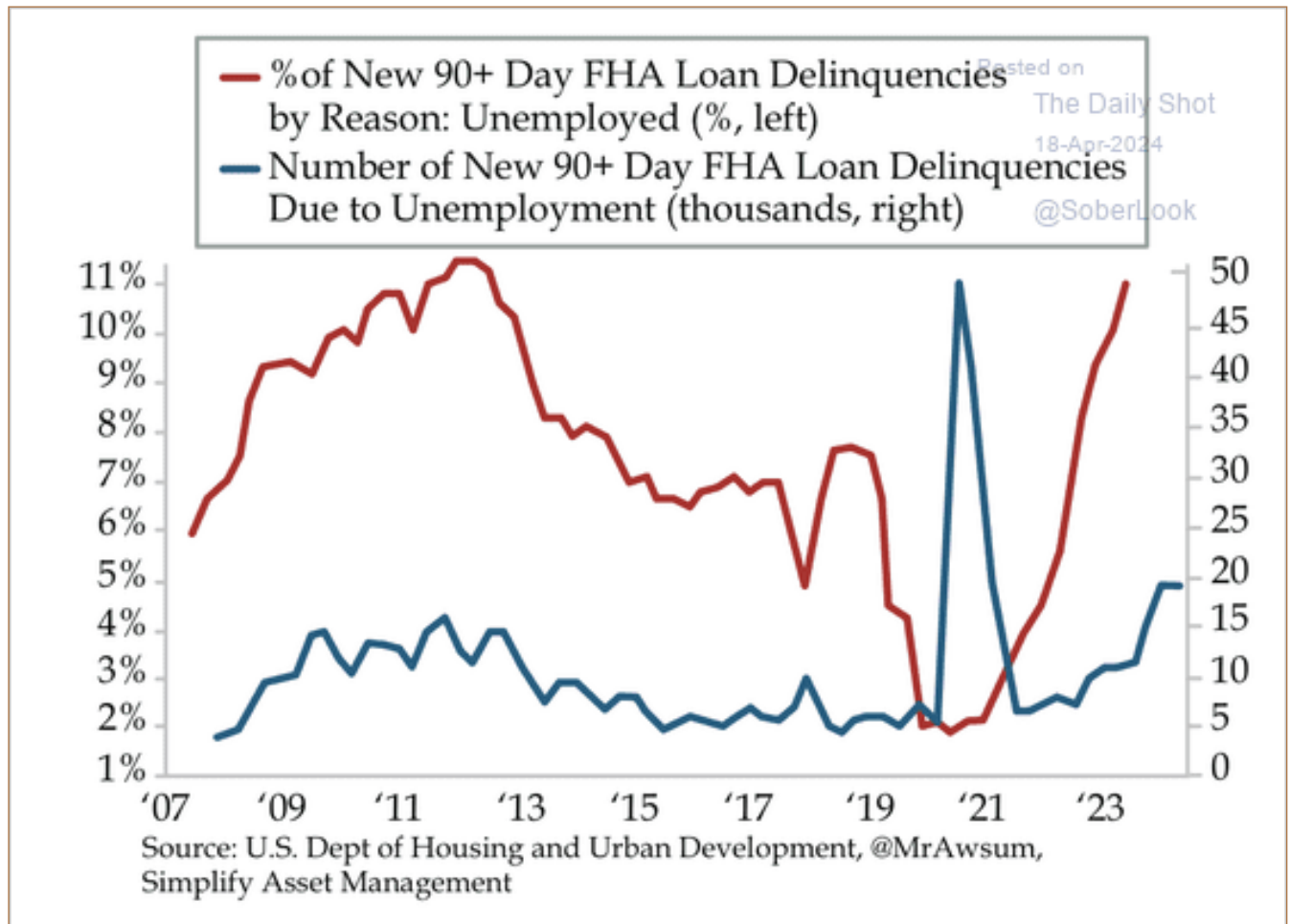
Highest in 30 years.

Servicing \$1.3 trillion.

Anyone see an issue?

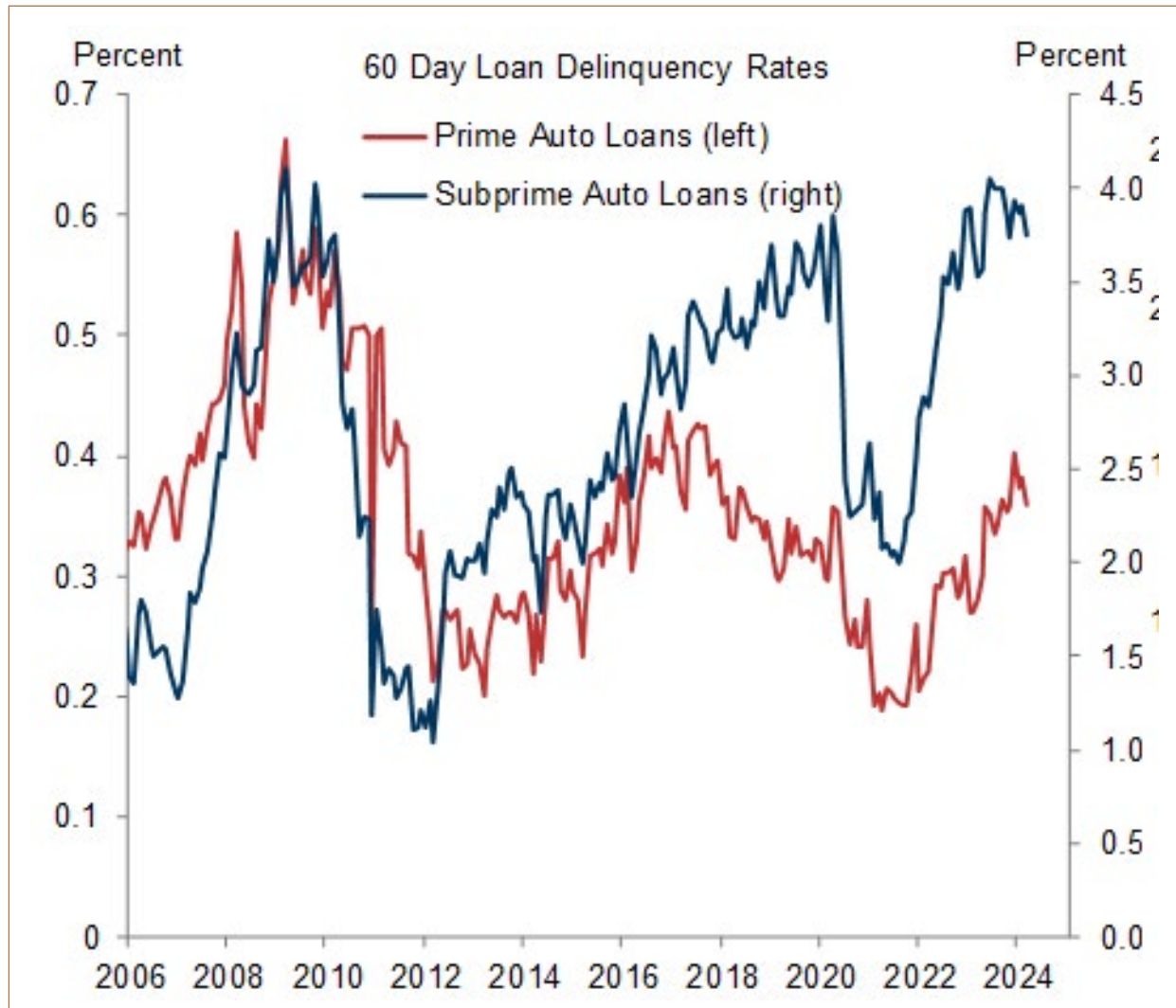


FHA mortgage delinquencies due to unemployment hit the highest level since the Great Financial Crisis ([from The Daily Shot](#))...



INVESTMENT CHRONICLES

Auto-loan delinquency rates have ticked down from their recent peak ([from Mike Zaccardi, CFA, CMT via X](#))

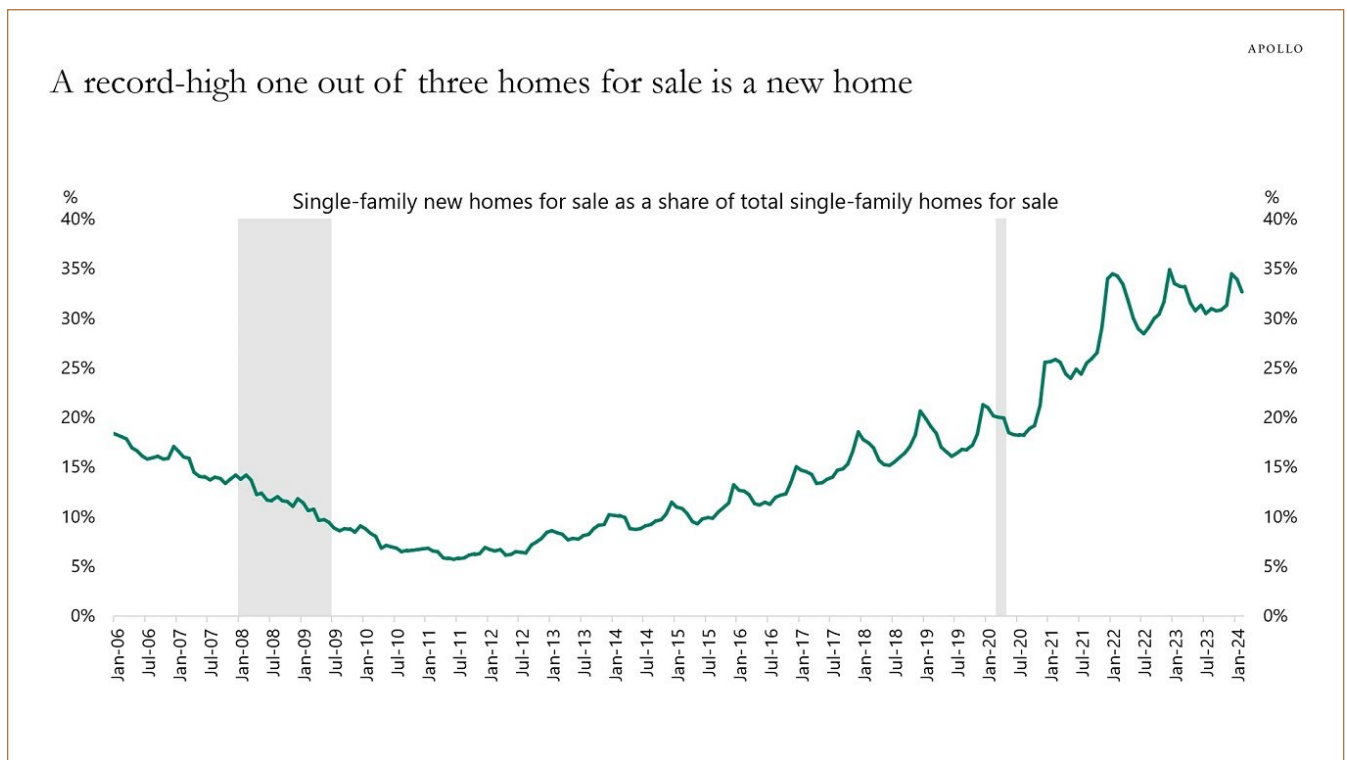


REAL ESTATE

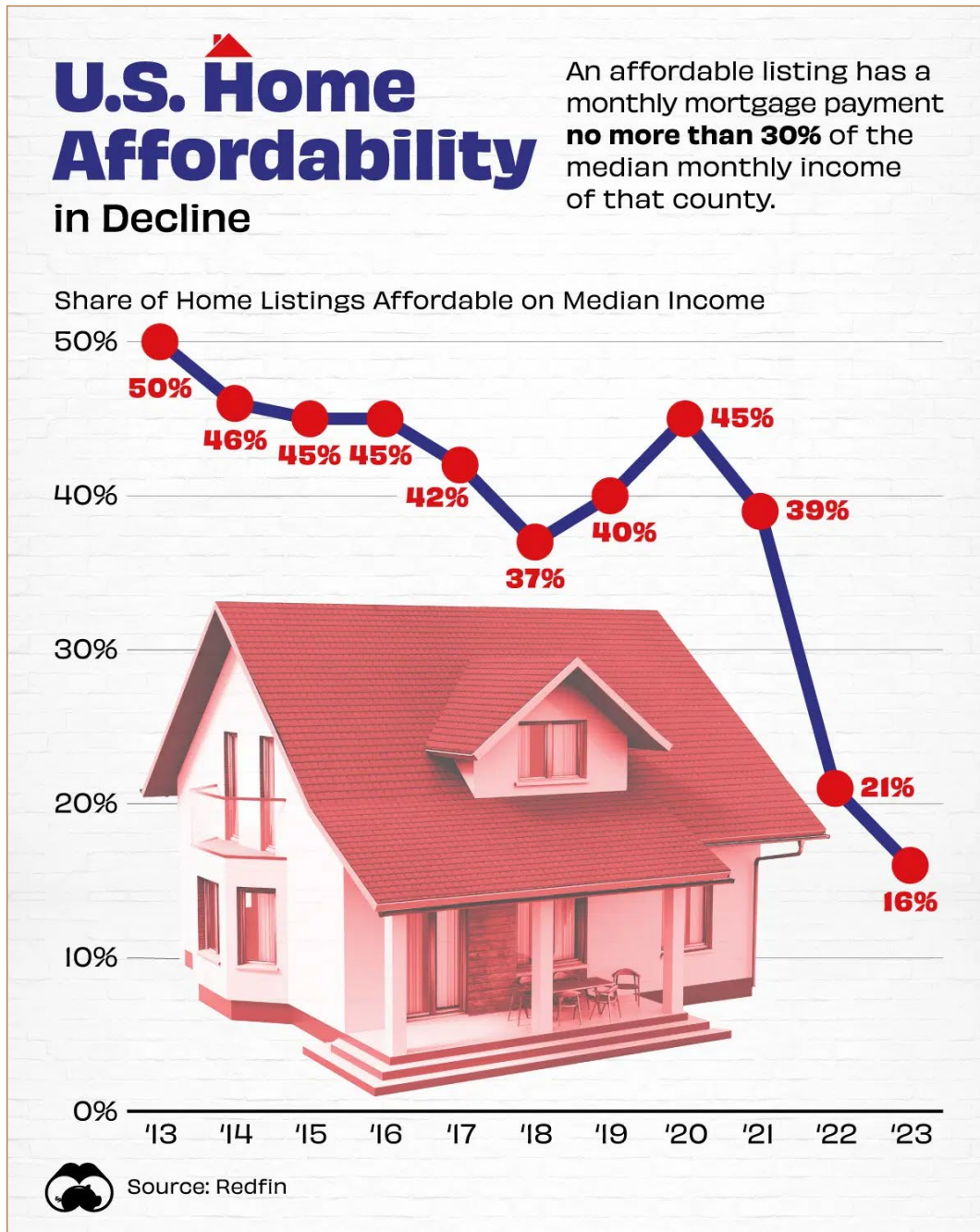
A record one out of three homes for sale is a new house (from Torsten Sløk in The Daily Spark)...

After the 2008 financial crisis, one out of 20 homes for sale was a new home. Today, one out of three homes for sale is a new home, see chart below.

The source of the current low inventory of existing homes for sale is the lock-in effect, as homeowners with low mortgage rates are unwilling to sell their homes and buy a new one at a much higher mortgage rate.



Visualizing America's shortage of affordable homes ([from Visual Capitalist](#))...

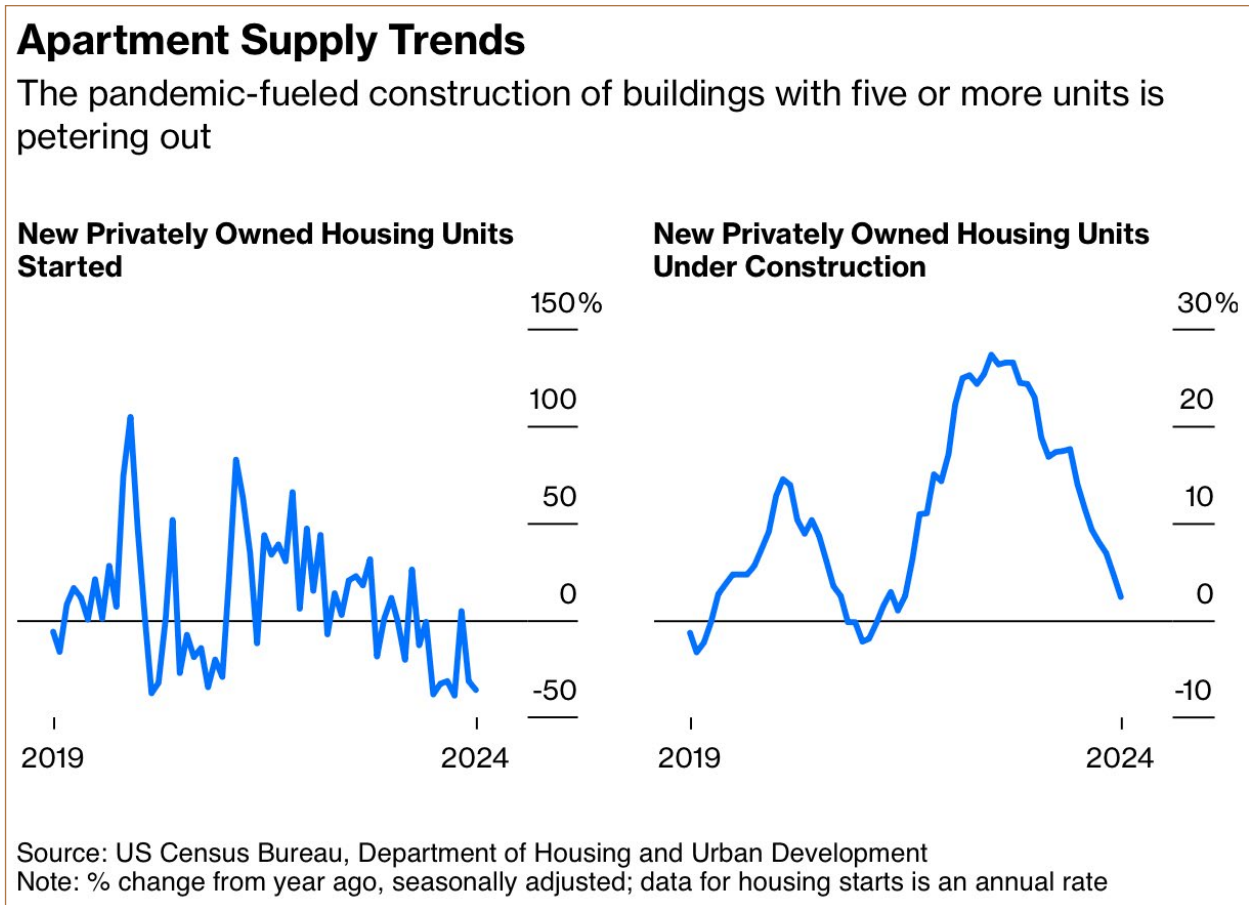


Enjoy cheaper rent while you can. It won't last (from Bloomberg)...

The current state of the market for renters is akin to being in the eye of a multi-year hurricane. Rents surged in 2021 and 2022, driving a wave of apartment construction that helped to stabilize or even lower prices this year. But storm clouds already loom on the horizon — new construction has slumped and financial conditions don't support a pickup, threatening another supply crunch in the not-too-distant future.

Groundbreakings for new apartments are down 35% from a year ago as high-construction metros such as Austin and Atlanta see rents decline. Building activity is also being held back by onerous funding costs and the muted stock performance of apartment REITs such as AvalonBay Communities Inc. and Camden Property Trust. This is in sharp contrast to a few years back when rents were surging, interest rates were low, and investor enthusiasm for REITs pushed some stocks up by more than 50% in 2021. Such favorable conditions meant the number of apartments under construction climbed pretty consistently to a record high last summer, ensuring that completed units will keep hitting the market over the next year or so.

INVESTMENT CHRONICLES



But the elevated supply is now being met with a pickup in demand. Carl Whitaker of RealPage, a housing analytics firm, notes that the first quarter of 2024 was the strongest for net apartment absorption since the 2021 pandemic-related boom. The online marketplace Apartment List has shown rent growth stabilizing in recent months as well, suggesting that supply is still keeping a lid on rents, but it is no longer putting as much downward pressure as was the case a year ago.

Apartment demand is likely up for a few reasons. As with most goods and services, renters are responding to lower prices. Austinites, for example, who found roommates over the last few years due to surging rents now have an easier time affording their own places after the recent drop. Additionally, the continued lack of affordability due to a combination of high house prices and high mortgage rates is keeping some people in apartments when they might otherwise have transitioned to homeownership. Finally, elevated immigration means more people looking for housing.

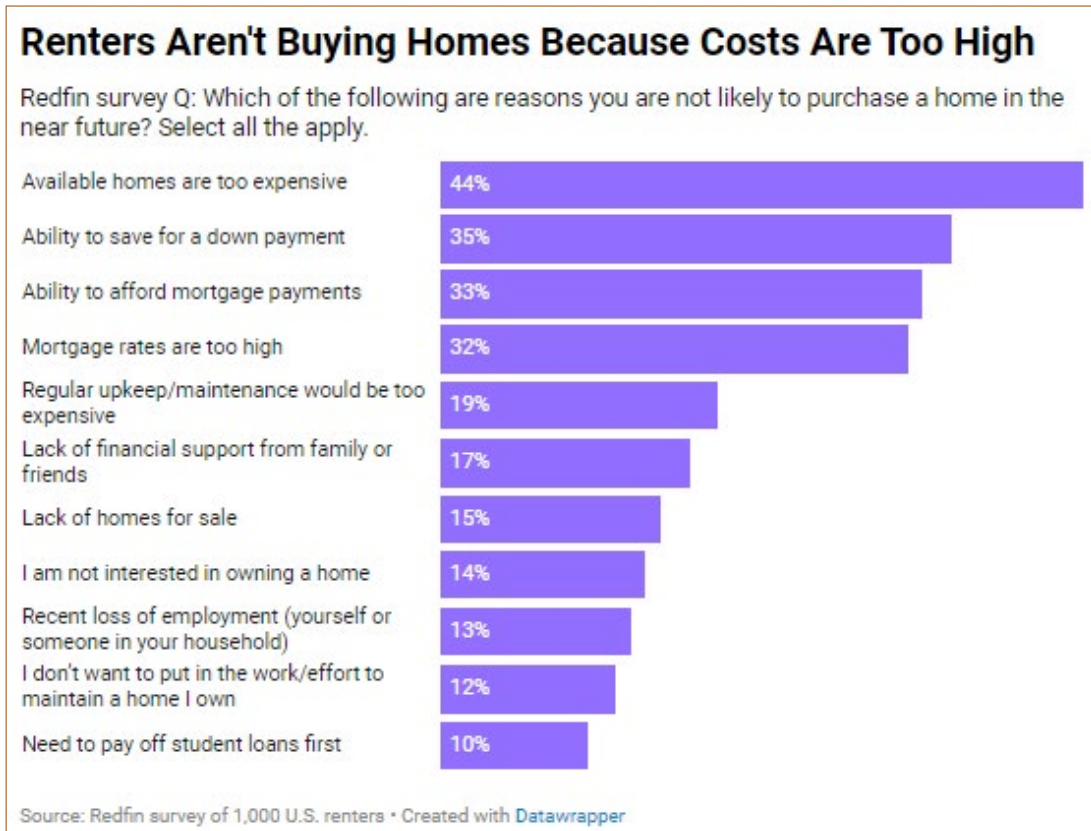
[Continue reading here](#) *(subscription may be required)*

Nearly 40% of renters think they'll never own a home (from Redfin)...

Nearly two in five (38%) U.S. renters don't believe they'll ever own a home, up from roughly one-quarter (27%) less than a year ago.

This is according to a Redfin-commissioned survey of roughly 3,000 U.S. residents conducted by Qualtrics in February 2024. This report focuses on the 1,000 respondents who indicated they are renters. The relevant questions were: "Do you believe that you will ever own your own home in the future?" and "Which of the following are reasons you aren't likely to purchase a home in the near future?" The 27% comparison is from a Redfin survey conducted in May and June 2023.

Lack of affordability is the prevailing reason renters believe they're unlikely to become homeowners. Nearly half (44%) of renters who don't believe they'll buy a home in the near future said it's because available homes are too expensive. The next most common obstacles: Ability to save for a down payment (35%), ability to afford mortgage payments (33%) and high mortgage rates (32%). Roughly one in eight (14%) simply aren't interested in owning a home.

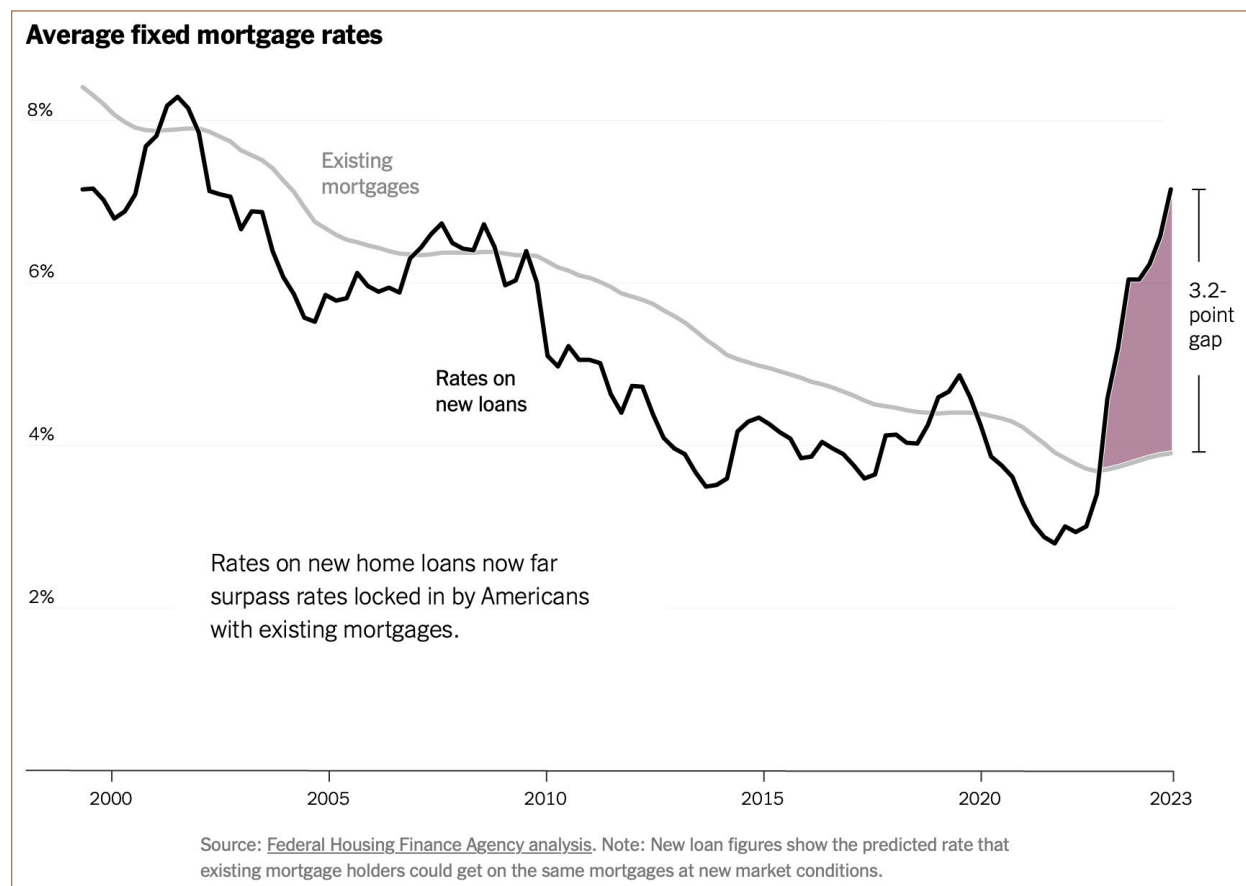


[Continue reading here](#)

A huge number of homeowners have mortgage rates too good to give up (from The New York Times)...

Something deeply unusual has happened in the American housing market over the last two years, as mortgage rates have risen to around 7 percent.

Rates that high are not, by themselves, historically remarkable. The trouble is that the average American household with a mortgage is sitting on a fixed rate that's a whopping three points lower.



The gap that has jumped open between these two lines has created a nationwide lock-in effect — paralyzing people in homes they may wish to leave — on a scale not seen in decades. For homeowners not looking to move anytime soon, the low rates they secured during the pandemic will benefit them for years to come. But for many others, those

rates have become a complication, disrupting both household decisions and the housing market as a whole.

Indeed, according to new research from economists at the Federal Housing Finance Agency, this lock-in effect is responsible for about 1.3 million fewer home sales in America during the run-up in rates from the spring of 2022 through the end of 2023. That's a startling number in a nation where around five million homes sell annually in more normal times — most of those to people who already own.

These locked-in households haven't relocated for better jobs or higher pay, and haven't been able to downsize or acquire more space. They also haven't opened up homes for first-time buyers. And that's driven up prices and gummed up the market.

Another way to state how unusual this dynamic is: Between 1998 and 2020, there was never a time when more than 40 percent of American mortgage holders had locked-in rates more than one percentage point below market conditions. By the end of 2023, as the chart below shows, about 70 percent of all mortgage holders had rates more than three percentage points below what the market would offer them if they tried to take out a new loan.

[Continue reading here](#) *(subscription may be required)*

Banks believe they are well-prepared for commercial real estate fallout ([from *The Wall Street Journal*](#))...

For another quarter, big banks saw only a smattering of losses on office loans. But lenders still remain braced for a lot more.

Seemingly every week brings fresh headlines about office towers selling at deeply discounted prices. Yet so far this reporting season, large banks that are office lenders are avoiding fresh big hits to their earnings. Partly that is because they have already set aside sizable reserves for future losses over the past few quarters. So they have taken the money out of prior earnings through credit provisions, preparing ahead of time for losses driven by vacancies or rising interest rates.

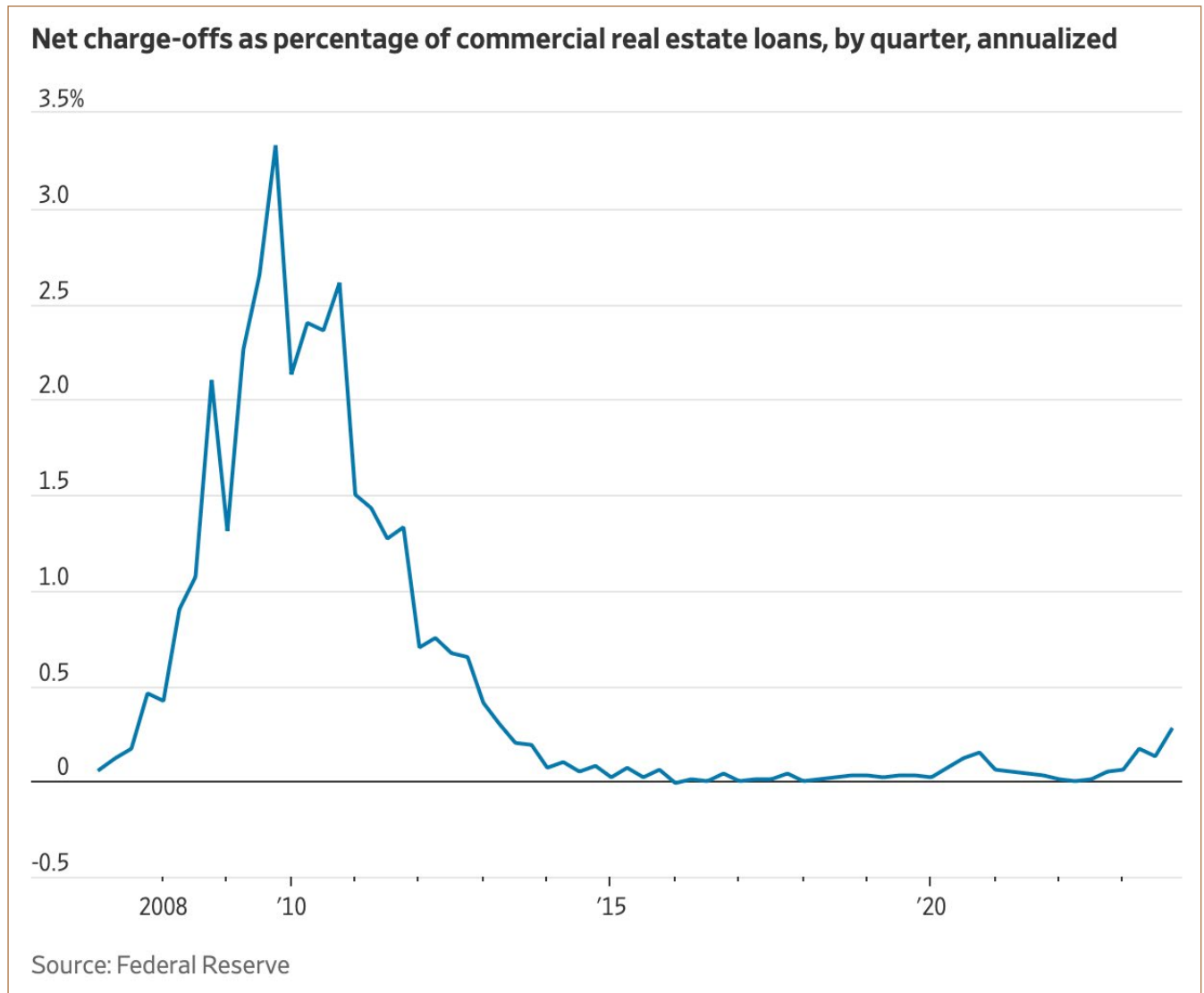
Through first-quarter reports so far, across a group of large banks reporting the figure tracked by Autonomous Research, the median was reserves of 8% for office loans. That is steady for those banks from the fourth quarter of 2023. Across all banks and all loan types, the loan-loss reserve ratio was well under 2% in the fourth quarter, according to Federal Reserve data.

