

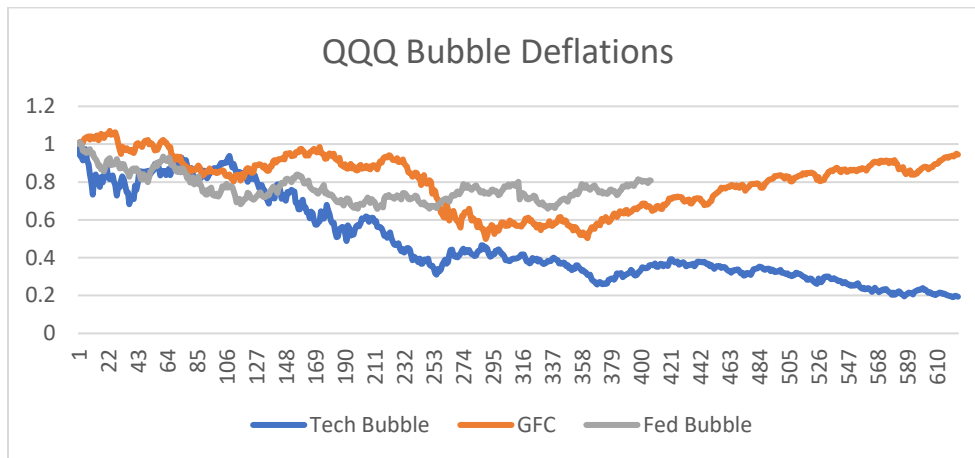
1Q 2023 Market Review

After a tumultuous 2022, 2023 has resembled 2021 with mania replacing depression. The S&P 500 advanced about 8%, and the Nasdaq about 17%. Glamor stocks did well: TSLA +68% (P/E 54x), NVDA +90% (P/E 118x). Even Bitcoin, which grew up on easy money somehow advanced while crypto-related banks started collapsing, gaining 74% in the quarter. Not bad for a quarter with the second largest bank failure in US history, and the Fed still insisting it will raise rates further, while earnings are in decline.

According to my friends at Colrain Capital, three large tech stocks (Apple, Nvidia and Microsoft) accounted for 90% of the value increase in the S&P 500 last quarter. Add in (Meta, Tesla, Amazon, Alphabet, Salesforce and AMD) and nine stocks accounted for 160% of the gain. On average, the other 491 stocks lost money. Poor market breadth tends to be a negative harbinger for the market.

Is the bear market behind us? Are we ready to rally to new highs? Famed hedge fund manager Michael Burry took to Twitter to scoff at this idea. “NASDAQ a bull market because it is up 20% off its low? Who makes this stuff up? After 2000, the NASDAQ did that 7 times as it fell 78% to its 2002 low.”

The NASDAQ started its decline at a higher level than the last two major bear markets, so I overlaid a chart starting with the highest monthly close.