A jump in actual charge-offs might allow banks to draw down those office-reserve levels, reassuring investors that the worst is behind them. For now, though, banks are mostly keeping office-loan reserve ratios elevated, even as some losses flow through.

“To use a colloquialism, the pig is going through the python, and it’s going to take a few more quarters for that to fully work its way through,” Citizens Financial Group Chief Executive Bruce Van Saun told analysts. “But we’re not seeing any surprises, which is the good thing about this.”

PNC Financial Services Group Chief Executive William Demchak told analysts he believes that values for some offices have dropped close to 30% or 40%, or even more. “We do feel that we’ve been ahead of this game, that we’re reserved correctly,” he said. “But this is going to play out over time, and your eyes aren’t lying to you when you look out and see vacancies.”

The Pittsburgh-based bank reported \$7.8 billion in office commercial real-estate loans as of the end of the first quarter, with \$50 million in net charge-offs in the quarter, down slightly from the fourth quarter. Its reserves stood at 9.7% of office loans, up from 8.7% at the end of 2023, though the portfolio was also shrinking in size.



INVESTMENT CHRONICLES

At U.S. Bancorp, commercial real estate nonperforming loans rose from 1.45% of those loans in the fourth quarter to 1.71%, which it said was primarily driven by office properties. The Minneapolis-based bank maintained its reserve coverage ratio on office loans at over 10%. “The thing to keep in mind with respect to commercial real estate office space is that we’ve aggressively reserved for that,” Vice Chair Terry Dolan told analysts. So even as nonperforming asset levels tick up, “we don’t see that as a real impact from a [profit-and-loss] standpoint,” he said.

[Continue reading here](#) *(subscription may be required)*

SPECIAL SITUATIONS

Activist Investing, Spinoffs, Arbitrage, Mergers and Acquisitions (M&A), and More

Alibaba (BABA) has been buying back a huge number of its own shares ([from Alibaba Group](#))...

During the quarter ended March 31, 2024, we repurchased a total of 524 million ordinary shares (equivalent of 65 million ADSs) for a total of US\$4.8 billion. These purchases were made in both the U.S. and Hong Kong markets under our share repurchase program. For the fiscal year ended March 31, 2024, we repurchased a total of 1,249 million ordinary shares (equivalent of 156 million ADSs) for a total of US\$12.5 billion.

As of March 31, 2024, we had 19,469 million ordinary shares (equivalent of 2,434 million ADSs) outstanding, a net decrease of 520 million ordinary shares compared to December 31, 2023, or a 2.6% net reduction in our outstanding shares after accounting for shares issued under our ESOP. For the full fiscal year ended March 31, 2024, our share repurchase program resulted in a net decrease of 1,057 million ordinary shares, or a 5.1% net reduction in our outstanding shares after accounting for shares issued under our ESOP.

Historical repurchases and net reduction in total shares outstanding are set forth in the table below:

	Fiscal year ended March 31, 2023				Fiscal year ended March 31, 2024			
	Three months ended				Three months ended			
	Jun. 30, 2022	Sep. 30, 2022	Dec. 31, 2022	Mar. 31, 2023	Jun. 30, 2023	Sep. 30, 2023	Dec. 31, 2023	Mar. 31, 2024
Repurchase amount (US\$Bn)	\$3.5	\$2.1	\$3.3	\$1.9	\$3.1	\$1.7	\$2.9	\$4.8
Shares repurchased (Mn ADSs)	39	24	45	22	36	19	37	65
Outstanding shares (Mn ADSs)	2,648	2,626	2,585	2,566	2,549	2,531	2,499	2,434
Net reduction % in total shares outstanding ¹	–	–	–	(3.9%) ²	–	–	–	(5.1%)

1. Net reduction % in total shares outstanding is calculated by comparing the outstanding number of shares at the end of the fiscal year to the outstanding number of shares at the end of the prior fiscal year.
2. As of March 31, 2022, we had 21,357 million ordinary shares (equivalent of 2,670 million ADSs) outstanding.

The remaining amount of Board authorization for our share repurchase program, which is effective through March 2027, was US\$31.9 billion as of March 31, 2024.

[Continue reading here](#)

Jefferies warns Lululemon Athletica (LULU) “could be the next Under Armour” ([from Hedge Vision via X](#))...

April 4, 2024 6:33 AM EDT

[Tweet](#) [Share](#) [E-mail](#)



LULU Hot Sheet [Get Alerts](#)

Price: \$373.00 -0.27%

Rating Summary:
32 Buy, 11 Hold, 3 Sell

Rating Trend: ↓ Down

Today's Overall Ratings:
Up: 12 | Down: 16 | New: 33

With a weakening brand strength and intensifying competition, Lululemon Athletica (NASDAQ: LULU) is facing a slowdown in growth and “could be the next UAA,” said Jefferies analysts in a note, referring to the rise and fall of sportswear maker Under Armour (NYSE: UAA).

Jefferies analysts point to several factors contributing to Under Armour's downturn, including a shift in consumer preferences from performance-oriented athletic wear to athleisure styles.

Moreover, the company faced headwinds from industry leader Adidas, which captured a significant portion of the market share, while Under Armour's expansion into footwear and fitness apps diverted attention from its foundational apparel business.

As a result, after enjoying over 25 consecutive quarters of sales growth exceeding 20%, the company saw a deceleration in revenue growth in the fourth quarter of 2016, which eventually turned negative by the third quarter of 2017.

According to Jefferies analysts, LULU is experiencing similar challenges.

“1) Data shows LULU losing incremental share to Alo/Vuori, 2) fashion in bottoms is shifting to wide-leg (not a core for LULU), and 3) entrance into Mirror and footwear are mistakes in strategic direction,” analysts led by Randal J. Konik wrote.

“The Result: LULU's total sales growth avg of >30% last 12 qtrs slowed to near 10% today,” they added.

Analysts also highlighted that Lululemon's financial metrics are at an unprecedented high, with sales per square foot exceeding \$1,600, compared to the mall average of around \$300. Gross margin percentages are near 60%, well above the 45% seen by its peers, and EBIT percentages are around 25%, doubling the industry norm of 12%.

This suggests that LULU's ballooning metrics “could hit a wall and inflect negatively.”

Jefferies's team reduced their LULU estimates for the calendar year 2025 by 25% below consensus projections, and reduced the target price from \$300 to \$240, implying a downside risk of 36%.

By [Vahid Karaahmetovic](#)

Here's a list of event-driven trade ideas that are potentially actionable today ([from ToffCap](#))...

SPIN-OFFS (and related)

- **3M (MMM US)**. Will spin its health care business into an independent public company ('Solventum'). Spin effective April 2.
UPDATE (April 8, 2024) 3M completed the separation of its health care business Solventum (SOLV). Shares -17% since (April 5). Classic pre-coverage period.
- **General Electric (GE US)**. GE is set to spin its energy business ('Vernova') on April 2. Will trade under 'GEV'. UPDATE (March 15, 2024) GE dove deep into the medium-term expectations of the upcoming spin-offs during the recent investor day.
UPDATE (April 8, 2024) GE completed the spin-off of GE Vernova (GEV). Shares -4% since listing (April 5). Classic pre-coverage period.
- **Cryo-Cell (CCEL US)**. Cryo-Cell announced plans to spin off its newly formed subsidiary Celle Corp to maximize shareholder value, exploring strategic alternatives post spin-off such as equity/debt financings, sale, or merger.

STRATEGIC ALTERNATIVES (potential take-outs, asset sales, M&A, etc.)

- **Bragg Gaming (BRAG Canada)**. Peer GAN to be taken out at >100% premium. Bragg is higher quality and profitable, trading at large discount to implied (similar) deal valuation.
UPDATE (April 8, 2024) Reviewing strategic alternatives, which may include the sale of the company or of its assets, a merger, financing, further acquisitions, or other strategic alternatives. No timetable to complete the strategic review process has been established.
- **Allovir (ALVR US)**. Classic example of a loser biotech. Share price <\$1 means Nasdaq delisting is very likely (hence more forced selling). ALVR has \$165m net cash on the b/s and recently significantly reduced opex (95% reduction of workforce) and the discontinuation of clinical development. Now the co is 'assessing strategic alternatives'. Next steps are potential reverse stock split to regain compliance, liquidation or take-over.
- **Aclaris (ACRS US)**. Aclaris is another one (i.c. net-cash busted biotech, -45% workforce reduction, 'evaluating strategic alternatives'). Guesstimating (mainly assumptions for cash

burn going forward and value NOLs), we can see a bear-bull case of \$1-3 per share here, or -20% to +140%. We highlight the [write up](#) from our friend Amadeus Value.

- **Reneo (RPHM US)**. The third on this week's list of net-cash, busted biotechs, reviewing strategic alternatives.
- **EML Payments (EML Australia)**. Interesting SOTP investment thesis from @puppyeh1. EML appears to have relatively inefficient assets that could be sold off, or the company as a whole. STOP value / share could be >\$1.70 vs \$1.09 current share price (October 30). Strong indications of near-term catalysts. Refer to @puppyeh1 thread (Oct. 26) for a more detailed explanation. UPDATE (Jan 21, 2024) Announced a full exit from PCSIL. Strategic review ongoing. Other assets could be next (Sentenial, perhaps clean pieces too). UPDATE (April 15, 2024) EML to sell Sentenial for \$54m. **UPDATE (April 8, 2024) Stock pressured on Board changes as Connor Haley (Alta Fox Capital) leaving (hence fear AFC - 8% owner - might sell).**
- **Ocean Wilson (OCN UK)**. Investment holdco trading at a significant discount to NAV. Announced strategic review of Wilson Sons (\$PORT3) which might unlock value. Strong upside in case of liquidation. **UPDATE (April 8, 2024) Strategic review ongoing but company expects it to be completed in 2024.**
- **Marlowe (MRL UK)**. Shares down strongly on recent results. Strategic review ongoing; company is considering sale or spin-off of TIC. Currently trading at ~6.3x FY23e ebitda, roughly 40% below peers. **UPDATE (April 8, 2024) To sell GRC software and service assets. After the deal, Marlowe will have a net cash position ~GBP200m (current market cap of c. GBP500m). The company will return at least GBP150m through share buybacks and/or dividends. There remains significant upside potential in our opinion.**
- **Summit Midstream Partners (SMLP US)**. Ongoing strategic process. Sale looks most likely outcome. Announcement could be imminent as update on strategic review will be provided on March 15. UPDATE (March 1, 2024) Strategic review entered 'critical phase with high interest'. **UPDATE (April 8, 2024) Divesting Utica assets to MPLX for \$625m. Stock +40% on the news.**

NOTICEABLE LARGE BUYBACKS

- Roivant Sciences (ROIV US)**. On the brink of sealing a \$7.25bn deal with Roche for their Telavant project. Once deal closed, cash (~\$7bn) + 57% stake in Immunovant \$IMVT results in roughly \$12 per share - vs. current share price of \$11; hence free optionality for everything else that Roivant is developing.

UPDATE (April 8, 2024) Approved a \$1.5B stock repurchase, c. 16% of the current market cap (April 8), with the first \$648m for the buy out Sumitomo Pharma.
- TD SYNTEX (SNX US)**. Announced a \$2bn buyback, roughly 19% of the market cap (05/04).
- National CineMedia (NCMI US)**. Good ol' NCMI popped back on our screens (remember the bankruptcy exit play), this time due to a \$100m buyback, roughly 19% of the market cap (05/04).
- RCM Technologies (RCMT US)**. Announced a \$50m buyback, but also a \$100m shelf. RCM appears to have a solid b/s and is trading at <7x FY24e ev/ebitda, for what seems decent growth.
- Fiverr International (FVRR US)**. To buy back \$100m in shares, c. 13% of market cap (05/04). We don't know this company, but at first sight we notice the strong net cash b/s, ebitda inflection into positive territory and <7x ev/ebitda on FY24e for >30% estimated ebitda growth.

INTERESTING INSIDER PURCHASES

- Journey Medical (DERM US)**. Insider buying at this micro-cap. Journey has a net cash b/s and earnings seem on the verge to inflect positively. According to Bloomberg, DERM is trading at ~2x FY25e ev/ebitda.
- OmniAB (OABI US)**. VERY strong recent purchases by insiders. Might be interesting to keep an eye on.
- Herbalife (HLF US)**. The lower the price goes, the more insiders seem to be buying. A lot going on here.
- Journey Energy (JOY Canada)**. Insiders acquired some shares. Very neat, clean company with strong torque to rising commodity prices.

MISCELLANEOUS (liquidations, merger arb., out-of-bankruptcy, uplistings, etc.)

- **Seritage Growth Properties (SRG US)**. Liquidation. At a strong pace. Could see \$10-17 per share distribution on \$9.64 share price (April 5), or 'potential strategic transactions'.
- **Bpost (BPOST Belgium)**. To acquire 3rd party logistics provider Staci. Transformational acquisition.
- **Sapiens International (SPNS US)**. Exploring a sale according to Bloomberg. Engaged investment bank to gauge interest.
- **Rent the Runway (RENT US)**. If you like dumpster diving, RENT received a notice from Nasdaq stating that the company is not in compliance with the minimum Market Value of Listed Securities required for continued listing. The company has a period to regain compliance with the MVLS Requirement, and a reverse stock split at a ratio of 1-for-20 was approved. Stock massively pressured by restructuring (and leverage), but could reach ebitda break-even soon.
- **Edible Garden (EDBL US)**. Nano-cap Edible Garden intends to effect a reverse stock split of its common stock at a ratio of 1-for-20 shares, effective on April 5, 2024. Despite the horrible share price performance, revenues have actually been growing steadily. Might provide a bump as compliance is regained.
- **Ashford (AINC US)**. Ashford approved a 1-for-10,000 reverse stock split, followed by a 10,000-for-1 forward stock split. Stockholders with <10,000 shares would receive \$5.00 per share in cash. Directors and officers owning 37.9% of shares are expected to vote in favor of the transaction. Stock trading at \$4.66 (April 5).
- **Landos Biopharma (LABP US)**. Landos Biopharma to be acquired by AbbVie for \$20.42 per share in cash + a CVR valued up to \$11.14 per share. Current LABP share price \$21.50 (05/04).
- **Rubicon Technologies (RBT US)**. In another dumpster dive exercise, Rubicon Technologies received a notice from the NYSE stating non-compliance with listing standards regarding market capitalization and stock price (<\$1.00). The company has time to submit a plan to regain compliance, generally done by stock splits. Shares

are generally pressured on these circumstances. RBT has c. \$300m in debt and prefs and a market cap of \$22m, on \$700m revenues. Might be interesting to keep an eye on.

- **Liquida Technologies (LQDA US)**. Patent litigation. Could stand to gain a lot if resolved and product brought onto market. See old VIC write-up. UPDATE (Jan 7, 2024) Recently won litigation against United Therapeutics (UTHR US). Secured additional funding. LQDA could be a multi-bagger if product successfully brought onto market.
UPDATE (April 8, 2024) FDA to probably approval for PAH and ILD indications. LQDA can start to sell immediately, which is a major catalyst for growth.
- **Nu Ride (NRDE US)**. Nu Ride is the post-reorg reincarnation of Lordstown. A net-cash, negative EV, busted SPAC with \$1bn in NOLs. Litigation against Foxconn. Messy but interesting.
- **Amplify Energy (AMPY US)**. Oil & Gas company trading at ~4x ev/ebitda on FY24e. Two major catalysts over the next six months: the results of Beta wells and the conclusion of the Bairoil sale. Cash flows to expect to significantly grow after FY25. Plus obvious commodity exposure.
- **Sun Corp. (6736 Japan)**. This Japanese company is the main shareholder in Cellebrite (CLBT) and trades at over 60% discount to the value of its stake and cash. Co. is looking into ways to monetize its stake/discount with the help of activist investors. H/t @SpecSitsCapMgmt for the idea.
UPDATE (April 8, 2024) We note the recent write-up of Clark Square Capital on Sun Corp. CSC is a highly recommended platform.
- **Bally's (BALY US)**. Merger arb. Takeover bid from Standard General at \$15 p/s. Set up a special committee to evaluate the offer. Roughly 13% spread (15/03).
UPDATE (April 8, 2024) Bally's announced the retention of advisors in connection with the offer (and potential strategic alternatives to the offer).
- **Itafos (IFOS Canada)**. Phosphate fertilizer company, trading at <2x ev/ebitda on 2024e. Strongly reduced debt. Strategic review ongoing (since roughly a year). Just seems too cheap.
- **Clasquin (ALCLA France)**. MSC to launch tender offer for Clasquin's (remaining) shares. Chairman Yves Revol already sold his stake for €142 per share. Current share price €137 (April 5). Looks like a nice trade for a short period. H/t @Govro12 and @InvestSpecial for the idea.
- **Smith Micro Software (SMSI US)**. Smith Micro Software approved a reverse stock split of one-for-eight, effective on April 10, 2024. Trading under the new CUSIP number will

commence on April 11. Might be interesting as a share price that moves <\$1 often means forced selling. A reverse stock split might (partially) reverse that action.

- **Surf Air Mobility (SRFM US).** Micro-cap Surf Air will hold its first investor day ever on June 7. Might be interesting as the stock is massively pressured (as due to potential delisting as the share price is <\$1). No idea what's real here, but Canaccord is plugging a \$200m revenue estimate for FY25.
- **Hanesbrands (HBI US).** Considering selling its Champion brands and strong rumors that it has received multiple bids. As a reminder, HBI is currently exploring strategic options. **UPDATE (April 8, 2024) To sell its Champion brand to Authentic Brands for ~\$1bn.**
- **Ascential (ASCL UK).** Ascential to sell two divisions after a strategic review. Remainco valued at ~5x ev/ebitda; peers trading at >10x. H/t @ClarkSquareCap for idea and write-up. **UPDATE (April 8, 2024) Ascential revealed a plan to return GBP 850m to shareholders in a combo of tender offer, special dividend and share buyback.**
- **Vishay Intertechnology (VSH US).** Announced a \$1bn buyback, roughly 20% of shares outstanding (16/02). VHS has a net cash b/s and is trading at roughly 7x 2024e ev/ebitda. **UPDATE (Mar 1, 2024)** Will be holding its first capital markets day on April 2. Could be interesting given relatively low valuation and what seems trough earnings. Might be bullish. **UPDATE (April 8, 2024) Hosted the first ever analyst day. VHS is looking for >\$5 EPS and \$700m FCF by FY28.**
- **Lifecore Biomedical (LFCR US).** Strategic alternatives. Potential buy-out. Demand for similar CDMO assets is high. Large shareholders pushing for sale. Potentially 75-100% upside. **UPDATE (Jan 7, 2024)** LFCR expanded and extended its CDMO activities with main partner Alcon. Reiterated to continue to actively evaluate strategic alternatives; still working on refiling. Trigger could be imminent. **UPDATE (April 8, 2024) Stock is depressed after the 'failure' of the sale. Might earn \$80m ebitda with the expansion by FY27. At 10x (pretty low) and \$200m debt (rough figs) that's 3x in a few years...**
- **Nuvation (NUVB US).** Busted biotech SPAC with >\$600m net cash on balance sheet, trading at negative EV. Currently pursuing last trials. If success, stock is cheap; if

failure, NUVB becomes a cash-distribution play. To play out over next ~12 months. UPDATE. Big insider buying recently, while share price under pressure.

UPDATE (April 8, 2024) To acquire AnHeart Therapeutics. Massive stock price reaction. No clue on the impact, but sell side strongly increased TPs.

- **Paramount Global (PARA US).** We highlight the write-up from David Katunarić on Paramount. David makes an interesting case on the potential take-out (value) of the company. Byron Allen recently offered to take PARA private for \$14bn; could accelerate interested parties to make a bid.

UPDATE (April 8, 2024) In exclusive talks with Skydance according to the WSJ.

3G Capital quietly exited its Kraft Heinz (KHC) investment last year ([from CNBC](#))...

Brazilian private equity firm 3G Capital quietly sold off its 16.1% stake in Kraft Heinz in the fourth quarter, nearly nine years after masterminding the blockbuster merger of Kraft Foods and Heinz with Warren Buffett.

The sale marks the end of an era for 3G. The firm's influence over Kraft Heinz had been dwindling in recent years as its number of board seats slipped from three to none by July 2022.

"3G has not been involved in the management of Kraft Heinz, nor have they been on the Board for several years. They had continued to be an investor and were treated as we do any investor," Kraft Heinz said in a statement to CNBC. "We did learn from their recent filing that 3G exited the Kraft Heinz stock entirely in 2023."

The company added that Buffett's Berkshire Hathaway, its largest shareholder with a 26.8% stake, is a committed long-term owner.

[Continue reading here](#)

Here's a \$10 million market cap company earning \$75 million of EBITDA, with an “upcoming catalyst that could unlock value in the business... or kill it” ([from Dirtcheapstocks Substack](#))...

KLDiscovery (Ticker: KLDI)

Let's say you have a business with a \$10MM market cap. How much EBITDA would you need that business to generate for it to be considered cheap? \$3 million? What about \$5 million? \$5MM would be 2x P/EBITDA. What about \$10MM? We're approaching an absurd value at \$10MM of EBITDA.

At \$0.24/share, KLDI has a ~\$10MM market cap. Last year the business generated \$75MM of adjusted EBITDA.

KLDI trades at a P/EBITDA of 0.13x.

Additionally, EBITDA isn't impacted by a one-time accounting quirk. It's legit. 2022 adjusted EBITDA was \$57MM.

KLDI provides eDiscovery, information governance and data recovery solutions to corporations, law firms, insurance companies and individuals. The company basically provides a software product that helps with data management as part of the legal process. This is a fundamentally good business.

KLDI boasts 96% of the AM Law 100 as clients. The AM Law 100 represents the 100 highest grossing law firms in the United States. KLDI also has 50% of the Fortune 500 as clients. This is a good business. So, what's wrong with the stock? Debt.

Debt and Capital Structure

KLDI has \$553MM of debt. All of this debt is categorized as a current liability. Here's the story.

KLDI was taken public via SPAC in 2019, at \$10/share. The business raised \$230MM in the IPO. That equity is now valued at ~\$10MM based on a stock price of \$0.24/share. **The Carlyle Group owns 46% of the equity today.** For those who don't know, Carlyle is a massive asset manager. They have \$380 billion of AUM. This is important to remember.

Anyway, there are \$261MM of convertible debentures owned by the CEO/founder of KLDI. These debentures mature in December 2024. In addition to the debentures, there is traditional

bank debt equaling \$292MM. The bank debt is senior and matures six months prior to the convertible debentures— so June 2024.

Debentures convert at \$18/share. So there's no direct dilution risk to common shareholders based on the current terms of the debentures.

The issue is KLDI doesn't have enough cash to pay off the debt, and refinancing could get sticky. So, what will happen? Well, it's tough to say with any level of certainty how the next few months will go, but let's bring forth a few different scenarios.

- 1. *Extend and Pretend:*** The bank tells the debenture holder to extend his maturity another year or so into the future. If the debenture holders extend maturity, then the bank can extend its maturity too. The business is saved from a bankruptcy filing for at least another several months. Maybe the equity reacts favorably in this scenario as the business is saved from imminent danger.
- 2. *Chapter 11 Bankruptcy Filing:*** This is a good business. It has a reason to exist. Unit economics are favorable, and the operation earns 10's of millions of operating income each year. It just can't service its debt burden in the current form. A Chapter 11 filing would allow for the debt to be restructured. The debt could be settled at a discount, or more likely, converted to equity. If the debt converts to equity, then we'll have a debt free business moving forward. The only issue would be, at what valuation is the debt converted? If parties agree that the enterprise value of this business is \$200MM, then the present equity holders are screwed. The debt holders would dilute us such that our investment would be worth less than its current \$10MM valuation. We'd get pushed so far down the capital stack that our shares would be worth a lot less. But what is the enterprise value of a strong business earning \$75MM of adjusted EBITDA? I don't think \$200MM would be the right number. Maybe \$750MM is more appropriate. If debt converts to equity, we still get diluted to hell, but at a slightly better valuation. For the sake of simplicity, let's just assume \$550MM of debt converts to equity, at face value. Present equity holders have a valuation of \$10MM. So the debt conversion would mean 98.2% (550MM divided by 560MM) of the post-BK equity would be represented by the former debt holders. We, as minority shareholders, would represent 1.8% of the equity value. Post-BK, the equity value would be equal to enterprise value, since all the debt was removed/converted. 1.8% ownership of a \$750MM entity (10x valuation on \$75MM of EBITDA) would result in a

\$13.5MM valuation, or 35% upside from today's prices. Of course it isn't this simple. A lot of stuff can happen in bankruptcy. New tranches of securities can show up, minority holders can get wiped, and on and on. If I can think of a couple potential ways to lose, that probably means there are another dozen that I'm not considering. But it's important to remember the largest shareholders today are smart, sophisticated investors. Carlyle owns 46% of the common stock. That means common shareholders are going into battle on the same team as Carlyle. I like Carlyle fighting my battles against operators and stodgy old bankers. Carlyle would care very deeply about what happens in Chapter 11. If they're fighting on our behalf, our odds of retaining more than \$10MM of post-BK equity value are a lot better.

- 3. Restructure Debentures:** Another potential solution would be for the debentures to be removed from the equation. Or at least restructured. In the latest 10-K management states the following as it relates to its indebtedness: "We are reviewing potential alternatives, including renegotiating the terms of the Debentures and/or the Amended 2021 Credit Agreement and identifying alternative sources of cash or additional financing." Maybe debenture holders convert to equity at a more favorable price than is currently reflected in the stock. The current bank debt requires a 7:1 net leverage ratio. At \$75MM of EBITDA, the bank could nearly take out the entire debentures owed and still be inside its leverage covenant. Of course, that brings up another question – how important is your founder and do you want him out of the capital stack? I don't know. It's difficult. Maybe we get some combination of all the above.

How to Think About KLDI

Normally when I see something like KLDI, I throw it in the too hard pile. There are a bunch of different outcomes that I can think of, good and bad, which means there are probably another dozen outcomes I haven't considered.

But at its core, KLDI is a good business. It generates hundreds of millions of dollars of revenue and earns 10's of millions of operating profit. It has a reason to exist. I feel certain that at some point in the future, equity holders will experience a valuation far greater than \$10MM. The question is, will it be today's equity holders? That's a lot harder to be certain about.

I like that I have a very sophisticated financial partner on my side of the deal in Carlyle. We own the same security, and so hopefully our interests are aligned. The stock is down 98% from its IPO. The stock is down 90% over the last year. It has only recently become interesting because of the massive price reduction.

In a way, you could say the stock is almost certainly mispriced. It's either worth zero, or it's worth significantly more. Shareholders can only lose 1x their money. The upside on something like this can be huge. If the business remains in its current form, and the market decides it should be valued at 10x EV/EBITDA, the equity has 20x upside. These kinds of enterprise SaaS businesses can trade for far higher than 10x EV/EBITDA. I'm not sure how likely that is. I'm certainly not willing to risk a lot of capital on the deal.

When I think of how I get screwed in something like this, I can't articulate a good reason. If all debt converts to equity, it would likely be at a reasonable valuation. Any sort of reasonable valuation, even coupled with massive dilution, should result in a slight profit for shareholders.

But I know enough to know that I don't know enough.

The world is a big complex place. This is not a drop-dead obvious investment. I'll certainly keep an eye on the stock for the next several months to see how things shake out. Maybe the best outcome would be a Chapter 11 filing. The stock would likely remain depressed and emerge with a cleaner balance sheet at a low valuation. At that point it could warrant a larger position. For now, I'm comfortable risking 1% of my investable capital on the deal.

[Continue reading here](#) *(subscription required)*

Bank of New York Mellon just announced a massive new share-buyback plan (from InsideArbitrage via X)...

\$BK The Bank of New York Mellon Reports Q1 Earnings

- Earnings & revenue beat estimates; posted the highest quarterly revenue total in its 240-year history, lifting profits by 5%!
- Authorized a new \$6 billion share repurchase plan; represents around 15% of its market cap at announcement!

1Q24 Financial Highlights	
Revenue Growth:	+3%
Expense Growth:	+2%
Pre-tax Margin:	29%
Tier 1 Leverage:	5.9%
ROTCE ^(a) :	20.7%
EPS Growth:	+11%

- **Revenue Growth:** Revenue of \$4.5bn up 3% YoY
 - Investment services fees up 8% YoY
 - Investment management and performance fees flat YoY
 - Foreign exchange revenue down 14% YoY
 - Net interest income down 8% YoY
- **Expense Discipline:** Expense of \$3.2bn up 2% YoY; up 1%^(b) excluding notable items
- **Balance Sheet Strength:**
 - Average total deposits of \$279bn up 2% YoY and QoQ
 - Tier 1 leverage ratio of 5.9% and CET1 ratio of 10.8%
 - LCR of 117% and NSFR of 136%
- **Profitability:**
 - ROE of 10.7% and ROTCE^(a) of 20.7%
- **Capital Returns:** Returned \$1.3bn to common shareholders, including \$324mm of dividends and \$988mm of share repurchases
 - Board of Directors authorized new \$6bn share repurchase program
 - 138% total payout ratio year-to-date

INVESTMENT CHRONICLES

A super-bearish thesis for EV-maker Lion Electric (LEV) ([from SunshineResearch via X](#))...

I think Lion Electric (\$LEV) could be forced to execute a highly dilutive capital raise or file for bankruptcy in the next 3-6 months. It may be as soon as 2-3 weeks.

I believe they exhausted their cash in mid March and are now fully funding their cashburn via their revolver.

Despite claiming on Q4 call they have adequate liquidity, LEV announced today a workforce reduction in an effort to reduce burn. This is too little too late.

LEV management continues to blame revenue headwinds on governments and their slow processing of subsidy payments. But LEV's issues are LEV's fault.

They have a history of product quality issues, with as many as 5 recalls since early 2022. The State of Maine [has urged school districts to remove LEV's buses from the road due to so many quality issues](#).



miles.

Josh Wheeler, the transportation director for Winthrop Public Schools, said one bus

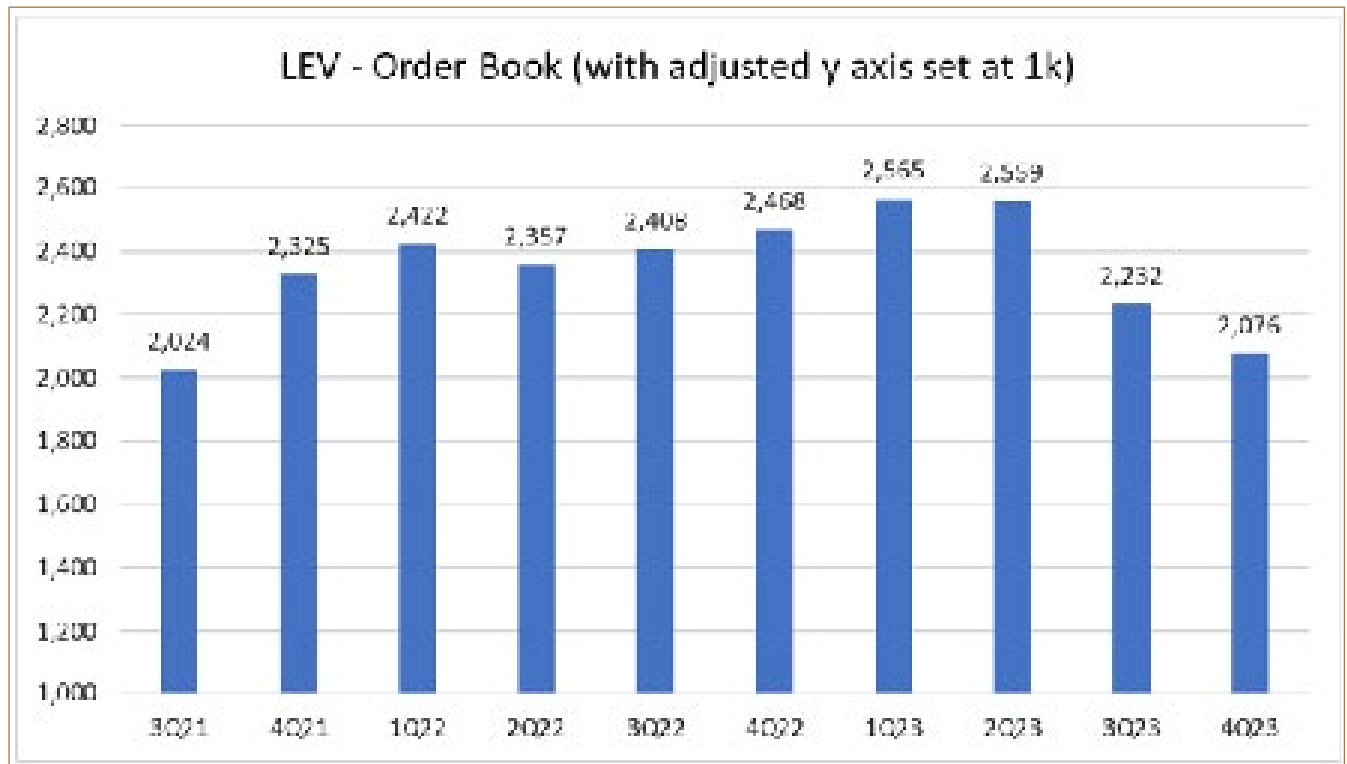
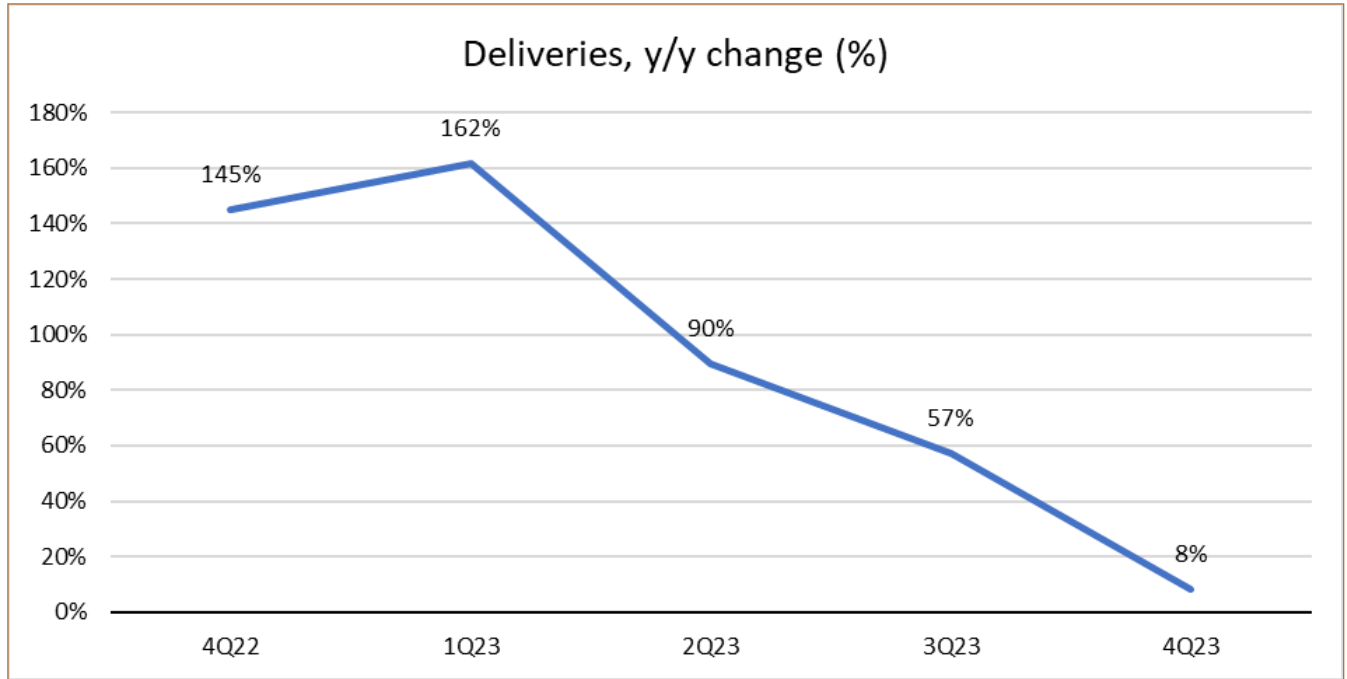
experienced a power steering failure when he

drove it a couple of weeks ago with no children on board. Wheeler had to steer into a snowbank to avoid crashing into traffic, he told the Winthrop School Board at its Feb. 7 meeting.

"I called Jim from the snowbank and was like: 'This is it. We are done,'" Wheeler said, referring to Superintendent James Hodgkin.

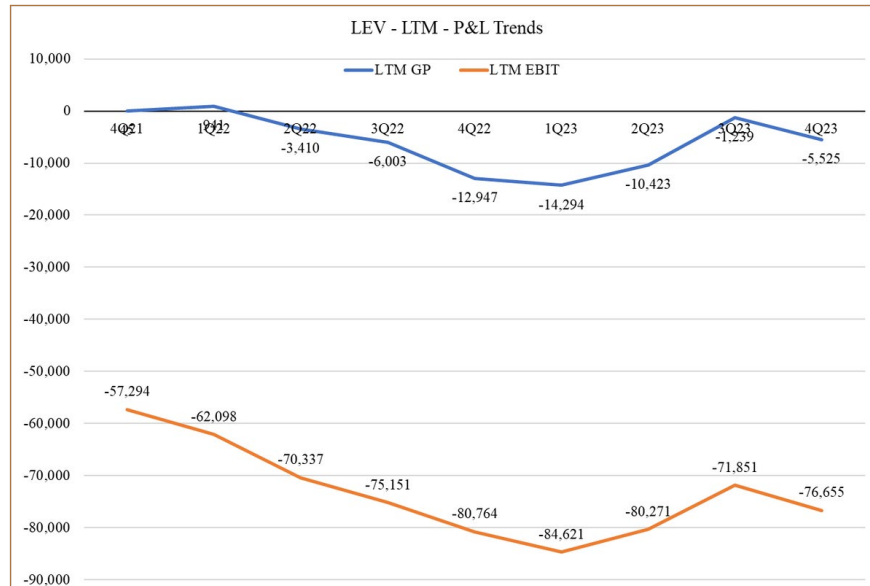
In one case, a transportation director was forced to crash the bus into a snowbank after a power steering failure. Luckily it was during a test and no children faced any danger.

I believe there quality issues are now impacting demand, with 3 straight qtrs of backlog declines and a deceleration in deliveries from >100% to only 8% in the most recent qtr

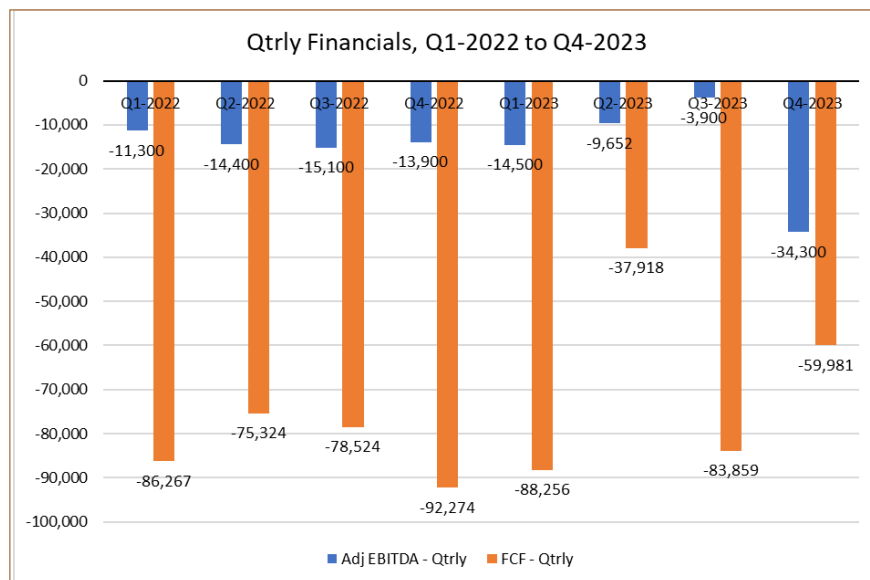


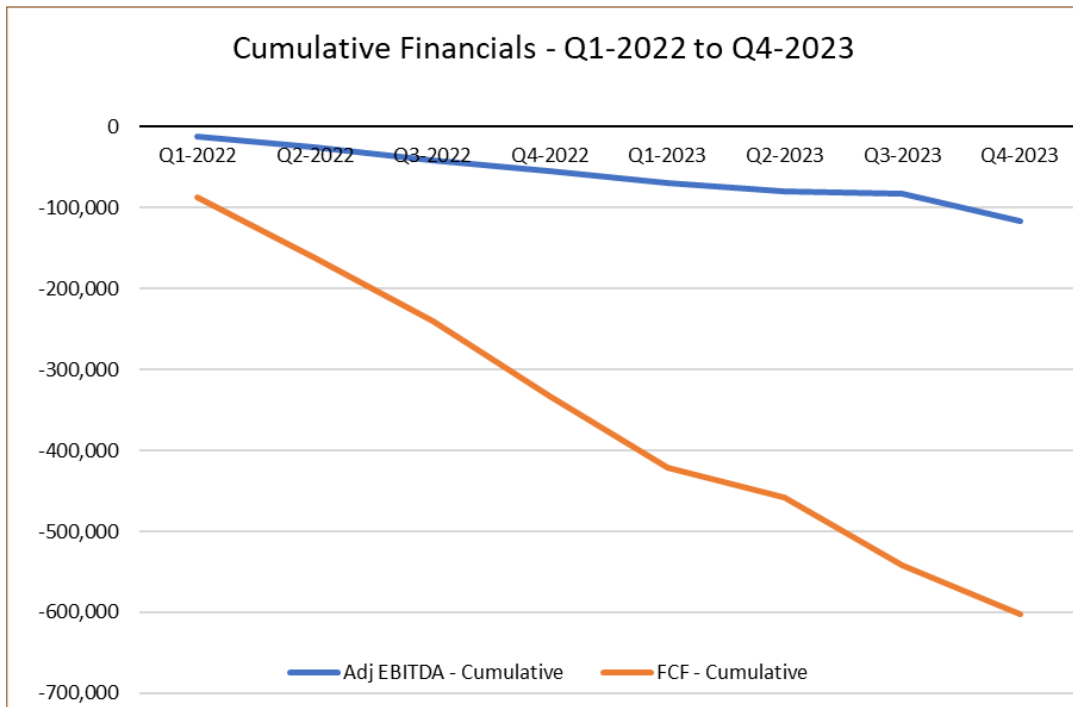
INVESTMENT CHRONICLES

Demand headwinds will only make LEV's challenged P&L worse Over the LTM period, LEV produced negative gross profits and operating margins of -30%

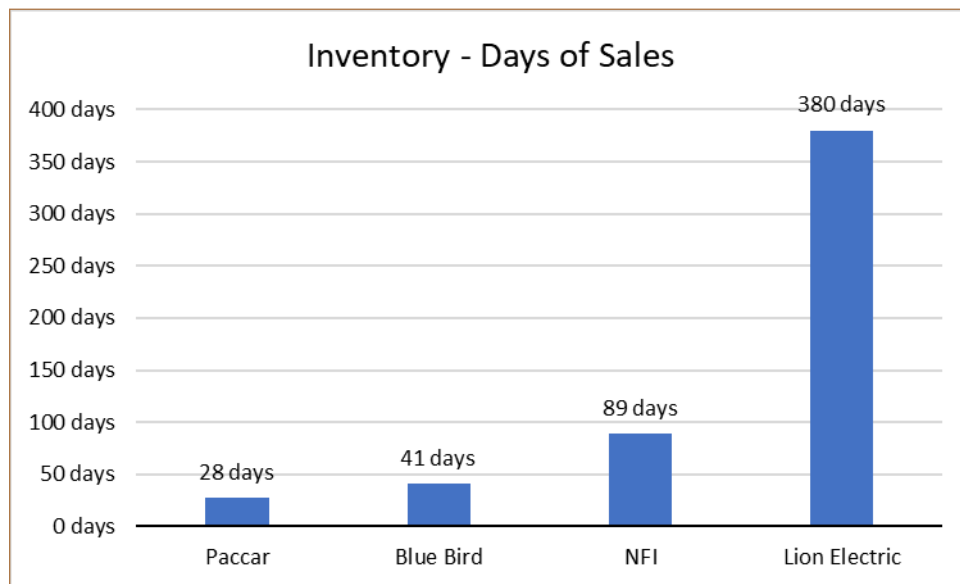


But LEV's cashburn tells an even more negative picture. Due to significant capex, intangible capitalization, and suspicious net working capital dynamics, LEV's cashburn is worse than reported losses by \$500m over the last 2 years.





One notable headwind for cash flow has been inventory. LEV has built inventory up to an amazing 380 days of revenue! This is a likely indicator of severe inefficiencies in production and/or a dramatically different demand picture than LEV expected.



Even assuming an improvement in cashburn, I estimate LEV will exhaust its cash and revolver capacity by July/August 2024. They should file before completely running out of liquidity, but they probably won't

I believe LEV will try to raise capital, but they will likely fail. There is \$270 million in high cost debt on the b/s today, with many of the potential valuable assets (battery factory, tax credits, etc) already pledged as collateral Bankruptcy seems imminent

Capital Structure	Maturity	Principal (\$mm),		
		Q4-2023	Rate	Interest (\$mm)
Revolver	11-Aug-25	70	7.0%	4.9
Secured Loan on Battery Facility	Amort, Jun-2027	24	4.4%	1.0
Unsecured Loan on Battery Facility	Amort, Apr-2026	15	4.0%	0.6
Tax Credit Loan	6-Nov-24	23	11.0%	2.5
Rolling Stock Loan	Aug-24	0	2.4%	0.0
Reverse Factoring Facility	120 days	4	SOFR+1.5%	0.3
Non-convert 2023 debt financing	19-Jul-28	69	11.0%	7.5
Convert - 2023 debt financing	19-Jul-28	74	13.0%	9.6
Gross Debt		279	9.5%	26.5

Notable executive departures disclosed this month ([from The Bear Cave](#))...

1. CEO of **Jabil Inc** (NYSE: JBL — \$14.3 billion) “was placed on a paid leave pending completion of an investigation related to corporate policies” after just one year on the job. In October, Jabil’s Chief Human Resources Officer departed and later joined a much smaller company according to her [LinkedIn](#).
2. CFO of **Vir Biotechnology** (NASDAQ: VIR — \$1.07 billion) resigned after a little over one year “to pursue another career opportunity.” The company’s Chief Medical Officer also resigned in February “to spend more time with his family” and last year the company’s CEO and Chief Operating Officer both departed.
3. CFO of **Graphjet Technology** (NASDAQ: GTI — \$1.06 billion) resigned “due to health reasons effective immediately” after a little over two years. The Malaysian company is down ~35% since its SPAC merger last month.
4. CEO of **Diamondrock Hospitality** (NYSE: DRH — \$1.86 billion) “departed” immediately after nearly 15 years running the company he co-founded. This week the REIT Chief Investment officer also “departed” immediately after ten years and in March the General Counsel retired after nearly fifteen years.
5. President of Research and Development at **Sana Biotechnology** (NASDAQ: SANA — \$1.67 billion) “resigned voluntarily for personal reasons” after one year. Last year, the company’s Chief Medical Officer “entered into a transition agreement and release agreement” and the company is down ~80% since its February 2021 IPO.
6. Sharon Rothstein, board member of **Block** (NYSE: SQ — \$43.4 billion), said she “would not stand for re-election” after two and a half years. The company disclosed that “Ms. Rothstein's decision to not stand for re-election was a result of wanting to devote more time to other professional and personal activities.” Ms. Rothstein continues to serve on the board of Yelp.

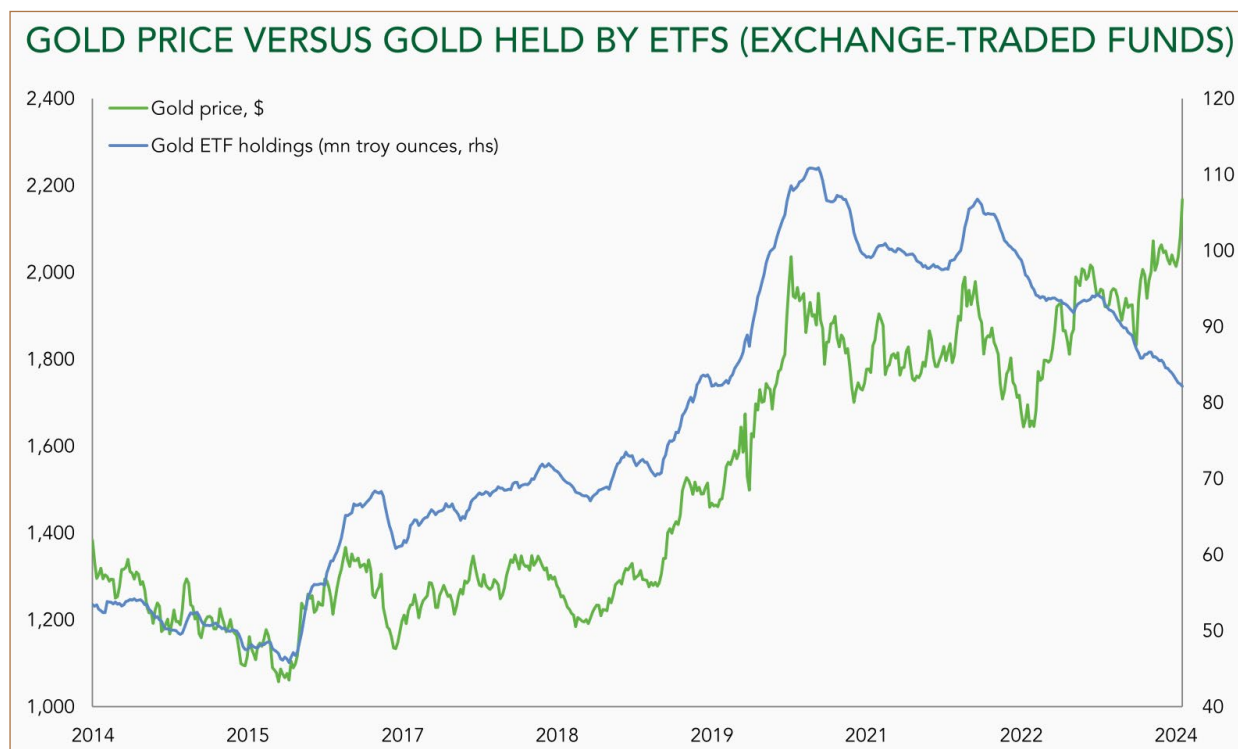
Two weeks ago, The Bear Cave published on problems at Marqeta (MQ), a large Block partner, and noted that the combined companies have seen a large number of executive and board departures. In February, Larry Summers, former United States Secretary of the Treasury, “informed Block that he is resigning as a member of the board of directors of the company, effective immediately, in order to devote more time to his other professional and personal commitments.” Mr. Summers also continues to serve on the boards of two other public companies.

Data for this section is provided by VerityData from [VerityPlatform.com](#).

[Continue reading here](#)

PRECIOUS METALS

What's behind the bull market in gold bullion? ([from Ruffer's The Green Line](#))...



In the first week of March, amidst much fanfare, the Nikkei, the Nasdaq and bitcoin (digital gold to its devotees) all soared to new highs.

But the bull market fewer people are talking about is the one in actual gold. It has also reached a new high in dollars of \$2,150 per ounce and is trading at all-time highs in every other currency. So what's behind the ascent? Perhaps it's not so much that these assets are going up, but that fiat money is going down.

In recent weeks, we have increased our exposure to silver and gold equities, amounting to around 7% of the portfolio.

If you wanted one asset to express Ruffer's long-term view – concerns about financial stability, inflation volatility and financial repression – gold might well be it. And, despite the new nominal highs, gold is still around 50% below its inflation-adjusted price peak in 1980.

Remarkably, gold has achieved its new high despite huge outflows from exchange-traded funds (ETFs) of around 30 million ounces or \$60 billion, as this month's chart shows. That tells you this gold bull market isn't being powered by retail investors, wealth managers or advisors. A recent Bank of America survey found that 75% of advisors had less than 1% of their portfolios in gold and less than 10% were considering increasing their positions, the lowest interest since 2017. Instead, these types of investors have preferred the allure of the new bitcoin ETFs. At roughly \$60 billion, these funds have grown (in the space of a couple of months) to about half the size of the gold ETFs, which have been around for 20 years.

So who has been buying gold?

Precious metals have three types of buyers: central banks and emerging market savers; investors; and jewellers. Forget jewellers, the first two move the price. Since the full-scale invasion of Ukraine, central banks and emerging market savers have been mega buyers of bullion, but they don't buy ETFs or stocks. Meanwhile, as interest rates rose, gold came to look expensive relative to the dollar, real yields or cash rates, so investors have not been buying, leading to outflows from ETFs and miners.

But perhaps that's the wrong thing to focus on. Are we in fact in a new era of price insensitive, strategic buyers taking ounces out of the market which will never return? Foreign central banks are not trading gold for a 10% move, they are fundamentally underpinning their currency and diversifying away from US Treasuries. The western banking system could be a dangerous place for anyone who might one day be deemed a bad actor by capricious authorities – much safer to have bullion where you can access it.

This is a bull market nobody cares about... yet. In particular, gold equities have become an investment backwater, down 5% year to date and 53% from their highs of 2011 or 35% below the highs of 2021. They are shunned due to a history of poor capital allocation and ESG concerns. As a result, US listed miners have a combined market cap of some \$250 billion, around the same as Nvidia rose in one day the last time it reported earnings. Listed miners' valuations are attractive and the stocks are naturally leveraged to a rising gold price.

If investors, spotting the sea change and the price momentum, now jump on the bandwagon – because interest rates come down, inflation goes back up or crypto goes pop – you could see fireworks.

Come the next crisis, if the monetary mandarins reach for the printing press again, few investors will feel they have enough gold.

Silver could be starting a massive move higher ([from Otavio \(Tavi\) Costa via X](#))...

This is undoubtedly the best-looking chart I've seen in my career.

One of the most important macro developments unfolding as of late.

If you ask me, the silver rush is just getting started.



INVESTMENT CHRONICLES

Millennials are rushing to buy \$2,300 gold bars at Costco ([from Mish Talk](#))...

Costco periodically offers one ounce gold bars. They sell out immediately, scarfed up by millennials. Looking for other sources? I have one.



Gold Bars in the Shopping Cart

The Wall Street Journal comments on [Gold Bars in the Costco Shopping Cart](#).

Costco, which started offering gold bars last year online and in a few stores, has been selling out within hours. Consumers rated gold as a better investment than stocks and mutual funds in 2023 for the first time in a decade, according to a Gallup poll. The price has been hitting record highs.

Gold buyers, especially those on the younger side, say it is a hedge against catastrophe. Even people who aren't building bunkers and predicting doomsday are increasingly preparing for worst-case scenarios. Natural disasters, wars in Ukraine and the Middle East and the Covid-19 pandemic are fresh in the minds of many. There is also fear of financial calamity.

Some millennial investors said they don't trust the financial system, especially after a series of bank failures last year. Searching for a safe store of value some turned to gold—and Costco.

The warehouse retailer said it sold \$100 million in gold bars in 2023. It later added silver coins to its inventory. Precious metal sales helped drive 18% year-over-year growth in e-commerce sales during its most recent quarter, which ended in February, Costco said.

Millennial gold bugs

Compared with older generations, millennials have a more optimistic outlook on the benefits of gold, as well as the ease of buying and selling it, according to research by financial-services company State Street. The average millennial allocates 17% of their investments to gold, including exchange-traded funds, while Gen X and baby boomers invest 10% of their portfolio in the metal.

[Continue reading here](#)

What's driving China's gold-buying spree? ([from DW](#))...

The price of gold broke the \$2,300 (€2,212) level for the first time this week as geopolitical issues, expectations of US interest rate cuts and China's accumulation of the precious metal spurred interest from speculators.

Gold is seen by investors as a safe haven in times of turmoil and a hedge against currency devaluation, so the conflicts in the Middle East and Ukraine have helped the recent price rise, along with the post-COVID inflation spike.

The move by China's central bank, the People's Bank of China (PBC), has been mirrored by other mostly emerging market central banks, who are all keen to up their gold holdings. DW takes a look at why Beijing has gone on a gold-buying spree.

What exactly has China been doing?

The PBC has been adding to its gold reserves for the past 16 months in a row, according to the [World Gold Council](#). In 2023, the PBC bought more gold than all other central banks.

The industry body calculated China's purchases of the precious metal last year at 225 metric tons, roughly a quarter of the 1,037 tons bought by all the world's central banks.

In January and February alone, the PBC increased its gold reserves by 22 tons, Krishan Gopaul, senior analyst EMEA, at the World Gold Council wrote on X, formerly known as Twitter. China's central bank now holds roughly 2,257 tons of gold in its vaults.

As well as the PBC, Chinese consumers have been buying gold coins, bars and jewelry, after their [real estate](#) investments, the [yuan currency](#) and the country's stock market dropped in value due to recent [economic woes](#) in the world's second-largest economy.

"From the start of the year, we've seen enormous Chinese retail buying ... record amounts of buying on the domestic Shanghai Gold Exchange," John Reade, chief market strategist at the World Gold Council, told Bloomberg TV last month.

Why is China buying so much gold?

China is heavily reliant on the US dollar for trade with the rest of the world. As the world's reserve currency, most commodities are priced in dollars and more than half the world's trade is conducted using the greenback.

While growing to challenge the **US's economic dominance** over the past 30 years, China has built up huge foreign exchange reserves, mostly in dollars.

But Beijing fears it has become too reliant on the greenback and is keen to diversify the PBC's reserves.

China has been gradually reducing its holdings, which have gradually fallen by a third since 2011 to around \$800 billion, according to US data. The drop has accelerated since the COVID-19 pandemic.

The goal of diversification aligns with those of other countries in the **BRICS** (Brazil, Russia, India, China and South Africa) group, whose economies are set to dominate the global economy by 2050.

The BRICS have even mooted the idea of a shared currency in the future, which could potentially challenge the dollar as the world's reserve currency.

Why does China want to diversify from the dollar?

BRICS nations, including China, are concerned about how Washington weaponizes the dollar to preserve its global economic and geopolitical position.

The dollar's position allows the US to borrow money at a much lower cost. Washington can also use the currency as a diplomacy tool, for example when imposing sanctions on Russia, Iran and North Korea.

Following Russia's invasion of Ukraine in February 2022, the US and European Union imposed **several rounds of sanctions** on Moscow, including freezing the Russian central bank's foreign reserves.

Under US pressure, most Russian banks were also ejected from the SWIFT payment system, which facilitates international money transfers.

"I think it [the sanctions] has made a lot of central banks think carefully about what they hold in their reserves," Reade told Bloomberg last month.

[Continue reading here](#)

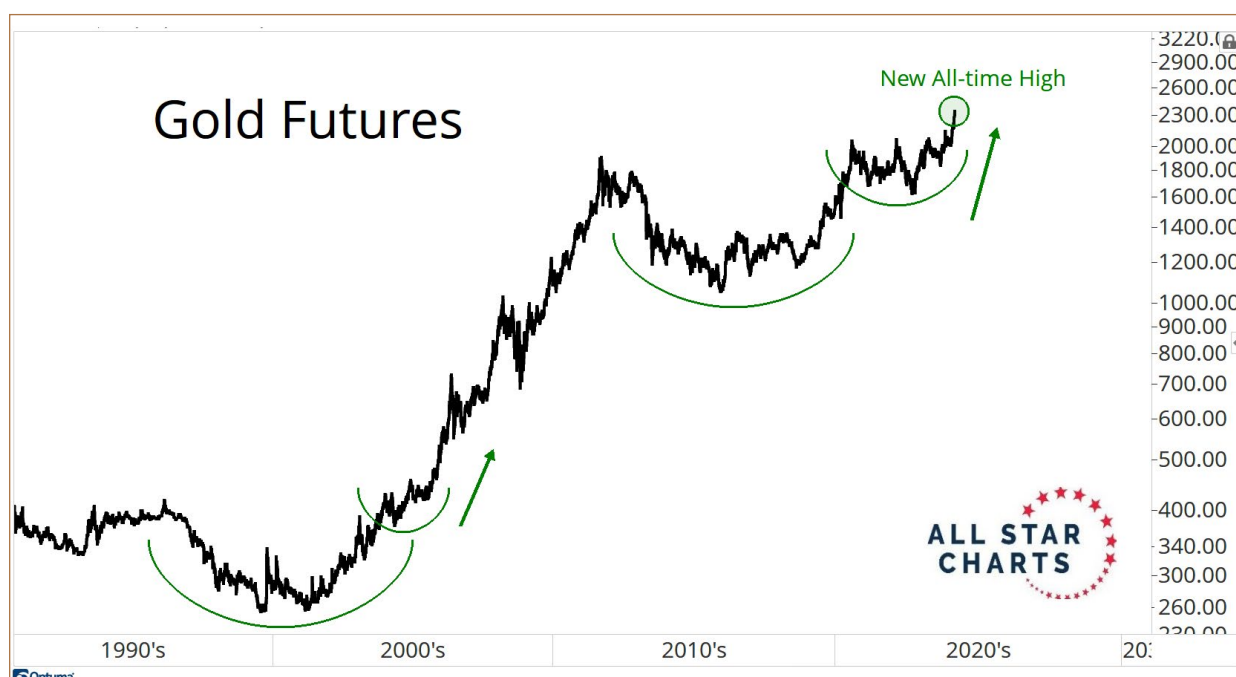
“Real money” is outpacing “paper money” all over the world (from All Star Charts)...

Did you see Gold just close at the highest price in history?

This is something we’ve never ever seen before – Gold closing out a week above \$2300/oz.

It’s the highest valuation for Gold in its entire history.

This is what that looks like:

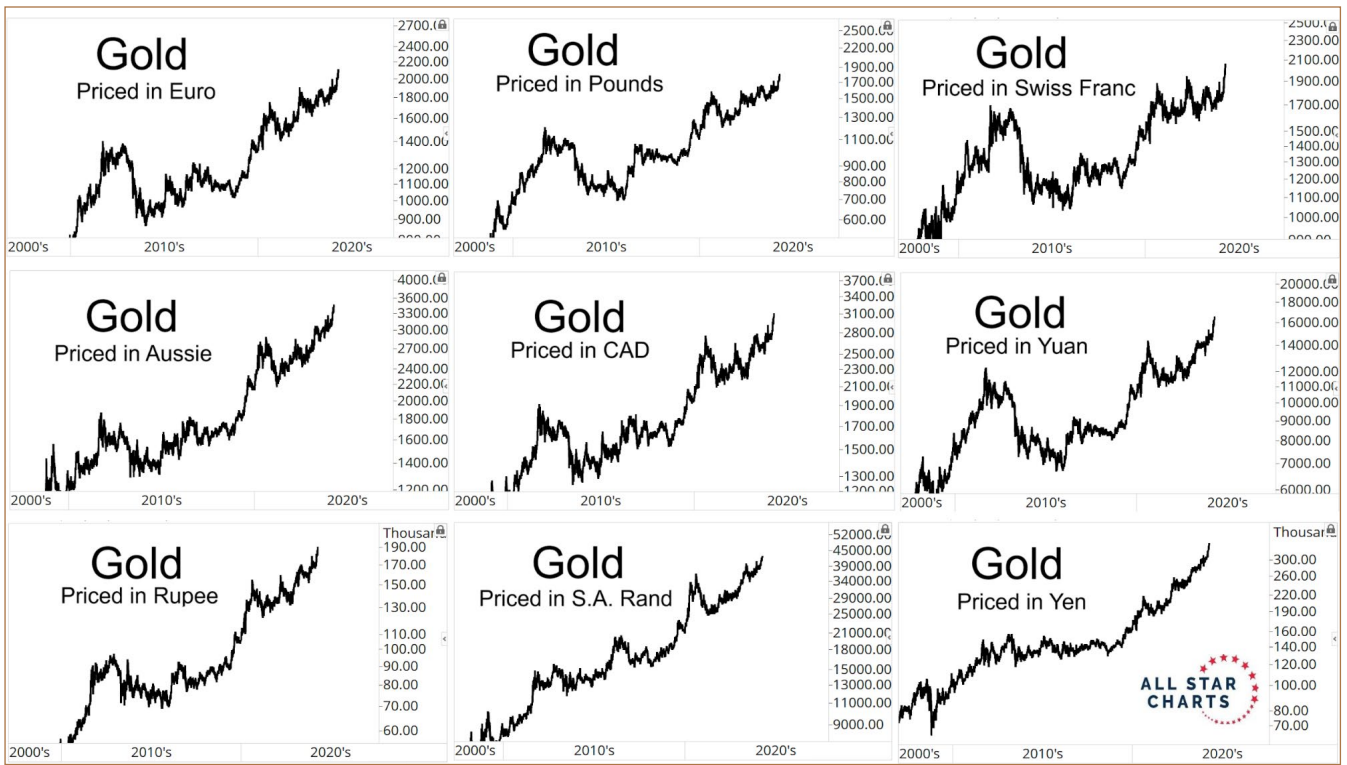


But here’s the thing.

Gold making new all-time highs, priced in US Dollars, should not be a surprise to anyone.

When you take a look at how Gold has been doing, priced in other foreign currencies, it’s already been making new all-time highs for quite some time.

Take a look at the behavior of Gold when priced in some of the other currencies here:



It's not just that the US Dollar is now breaking down relative to real money.

It's that all the paper money has been breaking down.

The US Dollar, to its credit, was the one [that] was able to hang on the longest.

But now even the mighty Dollar succumbed to the pressure.