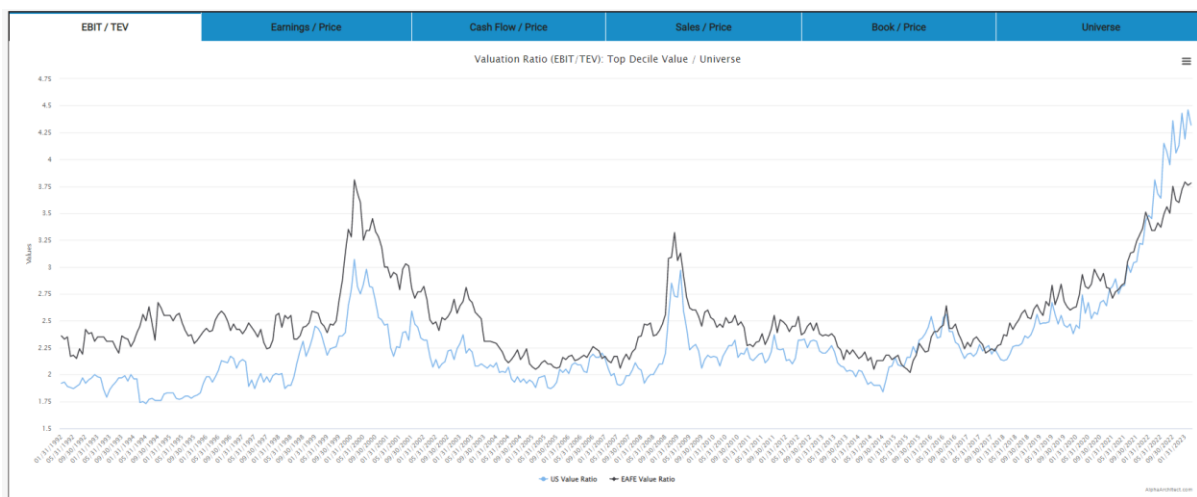


Source: Yahoo! Finance, Rothman Investment Management

While we do not claim to know the future, bear market rallies are normal. It is far too early to assume that valuations will go back to the historically high levels of 2021. The last two times valuations got frothy, the ensuing bear market was quite painful, and took some time to play out. There were plenty of rallies along the way, convincing investors that the worst was behind them. There are signs the economy is slowing. Bellwether Walmart is guiding to full year earnings declining about 5% year over year, as total revenue grows less than inflation, in a sign that the consumer may be exhausted after binge spending over the last couple of years.

We do not comment on our specific recommendations in this note, but we will highlight certain trends that affect the way we invest. We use academically vetted investment factors to quantitatively construct portfolios. While plenty of studies have shown that low cost (value), positive trending (momentum), quality and small (size) stocks earn higher returns than the market over time, this extra return is by no means consistent. In the first quarter of this year, all four factors had [negative returns](#), with momentum doing the worst. This is a resumption of the prior long trend that favored stocks with interesting stories (both so-called disruptive innovation and late in the bull market, meme stocks) and ignored more traditional cash-producing companies.

I find it useful to see how discounted the cheapest stocks are. If we rank all the top 1500 stocks by Total Enterprise Value/EBITDA (this metric is a better for comparing companies with varying levels of debt), the valuation multiple for the market is currently about 4.5x that of the cheapest 10% of stocks. The long-term average is about 2x. The previous highs over the last 30 years were both about 3x in February of 2000 and February, 2009. Similarly, the average multiple in developed markets is about 3.8x that of the cheapest decile, comparable to February 2000 and higher than February 2009. After both of these instances, the cheap stocks went on to outperform the market by a wide margin over the following five years. Cheap stocks are historically cheap relative to the market. This explains the underperformance of cheap stocks over the last several years – the declining valuations have more than offset the higher earnings yield. Buying at an even steeper discount to the market should position us well going forward.



The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Indexes are unmanaged and do not reflect management or trading fees, and one cannot invest directly in an index. Please see a list of descriptions and a list of disclosures [here](#).

Source: Alpha Architect, used with permission

Momentum does not have the same built in catch-up mechanism, but short-term underperformance of the momentum factor is nothing new. Given the odd behavior of markets of late, it is unsurprising that what generally has worked over time has not done well lately. We remain convinced that the long-term studies of momentum and the other factors are still relevant, as human nature has not changed.

Some thoughts on bank failures

Thankfully, bank failures are rare in the US. Banks are essential to a well-functioning economy by taking deposits from savers who need to store their money safely and lending to businesses or other borrowers who need the funds to finance investment (and in some cases consumption.) Banks are one tool to enable capital to go where it is most efficient. By nature, banks should be conservative. They use very little of their own money, so small changes in the value of their investment portfolio (usually loans) can wipe out their equity. Further, depositors value safety above all else. If they want to take risk, they can do so elsewhere. Banks must maintain the confidence of their depositors, as the business model is to take in short-term money and to invest longer-term at higher rate. Banks keep a small amount of their money liquid to meet normal redemptions, while lending out most of their assets. Because lack of trust can ruin a bank, and because analyzing the safety of banks is beyond the skills of consumers (and maybe even bank analysts), the government insures deposits up to a limit. This is good for banks, and good for the economy as a whole. The Federal Depositors Insurance Corporation (FDIC) is funded by fees charged to banks, and thus ultimately to bank customers, not to taxpayers. If a solvent bank was forced to redeem too many depositors too quickly, it would have to sell illiquid investments, likely taking a loss to quickly convert to cash. This alone could ruin a bank.