And it looks like this is just getting started.

Gold's current market capitalization is only \$15.7 Trillion.

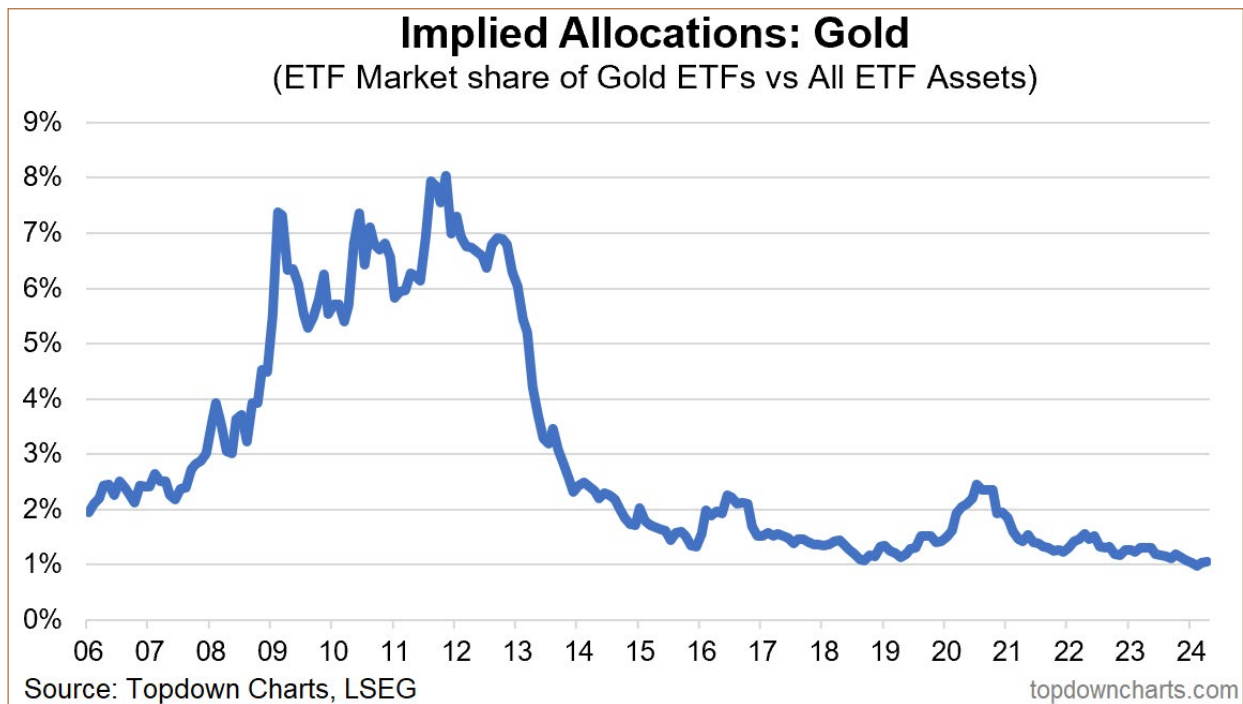
For perspective, the US Stock Market's total capitalization is right around \$50 Trillion.

The Global Stock Market is worth closer to \$100 Trillion.

I think this trend is just getting going.

The gold rally is not (yet) a mainstream phenomenon (from Callum Thomas via X)...

Retail implied allocations to gold (via ETFs) are still at the bottom of the range, barely moved [despite gold breaking out to new all-time highs, and beating stocks YTD, up more than 10%]



Market veteran Ed Yardeni: Gold could rally another 50% if inflation continues to rise ([from Yahoo Finance](#))...

Gold prices could soar through the end of 2025 if inflation stages a comeback, according to market veteran Ed Yardeni.

The Yardeni Research president predicted that gold prices could rise as high as \$3,500 by the end of next year, implying as much as a 49% upside for the precious metal from Monday's price around \$2,347. That's because inflation could follow the path it did in the 1970s, when prices began to spiral and gold went from \$35 an ounce to a peak of \$665 an ounce.

"The price of gold is soaring in new high territory," Yardeni said in a note to clients on Sunday, referring to gold prices notching an all-time record in March. "Another wage-price spiral attributable to rising oil prices would be very reminiscent of the Great Inflation of the 1970s, when the price of gold soared. In this scenario, \$3,000-\$3,500 per ounce would be a realistic target for gold through 2025."

[Continue reading here](#)

Here's a crazy fact about gold and the "60/40" portfolio (from [Meb Faber via X](#))...

The universal investment benchmark is the 60/40 portfolio of stocks and bonds.

What if you replaced the bonds entirely with gold... crazy right?

Turns out it makes no real difference.

1973-2024	Stocks Bonds	Stocks Gold
Returns	9.73%	9.93%
Volatility	10.12%	12.12%
Sharpe Ratio	0.53	0.46
Max DD	-29.30%	-30.20%

Last 100ish years too.

1928-2024	Stocks Bonds	Stocks Gold
Returns	8.35%	8.68%
Volatility	11.82%	12.87%
Sharpe Ratio	0.42	0.41
Max DD	-63.53%	-64.09%



There could be another (more ominous) reason for the breakout in gold (from Ambrose Evans-Pritchard in *The Telegraph*)...

A powerful force is stalking the world's gold market. It is operating in the shadows.

None of the normal footprints are visible on the London bullion market or the Chicago Mercantile. Retail goldbugs have not been buyers: ETF gold funds have been shrinking since December. The crowd is piling into [Bitcoin] instead.

Yet gold has smashed through a four-year barrier around \$2,000 an ounce, rising in parabolic fashion since mid-February, and hitting an all-time high of \$2,431 on April 11. Is somebody preparing for an escalation of the shadow Third World War?

"It is not a Western institution behind this. It is a massive player with very deep pockets. I have never seen this kind of buying before," said Ross Norman, a veteran gold trader and now chief executive of Metals Daily.

Gold has been ratcheting up fresh records against the headwinds of a strong dollar, a 70 point jump in 10-year US Treasury yields, and hawkish talk from the Federal Reserve. This mix would normally spell trouble for gold.

Whoever it is – or they are – seems insensitive to cost. Central banks do not behave like this. "They buy on the London benchmark and they don't chase the price," said Mr Norman. This rally is happening off books in the OTC market.

Yes, China's central bank has been adding to its declared gold reserves for 17 consecutive months, part of the gradual portfolio shift away from US Treasuries and European bonds by the Global South.

Dollar weaponisation since the war in Ukraine has unnerved every country aligned with the authoritarian axis of China and Russia. None can feel safe parking money in Western securities after Russia's foreign reserves were frozen.

Yet the scale is modest. The World Gold Council said central banks bought a net 18 tonnes in February: 12 in China, six in Kazakhstan and India, four in Turkey, partly offset by Russian sales. This hardly moves the needle.

The Chinese people certainly have been buying gold, creating traffic jams at the Shuibeijewellery hub. Precious metal is the only refuge from the property crash and the slump on the Shanghai bourse. Tightening capital controls make it hard to smuggle serious sums abroad.

But this alone cannot account for the price surge, either. Mr Norman says the gold flow to Asia has been within normal bounds.

So let me take two stabs at this mystery, one geopolitical and one financial. It has been clear for three years that Russia, China and Iran are operating in collusion, each feeding opportunistically on each other. All three have fostered belligerent hyper-nationalism as a means of regime survival, and all aim to press their advantage against a fatally complacent West before the window of opportunity closes.

This menace on three fronts has reached a dangerous juncture. None of the major democracies have put their economies on a war-time footing despite the obvious threat.

The West has dropped the ball on Ukraine – or worse, it is preventing Ukraine from hitting Russian oil facilities – and has therefore left the door wide open for a knock-out blow by the Kremlin this summer.

Iran has been emboldened by Putin's military comeback. It is also flush with money. Joe Biden is so worried about rising petrol prices that he has turned a blind eye to sanctions busting, letting Iran sell as much crude as it wants. This has enabled Tehran to advance its pawns in the Middle East, and now to risk a direct missile strike against Israel.

The third shoe has yet to drop but China knows that the West has run down its stock of military kit trying to contain these other two crises. Xi Jinping may never have a better moment to tighten the noose on Taiwan with a naval and air blockade, gaining a stranglehold over the West's supply of advanced semiconductors that can then be used as a bargaining chip. How would the democracies respond to this?

There is a strong suspicion among gold experts that China is behind the surge in buying, building up a war-fighting bullion chest through state-controlled banks and proxies. But others, too, can see that we are living through a fundamental convulsion of the global order, and that the dollarised financial system will not be the same at the end of it. Gold is the hedge against dystopia.

However, there is a parallel explanation. Covid finally broke our spendthrift governments. The talk in hedge fund land is that some big beasts are taking bets against "fiscal dominance" across the West.

It is a collective judgment that too many countries have pushed public debt beyond 100pc of GDP and beyond the point of no return under prevailing economic ideologies and political regimes. Budget deficits have broken out of historical ranges and are running at structurally untenable levels for this stage of the cycle.

[Continue reading here](#)

Gold and gold miners account for just 1% of the global asset markets (from Otavio (Tavi) Costa via X)...

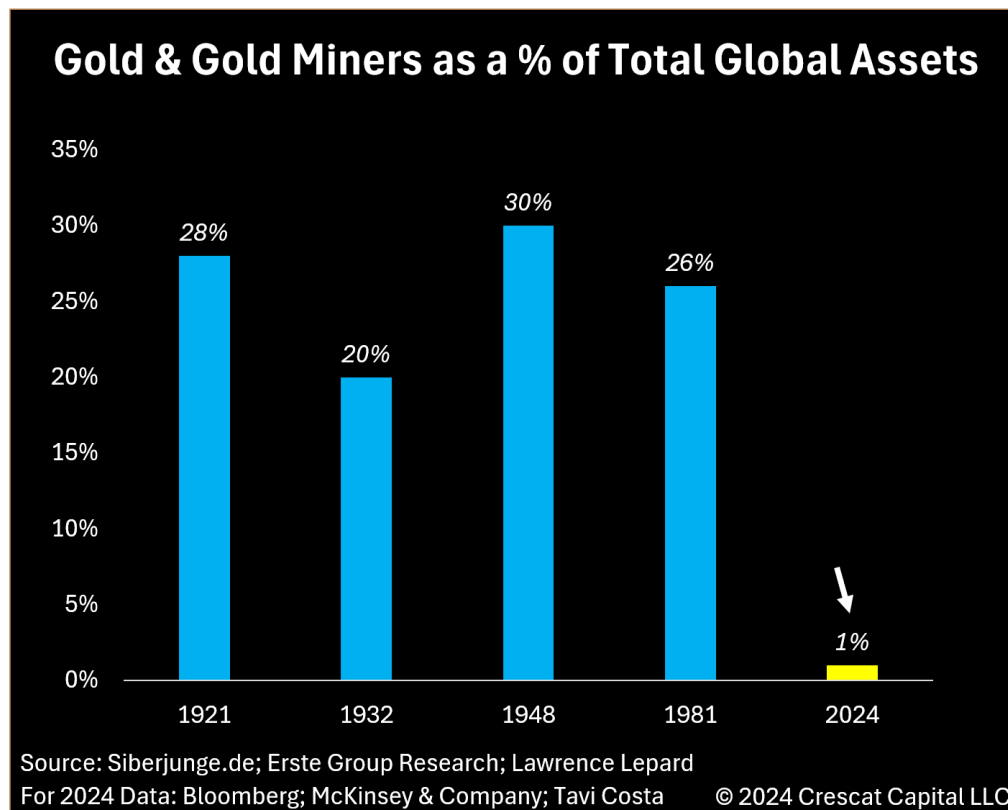
Gold and gold miners possibly constitute the smallest share of global assets in the last century.

The same people who previously doubted the metal's potential for entering another cycle are now criticizing the miners.

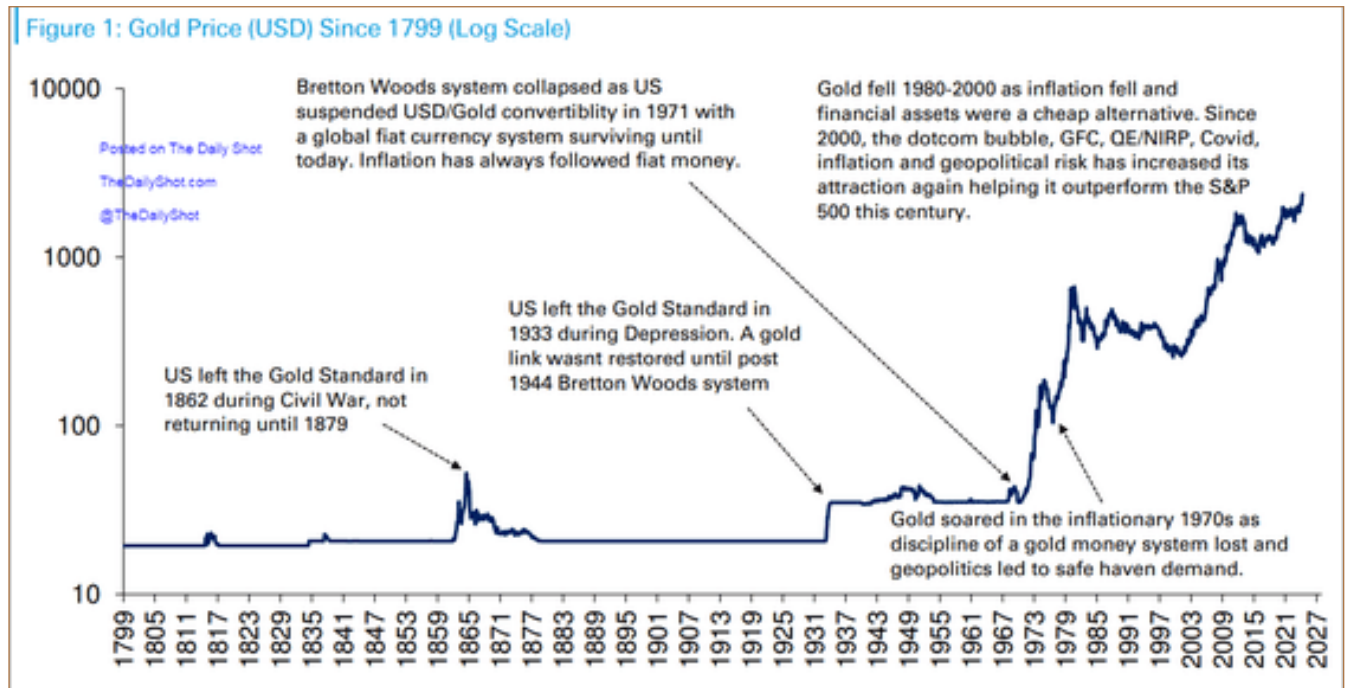
If you ask me, this industry offers the most asymmetric opportunity I've seen in my career.

The multitude of structural forces driving metals has yet, in my opinion, to prompt a major re-rating of the valuations of these businesses, which continue to linger at historically depressed levels.

H/t to @LawrenceLeopard for this outstanding chart idea.



Here's a 200-year annotated history of the price of gold (from [The Daily Shot](#))...



INVESTMENT CHRONICLES

ENERGY

Energy expert Daniel Yergin shares the hard truth about the “green energy transition” **(from NZZ)**...

NZZ: At the COP28 climate summit in Dubai, countries committed themselves for the first time to moving away from oil, gas and coal. According to the International Energy Agency, demand for fossil fuels is set to peak before 2030. Is this the end of the oil age?

Yergin: No. Predicting exactly when the demand for oil will fall is like a game. Demand is growing in developing and emerging countries right now. We will probably continue to see growth until sometime into the early 2030s, and even then demand won't be dropping precipitously. It will be more of a slow decline.

So there won't really be a big sudden change?

It will not come with a clash of cymbals announcing that it's all over. This whole discussion of energy transition sometimes seems to lose contact with economic history and reality. If you look at the history of energy transitions, they all last for over a century. To try and make change happen in 25 years, or even half of that time is highly unlikely.

What is the difference between the current energy transition and previous ones?

Well, there is one fundamental difference. All of them were energy additions. Oil overtook coal as the world's number one energy source in the 1960s. But coal hasn't disappeared. Last year, the world used more coal than ever before, three times as much as in the 1960s. Now we are trying to go from one system to another in a really short time without paying a lot of attention to the amount of resources and minerals that would be required.

How will the energy transition accelerate? By a lack of demand for fossil fuels or by an increasing supply of carbon-free forms of energy?

Renewable energies will continue to grow. This past year, renewable energy increased by another 6% worldwide. But there are also real-world issues that come up: difficult supply chains, higher interest rates, inflation. There were very optimistic goals two years ago for offshore wind in the United States. Now, those projects have been canceled or renegotiated. Obviously, we have a huge accelerator in the United States with the

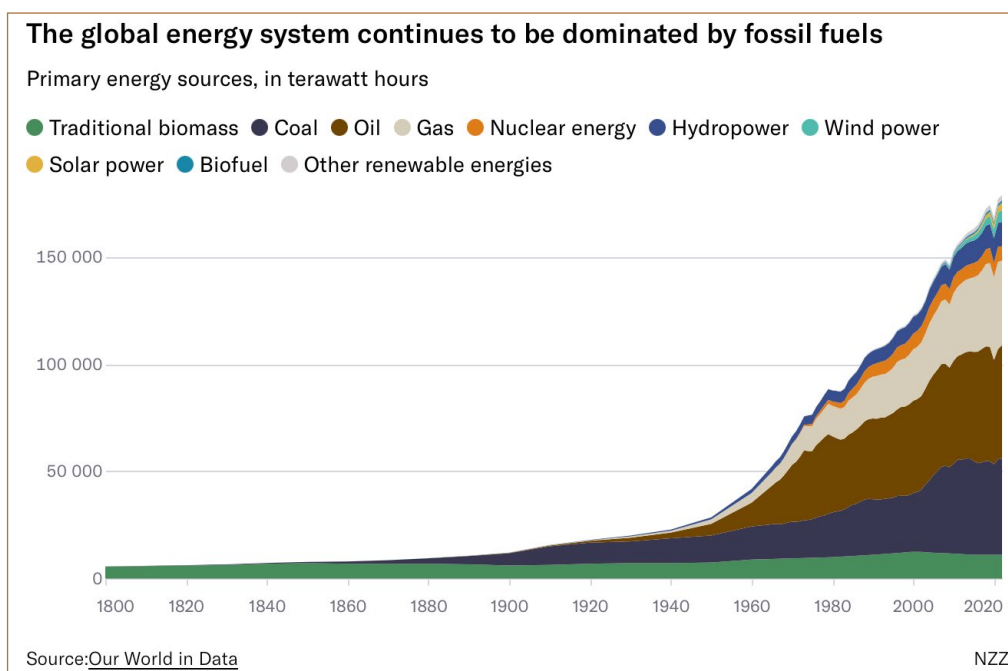
Inflation Reduction Act. That’s on the supply side. On the demand side, we need to look at demographics. There could be 2 billion more people living in the world by 2050. That’s why there will be a growth in demand from developing and emerging countries. These countries need to grow, and they need energy to do that. If they don’t grow, the migrant crisis in Europe is going to get worse, among other things.

Some time ago, things sounded more optimistic.

A lot of the thinking about the energy transition occurred during the Covid-19 pandemic, when prices were weak and energy demand collapsed. And now we’re in a post-Covid world. A lot of things have happened, such as the war in Ukraine, energy shocks, increased price volatility. Our thinking about the energy transition needs to be updated.

In what way?

If we look back a couple of years, people were still working with a very linear notion: They would draw graphs with a clear line, and they got where they wanted to be by 2050. I like to speak of a multidimensional energy transition instead: a process which will move at different times, at different paces, in different regions. This concept also leaves room for technological innovations and breakthroughs.



INVESTMENT CHRONICLES

The war in Ukraine in particular has shown the world that, in addition to decarbonization, securing supply is also important.

That's the big difference compared to 2021. Look at Germany, for example, which has just presented a new power plant strategy. It announced plans to build gas-fired power plants so that there won't be a shortfall in electricity. It has been recognized worldwide that energy security also needs to be addressed alongside the energy transition.

Is there still enough investment in oil and gas projects to ensure a safe transition?

People often forget that there's a decline rate in oil and gas production of around 5%. We have also calculated a shortage of 3 million barrels of oil per day by 2040. The world is going to require both continued investment in renewables as well as investments in oil and gas. Otherwise there will be shortages and price shocks.

[Continue reading here](#)

The Biden administration has canceled its plans to refill U.S. oil reserves amid high prices [\(from Bloomberg\)](#)...

The Biden administration won't move forward with its latest plans to buy oil for the Strategic Petroleum Reserve amid rising prices.

The Energy Department said it was "keeping the taxpayer's interest at the forefront" in its decision not to purchase as many as 3 million barrels of oil for a Strategic Petroleum Reserve site in Louisiana. The plan for the barrels to be delivered in August and September had been announced in mid-March.

"We will not award the current solicitations for the Bayou Choctaw SPR site and will solicit available capacity as market conditions allow," the department said. "We will continue to monitor market dynamics."

The move follows a rally in crude prices, with US benchmark West Texas Intermediate on Tuesday breaking above \$85 a barrel for the first time since October. The Biden administration has a target to buy oil at \$79 or lower to refill the reserve, though spent an average of about \$81 a barrel in its latest purchase of 2.8 million barrels late last month.

The Energy Department has been slowly refilling the emergency oil supply after it reached a 40-year-low following the administration's unprecedented drawdown of a record 180 million barrels in the wake of Russia's invasion of Ukraine. It currently holds about 363 million barrels, according to Energy Department data, down from almost 600 million at the start of 2022.

[Continue reading here](#) *(subscription may be required)*

Chip-design CEO: Artificial intelligence's "insatiable" energy needs are not sustainable [\(from *The Wall Street Journal*\)](#)...

Chip-design company Arm ARM 5.83%increase; green up pointing triangle made its name by devising ways to minimize smartphones' power consumption and extend battery life. Now, the company's head says the same push for energy efficiency is needed in artificial-intelligence applications.

Rene Haas, chief executive of Arm, spoke ahead of an announcement Tuesday by the U.S. and Japan about a \$110 million program to fund AI research at universities in the two countries. U.K.-based Arm and its parent, Tokyo-based SoftBank Group, are together offering \$25 million in funding for the program.

AI models such as OpenAI's ChatGPT "are just insatiable in terms of their thirst" for electricity, Haas said in an interview. "The more information they gather, the smarter they are, but the more information they gather to get smarter, the more power it takes."

Without greater efficiency, "by the end of the decade, AI data centers could consume as much as 20% to 25% of U.S. power requirements. Today that's probably 4% or less," he said. "That's hardly very sustainable, to be honest with you."

The power issue has drawn growing attention from technology executives in recent months and helped drive up the stock prices of companies that own and operate electric-power plants.

In a January report, the International Energy Agency said a request to ChatGPT requires 2.9 watt-hours of electricity on average—equivalent to turning on a 60-watt lightbulb for just under three minutes. That is nearly 10 times as much as the average Google search. The agency said power demand by the AI industry is expected to grow by at least 10 times between 2023 and 2026.

"It's going to be difficult to accelerate the breakthroughs that we need if the power requirements for these large data centers for people to do research on keeps going up and up and up," Haas said.

[Continue reading here](#) (subscription may be required)

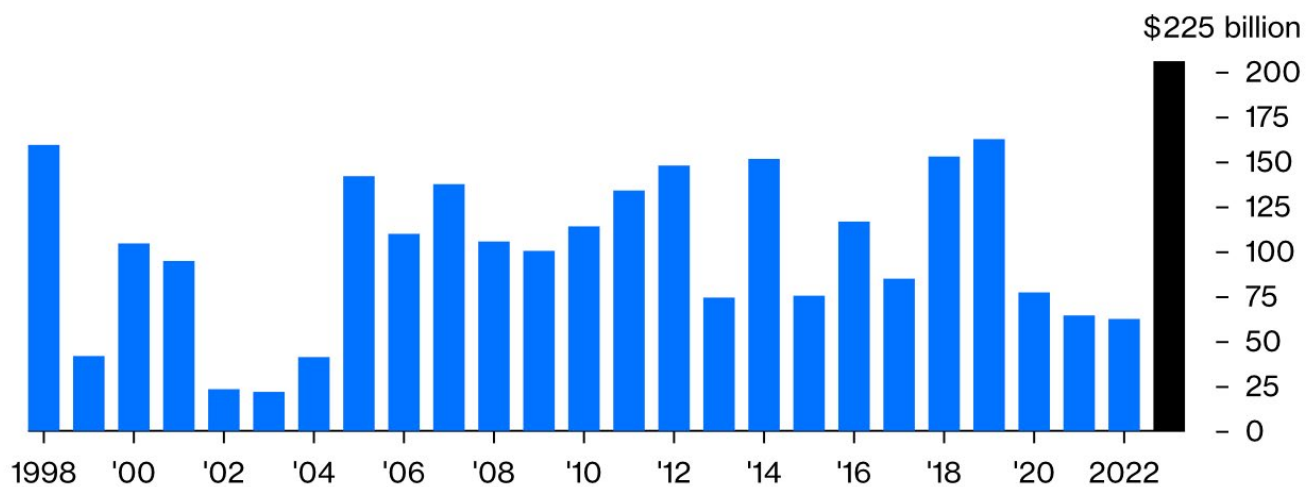
More mergers and acquisitions (M&A) activity is likely in the oil industry (from Javier Blas at Bloomberg)...

Even after a record \$200 billion dealmaking frenzy last year, US oil and gas producers haven't consolidated nearly enough. On a-per-barrel basis, there are still too many companies, too many chief executives, and too many drilling rigs wooing a limited pool of available capital.

The solution is simple: more M&A.

Oil M&A Boom

Dealmaking in the North American oil and gas industry surged to a record north of \$200 billion last year. Year-to-date in 2024, M&A is trending higher

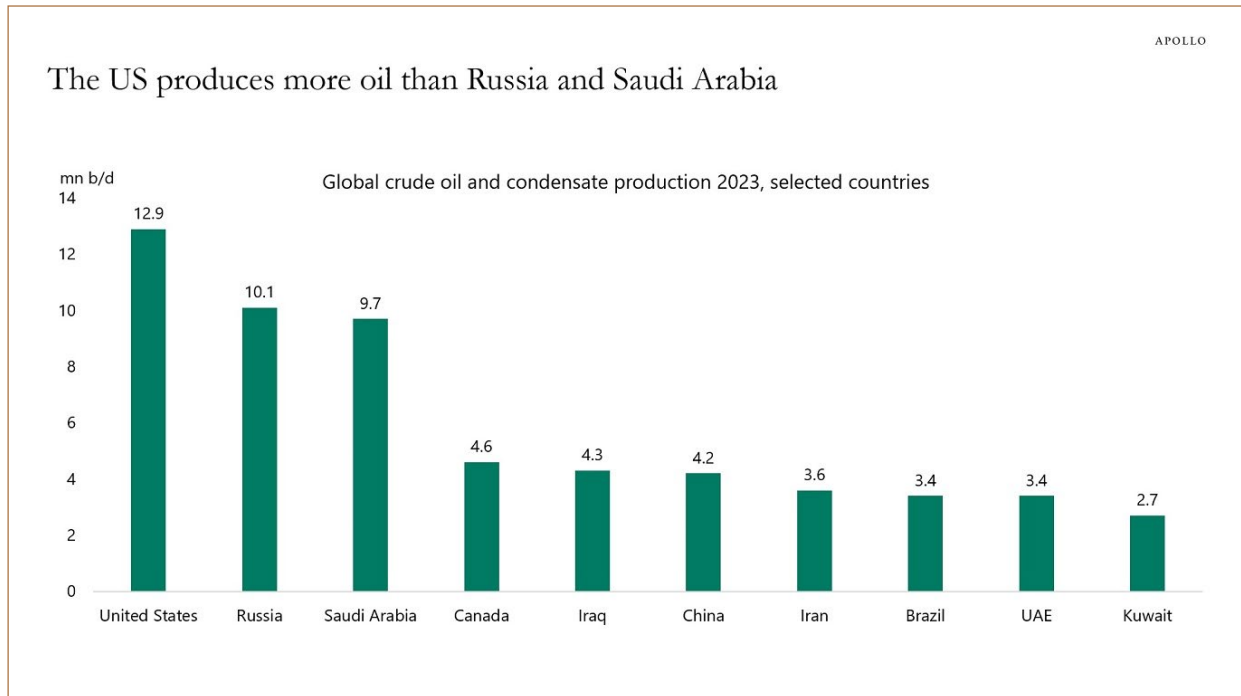


Source: Bloomberg

[Continue reading here](#) (subscription may be required)

INVESTMENT CHRONICLES

The U.S. is once again the biggest oil producer in the world ([from Torsten Sløk in The Daily Spark](#))...



Details on the “once-in-decades” opportunity in uranium ([from Doug Casey's Crisis Investing](#))...

The Uranium Market Today

It took over a decade for uranium to slowly start its recovery from the post-Fukushima bear market. This was because the sudden pullback in demand after Fukushima led to increased commercial inventories of uranium. This meant that utilities had been able to rely on the sale of existing uranium inventories to continue operating.

This has kept prices suppressed, even with McArthur River offline.

We're talking a huge pile, something like 500 million pounds of extra uranium just sitting on top of the market.

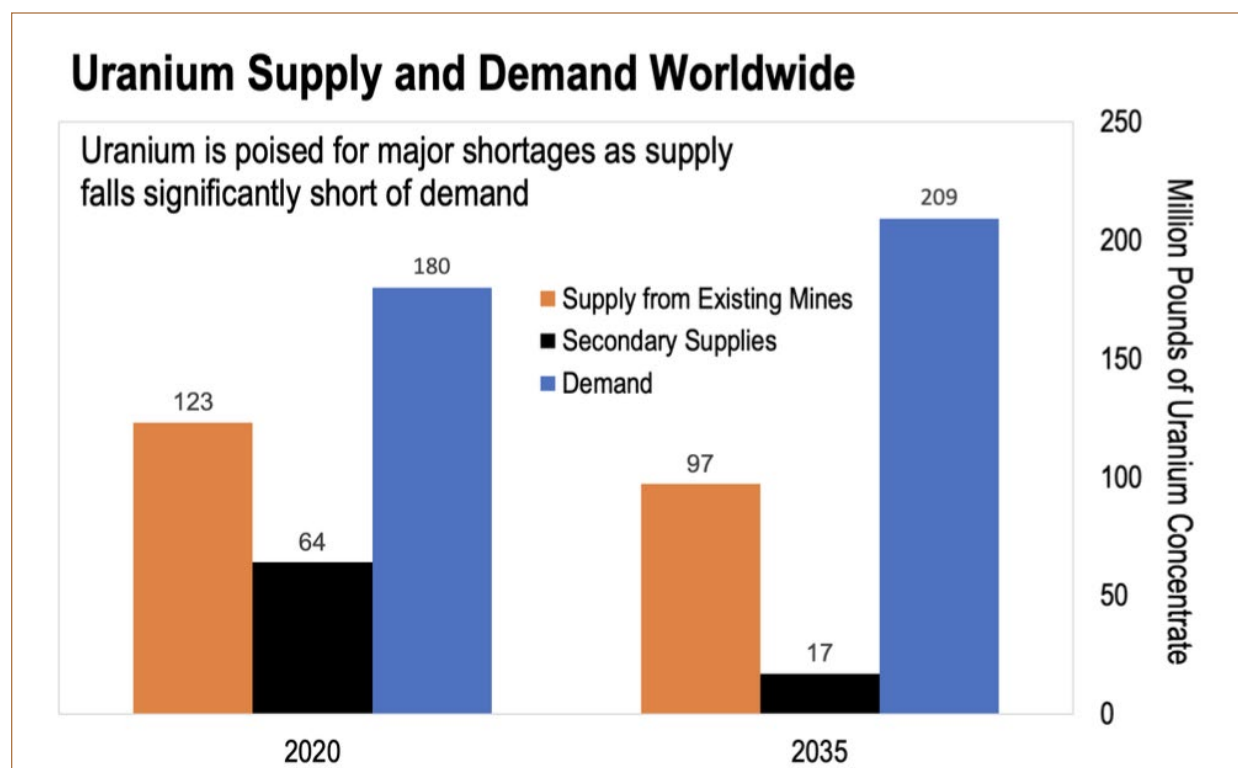
But then, from 2020 on, those stockpiles began to shrink quickly. Every year, demand exceeded supply, leading to deficits. By 2023, it was apparent that these stockpiles were on the brink of running out.

Naturally, uranium spot prices surged, moving from below \$50 per pound to finishing the year well over \$90.

This made uranium one of the top-performing commodities last year. At the time of writing, uranium prices are hovering around the same \$90 mark.

But we think they are going a lot higher. Here's why....

Demand for uranium is expected to grow to 209 million pounds by 2035. You can see this in the next chart.



Meanwhile, supply is expected to fall to 114 million pounds by 2035.

So, what we're seeing here is total demand significantly outstripping mine supply.

But it's more than just that... We're looking at huge deficits, with a shortage of 95 million pounds. In other words, the market will need to nearly double the amount of uranium that's available.

And remember, we can't count on commercial stockpiles to fill this gap anymore.

That's because in the past 20 years, governments focused more on investing in solar and wind, leaving nuclear reactors and uranium exploration behind. That's how we got to these projected shortages. And when there are shortages, we get price spikes. And that's pretty much where we are today.