Silicon Valley Bank (SIVB) had some interesting characteristics, but excellent risk management was not one of them. Relative to other banks, it had a much higher percentage of uninsured deposits. This is risky for a bank, because these deposits are likely to flee if there is a hint of bank trouble. Second, Silicon Valley Bank was also unusual in that it was undiversified. It was built to serve the start-up ecosystem. As funds flowed into Venture Capital and Private Equity in 2020 and 2021, they also flowed into SIVB, causing rapid growth. The bank stuffed this cash influx into government bonds when rates were at rock bottom yields. SIVB bought longer-term bonds to get a little extra yield. The bank failed to properly manage the interest rate risk, even after it was obvious the Fed would need to raise rates to fight inflation. When the Fed aggressively raised rates, these bonds lost value. As a result, SIVB had a high degree of losses relative to its Common Equity Tier 1 Capital Ratio. Sources I saw put this around 100% of the CET1 Capital. Good risk management would have avoided this situation by selling longer-term bonds that carry higher interest rate risk and moving shorter-term. One savvy investor figured out the loss-adjusted CET1 Capital ratio and posted his finding online, which spooked depositors, who had large uninsured balances. As they began to pull their funds, SIVB had to sell bonds to raise cash. The accounting for the bonds had to change from “Held to Maturity”, which is not marked to market value to “Available for Sale” which is. As the bank recognized the unrealized loss on bonds (and the realized losses on bonds it sold) it generated large losses and a declining capital ratio. The bank run exposed the bank as insolvent.

We are eagerly watching to see what the fallout will be from the failure of this bank, along with Signature Bank and Credit Suisse. The government is working to stop the crisis from spreading, and so far appears to be successful. While no one who lived through the Great Financial Crisis wants to see another round of bank failures or near-failures, James Kostohyryz

[sees risk](#) that the current symptom gets treated but the root cause remains unaddressed because we have moved on from the problem too quickly. He also sees a shift away from leaving large uninsured deposits at banks.¹ John Mauldin also [sees potential trouble for banks](#) with about \$10 trillion in uninsured deposits that could find better deals elsewhere:

“This comes as some of those depositors were beginning to notice they could get significantly higher yields in non-bank instruments like Treasury bills and money market funds. Bank rates have always been lower but the spread matters. Moving money out of your bank for an additional 1% yield might not be worth the trouble. Triple that difference and it becomes more tempting.

So, we have two different but complementary forces at work: safety and yield. Both are pulling money out of banks, particularly small banks. If yield is your priority, your best bet is to move out of banks into Treasury securities, money market funds, and other short-term debt instruments. If you absolutely want safety, then Treasury bills are probably still your best bet.”

He goes on to point out that the very large banks will be fine, as they carry the implicit guarantee by being systematically important. The smaller banks, which have almost 70% of commercial real estate loans, could be in a different situation. This, along with reduced office space demand due to work from home trends, could present a problem for the banks and for commercial real estate values.² Analyst Eric Parnell [agrees](#): “Small and mid-sized banks make up the lion’s share of commercial real estate lending. And a number of these same small to mid-sized banks that may already be coping with the ongoing flight by depositors to higher interest rate money market funds are also seeing mounting challenges in their commercial real estate loan portfolios where property values have already fallen over the past year and may potentially decline much further depending on the depth and length of the anticipated economic recession ahead. This has the potential to lead to a compounding situation where declines in commercial real estate values lead to a tightening in bank lending that further exacerbates the decline in commercial real estate values and could eventually culminate in the financial health of the lending banks being called into question by the market. And this is an issue that will not be as easily resolved by government intervention.”³ This does not necessarily mean wide-scale bank failure, but an economy-choking decrease in lending along with falling property values.

Interest Rates

After decades of low and falling interest rates that we came to believe was our birthright, rates have been rocketing upward. Danielle Park notes that we are in the midst of the most aggressive Fed tightening cycle in at least 30 years. (Inflation went to the highest it had been in forty years, so this sounds about right.) She points out that average interest rates on credit cards, used cars and new cars are 24.5%, 14 and 9%, respectively. Perhaps even more importantly, the

¹ (Kotohyrz, 2023)