All this tells me that we're in the early innings of a major uranium bull market, all thanks to what I like to call the "Nuclear Renaissance."

Can't Stop Nuclear

Nuclear power suffered a terrible blow to its reputation after the 2011 Fukushima meltdown in Japan. The disaster set off a wave of reactor closures not only in Japan but worldwide, single-handedly pushing nuclear progress back by decades... and it stayed that way for many years.

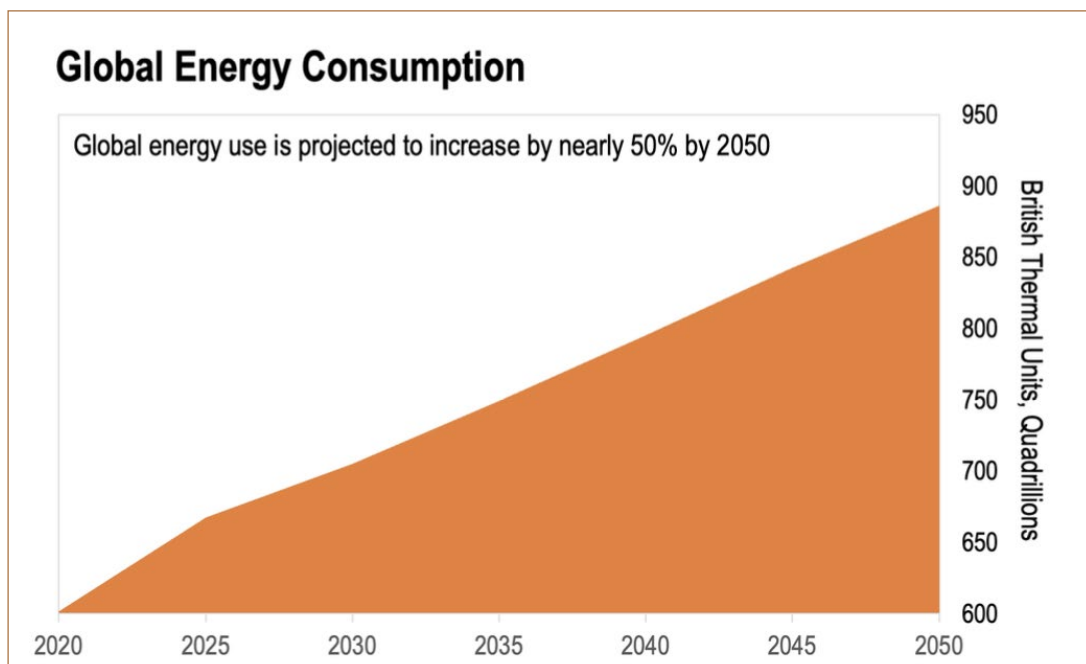
But the tide is turning... data from the International Atomic Energy Agency (IAEA) shows that nuclear power generation is projected to grow by nearly 3% annually, doubling by 2050.

But in nations that matter economically, this growth rate is closer to triple.

In fact, countries such as the U.S., the U.K., France, Japan, the United Arab Emirates, South Korea, and 16 other advanced economies have pledged to triple their nuclear energy capacity by 2050. This commitment was made at the climate conference COP28 in Dubai, just months ago, on December 1, 2023.

This was as close as you'll ever get to governments publicly acknowledging that they have no chance of reaching their ridiculous net-zero targets without nuclear energy.

And with a projected 50% increase in global energy demand by 2050, there's no way major economies can keep their economies running solely on renewables.



One country that understands this very well is China.

The country is aggressively building out its nuclear sector. For example, it's setting aside \$440 billion for its nuclear program. And China's president, Xi Jinping, is planning to build 150 new reactors by 2037.

That's more than the rest of the world has built in the last 35 years. And India is planning to triple its nuclear power over the next decade.

Then there's Japan, the world's third-largest economy. As mentioned earlier, after the Fukushima meltdown in 2011, Japan pretty much gave up on nuclear power.

But now, Prime Minister Fumio Kishida says the Japanese energy situation has "drastically changed." So, they're bringing many idle reactors back online. That's on top of developing 20 new reactors to replace the ones shut down after Fukushima.

In South Korea, they're aiming for six new nuclear plants by 2036. The goal is to have nuclear power make up one-third of the electricity supply by 2030, while renewables have been reduced from 30% to 22%.

Saudi Arabia plans to use domestically sourced uranium to build up its early-stage nuclear power industry. Several other Gulf Arab states are contemplating a nuclear program too.

These nations are leading the charge in the Nuclear Renaissance. That's where most of the demand for uranium will come from until 2030.

What about Europe?

Well, as usual, Europe (and much of the collective West) is lagging behind.

But after seeing their energy bills double after the outbreak of war in Ukraine, they, too, have been coming to their senses...

Keep in mind that until recently, Europe was on the verge of decommissioning its entire nuclear power fleet. Germany had already embarked on that path, and France, Belgium, and the UK were all heading in that direction as well.

But that's changing now.

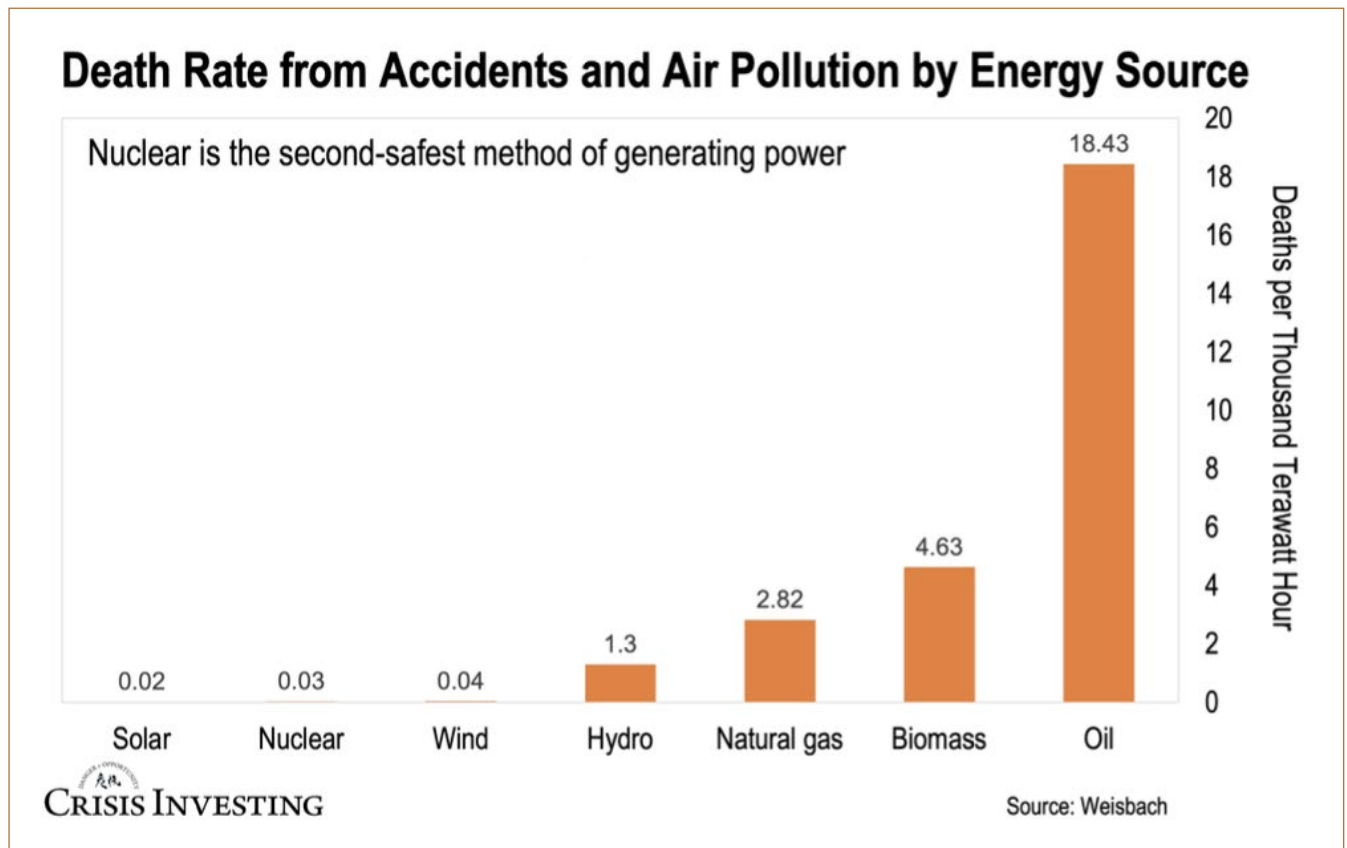
The U.K. announced plans to triple its nuclear power generation capacity by 2050.

France aims to add 14 new reactors in what they call “the rebirth of France’s nuclear industry.”

Even the world's fourth-largest economy and the "California of the European Union," Germany, decided to extend the life of several of their reactors.

In total, there are 60 nuclear power plants currently being built around the world. Plus, there are another 110 in the pipeline and over 300 more proposed.

The bottom line is that global energy demand is fueling a nuclear energy revival. And it’s easy to see why if we look at the chart below...



The graph shows the seven most common power technologies – from solar to coal to nuclear. And it measures each technology’s Energy Return on Investment (EROI).

INVESTMENT CHRONICLES

EROI is an important metric. It tells us how efficient each technology is at producing power.

And, as you can see above, nuclear power is by far the most efficient form of energy today. It returns 75 times the energy that is invested in its construction and production.

Other technologies like solar and wind come last, with a return of only three to 16 times the energy invested.

So for countries struggling to meet their energy needs – which is most of them – there is no better option than nuclear.

And that's all great news for uranium, the backbone of nuclear energy.

The Wild Card

Now, we like our investments to have a wildcard angle. A wildcard is basically a low-probability, high-impact event. And in the uranium story, we have at least one of those for sure.

Let me explain...

Many people don't realize but the spread of nuclear power over 30 years ago can trace its roots to a major energy crisis: the 1970s Oil Shock.

That oil crisis began when the Organization of Arab Petroleum Exporting Countries (OAPEC) proclaimed an embargo on oil exports.

The embargo was targeted at nations that had supported Israel during the Yom Kippur War against the Arab states... most notably, the U.S., Japan, and Western Europe.

The resulting 1970s Oil Shock knocked the wind out of the global economy. The price of oil went up nearly 300% globally. It set U.S. inflation soaring to above 11%, and even led to food shortages.

So, a lot of nuclear energy capacity buildout in the 1970s was because the U.S. was focused on energy security due to the OAPEC squeeze.

This was the time when the U.S. emerged as the world's largest uranium producer.

Until the 1980s, there were active uranium mines in Arizona, Colorado, New Mexico, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

But as the price of uranium sharply declined in the late 1970s and early 1980s, many uranium deposits in the U.S. became uneconomic due to their lower grade. This was worsened by the U.S. government's strict rules on private companies handling ores containing uranium or other radioactive elements.

Uranium mining in the U.S. came to a screeching halt.

Jump to today, and the U.S. still basically produces no uranium.

A staggering 95% of the uranium bought by domestic nuclear power plant operators in the U.S. comes from overseas. Canada is the primary source, accounting for 27%, followed by Kazakhstan at 25%, and Russia at 12%.

If you're curious about Kazakhstan, think of it as the "Saudi Arabia of uranium." It's actually four times more dominant in uranium production than Saudi Arabia is in oil. This Central Asian republic produces about 45% of the world's uranium. It's an ex-Soviet republic, a buddy of Russia, with some of the closest economic and political ties among all former Soviet states.

So, over a third of the U.S. uranium supply comes from countries that many would consider less than friendly to our nation.

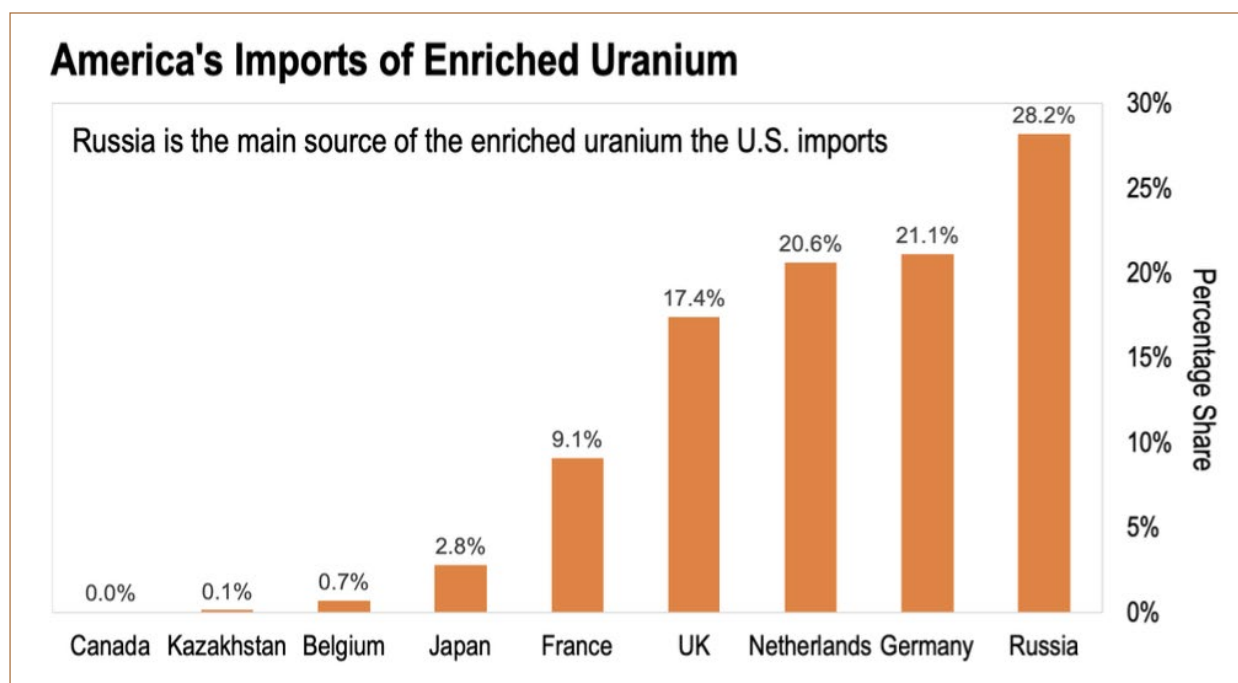
But that's just one piece of the nuclear process puzzle. As you may know, raw uranium is not suitable as fuel for nuclear plants. It needs to be refined into uranium concentrate, U₃O₈, commonly referred to as "yellowcake," then converted into gas, and subsequently enriched.

It's not uncommon for U.S. companies to buy yellowcake from some countries and then contract enrichment services in other countries.

And this is where the U.S. becomes even more dependent on a country like Russia.

You see, Russia excels in uranium enrichment, operating three major commercial uranium enrichment plants out of a handful that exist around the world. Today, the nation holds 46% of the global uranium enrichment capacity.

In 2022, Russia accounted for a staggering 28.2% of the enriched uranium imported by the U.S. You can see how this figure dwarfs the enriched uranium imports from most other countries in the next chart.



The reason for this is that the U.S. is nowhere near able to mine and enrich enough uranium to keep our current fleet of nuclear plants running... let alone supply new ones coming online.

And with no signs of tensions easing between the U.S. and Russia, America's uranium supply is on shaky grounds. And that's putting it mildly.

To me, this situation strongly echoes what was happening in the leadup to the oil embargo in the 1970s, as I highlighted earlier.

If Russia or Kazakhstan were to halt uranium exports to the U.S., it would create a supply crunch in the U.S. market. This would be catastrophic for domestic power generation but great for uranium prices and a handful of uranium companies well-positioned to take advantage.

Could a Nuclear Renaissance Lead to Another Chernobyl?

This part is a bit like addressing the proverbial elephant in the room. But it's a sensible question given that the last uranium bull market ended in a catastrophe.

And, as I mentioned, nuclear power made a lot of enemies after the Fukushima meltdown. And not only in Japan.

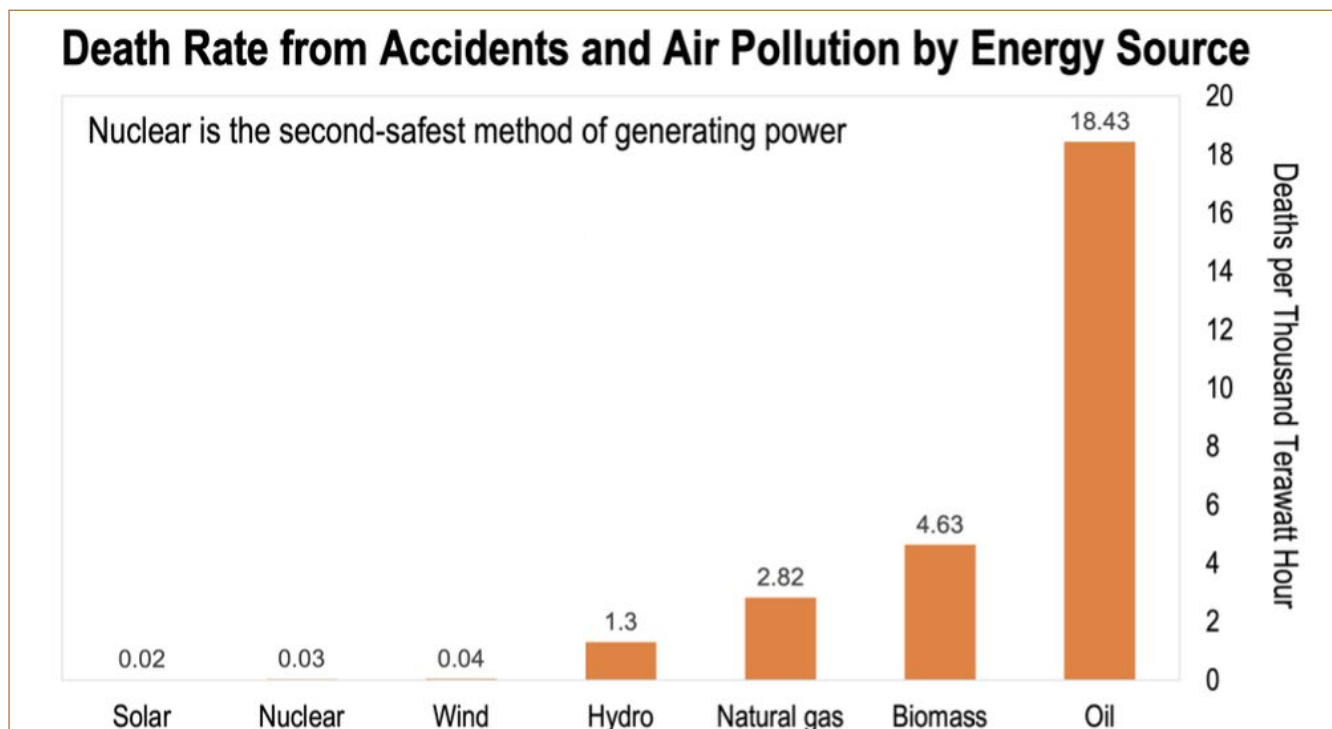
If something like this were to happen again, many countries around the world would start shutting down reactors left and right, and they'd scrap their plans for new ones. That would kill demand, and uranium prices would tank. In such a scenario, none of the outlined fundamentals would matter. So, the question can't just be shrugged off.

The short answer is, yes, it can. Black Swan events are notoriously difficult to predict, which is kind of the whole point.

But here's what most people don't realize... Nuclear reactors have come a long way since the 1980s. The technology in today's reactors is more advanced than that of the reactors that led to the Three Mile Island, Chernobyl, and Fukushima disasters.

In fact, nuclear energy is 100 times safer than natural gas and almost 1,000 times safer than coal.

In the chart below you can see the mortality rates of nine different power sources. Nuclear is the second safest.



INVESTMENT CHRONICLES

And that's based on old nuclear technology. Over recent decades, there have been important breakthroughs in nuclear reactor designs.

The main difference between modern reactors and past ones is higher degrees of control and monitoring of heating and cooling states within the reactor.

Computer systems today are simply more capable of analyzing data quickly. They have sensors that monitor the reactor and its various components constantly.

That means any rising issues are immediately detected and repaired.

Modern reactors are also "passively safe." That's a big one. It means that they turn themselves off if something goes wrong without intervention of electronic or human controls. They also have several layers of containment and other safety features to block radioactive material. This mitigates the risk of widespread contamination.

In other words, it's the design that keeps things safe, not just some guy trying not to doze off at the computer screen.

So, yes, it's a valid question. But drawing parallels between today's technology and Chernobyl – as many in the media do even today – which was essentially a Soviet weapons program with no pretense of safety, is just silly.

How to Profit?

If history is any guide, by the time this current bull run wraps up, uranium prices could not only hit new all-time highs but soar far beyond them.

Recall that the last time uranium prices bottomed in December of 2000, they went on a seven-year bull run. They topped out at \$140 per pound, for more than an 1,800% return.

Yes, we're not exactly at the bottom of the cycle right now... But with nuclear power capacity set to double in the coming years, there just won't be enough supply to keep up with the upcoming nuclear power buildout for decades to come.

This tells me that there's still a lot of bullish momentum in this market. It's not impossible to think that uranium may eventually surpass \$300 per pound for this cycle.

That means we're only a third of the way there. So, this is a trend that is going to

continue for a while longer.

Here's another important point to consider: the price of uranium compared to the overall cost of generating power is tiny. Fuel expenses usually make up just 6% of running a nuclear plant. So even if uranium prices shoot up, it'll have very little impact on the finished price of power generated by the plant. Once you have a multi-billion-dollar nuclear reactor up and running, you'll do whatever it takes to keep it going.

Because of this inbuilt feature, uranium has the potential to deliver massive returns during bullish markets.

So, how do you take advantage?

The best way to do that is to invest directly in U3O8 or, if you're willing to take on more risk, in companies involved in getting it out of the ground.

Doug Casey: The trick is to find companies that are cognizant of the opportunity and have the business plan, the knowledge, and the resources (both geological and financial) to exploit it. The type of company I want should now be buying marginal resources and have the ability to put them into production quickly, preferably using fixed price contracts. To do that, they must have knowledgeable, reputable uranium people in place now. Last, but not least, they must have the financial backing to allow them to survive until the inevitable becomes imminent.

Now, the thing to understand about uranium is that there aren't many ways to get exposure to it. But that's actually a plus. It means that if you pick quality investments, you'll likely see a ton of cash flowing in when the market goes wild. And our pick for this report, which Doug himself has invested in, fits the bill perfectly.

Sprott Physical Uranium Trust Fund (SRUUF)

Sprott Physical Uranium Trust (SRUUF) is a physical uranium fund. SRUUF was created to invest all of its assets in uranium. In other words, the fund is simply 63.8 million pounds of physical uranium trading on the stock market.

The company behind the fund is Sprott Inc. – an early champion of precious metals investing. Founded by Eric Sprott, a precious metals guru and self-made billionaire, the company has been in operation for about four decades.

In 2021, Sprott Inc. launched the Sprott Physical Uranium Trust after taking over Uranium Participation Corporation (UPC) because they saw the market demand. Unlike stocks, investing in physical uranium wasn't as simple. Options were limited, and you couldn't just store it like gold.

The fund has given investors a convenient way to invest in uranium without the need to put money in mining companies or deal with complex derivative instruments.

It's a great product with limited competition. Yellow Cake, its closest rival, holds just a fraction of the uranium and net assets.

All this plus the fact that Sprott Physical Uranium Trust tracks uranium closely, makes it a great way to profit from the coming bull market in uranium.

You're better off seeing it as a long-term bet that you slowly build up, picking some up here and there, especially when uranium is trading on the cheap.

At writing, Sprott Physical Uranium Trust (SRUUF) is trading around \$21.60. This puts it about 16% below its January peak.

[Continue reading here](#)

Digital data centers – along with years of short-sighted energy policy – are fueling the drive to an old power source: coal ([from *The Washington Post*](#))...

A helicopter hovers over the Gee family farm, the noisy rattle echoing inside their home in this rural part of West Virginia. It's holding surveyors who are eyeing space for yet another power line next to the property — a line that will take electricity generated from coal plants in the state to address a drain on power driven by the world's internet hub in Northern Virginia 35 miles away.

There, massive data centers with computers processing nearly 70 percent of global digital traffic are gobbling up electricity at a rate officials overseeing the power grid say is unsustainable unless two things happen: Several hundred miles of new transmission lines must be built, slicing through neighborhoods and farms in Virginia and three neighboring states. And antiquated coal-powered electricity plants that had been scheduled to go offline will need to keep running to fuel the increasing need for more power, undermining clean energy goals.

"It's not right," said Mary Gee, whose property already abuts two power lines that serve as conduits for electricity flowing toward the biggest concentration of data centers — in Loudoun County, home to what's known as Data Center Alley. "These power lines? They're not for me and my family. I didn't vote on this. And the data centers? That's not in West Virginia. That's a whole different state."

The \$5.2 billion effort has fueled a backlash against data centers through the region, prompting officials in Virginia to begin studying the deeper impacts of an industry they've long cultivated for the hundreds of millions of dollars in tax revenue it brings to their communities.

Critics say it will force residents near the coal plants to continue living with toxic pollution, ironically to help a state — Virginia — that has fully embraced clean energy. And utility ratepayers in the affected areas will be forced to pay for the plan in the form of higher bills, those critics say.

But PJM Interconnection, the regional grid operator, says the plan is necessary to maintain grid reliability amid a wave of fossil fuel plant closures in recent years, prompted by the nation's transition to cleaner power.

[Continue reading here](#) (*subscription may be required*)

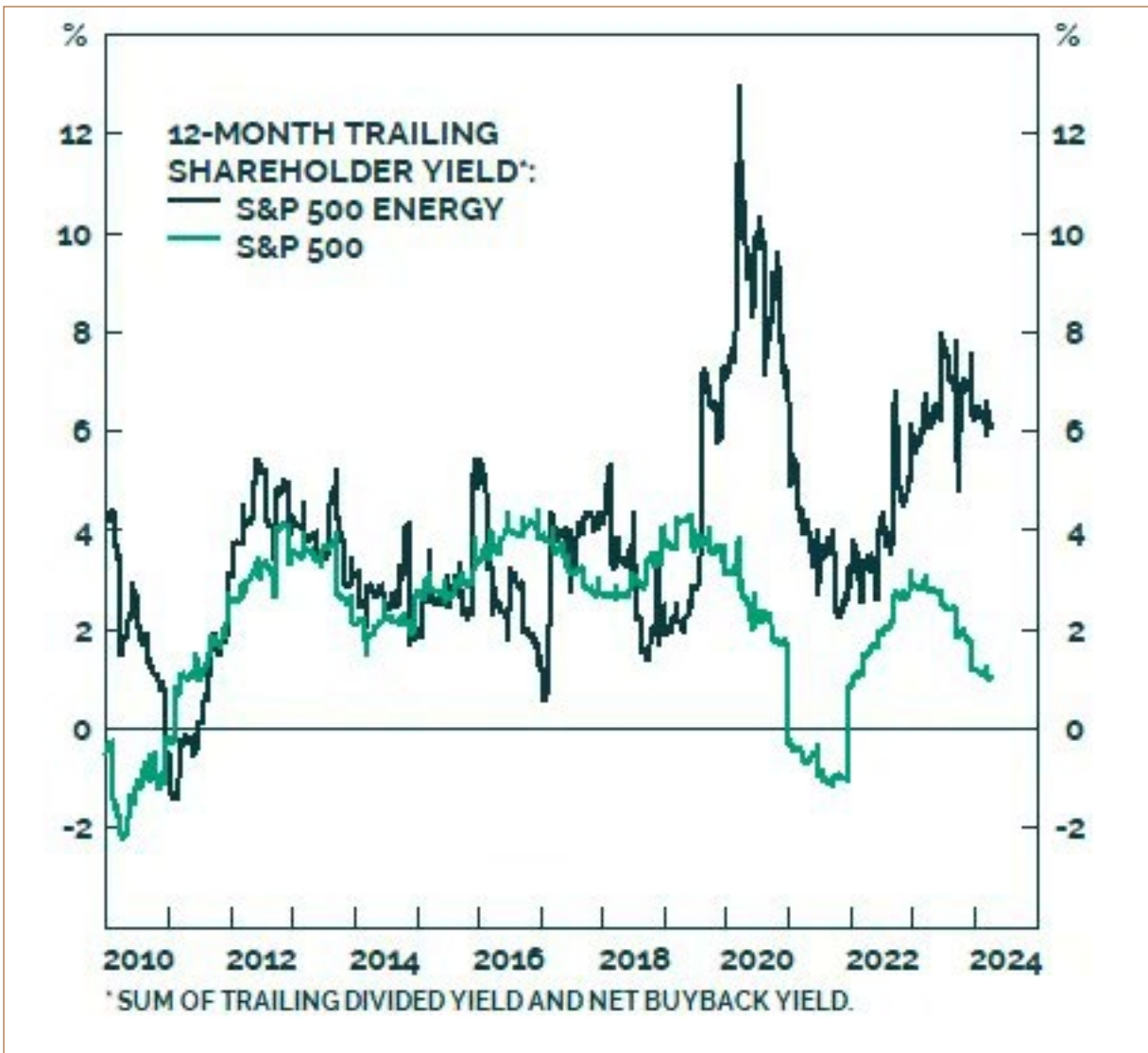
Saudi Arabia reportedly needs oil prices near \$100 to stay solvent ([from annmarie hordern via X](#))...

Riyadh will require an average oil price of \$96.20 a barrel to balance its budget, assuming it holds crude output steady near 9.3 million barrels a day this year, per IMF.



Shareholder yield in the energy sector has positively diverged from the overall market in recent years ([from Daily Chartbook](#))...

When compared to the overall S&P you can see we entered a new payout policy regime for the Energy sector in the 2020s.



INVESTMENT CHRONICLES

Don't expect energy companies to dramatically ramp up new investment until executives are once again compensated for production rather than environmental, social, and governance ("ESG") goals (from Jesse Felder via X)...

Exhibit 40: Don't expect a supply response in Energy...

S&P 500 Energy capex as % of operating cash flow (1990-4Q23)

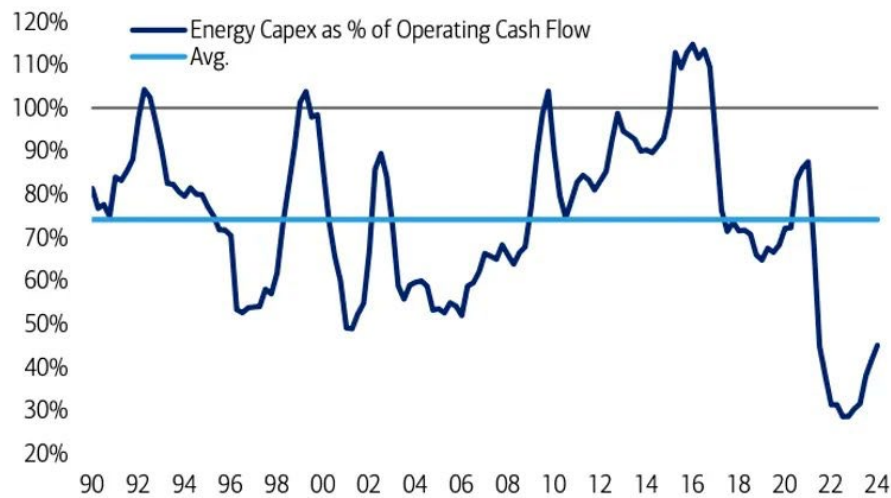
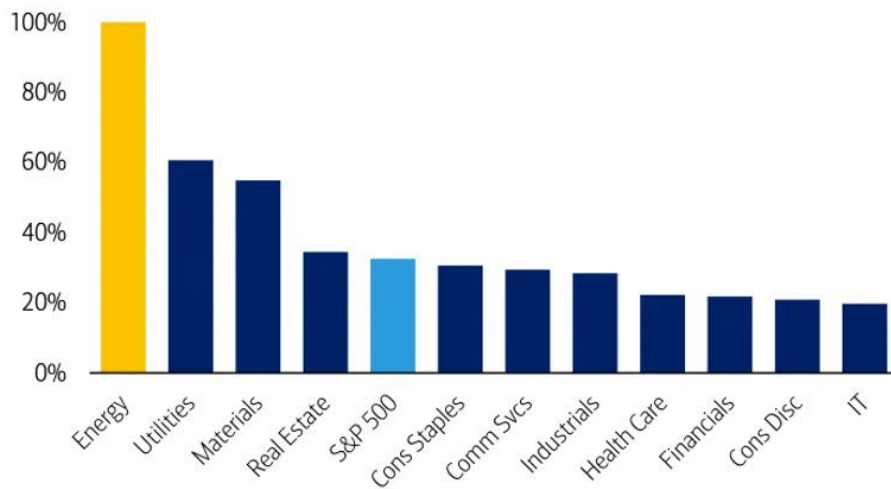


Exhibit 41: ...until CEO comp incentives revert to production goals

% of S&P 500 cos with ESG as part of CEO short-term incentive compensation plan (as of 11/23)



Source: BofA US Equity & Quant Strategy, ICE Data Services

BofA GLOBAL RESEARCH

OTHER COMMODITIES

Five reasons commodities deserve a place in a diversified portfolio ([from Man Institute](#))...

Investors often must navigate a combination of cyclical and secular forces, ranging from geopolitical unrest to volatile inflation. Natural resource investments, referring to assets which derive from nature such as agriculture, oil and gas, and metals, are often overlooked by investors but we believe, in today's world, they should form a core part of any well-diversified portfolio. In this paper, we outline some of the key attributes of the asset class which lead us to this conclusion, including:

1. Natural resources have ranked among the most effective hedges against inflation and may offer protection in various market environments.
2. They have tended to have a low correlation to other major asset classes.
3. Each commodity is exposed to a unique supply and demand dynamic which drives distinct price performance, creating opportunities to generate alpha.
4. The commodities market has offered high liquidity owing to its long-established and developed nature.
5. Natural resources can offer protection against volatility induced by geopolitical conflict.

Let's dive in.

1. Potential for protection in various market environments

In times of inflation volatility, investors often flock to real estate, infrastructure or private investments. These asset classes may offer some degree of protection but historical data shows that natural resources rank among the most effective. Table 1 shows that the commodities complex provided both real returns, as well as a high hit rate, as defined below, in various historical inflationary environments. While the sharp inflationary spikes of recent years are likely anomalies, the low inflation environment of the past several decades is unlikely to be the norm going forward. In an environment where market and inflation volatility persists, we believe that natural resource equities can offer potential protection and real returns in various market environments.

Table 1. Commodity futures returns during historical US inflationary episodes and annualised returns during inflationary and non-inflationary times

	Specific inflation regimes								Combined regimes			
	US enters WW2	End of WW2	Korean War	Ending of Bretton Woods	OPEC oil embargo	Iranian Revolution	Reagan's Boom	China demand boom	Inflation (19%)	Other (81%)	All (100%)	Hit rate
Start month	Apr 1941	Mar 1946	Aug 1950	Feb 1966	Jul 1972	Feb 1977	Feb 1987	Sep 2007				
End month	May 1942	Mar 1947	Feb 1951	Jan 1970	Dec 1974	Mar 1980	Nov 1990	Jul 2008				
Total price level chg	15%	21%	7%	19%	24%	37%	20%	6%				
Commodity	Real return (total)								Real return (ann.)			
Industrials				115%	38%	-6%	306%	3%	19%	4%	7%	80%
Precious				28%	29%	185%	-27%	33%	11%	-2%	1%	80%
Agriculture		12%	6%	-23%	197%	-21%	6%	33%	7%	-3%	0%	71%
Softs				-41%	243%	15%	11%	15%	8%	-3%	-1%	80%
Livestock				69%	-21%	35%	97%	-23%	7%	1%	2%	60%
Energies	-3%	2%	-6%	-16%	264%	57%	201%	68%	41%	-1%	3%	100%
Gold					166%	154%	-18%	27%	13%	-1%	1%	67%
Silver				9%	99%	210%	-41%	36%	12%	-5%	0%	80%
Commods Aggregate		12%	6%	26%	85%	38%	84%	21%	14%	1%	4%	100%

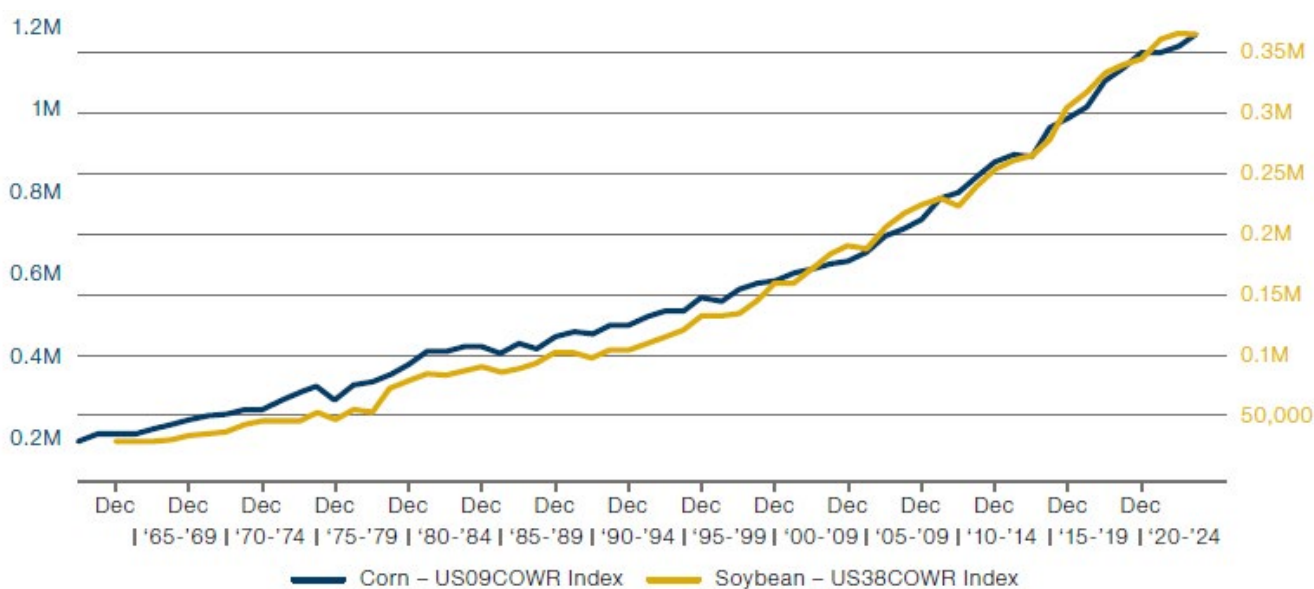
A common argument is that a bearish economic cycle will derail commodity prices. Separating myth from reality is important here. Firstly, historical precedent shows that commodity demand destruction from economic slowdowns is more limited than generally perceived, as well as isolated to certain commodities rather than broad based. Secondly, demand tends to return to growth trends within a relatively short period of time. In many cases, the severity of commodity downturns depends as much on supply response. Furthermore, occurrences of “stagflation” – a low growth, inflationary environment – are quite rare, with the main recorded instance in the 1970s when global markets were hit by a combination of supply shock (oil embargo) and ineffective central bank policies. If the 1970s cycle serves as a precedent, commodities offered one of best offensive and defensive investments. It is also interesting to note that commodities’ outperformance in the 1970s was not isolated to the energy complex, but was rather experienced across agriculture and precious metals.



How can commodities outperform if economic growth is low or negative? Contrary to popular belief, natural resources demand is not as price sensitive as commonly perceived. Indeed, it is generally supply response that ends commodity cycles. When viewed through a long term, multi-decade lens, we can see that consumption of commodities (showing grains and steel as an example in Figure 1 and 2 below) trends steadily higher, with economic shocks like the Global Financial Crisis (GFC) being fairly small blips in the overall bigger picture. As an example, during the depths of the GFC, peak quarterly crude oil demand saw only a 3% decline to the trough and by 2009-2010, global oil demand had rebounded to new highs. Economic cycles will rise and fall but consumption will remain a constant trend.

Figure 1. Global corn and soybean consumption

2. Low correlation to other major asset classes



One of the most important characteristics of the natural resource asset class is its low correlation to other major asset classes. Using the Bloomberg Commodity Index as a proxy, we analysed the correlation of natural resources to both equities and bonds across various timeframes, as well as during significant market events. The low correlations are particularly remarkable from a long term perspective (when economic and/or commodity cycles are smoothed out). During extraordinary market events such as the GFC or Covid-19 pandemic, correlations with other assets can temporarily 'go to one' but will revert to the historic low correlation shortly thereafter.

INVESTMENT CHRONICLES

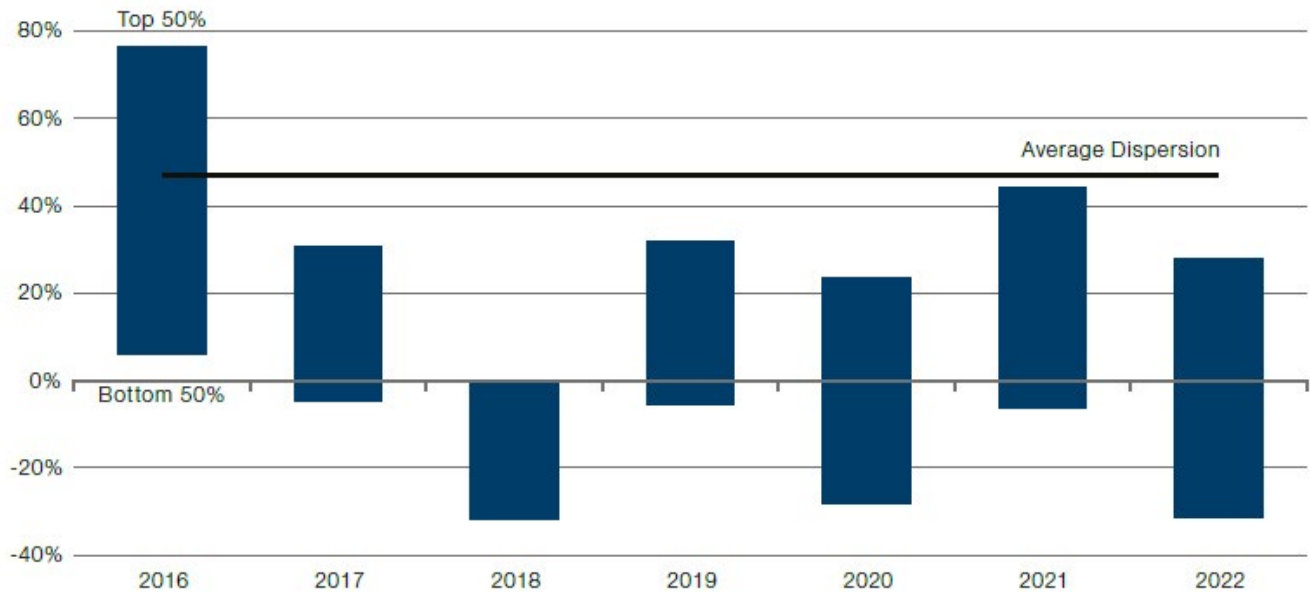
Table 2. Correlation with equities and bonds

Period	Correlation with Equities	Correlation with Bonds
1973-2022	0.16	0.36
1980-2022	0.02	0.22
1990-2022	-0.19	0.03
2000-2022	-0.51	-0.45
2010-2022	-0.56	-0.76
70s Inflation Cycle (1970-1980)*	-0.01	0.80
China Supercycle (1998-2007)	0.30	0.89
Global Financial Crisis (2007-2009)	0.76	-0.64
Lost Decade (2010-2019)	-0.85	-0.84
COVID (2020)	0.96	-0.28
Current (2021-2022)	-0.13	-0.64

3. Idiosyncratic characteristics of natural resources drives dispersion of returns

Dispersion is a vital feature of investing in natural resources. Each commodity is exposed to a unique supply and demand dynamic that drives distinct price performance, regardless of broader systematic trends. For example, in the broader metals and mining universe, iron ore demand will be primarily driven by Chinese property and infrastructure consumption while another metal like copper will have a more diverse set of consumption drivers such as energy transition uses. For natural resource equities, the average dispersion (measured by the average performance in the top 50% versus the bottom 50%) is close to 50% (see Figure 3). This is among the widest across asset classes and can create meaningful opportunities for active investors.

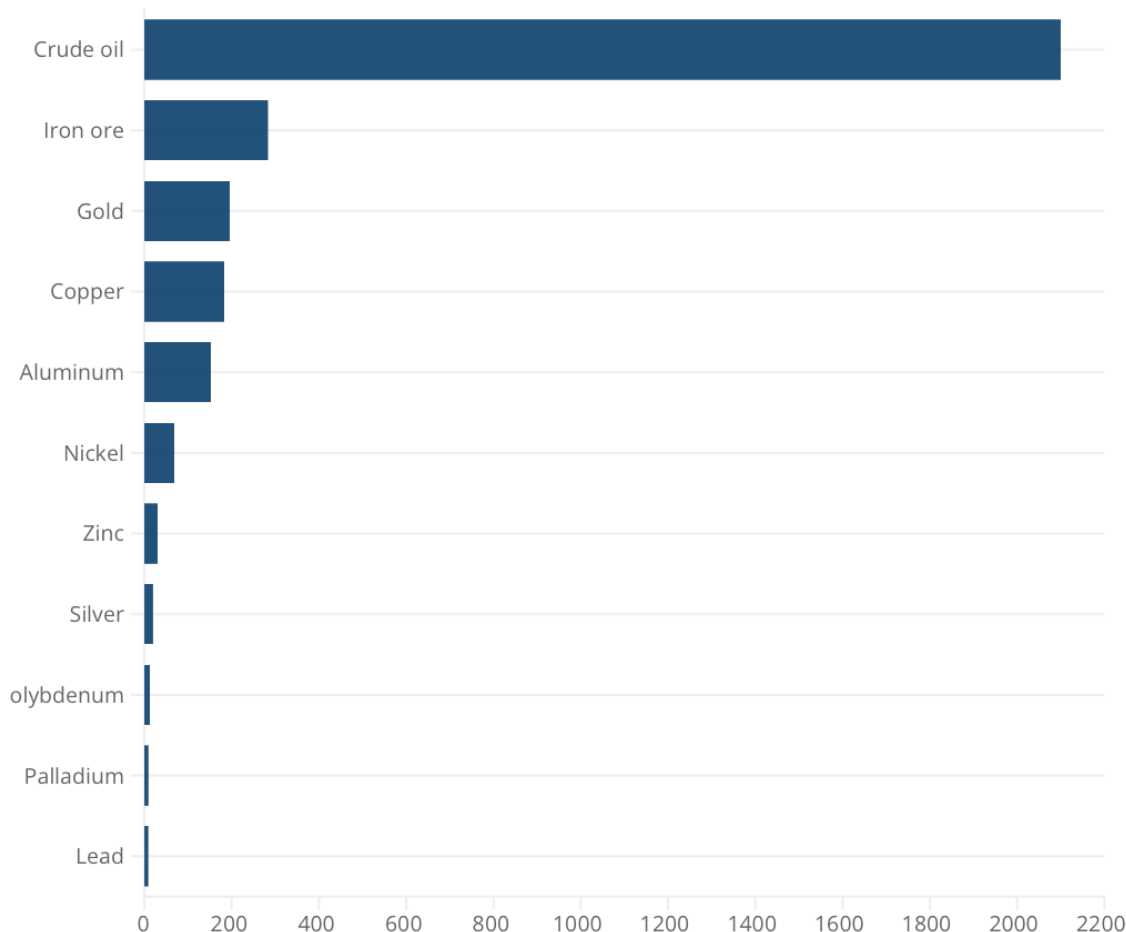
Figure 3. Wide dispersion of returns in the S&P Global Natural Resources Index



4. Liquidity and daily mark-to-market

Commodities are one of the basic building blocks of the global economy and the market is long-established and developed. As of June 2023, the annual market size of oil surpassed \$2 trillion (market size measured as 2022 production multiplied by June 2023 prices). The largest metals markets as illustrated by iron ore, gold and copper were \$283 billion, \$196 billion and \$183 billion, respectively. Given the size of the physical market, the daily financial market is consequently highly liquid, providing a daily and constant mark-to-market on price. Within listed public equities, the three-month average daily traded volume for the S&P Global Natural Resources Index is estimated to be in the range of \$7.5-8 billion at the time of writing.

Figure 4. Market size of oil compared to top 10 metals worldwide (in billion USD)

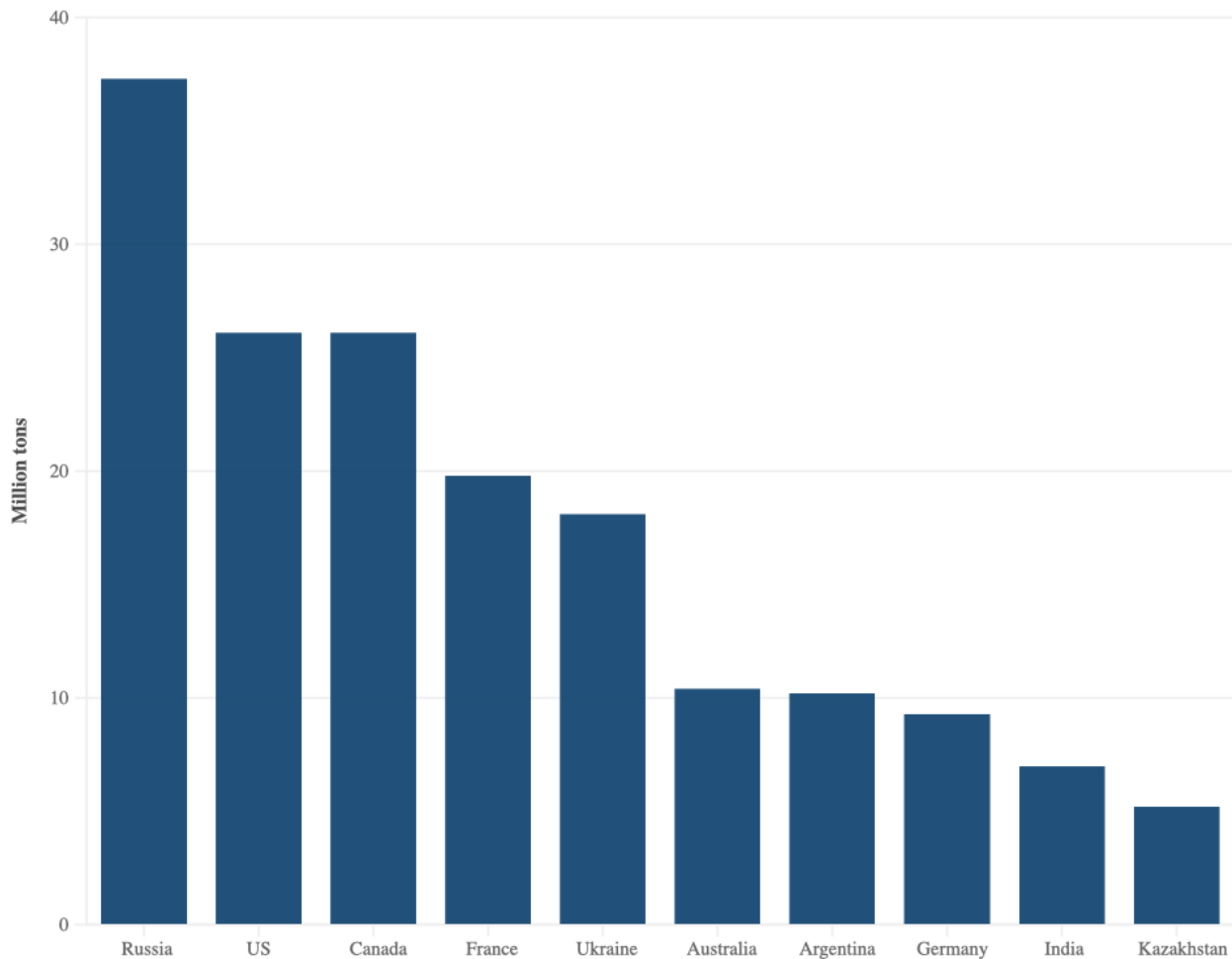


5. Protection against geopolitical tensions

In recent years, we have seen an emergence of a multi-polar world and a slow breakdown of historical social and economic conventions. From the rise of China as an economic superpower to the increased military activism seen in Russia/Ukraine and the Middle East, there is an underlying power paradigm change. For investors, geopolitical shifts and spikes are difficult to hedge against. One overarching factor that links many geopolitical events is commodities. The natural resource world is bifurcated between the 'have' and 'have nots', with production often concentrated in the hands of a few producers. Using wheat as an example, the top 10 wheat exporters in the world account

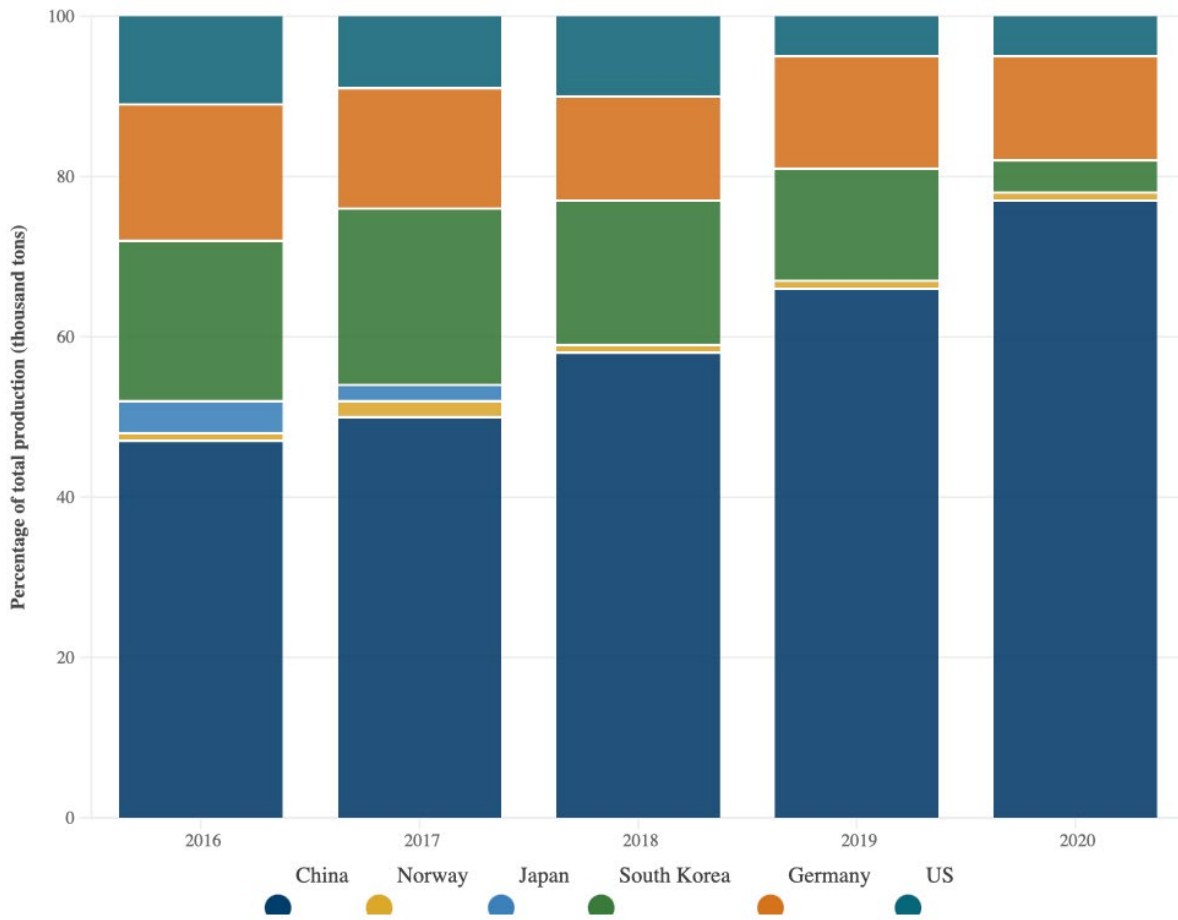
for more than 80% of total global export volumes (see Figure 5). Even more alarming, the Russia/Ukraine region accounts for between 30-40% of global total exports. Even non-traditional areas like renewables are often dominated by one or two countries. China, for example, controls most of the solar supply chain (see Figure 6), as well as other critical areas like rare earth. As geopolitical tensions continue to shift and grow in the future, commodities will be increasingly 'weaponised' and we believe the natural resource equity complex will be one of the most effective means of hedging the resulting price volatility.

Figure 5. 2020 world's largest wheat exporters



INVESTMENT CHRONICLES

Figure 6. China dominated all steps of solar panel production



[Continue reading here](#)

We're about to witness a "historic migration of capital" into resources ([from The Market NZZ](#))...

Over decades, the global financial markets have enjoyed a period of low and stable inflation, accompanied by steadily declining interest rates. This fertile environment fueled a spectacular bull market in equities, particularly favoring growth stocks in the tech sector.

In his new book, «How to Listen When Markets Speak: Risks, Myths, and Investment Opportunities in a Radically Reshaped Economy», best-selling author Larry McDonald argues that the era of low inflation and declining interest rates is over – with significant implications for investors around the globe.

The danger of these long cycles is that the belief lives on for much longer than markets allow, says the creator of The Bear Traps Report» and former senior trader at Lehman Brothers. Many investors are therefore unprepared for this new environment, he adds.

In this in-depth interview with The Market NZZ, which has been lightly edited, Mr. McDonald explains why he believes the macroeconomic environment is about to change fundamentally and which sectors and companies will be the big winners.

Your new book is entitled *How to Listen When Markets Speak*. What are the markets telling us right now?

It looks like the central banks are no longer too worried about inflation. This comes at a time when the signs are pointing to a second wave of inflation. I therefore believe we're about to witness a historic multi trillion-dollar migration of capital, one that ushers in a new class of winners and losers.

What does this mean for investors?

Anyone invested in the markets will be affected by these tectonic shifts. Since the end of the Cold War, the world has experienced an almost uninterrupted period of declining inflation. Most people have become so accustomed to this environment that a significant proportion of global wealth has been, and still is, concentrated in financial assets such as growth stocks and bonds.

However, such investments have paid off well in the past.

That's true. But from an investing standpoint, the danger of these long cycles is that the belief lives on for much longer than markets allow. Many investors are therefore unprepared for this new environment and are still convinced that tech behemoths such as Apple, Microsoft, Amazon

or Nvidia will continue to outperform the market over the next ten years. But here's the problem: As we transition to a new era of persistent inflation, similar to the stagflation period of the late 1960s to the early 1980s, we can expect a significant rotation away from growth stocks and towards hard assets and value stocks.

Why do you think we're about to observe a similar shift today?

The main drivers of the great boom that shaped the financial markets in the past period were globalization and the integration of labor and savings from Asia into the global economy. An increasingly borderless financial system emerged, to which technological innovations from Silicon Valley made an important contribution. These structural forces have driven inflation ever lower since its peak in the late 1970s. But this era is now over.

How come?

One of the main reasons has to do with geopolitics. As we're already witnessing, conflicts around the globe are on the rise. After the United States have largely dominated global politics for many years, a multipolar world order is emerging, which will be accompanied by a devaluation of the dollar and sovereign debt crises. This, coupled with trade wars and the re-shoring of industrial production, creates a recipe for sticky inflation. Against that backdrop, I also fear that we will soon be faced with a catastrophic shortage of natural resources.

What leads you to this assumption?

The roots of the problem lie in the fact that booms and bubbles lead to excesses. For example, the final phase of the last major commodities boom was characterized by exuberant capital investment in the years between 2009 and 2014. From oil, gas and uranium to industrial metals such as iron ore and copper, gigantic sums of money were poured into new projects, leading to a total collapse of commodity prices. This brutal bear market fundamentally changed the mentality of the industry. If you're the CFO of a commodities producer and see one CEO after another being fired, you soon adopt a very conservative attitude to investments.

So what are the consequences today?

This unrestrained behavior, which resulted in numerous bankruptcies and asset sales during the crisis, as well as stricter regulations, killed investment in the traditional energy

sector, including oil, natural gas, and coal. According to my calculations, investments in fossil fuels and metals were cut by \$2.4 trillion between 2014 and 2020. In recent years, Western countries have also waged a political campaign against fossil fuels. As a result, supply has declined across the board, while the global population has increased by 800 million people since 2014. So today, we might need \$3 trillion in additional capital expenditure just to play catch-up.

What is the best way to prepare for this new environment?

You want to be in hard asset type companies, companies that do well in an elevated inflation regime. Copper and aluminum producers such as Freeport McMoRan and Alcoa will benefit from the lack of capital investment, as the electricity infrastructure needs to be modernized and expanded. Big names like BHP, Rio Tinto and Vale should also be part of your portfolio. It's expected that 40% of the growth in demand for copper will be based on green technologies such as electric vehicles, wind turbines and solar systems. And there's been such an aversion to mining that the amount of copper mines scheduled to come online over the next decade is probably less than half of what it was ten or fifteen years ago. I think Barrick Gold could even change its name to Barrick Copper and Gold because copper will play such an important role for their business.

And what about the energy sector?

Energy stocks such as Chevron, Shell or ExxonMobil are also a good starting point. Just think, for example, of the additional demand for energy created by the rapid expansion of data centers for artificial intelligence and the mining of cryptocurrencies. If you believe the growth forecasts of chip providers such as Nvidia, natural gas producers such as Chesapeake Energy and Antero Resources are particularly attractively valued.

[Continue reading here](#)

Industrial metals may be poised for a huge long-term reversal ([from Nautilus Research via X](#))...

Industrial Metals relative strength (vs. SPX) ready to turn?



“Doctor Copper” has a message about inflation (from McClellan Financial Publications Chart In Focus)...



INVESTMENT CHRONICLES

One trite Wall Street saying is that copper is the only metal with a PhD in economics. This is because copper is an industrial metal, the demand for which waxes and wanes with economic growth and shrinkage. So falling copper prices can be a sign that economic trouble lies ahead, and the converse is also true.

I would argue that copper's more reliable role is as a leading indicator of inflation, as illustrated in this week's chart. It shows the price of copper, shifted forward by 2 months to reveal how the growth rate of the Consumer Price Index (CPI) tends to echo copper's movements. The plot of copper prices uses daily data, whereas the CPI is monthly, and so naturally there is going to be more noise in the copper data.

Generally speaking the correlation has been good, although the first couple of years after Covid strained the correlation a bit. The copper market was arguably not functioning properly then, like so many other markets, with industrial demand and copper mining production both seeing turbulence from labor availability. But that seems to have settled down now.

The latest posting for CPI just out on April 10 caught many by surprise, but it reflects an up move which already started in copper from its December 2023 low. And the most recent jump to above \$4/pound says that inflation is not yet done rising.

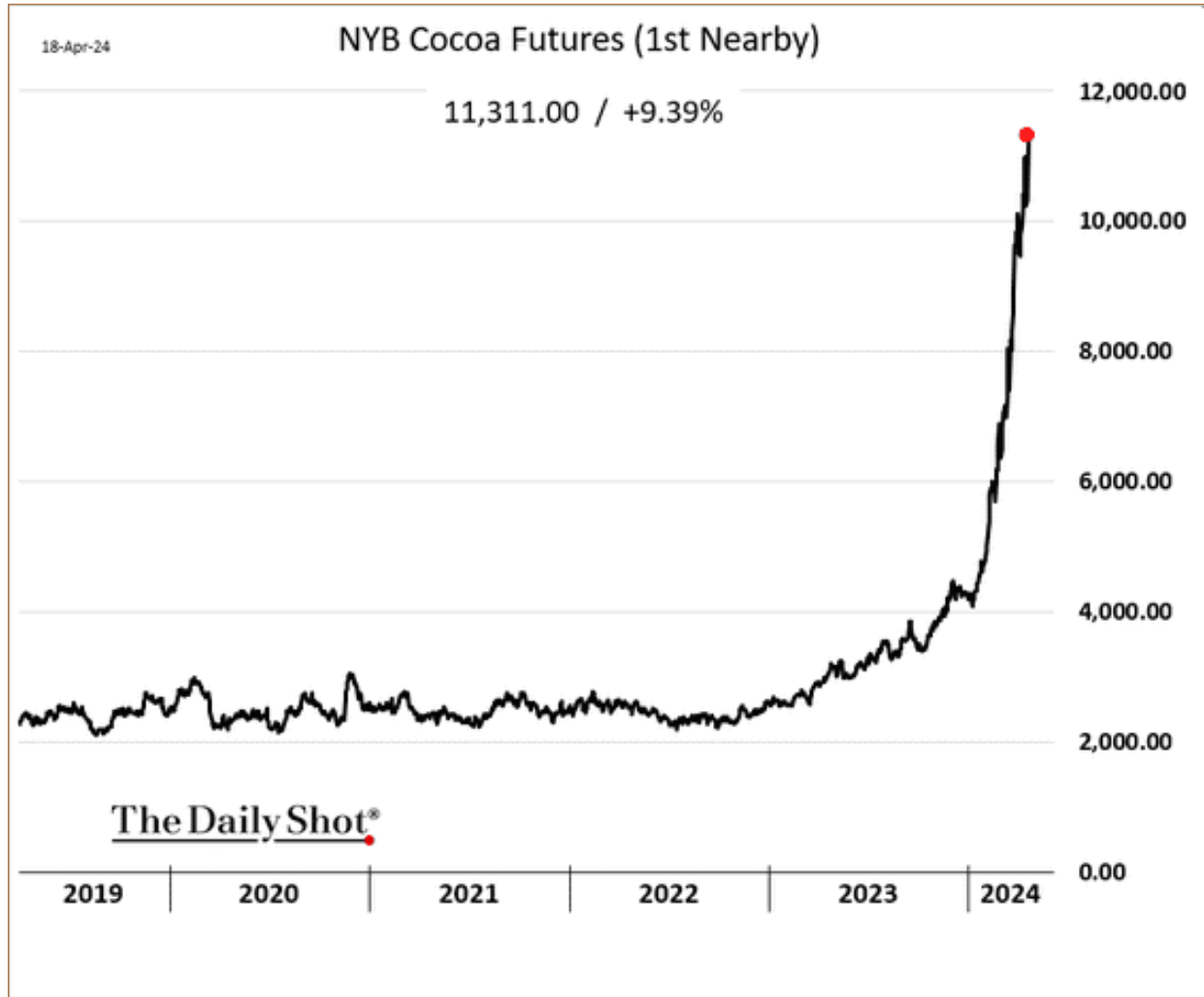
There is room to question the legitimacy of that message, since part of the rise in copper prices may have come from speculative trading in China. The Shanghai Stock Exchange just recently imposed trading limits on futures contracts for both gold and copper, in an effort to tamp down on that trading. So if this spike disappears rapidly, then one may be able to put a thumb over that point on the chart and disregard it. For now, though, the message is that inflation is going to be rising for at least the next 2 months.