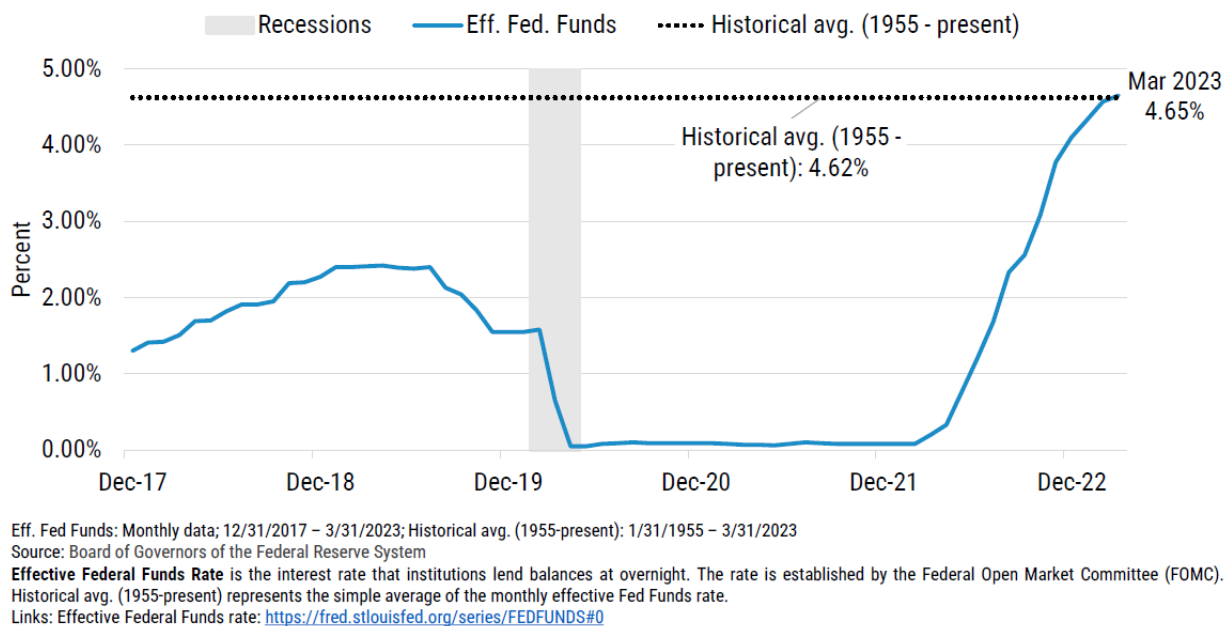
² (Mauldin, 2023)

³ (Eric Parnell, 2023)

household income needed to qualify for a mortgage on the median US home jumped from \$47,232 in February 2020 to \$86,736 today.⁴

Many think that interest rates must come down to somewhere close to 2021 levels. This certainly could happen, but perspective is important here. The aberration is not where rates are now, but where they were. The Fed kept interest rates artificially suppressed for over a decade, starting with the Great Financial Crisis. COVID brought rates down to effectively zero. The Fed's aggressive tightening has only pushed the [Fed Funds Rate](#) back to its historical average.

What does it *cost to borrow*?



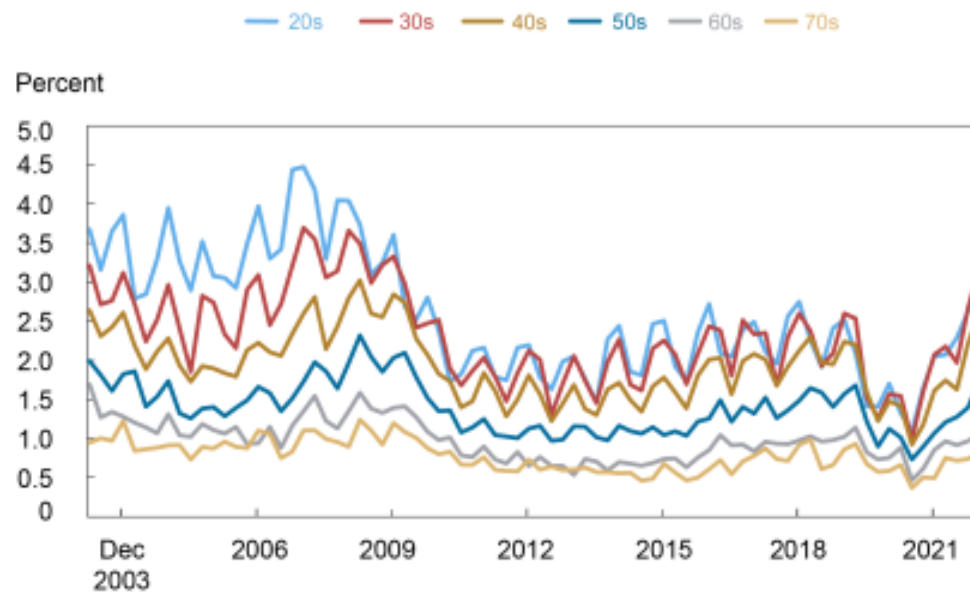
Source: Alpha Architect, used with permission

If rates are only average, what is the problem? There are many. First, years of dirt-cheap debt has encouraged borrowing by consumers and companies. Those lulled into complacency by near-costless debt may need to refinance at much higher rates. Consider, at the end of 2012, [US Household debt](#) was \$11.35T (\$2.75T non-housing and \$8.6T housing). Ten years later, at the end of 2022, it was \$16.9T (\$4.64T non-housing and \$12.26T housing). That is an increase of almost 50% in household debt in a decade, and close to 70% for non-housing, which tends to be much shorter term. These interest rates could be a serious drag on consumer spending. Not only does borrowing to spend become a more difficult decision, but the interest burden of existing debt will eat into household budgets. [The New York Fed](#) has already observed an uptick in credit card delinquency, particularly among borrowers in their 20's, 30's, 40's and 50's. While

⁴ (Park, 2023)

default levels aren't alarming yet, the rapid rise exceeds even that of the Great Financial Crisis (GFC). The New York Fed's Liberty Street Economics commented, "Surpassing the pre-pandemic delinquency rates isn't worrisome per se, because the pandemic recession ended what had been a historically long economic expansion. But the fact that more borrowers are missing their payments, particularly when economic conditions appear strong overall, is somewhat of a puzzle. This is particularly concerning for younger borrowers who are disproportionately likely to hold federal student loans that are still in administrative forbearance. Some of these borrowers are struggling to pay their credit card and auto loans even though payments on their student loans are not currently required. Once payments on those loans resume later this year under current plans, millions of younger borrowers will add another monthly payment to their debt obligations, potentially driving these delinquency rates even higher."⁵

Share of credit card borrowers transitioning to 90 days past due by age group

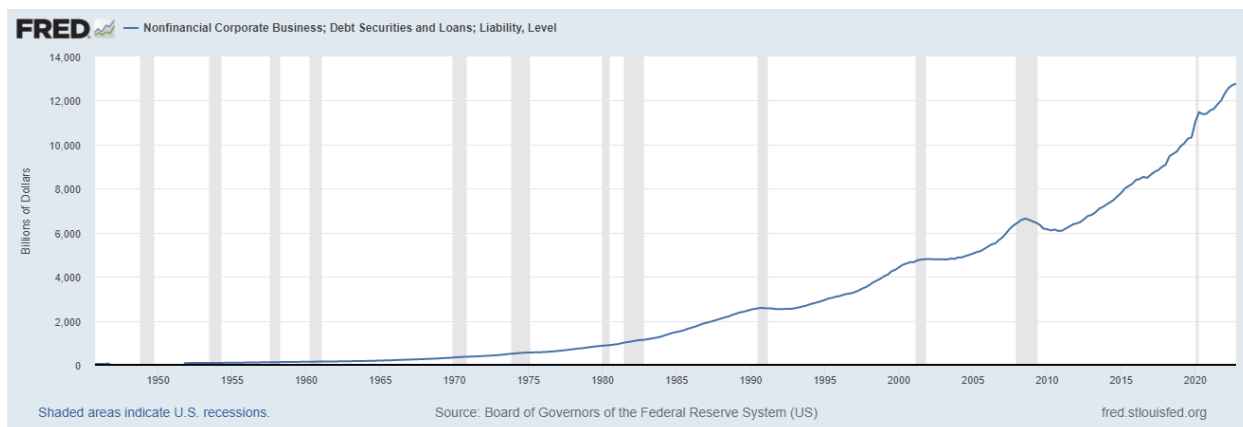


Source: New York Fed Consumer Credit Panel / Equifax.

As was just mentioned, interest rates have made buying a home much more difficult. This has put pressure on home prices. Not only does housing drive a lot of economic activity, but cash-out refinances have been an easy source of cash. With lower home values and higher interest rates, expect that growth driver to dry up.

Businesses also took advantage of very low interest rates. Corporations can borrow to invest in their own businesses, buy other businesses or buy back their shares. All of these are good for the stock market. Over the last decade, [non-financial corporate debt grew by 89%](#) - even faster than household debt.