Commodities continue to trade near historic lows relative to the S&P 500 ([from The Daily Shot](#))...



INVESTMENT CHRONICLES

Cocoa futures have resumed their unprecedented rally ([from The Daily Shot](#))...



BITCOIN AND CRYPTO

How Bitcoin made a believer out of BlackRock (*from The Wall Street Journal*)...

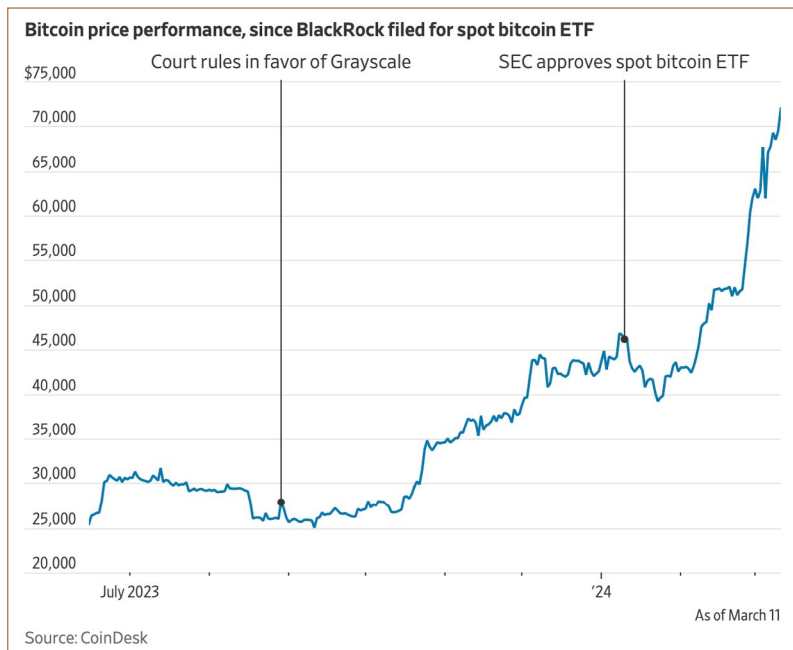
One of crypto’s erstwhile doubters is helping to take bitcoin mainstream.

Larry Fink, the chief executive officer of BlackRock, called bitcoin “an index of money laundering” back in 2017 and later rebuffed cryptocurrencies as something his clients weren’t looking to buy.

Today, he says he is a big believer in bitcoin. His firm manages the fastest-growing bitcoin fund and has forged partnerships with some of the largest players in the digital-assets industry.

The U-turn Fink is making at BlackRock has lent legitimacy to bitcoin and signals Wall Street’s growing desire to capitalize on a market that has long been considered the Wild West of finance. By selling bitcoin in a low-cost and popular exchange-traded fund, BlackRock opened the door for mainstream investors to buy and sell bitcoin as easily as stocks.

“We view a core part of our mission as providing choice and access,” Rob Goldstein, BlackRock’s chief operating officer, said in an interview. “This is an important topic for our clients.”



INVESTMENT CHRONICLES

Bitcoin's resilience played a hand in that decision, too. The token's short history has been dotted with crashes. Yet after each bust, another boom cycle began that attracted more investors. Today, Bitcoin prices are back at record levels and flirting with \$70,000, a run that seemed improbable 16 months ago, when the crypto exchange FTX collapsed in spectacular fashion. Bitcoin prices were hovering near \$16,000 at that time.

Industry critics said they are surprised by BlackRock's embrace of crypto in light of the reputational risk the company faces in offering its clients exposure to such a volatile asset.

John Reed Stark, former chief of the Securities and Exchange Commission's Office of Internet Enforcement, said it is obvious that companies such as BlackRock are in the game for the fees.

[Continue reading here](#) *(subscription may be required)*

Four case studies: Should you hold Bitcoin in a Roth IRA? ([from Bitcoin Magazine](#))...

Whether you're young, mid-career, or playing the back nine, Roth IRAs can be an important tool for your financial goals. Four case studies below will illustrate how by combining Roth IRAs with bitcoin, you can save for retirement, optimize for your personal tax situation during retirement, and leave your bitcoin for the next generation.

These are hypothetical case studies based on our experiences, not real people. They're intended to help you better understand how bitcoin Roth IRAs can fit into many types of retirement plans. Hence, they're for educational purposes—you should discuss all personal situations with a financial, tax, or legal expert.

1. Sally the super stacker: Saving for retirement
2. Rod is retirement ready: Entering retirement
3. Larry wants to leave a legacy: Inheritance
4. "Why Would I?" Wayne: Reasons not to Roth

1. SALLY THE SUPER STACKER: SAVING FOR RETIREMENT

Sally is in her early 30s and has fallen down the bitcoin rabbit hole. Sally views bitcoin as the best savings technology given today's current macroeconomic backdrop and bitcoin's fixed supply of 21 million and is committed to a disciplined accumulation strategy.

She's looking for a way to save her hard-earned money without suffering debasement over time. Ultimately, she would like to use her savings for major goals: a dream vacation, a house, starting a family, and maybe retiring someday. But retirement is a distant goal, and she thinks the United States could go through some significant changes before she's ready to settle down.

Why would she even bother with the fiat-based American retirement system? The rules, limits, penalties, and potential changes aren't worth it. Just keep your head down and stack sats, right? Not so fast, Sally.

IMPORTANCE OF TAX-FREE GROWTH

Like most bitcoiners, Sally is stacking bitcoin with money that has already been taxed. Her payroll taxes are withheld on payday, and she is paid the remaining U.S. dollars into her bank account. She then sends money to an exchange and purchases bitcoin. This is the typical way most people stack sats—post-tax.

However, just because the bitcoin is purchased post-tax does not mean it won't be taxed again. Non-retirement bitcoin earnings are taxed as a capital gain when sold. Over her years of stacking, she will need to keep track of her cost basis and deduct that amount from the gross proceeds when selling.

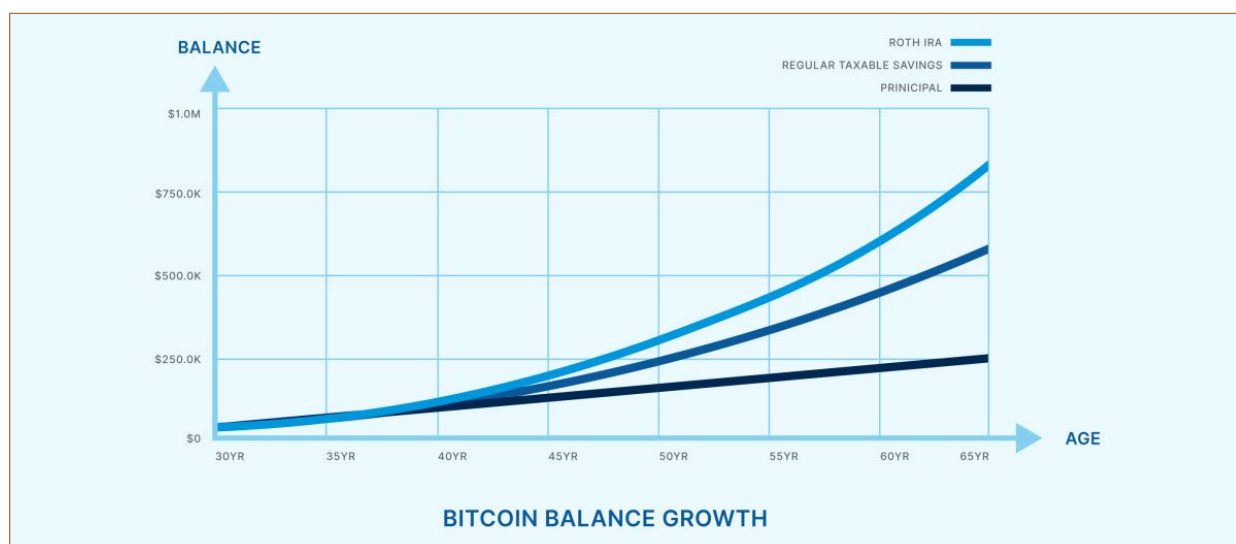
It's a simple formula: (final trade) minus (what you paid) equals (what you made). What you make is taxed as capital gains.

ENTER THE ROTH IRA

This is where a Roth IRA savings vehicle adds value. If Sally were to contribute to a bitcoin Roth IRA, contributions would still be made post-tax—same as before. But the key difference is that qualified Roth IRA distributions are tax-free. She only pays tax once, not twice.

The potential implications of tax-free bitcoin are massive. If the dollar value of bitcoin exponentially increases as Sally expects, then reducing her potential tax burden becomes increasingly rewarding.

Let's assume she starts saving \$6,000 per year at age 30 until she reaches age 65, and bitcoin grows at 6% annualized (feel free to plug in your own assumptions). At age 65, she will have accumulated \$822,330. And if she had to pay an estimated 20% capital gains tax, it would amount to a bill over \$117,000.



In this scenario, a Roth IRA saves her more than \$117,000. The Roth becomes a vehicle to supercharge future purchasing power without changing her current taxation. Not having to pay tax on future gains has an exponential impact over time.

NOT JUST RETIREMENT: WITHDRAWING CONTRIBUTIONS

Four years into maximizing her bitcoin Roth IRA contributions, Sally has contributed \$24,000 (four years of \$6,000 max) and experienced a rapid increase in bitcoin price—a common experience for many bitcoiners. Let's assume a hypothetical balance of \$100,000. To celebrate and reward herself, she has planned a Miami vacation. However, she can't decide if she should sell her non-retirement bitcoin and pay gains tax or take it from her retirement account and pay penalties.

With penalty-free access to Roth contributions, Sally can take up to \$24,000 (her total contributions) out of her Roth without incurring penalty or tax. In this imaginary scenario, let's say she ends up pulling \$10,000 from the Roth for her Miami vacation.

MORE WAYS TO MAXIMIZE A ROTH

If Sally meets someone in Miami, she could pull \$10,000 more from the Roth for an elopement wedding. And the house with the picket fence? The Roth allows for some flexibility in that, too: Roth IRAs allow for up to \$10,000 of earnings to be withdrawn penalty-free if used for a first-time home purchase. With \$4,000 of contributions left and an additional \$10,000 in earnings for the first-time home purchase, Sally could combine forces with her equally-wise new spouse—who was also contributing to a Roth—and compile \$24,000 for a down payment.

After the tax- and penalty-free spending spree has subsided, she and her spouse can continue to regularly contribute again, saving for the next big goal, and ultimately for retirement.

KEY TAKEAWAYS

The Roth account has more flexibility than just saving for the classic age 59 ½ retirement scenario. Tax-free growth is a powerful tool to grow wealth over time and should be strongly considered for any retirement plan. You can pull contributions tax- and penalty-free at any time, and earnings are tax-free at retirement age. Certain conditions even allow you to pull earnings from your Roth without a penalty.

2. ROD IS RETIREMENT READY: ENTERING RETIREMENT

Rod has been diligently preparing for retirement. He's mentally there, but financially not ready to

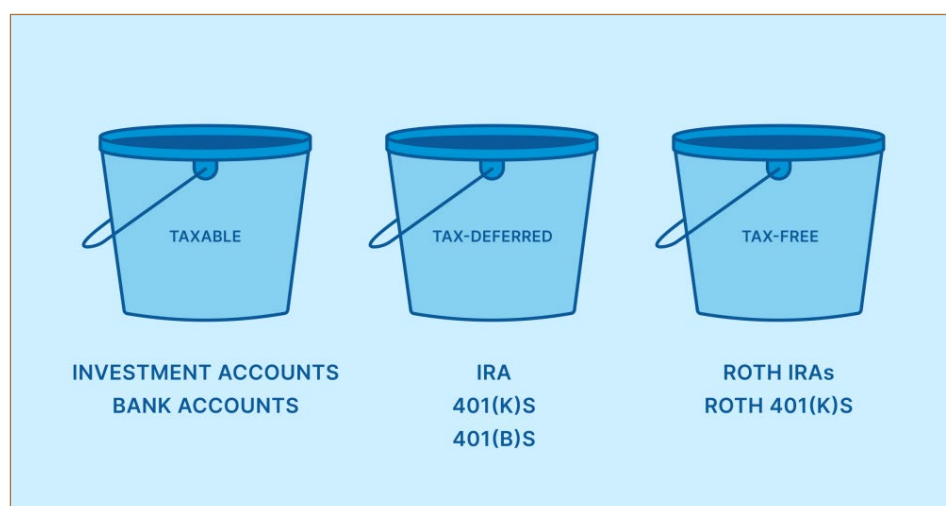
take the leap. Still, bitcoin has become an increasingly important position in his portfolio. What started as a hedge (1-2%) has become a core component (+10%). He holds some bitcoin directly but has more exposure through bitcoin-adjacent assets (GBTC, MicroStrategy, mining stocks, etc.).

He's not ready to go all-in on bitcoin because, although he believes in its importance, the volatility conflicts with his desire for financial stability during retirement. He has worked hard to earn his nest egg and would hate for it to disappear—especially to taxes. Within the next 5-10 years, he will transition out of his career and live off his 401k, investment account, real estate equity/income, and bitcoin. Any social security or pension are just a bonus.

BRACKETS AND BUCKETS

Rod needs to dive into his financial situation and see how his tax brackets will look. What will they look like the Monday morning after he retires? What will they look like after the pension or social security start? What about when the 401k required minimum distributions start at age 72? Knowing where the money is coming from, when it occurs, and how it's taxed are critical components to retiring—and staying retired.

To make a plan, Rod needs to think about each account type as being in a different “tax bucket”. His taxable assets are taxed upon sale, and his tax-deferred accounts are taxed when he takes income from them. The Roth provides another bucket: tax-free income. If Rod were to add a Roth IRA, he could pull from different buckets depending on the plan and the need.



For example, Rod can pull from the Roth in high tax years and keep his bracket from climbing too quickly. He can pull from taxable or Traditional IRAs in low tax years and accelerate that income at a lower marginal rate. More sophisticated strategies could include conversions, delaying income, gifting taxable assets, etc. The key point: Roth allows for diversification in “tax buckets” to optimize your tax bracket in retirement.

When Rod adds this tax-free bucket to his picture, he decides to fill it with high risk/reward assets like bitcoin. If the growth is tax-free, then it makes sense for it to grow as much as possible. He decides to sell his mining stocks, GBTC, and MSTR and convert that cash into a bitcoin IRA (preferably one where he controls access to the keys).

KEY TAKEAWAYS

What did your bracket look like this year? No, not the March Madness one. The un-fun IRS one. All retirees must consider their expected tax bracket throughout retirement, and tax bracket management is a science and an art. Specifics vary from person to person, but the main concept applies: The more diversified your “tax buckets,” the more flexibility and optionality you will have in any tax environment.

3. LARRY WANTS TO LEAVE A LEGACY: INHERITANCE

Larry has been enjoying his time with his wife and grandchildren. He had a successful career and profitable investments that have sustained his lifestyle through retirement. Now, he thinks much more about the next generation and the challenges and struggles they will face. He wants to protect those he cares about and leave the world a better place.

At first, bitcoin didn't make sense to him. He thought it was just another get-rich-quick scheme. But given the state of the world today and institutional financial foolishness taking place, he's now open to seeing its long-term potential. Larry's main goal is to leave bitcoin for the kids and grandkids. He thinks it could become meaningful for their future when he's no longer with them.

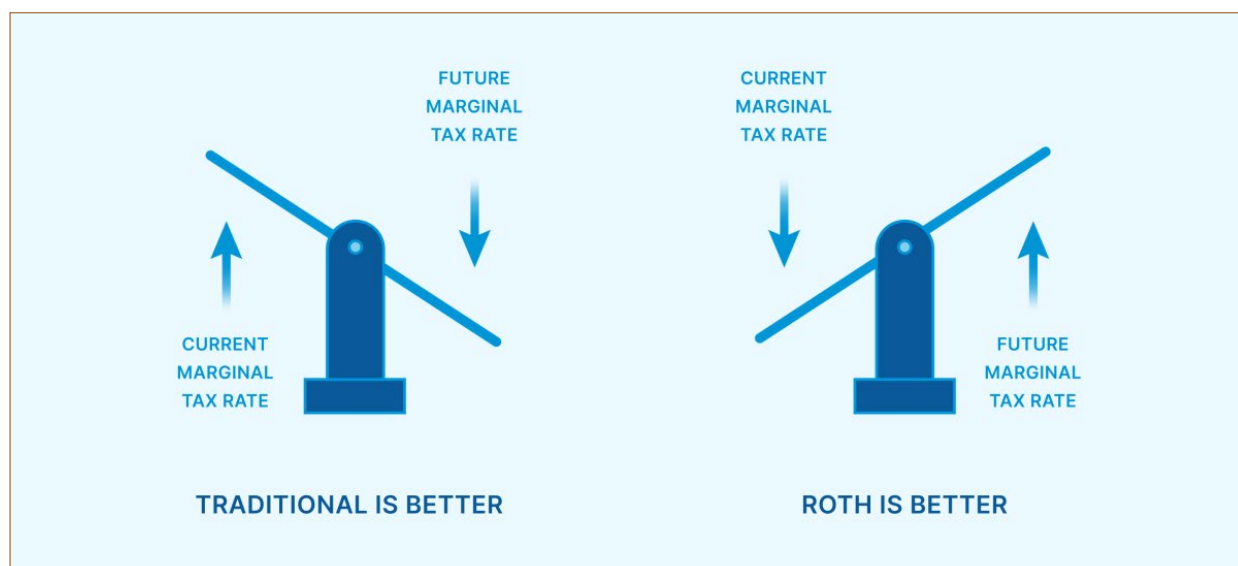
INHERITANCE AND ESTATE CONSIDERATIONS

When Larry sets up a Roth IRA, he does not ever have to take Required Minimum Distributions from that account. He can leave the assets there to grow tax-free for the long term—perfect for bitcoin. Larry can easily add or modify beneficiaries to that IRA at any time, and beneficiaries will receive the Roth income tax-free upon his passing. He can accomplish his goal of passing bitcoin to his loved ones. (Estate taxes may still apply, Roth IRAs only avoid income tax.)

CONVERTING TO A ROTH IRA

Larry was already retired when the Roth IRA came out in 1997, so he doesn't have an existing Roth, and you need earned income to contribute. But even though he can't add money directly to one, he can consider a Roth conversion.

He can take pre-tax 401k/IRA funds and convert them to Roth, allowing him to pay the tax now and turn it into a tax-free vehicle for future generations. As to whether this is a good idea for your beneficiaries, the math is fairly simple: if you expect your tax rate to be lower than your beneficiaries' tax rate, then the Roth would make more sense.



KEY TAKEAWAYS

Larry has optionality. If the math makes sense, he could turn a portion of his portfolio into a bitcoin Roth IRA and leave the asset for future generations. It's worth noting that holding your own keys in an Unchained IRA requires that you also do [proper inheritance planning](#).

4. "WHY WOULD I?" WAYNE: REASONS NOT TO ROTH

Wayne is in his peak earning years and making really good money at his fiat job. He lives a simple life enjoying a lot of time outdoors, and expects not to need much income after

he retires. He has many hobbies, one of which is mining bitcoin with a few machines from his home. It's not a large-scale operation, just a hobby, but he would consider mining bitcoin with his retirement account if that were an option. Ultimately, he plans to leave all assets he owns to charities that he cares about.

BRACKETS AND BUCKETS PT. 2

Revisiting the brackets and buckets discussion from above, Wayne's current income (high bracket) is much greater than his expected future income needs (low bracket). If he were to convert any of his existing retirement assets to Roth, he would be paying a higher rate than if he had just waited to pull it in retirement. From this perspective, it may be wiser to keep the assets in a Traditional pre-tax account and not convert to Roth.

DEATH AND TAXES...

You know the saying: nothing is certain in life but death and taxes. If that's true, we can certainly add "death taxes" to the list. "Death tax" probably wasn't too popular in opinion research studies, so "estate tax" is the politically correct term these days. In 2022, the estate tax kicks in around \$12 million of net worth (\$24 million for married couples). Over time, more and more bitcoiners will need to consider this threshold as it becomes relevant to their situation.

As Wayne considers a Roth IRA, he should note Roth IRAs do not avoid the estate tax, only the income tax. Wayne plans to leave all assets to charity. Assets left to qualified non-profit entities would avoid both estate and income tax. In his case, there is no benefit to the Roth over his current structure from a taxation-at-death standpoint. If it goes to charity, it avoids the death tax—a silver lining to say the least.

MINING IN A ROTH?

Now, let's re-introduce Wayne's bitcoin mining hobby. Mining bitcoin within an IRA is technically possible but highly advised against for the average investor. He should be aware of the tax nightmare often involved and consult a tax advisor regarding UBIT (Unrelated Business Income Tax) within IRA accounts. Additionally, if Wayne wants to hold his mined bitcoin without revealing personal information to a financial institution, Roth IRAs simply aren't an option.

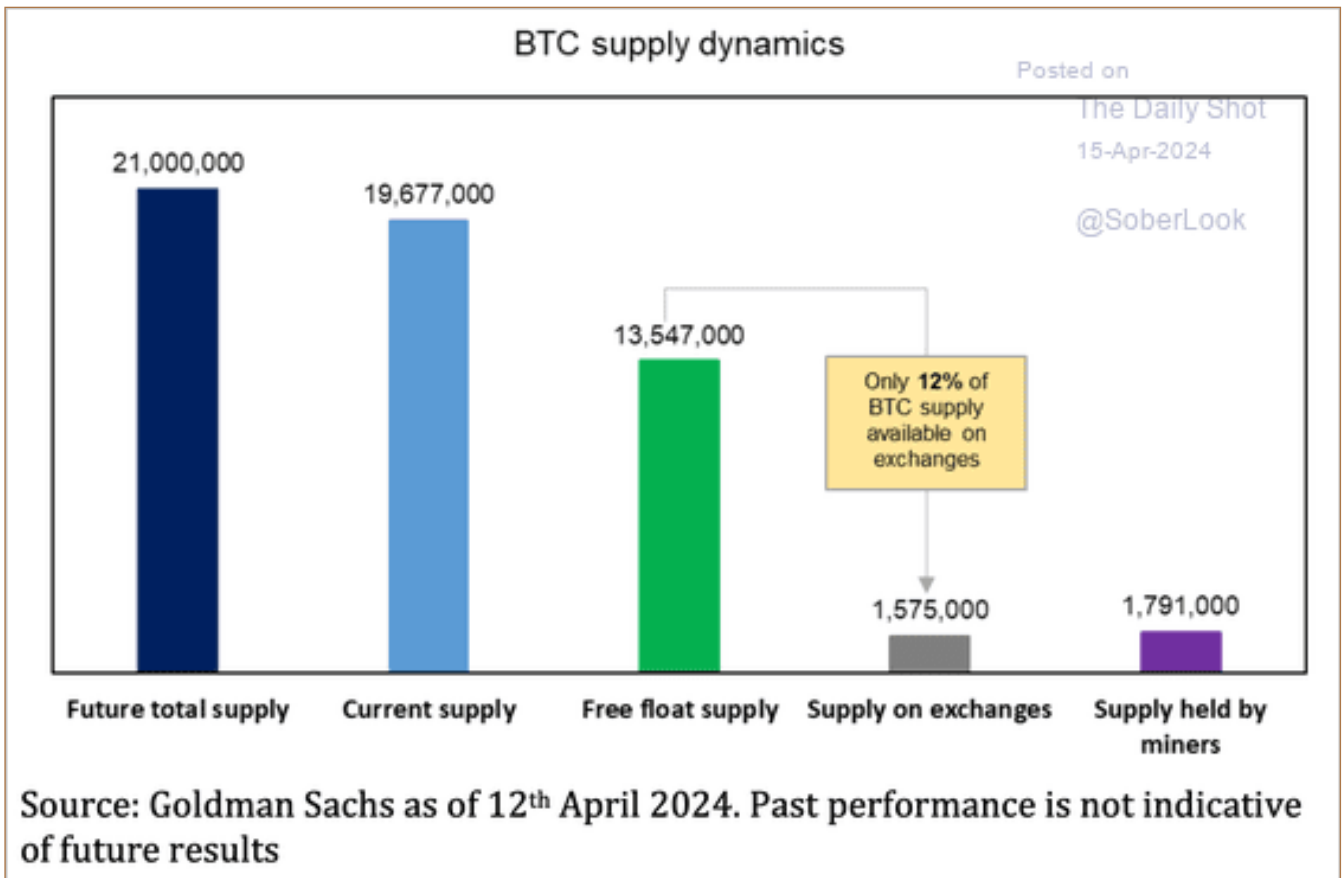
KEY TAKEAWAYS

When considering a financial strategy, no single tool works for every individual's situation. Factors such as tax bracket, net worth, and charitable intent are all relevant considerations

when evaluating a Roth IRA. Mining doesn't tend to be well-suited for bitcoin IRAs because of UBIT. Due to these factors, a Roth IRA may not be the right route for Wayne.

[Continue reading here](#)

Only 12% of the total Bitcoin supply is available for purchase on exchanges ([from The Daily Shot](#))...



INVESTMENT CHRONICLES

Hong Kong gives initial nod to Bitcoin and Ether ETFs, issuers say ([from Bloomberg](#))...

Hong Kong gave conditional approvals for asset managers to start spot-Bitcoin and Ether exchange-traded funds, the firms said, a development that boosted both tokens and the wider crypto market.

Harvest Global Investments Ltd. and a partnership between HashKey Capital Ltd. and Bosera Asset Management (International) Co. announced initial approvals in separate statements on Monday.

The Hong Kong unit of China Asset Management said it had received approval from the city's Securities & Futures Commission for the provision of virtual-asset management services and is deploying resources to develop products.

Hong Kong is vying with the likes of Singapore and Dubai to become a digital-asset hub after rolling out a dedicated regulatory regime last year. Officials are trying to restore the city's reputation as a modern financial hub following a crackdown on dissent that dulled its allure.

[Continue reading here](#) (*subscription may be required*)

JPMorgan analysts expect Bitcoin to face headwinds following the recent halving (from Coindesk)...

The bitcoin (BTC) price is likely to weaken after the reward halving, a quadrennial event that slows the rate of growth in bitcoin supply [that occurred on April 19], Wall Street giant JPMorgan (JPM) said in a research report on [last week].

The bank sees downside for the world's largest cryptocurrency after the halving because the market is still in overbought conditions, according to its analysis of open interest in bitcoin futures.

Furthermore, the cryptocurrency price of about \$61,200 is still above the bank's volatility-adjusted comparison with gold, which sets it at \$45,000, and its projected production cost of \$42,000 after the halving. The bitcoin production cost has historically acted as a lower boundary for BTC prices.

JPMorgan also notes that venture-capital funding remains subdued despite the recent crypto market resurgence.

The biggest impact of the halving will be felt by mining companies: "As unprofitable bitcoin miners exit the bitcoin network, we anticipate a significant drop in the hashrate and consolidation among bitcoin miners with a highest share for publicly-listed bitcoin miners," analysts led by Nikolaos Panigirtzoglou wrote.

"Post halving event, it is also likely that some bitcoin mining firms may look to diversify into low energy cost regions such as Latin America or Africa to deploy their inefficient mining rigs to gain salvage values from those rigs which would otherwise sit idle," the authors wrote.

The Bitcoin halving explained for novices ([from The Informationist](#))...

Today's Bullets:

- The Epochs
- The Formula
- The Future

Inspirational Tweet:



The Halving is here, the **Halving** is here!

Unless you've been on holiday and/or ignoring the financial markets altogether the past week, you likely heard about something called the Bitcoin Halving.

I mean, even *Senators* are getting in on the Halving excitement!

All kidding aside, Senator Lummis has been a strong advocate for Bitcoin, and I appreciate her presence in DC. It's always good to see her posting about Bitcoin.

That said, whether you are new to Bitcoin or a newly-minted HODLer, you may or may not know exactly what the Halving is and how it is governed.

The simple answer is *math*, of course.

But before you worry you'll be subjected to intense numbers and calculations today, have no fear. Because we always keep it simple and accessible around here, and today is no different.

My goal is to arm you with knowledge. The kind of stuff you can point to and explain to others after reading this. And we always like to have and poke a little fun (usually at the Fed or Treasury) around here, too.

So, grab a nice hot or cold brew coffee (getting warm where we are already) and settle into your favorite chair for some math-made-simple with The Informationist.

The Epochs

Whether you call it or have heard it called The Halving or Halvening (this sounds more like a Vampire or *Shape-Shifting* affliction to me, TBH), there's a simple but super important reason for this (roughly) four-year event.

You'll see why I said 'roughly' in a moment.

One of the aspects of Bitcoin that you're likely well aware of, is the fact that there will only ever be 21 million Bitcoin produced.

Exactly. Unlike the endless and relentless expansion that the fiat-photocopying masters employ for dollars and yen and euros and more, Bitcoin is ruled by an equation.

Whoa.

Before we go further, for those of you wondering, if there's only 21 million of them, how could there ever be enough for the whole world to use?

The answer is, each of those 21 million Bitcoin can be divided into 100 million parts, or Satoshis, as we like to call them.

Bitcoin was invented by Satoshi Nakamoto, so this is a nice little hat tip to the founder.

So, that makes a total of 2.1 quadrillion satoshis.

To put it in more tangible terms, if the value of each Bitcoin rises to \$1 million USD, that would make each satoshi worth one US penny.

And the total value of all the Bitcoin in the world at that point would be \$21 trillion, or roughly 1.5X the current value of all the gold in the world.

Plenty.

Back to the Halvings.

The way the supply is limited is that the total production of Bitcoin that is mined is controlled by an equation (we will get to that in a moment) that cuts the production (the amount mined) in half every four years, or so.

Now, imagine that gold miners were governed by a law that made them cut production in half every four years. As you can then imagine, the value of gold would rise with this decreasing production and thereby hardening of gold money.

Truth is, we don't know exactly how much gold is still out there to be mined on earth, on the moon, or perhaps elsewhere in our Universe. And so, gold continues to expand its supply at a fluctuating rate.

Back to basics and how Bitcoin mining is similar but very different.

- Bitcoin is mined by computers competing to solve complicated mathematical problems (there's that math governance again)
- The miner that solves the problem wins the award
- This happens roughly every ten minutes
- This reward is cut in half every four years
- Once the reward is cut in half, we enter what is know as a new Bitcoin Epoch.

So, the reward yesterday *morning* was **6.25** Bitcoin, and after the Halving, the reward yesterday evening was cut in half and is now **3.125** Bitcoin.

We entered a new *Epoch*.

Some of you may be asking, *why does this happen every four years, and why did there seem to be some confusion around exactly when the halving was going to occur?*

Let's dig just a little deeper and into the math side of things now to answer that and more.

The Formula

You have likely seen the equation, maybe in an article or if you've been to a Bitcoin conference, on a t-shirt or a hat. It looks confusing, or like another language. It looks like a bunch of jumbled nonsense.

It looks like this:

I once heard someone say that. Just looking at this equation was enough to make them break

$$\sum_{i=0}^{32} 210,000 \frac{50}{2^i}$$

out in hives.

Perhaps a bit dramatic, but yeah, to the non-math types, I get it. It looks super confusing. Intimidating, perhaps.

First things first, let's demystify some of this.

We will use this annotated graphic as a key. Take a peek:

The annotated formula is: $\sum_{i=0}^{32} 210,000 \left(\frac{50}{2^i} \right)$

- An arrow points from the text "Total # of halvings ever" to the number 32 in the upper limit of the summation.
- An arrow points from the text "# of new Bitcoin mined per block" to the number 50 in the numerator of the fraction.
- An arrow points from the text "# of blocks between halvings" to the number 210,000.
- An arrow points from the text "total # of halvings thus far" to the variable i in the denominator of the fraction.

That big Σ at the front of the equation is the Greek symbol for *Sigma*. And this basically means Sum.

The 32 means there will be 32 *equations* to sum.

The part after the Σ are the equation(s).

This equation tells us that there are 210,000 mining Blocks (these happen every ~10 minutes, as miners solve a different and very difficult equation to win the award) for each Epoch.

See, the miners are performing a calculation (***different than the one above!***) that is automatically adjusted in difficulty to take into account the number of computers trying to solve it. Kind of like in James Bond's Skyfall, where Q says, "*it's like trying to solve a Rubik's cube that is fighting back*"



In any case, it takes about 10 minutes to solve these problems, and so 210,000 of these contests adds up to approximately four years.

210,000 X one Block mined every 10 minutes = ~4 years

Now look to the part of the equation to the right of the 210,000. This is the number of Bitcoin that is rewarded in each Block.

The reward starts at 50 and is divided by 2 to the power of i , which represents the *Last Halving Epoch*.