⁵ (Andrew Haughwot, 2023)



While this may present less of a problem to the economy, higher interest rates along with still high stock valuations change the economics of stock buybacks, which some have estimated were responsible for [40% of the market returns](#) over the last decade. We can quibble about what the exact number should be, but it is clear that the decade of easy money was fully taken advantage of by Wall Street, and that easy money is no longer available.

Economic Outlook

Nothing lasts forever. We've been in economic expansion for all but a few months of the last twelve years or so, but this must eventually give way to recession. That won't last forever either. Such is the nature of economic cycles. How close is the next recession? While nobody knows for sure, it could be getting close. Neuberger Berman [is concerned](#) about a credit-driven economic tightening that would be self-reinforcing. "Credit is the oxygen of economic growth. If the economy turns increasingly recessionary in the coming months, we believe more banks will likely feel the need to shore up their balance sheets and further tighten lending standards, which could rapidly push up the cost of capital, reduce the availability of credit, and ultimately accelerate—and deepen—our anticipated decline in corporate earnings." The firm sees three causes for the recent rally: 1) China reopening, 2) relief from elevated energy prices, particularly in Europe, and 3) order backlog being converted to sales as supply chains recover. All of these are "likely to amount to temporary relief rather than durable growth." Further, earnings quality is very poor, and financial conditions have actually eased since the bank failures, but should tighten as credit quality comes into view.⁶

Inflation has been a hot topic, after being dormant for decades. Common knowledge now seems to be that inflation is under control and rapidly falling. It takes time for rate hikes to work their way through the economy. When the Fed did finally act, it acted decisively, and it seems intent on seeing the job through. I humbly submit that rates may not come back down quickly, and that inflation might not be so easily slain. Labor is still in short supply, and wages could make inflation stickier, as workers demand raises to keep up with higher prices and employers raise prices to pass along higher wages. (Although with profit margins still very high, another

⁶ (Neuberger Berman, 2023)

possibility is that wages increase and prices don't, which would be good for workers and bad for investors.) [Chris Yates](#), of Archeron Insights observes an ongoing “balance of power shift between labour and capital.” The last four decades have favored capital, but once the system is too far out of balance, it starts to revert back in the other direction.⁷ This could be a long, sustained driver of higher inflation and lower profit margins.

Energy is another factor that could push inflation back higher. Falling energy prices have provided a relief to consumers and producers and have helped lower inflation. How sustainable is the drop in energy pricing? It is hard to say for sure, but consider that while US production of 12.2 million bpd is up about 3% from a year ago, it is down about 7% from March 2020.

Assuming the Strategic Petroleum Reserve (SPR) will be replenished, we need to consider US ending stocks including SPR. Stocks are the lowest in about twenty years. This is not as bad as it sounds, as consumption has also fallen somewhat in the last two decades. Zooming out to the rest of the world, the IEA [forecasts growth accelerating](#) from 710 kb/d in the first quarter of this year to 2.3 mb/d in the last quarter and continuing at close to that pace next year. It predicts that non-OPEC+ will be able to keep up with the demand growth for the first half of the year, but fall behind later in the year. While the world seems to be fully supplied right now, after fears of losing Russian production have so far failed to materialize, risk still remains for prices to spike higher.⁸ The oversupply was a result of the US SPR draw and OPEC+ increasing production to prepare for the Russian supply disruption. The SPR draw can not go on forever and will need to be replenished, and OPEC+ has announced a supply cut. As both factors that moderated oil price wane, prices could rise. Return to the office policies could also bump up demand. In addition to direct consumption of energy, energy prices factor into the cost for food and for making and transporting almost all goods.

In addition to wages and energy, deglobalization is likely a long-term driver of inflation, just as globalization depressed inflation for decades. While we may not see the extreme regionalization predicted by Peter Zeihan, global tensions have risen and globalization has at least slowed and probably reversed. According to the World Bank, global trade as a percentage of GDP peaked at 61% in 2008 and declined to 57% in 2021. This is inflationary, at least for wealthy countries.