In other words, Before the first Halving, the i would equal zero (zero Halvings, thus far), and so it looked like this:

50 divided by 2 to the power of 0, or 2^0

$$2^0 = 1$$

And so,

50 divided by 1 = 50

Before the first halving, the reward for mining a block was therefore 50 Bitcoin!

Those were the days, I guess. I wasn't around to enjoy them.

After the first halving, this equation became:

50 divided by 2 to the power of 1, or 2^1

$$2^1 = 2$$

50 divided by 2 = 25

After the first halving, the reward was cut in half, from 50 to 25.

and so on...

After the second halving, $2^2 = 4$:

50 divided by 4 = 12.5

After the third halving $2^3 = 8$:

50 divided by 8 = 6.25

After the fourth halving $2^4 = 16$:

50 divided by 16 = 3.125

Which is where we are today. The fourth Halving has occurred, and we are in Bitcoin's 5th Epoch.

Now you may be asking, what does that mean for Bitcoin and mining going forward?

How long will this continue?

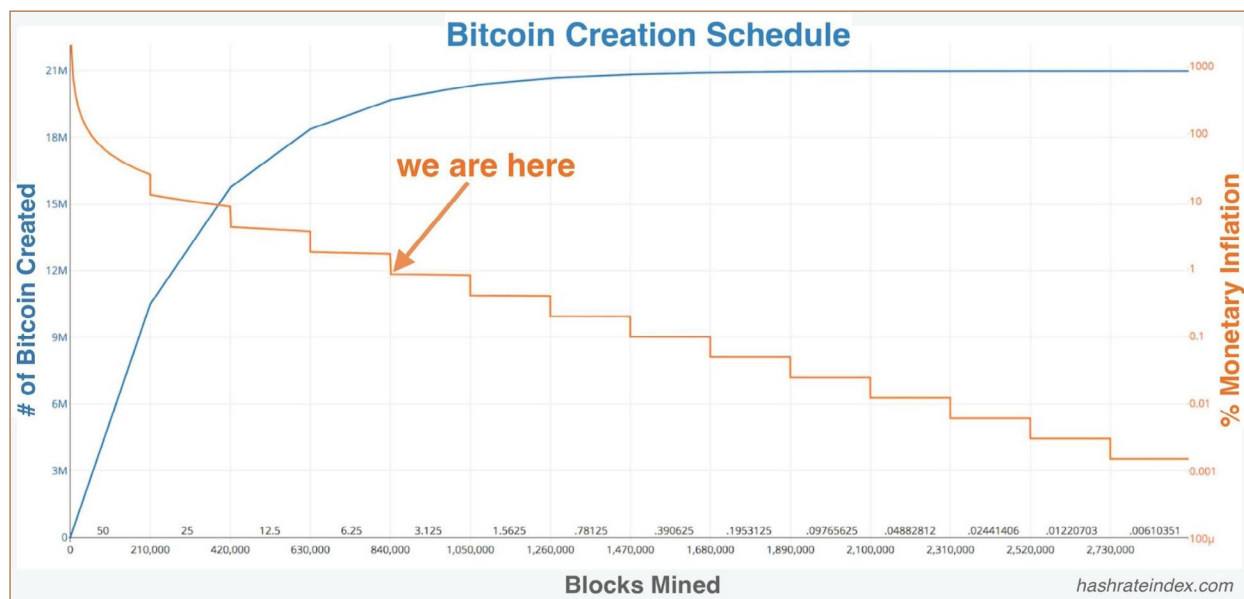
The Future

Remember the 32 up there? The one above the Σ ? This tells us that we will do this 32 times.

That's right, 28 Halvings to go.

And with each halving the reward will be cut in half again. So, in 4 years, the reward will drop to 1.5625 Bitcoin.

Look at this chart to see how the amount of Bitcoin created (Blue Line) decreases exponentially each Epoch. And the inflation rate, or amount of additional Bitcoin created (Orange Line) stair-steps lower until it reaches zero.



As you can see, the amount of Bitcoin created was quite high in the first epoch. After all, 50 Bitcoin mined every 10 minutes added up to 10,500,000 Bitcoin mined in the first epoch.

No wonder there are some seriously wealthy Bitcoin OGs out there.

In the next four years, 5,250,000 Bitcoin were mined, adding up to 16,750,000 total mined in the first eight years.

Flash forward to today, and 19,687,500 Bitcoin have been mined so far.

656,250 more will be mined in the next four years.

And in the 6th Epoch, from the years 2028 to 2032, there will be a total of 328,125 Bitcoin mined.

What is significant about this, is that it will be the ***last set of rewards that feature a full Bitcoin.***

Because in the 7th Epoch, only 164,062.5 Bitcoin will be mined over 210,000 Blocks, which makes the reward for each Block mined just .78125 Bitcoin.

At that point, by the year 2032, *98.4% of all Bitcoin will have been mined already*, and the inflation rate of Bitcoin will be just .33%.

Eat your heart out, JayPow. That's true *disinflation* for you.

How rare or *scarce* does that make Bitcoin?

Considering there are currently ***approximately 59.4 million millionaires*** in the world and less than ***19.7 million*** total Bitcoin to go around, I would say that makes it extremely scarce.

And this doesn't even consider the number of Bitcoin that have been lost because of misplaced keys or trashed computers, etc.

Some estimates put this number at over ***6 million*** Bitcoin.

Good. Lord.

Can you imagine knowing you have a few thousand Bitcoin you mined back in the day and forgot about that are on a hard drive or wallet that are now irretrievable, magnetically scrambled from a laptop drive failure, abandoned accidentally, or tossed in a landfill??? (Yes that actually apparently and horrifically happened):

ANNALS OF MONEY

HALF A BILLION IN BITCOIN, LOST IN THE DUMP

*For years, a Welshman who threw away the key to his
cybercurrency stash has been fighting to excavate the local
landfill.*

So, the next time you feel bad about getting into Bitcoin late (I occasionally have those pangs, too) remember that you aren't trying to find 7,500 of your Bitcoin in a landfill somewhere.

Also, with the creation of Bitcoin spot ETFs this year, the institutional investors are just now coming around to the idea that Bitcoin is not only here to stay, but that they may want to add some to their own portfolios. And they are, slowly.

This influx of serious and massive money has only just begun.

With a mere 13 million or so Bitcoin to go around these days (net of all the lost ones), and just 1.3 million left to be mined, things could get pretty spicy in the Bitcoin market soon.

I know I won't be around to witness the pure beauty of Satoshi's Bitcoin Supply Formula pay out its final reward. When the last fraction of Bitcoin is mined in 2140.

But I hope my grandkids will. And I fully intend to pass some Bitcoin down to them before then.

[Continue reading here](#)

NOTABLE INTITUTIONAL BUYING

From SEC Form 13F Filings by Top Investment Managers and Concentrated Hedge Funds This Month

Institution or Fund	Reporting Manager	Report Quarter	Stock Purchased/Sold	Ticker	Shares Owned	Value of Holdings (Average Price)	% of Portfolio	Change in Shares	Purchase Value
APEIRON CAPITAL Ltd	YAO WANYI	2023Q4	COINBASE GLOBAL INC	COIN	409,000	\$108,434,080(\$265.12)	43.00%	409,000(New Position)	108,434,080.00 \$
APEIRON CAPITAL Ltd	YAO WANYI	2023Q4	MICROSTRATEGY INC	MSTR	31,600	\$53,864,096(\$1,704.56)	21.00%	31,600(New Position)	53,864,096.00 \$
Beach Point Capital Management LP	Lawrence M. Goldman	2023Q4	GLOBAL BUSINESS TRAVEL GROUP	GBTG	7,074,482	\$42,517,637(\$6.01)	14.87%	7,074,482(New Position)	\$42,517,637
Clio Asset Management LLC	James Aldige	2023Q4	BUILDERS FIRST SOURCE, INC	BLDR	41,525	\$8,660,039(\$208.55)	6.00%	41,525(New Position)	8,660,039.00 \$
CONTINENTAL GENERAL INSURANCE CO	Michael Gorzynski	2023Q4	MACH NAT RES LP COM	MNR	825,000	\$13,604,250(\$16.49)	6.00%	825,000(New Position)	13,604,250.00 \$
CONTINENTAL GENERAL INSURANCE CO	Katia Chauprade	2023Q4	PNC FINL SVCS GRP	PNC	57,030	\$9,216,048(\$161.60)	7.00%	57,030(New Position)	9,216,048.00 \$
Exor N.V.	Guido de Boer	2023Q4	CLARIVATE PLC	CCC	67,294,884	\$500,000,977(\$7.43)	100.00%	2.38%(1,566,519)	11,639,236.00 \$
First American Financial Corp	Lisa W. Cornehl	2023Q4	OFFERPAD SOLUTIONS INC	OPAD	5,119,314	\$52,472,969(\$10.25)	15.00%	5,119,314(New Position)	52,472,969.00 \$
GP Brinson Investments LLC	Timothy J. Dolan	2023Q4	ENTERPRISE PRODS PARTNERS LP	EPD	743,733	\$21,702,129(\$29.18)	10.00%	173.97%(472,270)	13,780,839.00 \$
Greenhaven Road Investment Management L.P.	Mark Rubin	2023Q4	DIGITAL TURBINE INC	APPS	1,940,020	\$13,308,537(\$6.86)	5.80%	244.93%(1,377,587)	\$9,450,247
Key Colony Management LLC	Alex R. Lieblong	2023Q4	EVOLV TECHNOLOGIES HLDGS INC	EVLV	4,577,027	\$20,367,770(\$4.45)	21%	64.53%(1,795,099)	7,988,186.00 \$
Key Colony Management LLC	Alex R. Lieblong	2023Q4	GENCO SHIPPING & TRADING LTD	GNK	200,000	\$4,066,000(\$20.33)	4%	119.78%(109,000)	2,215,970.00 \$
Kopion Asset Management LLC	Terry Lee Ledbetter Jr.	2023Q4	BORGWARNER INC	BWA	299,260	\$10,728,471(\$35.85)	8.00%	45.29%(93,285)	3,344,267.00 \$
Maple-Brown Abbott Ltd	Anna Pohjonen	2023Q4	AMEREN CORP	AEE	1,714,520	\$126,805,898(\$73.96)	13.00%	8.87%(139,665)	10,329,623.00 \$
Maple-Brown Abbott Ltd	Anna Pohjonen	2023Q4	NISOURCE INC	NI	3,442,513	\$95,219,909(\$27.66)	10.00%	23.54%(656,060)	18,146,619.00 \$
Maple-Brown Abbott Ltd	Anna Pohjonen	2023Q4	SEMPRA COM	SRE	1,322,734	\$95,012,000(\$71.83)	10.00%	15.66%(179,074)	12,862,886.00 \$
Mass General Brigham Inc	William X. Kane	2023Q4	COINBASE GLOBAL INC	COIN	140,229	\$37,177,512(\$265.12)	65.08%	8.75%(11,282)	\$2,991,084
Mass General Brigham Inc	William X. Kane	2023Q4	REVOLUTION MEDICINES INC	RVMD	338,191	\$10,899,896(\$32.23)	19.08%	338,191(New Position)	\$10,899,896
Mass General Brigham Inc	William X. Kane	2023Q4	PLIANT THERAPEUTICS INC	PLRX	288,690	\$4,301,481(\$14.90)	7.53%	288,690(New Position)	\$4,301,481
Mass General Brigham Inc	William X. Kane	2023Q4	TANGO THERAPEUTICS INC	TNGX	354,192	\$2,812,284(\$7.94)	4.92%	354,192(New Position)	\$2,812,284
Medicxi Ventures Management (Jersey) Ltd	Giles Johnstone-Scott	2023Q4	PHATHOM PHARMACEUTICALS INC CO	PHAT	7,464,572	\$79,273,755(\$10.62)	18.00%	98.48%(3,703,703)	39,333,326.00 \$
Melia Wealth LLC	Aryn Sands	2023Q4	BLUE OWL CAPITAL CORPORATION	OBDC	899,130	\$13,828,619(\$15.38)	8.00%	899,130(New Position)	13,828,619.00 \$
Melia Wealth LLC	Aryn Sands	2023Q4	GLADSTONE INVESTMENT CORP	GAIN	945,539	\$13,455,020(\$14.23)	8.00%	945,539(New Position)	13,455,020.00 \$
Melia Wealth LLC	Aryn Sands	2023Q4	OAKTREE SPECIALTY LENDING CORP	OCSL	669,800	\$13,168,268(\$19.66)	7.00%	669,800(New Position)	13,168,268.00 \$
Melia Wealth LLC	Aryn Sands	2023Q4	SACHEM CAP CORP COM	SACH	2,252,420	\$10,045,793(\$4.46)	6.00%	2,252,420(New Position)	10,045,793.00 \$
Mithaq Capital SPC	Muhammad A. Seemab	2023Q4	CHILDRENS PL INC	PLCE	7,001,387	\$80,796,006(\$11.54)	21.00%	1,932.37%(6,656,894)	76,820,557.00 \$
Multicoin Capital Management LLC	Daniel Leonardo	2023Q4	COINBASE GLOBAL INC	COIN	645,799	\$112,317,362(\$173.92)	100.00%	645,799(New Position)	112,317,362.00 \$
Navigation Wealth Management Inc	Adam Brunin	2023Q4	MODULAR MED INC	MODD	18,340	\$33,929(\$1.85)	14.00%	18,340(New Position)	33,929.00 \$
NEW THINKING INVESTMENT MANAGEMENT	ZHANG MENGFEI	2023Q4	PDD HOLDINGS INC. AMERICAN DEP	PDD	19,566	\$2,275,000(\$116.27)	23.00%	19,566(New Position)	2,275,000.00 \$
Origin Asset Management LLP	Nishil Patel	2023Q4	TRIP COM GROUP LTD	TCOM	946,130	\$41,525,645(\$43.89)	11.00%	37.21%(256,600)	11,262,174.00 \$
Origin Asset Management LLP	Nishil Patel	2023Q4	TENCENT MUSIC ENTMT GROUP	TME	3,352,570	\$37,515,257(\$11.19)	10.00%	47.57%(1,080,700)	12,093,033.00 \$
P&S Credit Management L.P.	Marie Bober	2023Q4	CHEVRON CORPORATION	CVX	20,000	\$3,154,800(\$157.74)	17.00%	20,000(New Position)	3,154,800.00 \$
Palliser Capital (UK) Ltd	Jeremy J White	2023Q4	MATCH GROUP INC	MTCH	176,175	\$6,391,629(\$36.28)	9.00%	176,175(New Position)	6,391,629.00 \$

NOTABLE INTITUTIONAL BUYING

From SEC Form 13F Filings by Top Investment Managers and Concentrated Hedge Funds This Month

Institution or Fund	Reporting Manager	Report Quarter	Stock Purchased/Sold	Ticker	Shares Owned	Value of Holdings (Average Price)	% of Portfolio	Change in Shares	Purchase Value
PATRIZIA Pty Ltd	Brydie Kelly	2023Q4	EVERSOURCE ENERGY COM	ES	90,359	\$5,400,757(\$59.77)	8.50%	2.72%(2,396)	\$143,149
PATRIZIA Pty Ltd	Brydie Kelly	2023Q4	EXELON CORPORATION	EXC	142,833	\$5,366,236(\$37.57)	8.45%	142,833(New Position)	\$5,366,236
PATRIZIA Pty Ltd	Brydie Kelly	2023Q4	PORTLAND GENERAL ELECTRIC CO	POR	127,104	\$5,338,368(\$42.00)	8.40%	2.55%(3,166)	\$132,930
PATRIZIA Pty Ltd	Brydie Kelly	2023Q4	SJW GROUP	SJW	94,211	\$5,331,400(\$56.59)	8.39%	19.63%(15,459)	\$874,825
PATRIZIA Pty Ltd	Brydie Kelly	2023Q4	CROWN CASTLE INC.	CCI	48,454	\$5,127,887(\$105.83)	8.07%	4.08%(1,900)	\$201,077
RJA Asset Management LLC	Kristi Jeffrey	2023Q4	AFFIRM HLDGS INC	AFRM	397,425	\$14,808,056(\$37.26)	5.00%	397,425(New Position)	14,808,056.00 \$
STONEBRIDGE ADVISORS LLC	Scott Fleming	2023Q4	WELLS FARGO 7.5% NON CUMV PERP	WFCPRL	217,004	\$264,603,822(\$1,219.35)	82.00%	19.88%(35,992)	43,886,844.00 \$
Svenska Handelsbanken AB	Anna Lindkvist	2023Q4	WAL-MART INC	WMT	686,635	\$41,315,000(\$60.17)	13.03%	686,635(New Position)	\$41,315,000
Svenska Handelsbanken AB	Anna Lindkvist	2023Q4	ABBVIE INC	ABBV	182,749	\$33,279,000(\$182.10)	10.49%	182,749(New Position)	\$33,279,000
Svenska Handelsbanken AB	Anna Lindkvist	2023Q4	S&P GLOBAL INC	SPGI	76,909	\$32,721,000(\$425.45)	10.32%	76,909(New Position)	\$32,721,000
Svenska Handelsbanken AB	Anna Lindkvist	2023Q4	EQUINIX INC REIT	EQIX	37,982	\$31,348,000(\$825.34)	9.88%	37,982(New Position)	\$31,348,000
Svenska Handelsbanken AB	Anna Lindkvist	2023Q4	ELECTRONIC ARTS INC	EA	233,787	\$31,017,000(\$132.67)	9.78%	233,787(New Position)	\$31,017,000
SYQUANT CAPITAL SAS	BRUNO DUCAMP	2023Q4	TRICON RESIDENTIAL INC	TCN	3,873,297	\$43,187,000(\$11.15)	67.96%	3,873,297(New Position)	\$43,187,000
SYQUANT CAPITAL SAS	BRUNO DUCAMP	2023Q4	PIONEER NAT RES CO	PXD	49,974	\$13,118,000(\$262.50)	20.64%	49,974(New Position)	\$13,118,000
SYQUANT CAPITAL SAS	BRUNO DUCAMP	2023Q4	HOLLYSYS AUTOMATION TECHNOLOGI	HOLI	128,921	\$3,298,000(\$25.58)	5.19%	128,921(New Position)	\$3,298,000
Trinity Street Asset Management LLP	Craig Thompson	2023Q4	ICON PLC ADR	ICLR	736,385	\$247,388,550(\$335.95)	19.79%	2.33%(16,742)	\$5,624,475
Trinity Street Asset Management LLP	Craig Thompson	2023Q4	RYANAIR HOLDINGS PLC SPONSORED	RYAAY	1,574,300	\$229,202,331(\$145.59)	18.33%	1.92%(29,700)	\$4,324,023
Trinity Street Asset Management LLP	Craig Thompson	2023Q4	HDFC BK LTD ADS	HDB	3,577,400	\$200,227,078(\$55.97)	16.02%	3,577,400(New Position)	\$200,227,078
Trinity Street Asset Management LLP	Craig Thompson	2023Q4	KB FINL GROUP INC SPONSORED AD	KB	2,196,201	\$114,356,185(\$52.07)	9.15%	2.10%(45,177)	\$2,352,366
Vida Ventures Advisors LLC	J-P Kouakou-Zebouah	2023Q4	KYVERNA THERAPEUTICS INC	KYTX	4,523,924	\$112,374,272(\$24.84)	62.00%	4,523,924(New Position)	112,374,272.00 \$
WALNUT PRIVATE EQUITY PARTNERS LLC	Steven W. Seline	2023Q4	WILLIAMS COMPANIES	WMB	493,945	\$19,249,037(\$38.97)	12.24%	2.70%(13,000)	\$506,610
Zeno Equity Partners LLP	Steven Goldstein	2023Q4	DANAHER CORP	DHR	193,670	\$48,363,273(\$249.72)	11.00%	81.10%(86,729)	21,657,966.00 \$
Zenyatta Capital Management LP	Darek Rybicki	2023Q4	THE TRADE DESK INC	TTD	75,000	\$6,556,500(\$87.42)	9.00%	75,000(New Position)	6,556,500.00 \$
Zenyatta Capital Management LP	Darek Rybicki	2023Q4	ADVANCED MICRO DEVICES	AMD	25,000	\$4,512,250(\$180.49)	6.00%	25,000(New Position)	4,512,250.00 \$

NOTABLE INSIDER BUYING

From SEC Form 4 Filings by Top Executives and 10% Owners This Month

Stock Purchased/Sold	Ticker	Total Buy Value	Total Sell Value	Total Buy Filings	Total Sell Filings
Liberty Media Corp	LSXMK	\$515,530,192	\$0	8	0
COMSTOCK RESOURCES INC	CRK	\$100,450,000	\$0	1	0
Nkarta Inc.	NKTX	\$50,000,000	\$0	2	0
Versus Capital Infrastructure Income Fund	VCRDX	\$30,000,000	\$0	2	0
RXO Inc.	RXO	\$25,138,027	\$0	2	0
Acrivon Therapeutics Inc.	ACRV	\$20,000,500	\$0	1	0
LENZ Therapeutics Inc.	LENZ	\$15,000,075	\$0	1	0
Biohaven Ltd.	BHVN	\$14,999,932	\$0	3	0
Boundless Bio Inc.	BOLD	\$14,600,000	\$0	4	0
BlackRock ESG Capital Allocation Term Trust	ECAT	\$11,057,706	\$0	4	0
Eagle Bulk Shipping Inc.	EGLE	\$10,654,880	\$0	1	0
EyePoint Pharmaceuticals Inc.	EYPT	\$10,489,446	\$0	1	0
Clearway Energy Inc.	CWEN	\$9,005,667	\$0	2	0
BlackRock Innovation & Growth Term Trust	BIGZ	\$7,873,270	\$0	4	0
ARS Pharmaceuticals Inc.	SPRY	\$13,289,410	\$5,492,125	1	6
Atlanticus Holdings Corp	ATLC	\$7,431,417	\$7,419	1	1
Steel Connect Inc.	STCN	\$7,283,248	\$0	2	0
BRT Apartments Corp.	BRT	\$7,262,315	\$0	24	0
Oncocyte Corp	OCX	\$7,167,888	\$0	3	0
Surrozen Inc.	SRZN	\$5,999,988	\$0	2	0
FIVE STAR BANCORP	FSBC	\$5,499,988	\$0	6	0
SONIDA SENIOR LIVING INC.	SNDA	\$5,186,940	\$0	3	0
Snowflake Inc.	SNOW	\$5,000,038	\$234,570	1	1
Citi Trends Inc	CTRN	\$4,724,091	\$0	5	0
MasterCraft Boat Holdings Inc.	MCFT	\$4,367,519	\$0	2	0
TILE SHOP HOLDINGS INC.	TTSH	\$4,332,293	\$0	6	0
2seventy bio Inc.	TSVT	\$4,103,042	\$0	2	0
GRAFTECH INTERNATIONAL LTD	EAF	\$4,100,867	\$0	1	0
IGM Biosciences Inc.	IGMS	\$3,425,569	\$0	1	0
Liberty Latin America Ltd.	LILA	\$3,256,702	\$0	1	0
BlackRock Health Sciences Term Trust	BMEZ	\$3,135,536	\$0	3	0
abrdn Global Infrastructure Income Fund	ASGI	\$2,953,498	\$0	7	0
Centuri Holdings Inc.	CTRI	\$2,880,150	\$0	8	0
Aldeyra Therapeutics Inc.	ALDX	\$2,768,372	\$0	2	0
abrdn Life Sciences Investors	HQL	\$2,256,660	\$0	3	0
Sow Good Inc.	SOWG	\$2,155,019	\$0	6	0
NUVEEN PENNSYLVANIA QUALITY MUNICIPAL INCOME FUND	NQP	\$1,903,905	\$0	3	0
BLACKROCK MUNIYIELD PENNSYLVANIA QUALITY FUND	MPA	\$1,782,029	\$0	8	0
AMERICAS CARMART INC	CRMT	\$1,474,849	\$0	3	0
lululemon athletica inc.	LULU	\$1,439,501	\$0	1	0
FIRST TRUST HIGH YIELD OPPORTUNITIES 2027 TERM FUND	FTHY	\$1,335,721	\$0	5	0
BLACKROCK CALIFORNIA MUNICIPAL INCOME TRUST	BFZ	\$1,501,352	\$208,147	5	1
NU RIDE INC.	NRDE	\$1,245,308	\$0	1	0
Institutional Investment Strategy Fund	XIVYX	\$1,114,000	\$0	3	0
CVD EQUIPMENT CORP	CVV	\$1,084,162	\$0	1	0

NOTABLE INSIDER BUYING

From SEC Form 4 Filings by Top Executives and 10% Owners This Month

Stock Purchased/Sold	Ticker	Total Buy Value	Total Sell Value	Total Buy Filings	Total Sell Filings
NUVEEN NEW JERSEY QUALITY MUNICIPAL INCOME FUND	NXJ	\$1,071,113	\$0	2	0
OmniAb Inc.	OABI	\$1,167,750	\$101,343	1	2
HARROW INC.	HROW	\$1,055,701	\$0	3	0
Grocery Outlet Holding Corp.	GO	\$1,031,016	\$29,000	1	1
PIMCO Flexible Real Estate Income Fund	REFLX	\$1,000,000	\$0	1	0
Flora Growth Corp.	FLGC	\$999,999	\$0	1	0
Korro Bio Inc.	KRRO	\$999,992	\$0	1	0
TruBridge Inc.	TBRG	\$998,296	\$0	1	0
Ashford Inc.	AINC	\$982,000	\$0	1	0
Pagaya Technologies Ltd.	PGY	\$898,983	\$0	3	0
LEE ENTERPRISES Inc	LEE	\$874,060	\$0	3	0
Summit Therapeutics Inc.	SMMT	\$786,094	\$0	2	0
Longeveron Inc.	LGVN	\$699,999	\$0	3	0
Nuveen Core Plus Impact Fund	NPCT	\$607,954	\$0	2	0
Molecular Templates Inc.	MTEM	\$587,500	\$0	1	0
NEOGEN CORP	NEOG	\$538,498	\$0	3	0
Lovesac Co	LOVE	\$533,610	\$0	2	0
Cyteir Therapeutics Inc.	CYT	\$503,238	\$0	1	0
AMREP CORP.	AXR	\$462,071	\$0	6	0
ADVANCE AUTO PARTS INC	AAP	\$401,098	\$0	1	0
Science Applications International Corp	SAIC	\$490,671	\$95,486	3	1
BARNWELL INDUSTRIES INC	BRN	\$383,962	\$0	2	0
Mobile Infrastructure Corp	BEEP	\$380,669	\$0	5	0
Xilio Therapeutics Inc.	XLO	\$368,790	\$0	1	0
SIMON PROPERTY GROUP INC	SPG	\$338,910	\$0	11	0
LION COPPER & GOLD CORP.	LCGMF	\$338,369	\$0	2	0
MainStay CBRE Global Infrastructure Megatrends Term Fund	MEGI	\$301,301	\$0	1	0
Federated Hermes Premier Municipal Income Fund	FMN	\$293,147	\$0	2	0
TEAM INC	TISI	\$287,829	\$0	6	0
Rise Gold Corp.	RYES	\$276,500	\$0	2	0
Global Crossing Airlines Group Inc.	JETMF	\$274,581	\$0	1	0
Postal Realty Trust Inc.	PSTL	\$272,500	\$0	2	0
Pono Capital Two Inc.	PTWO	\$258,700	\$0	3	0
LENNAR CORP	LEN	\$247,275	\$0	1	0
LINDBLAD EXPEDITIONS HOLDINGS INC.	LIND	\$246,663	\$0	1	0
NEXPOINT DIVERSIFIED REAL ESTATE TRUST	NXDT	\$245,800	\$0	1	0
HERBALIFE LTD.	HLF	\$244,884	\$0	4	0
DOLLAR TREE INC.	DLTR	\$244,794	\$0	1	0
HALLADOR ENERGY CO	HNRG	\$240,136	\$0	1	0
Journey Medical Corp	DERM	\$237,290	\$0	4	0
Legacy Housing Corp	LEGH	\$236,967	\$0	3	0
FASTENAL CO	FAST	\$229,056	\$0	1	0
Vivakor Inc.	VIVK	\$222,660	\$0	1	0
AITi Global Inc.	ALTI	\$338,550	\$128,349	2	2
Westlake Chemical Partners LP	WLKP	\$204,887	\$0	2	0
UNIVERSAL BIOSENSORS INC	UBI	\$200,000	\$0	1	0
Hartford Schroders Private Opportunities Fund	XHFIX	\$199,846	\$0	1	0

NOTABLE INSIDER BUYING

From SEC Form 4 Filings by Top Executives and 10% Owners This Month

Stock Purchased/Sold	Ticker	Total Buy Value	Total Sell Value	Total Buy Filings	Total Sell Filings
Epsilon Energy Ltd.	EPSN	\$191,447	\$0	1	0
SMART Global Holdings Inc.	SGH	\$187,896	\$0	1	0
NewAmsterdam Pharma Co N.V.	NAMS	\$181,224	\$0	1	0
Entrada Therapeutics Inc.	TRDA	\$178,966	\$0	3	0
WD 40 CO	WDFC	\$177,317	\$0	2	0
Walgreens Boots Alliance Inc.	WBA	\$170,430	\$0	2	0
Texas Pacific Land Corp	TPL	\$163,236	\$0	22	0
Invesco Pennsylvania Value Municipal Income Trust	VPV	\$163,015	\$0	1	0
GRAY TELEVISION INC	GTN	\$161,868	\$0	2	0
Zumiez Inc	ZUMZ	\$143,100	\$0	1	0
P10 Inc.	PX	\$540,450	\$403,400	2	1
BRIGHTCOVE INC	BCOV	\$132,023	\$0	3	0
Clearside Biomedical Inc.	CLSD	\$129,665	\$0	1	0
Dominari Holdings Inc.	DOMH	\$129,063	\$0	3	0
FLOWERS FOODS INC	FLO	\$117,750	\$0	1	0
Gain Therapeutics Inc.	GANX	\$115,770	\$0	1	0
Greenwich LifeSciences Inc.	GLSI	\$107,190	\$0	2	0
Design Therapeutics Inc.	DSGN	\$104,604	\$0	2	0
Alto Neuroscience Inc.	ANRO	\$100,628	\$0	1	0
FTC Solar Inc.	FTCI	\$100,604	\$0	2	0
RICHARDSON ELECTRONICS LTD.	RELL	\$99,953	\$0	3	0
Compass Diversified Holdings	CODI	\$99,725	\$0	1	0
Concentrix Corp	CNXC	\$98,547	\$0	3	0
EYENOVIA INC.	EYEN	\$98,000	\$0	1	0
Western Asset Diversified Income Fund	WDI	\$90,006	\$0	1	0
Mistras Group Inc.	MG	\$90,000	\$0	1	0
PetVivo Holdings Inc.	PETV	\$90,000	\$0	1	0
Fresh Tracks Therapeutics Inc.	FRTX	\$87,154	\$0	4	0
Oncterna Therapeutics Inc.	ONCT	\$86,257	\$0	2	0
RETRACTABLE TECHNOLOGIES INC	RVP	\$85,878	\$0	6	0
Guerrilla RF Inc.	GUER	\$84,555	\$0	1	0
CITY HOLDING CO	CHCO	\$83,755	\$0	5	0
Ready Capital Corp	RC	\$83,461	\$0	1	0
authD Inc.	AUID	\$80,745	\$0	1	0
Sunoco LP	SUN	\$78,144	\$0	1	0
PHX MINERALS INC.	PHX	\$77,267	\$0	2	0
BUTLER NATIONAL CORP	BUKS	\$74,207	\$0	2	0
MEXICO FUND INC	MXF	\$70,760	\$0	1	0
Angel Oak Financial Strategies Income Term Trust	FINS	\$70,251	\$0	1	0
ISSUER DIRECT CORP	ISDR	\$67,514	\$0	2	0
ANGIODYNAMICS INC	ANGO	\$67,000	\$0	1	0
Nuveen AMT-Free Quality Municipal Income Fund	NEA	\$66,240	\$0	1	0
Rocket Companies Inc.	RKT	\$64,158	\$0	8	0
Sagimet Biosciences Inc.	SGMT	\$63,731	\$0	1	0
CME GROUP INC.	CME	\$63,231	\$0	1	0
First Trust Intermediate Duration Preferred & Income Fund	FPF	\$61,475	\$0	1	0
Altus Power Inc.	AMPS	\$59,750	\$0	1	0

NOTABLE INSIDER BUYING

From SEC Form 4 Filings by Top Executives and 10% Owners This Month

Runway Growth Finance Corp.	RWAY	\$59,400	\$0	1	0
FEDERAL AGRICULTURAL MORTGAGE CORP	AGM	\$59,311	\$0	1	0
CADIZ INC	CDZI	\$56,250	\$0	1	0
Fidelity National Information Services Inc.	FIS	\$56,087	\$0	1	0
Vuzix Corp	VUZI	\$54,413	\$0	3	0
Ares Commercial Real Estate Corp	ACRE	\$50,266	\$0	1	0
REAVES UTILITY INCOME FUND	UTG	\$50,009	\$0	1	0
Anixa Biosciences Inc	ANIX	\$49,230	\$0	1	0
CENTRAL SECURITIES CORP	CET	\$48,268	\$0	2	0
ATOSSA THERAPEUTICS INC.	ATOS	\$44,250	\$0	1	0
GameStop Corp.	GME	\$112,238	\$68,966	1	3