Finally, the “Green” energy transition is inflationary. The Manhattan Institute estimates that meeting the IEA’s energy transition goals would increase the energy sectors use of various metals from 10-20% of global production to 50-70% or more, driving prices higher. This is not for elimination of hydrocarbons, but just for the more conservative goals.⁹ Yates projects electrification to require 9x as much copper, 10x as much lithium, and 14x as much nickel and aluminum by 2030.¹⁰ Electric cars require far more of each of these minerals than internal combustion cars. Their charging stations also require metal-heavy infrastructure. Solar, wind

⁷ (Yates, 2023)

⁸ (IEA, 2023)

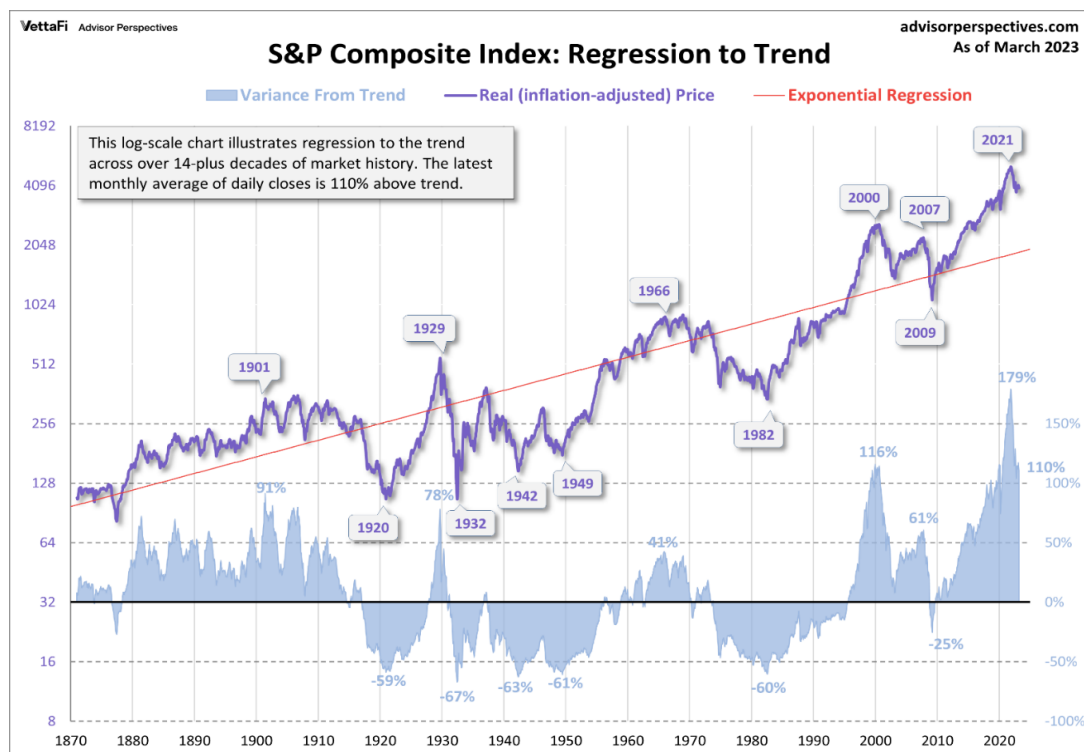
⁹ (Milles, 2022)

¹⁰ (Yates, 2023)

and battery capacity also require vast sums of these resources. Energy transition is long-term inflationary.

Valuation

My favorite valuation indicator, the Shiller PE, has declined from an all-time high (at least going back to 1886) of 39.6x at the start of 2022 to 29.4x as of March 31. This is a good start, but is still 39% above its fifty-year average. That means that the market would need an immediate drop of almost 30% just to get back to average. This is not a prediction, but simply a demonstration of where we are now. The Price/Sales ratio normalizes the effects of profit margin, which is highly cyclical. It shows an even more extreme level at 56% above the average valuation since 2000. From time to time, I talk with people who tell me that they were doing well until last year, and now they just need to wait out this dip, with the implication that once things get back to “normal” they will be in good financial shape again. This assumes that drops in stock prices are short-term trends that need to be reversed, while spikes in price are reflective of true valuation and not simply deviations in the other direction. This chart provides great perspective:



While it is certainly possible that the long-term trend inflected upwards in the 1980's or 1990's, it is also very possible that the normal cycle of trading above the trend for a while followed by being below the trend is still in effect. The S&P index was consistently above trend for about five decades, then below the long-term trend for about four decades, then above trend for almost two decades, followed by almost three decades below trend, and now about three decades above trend. The recent pull-back is minor in historical perspective.

One would think that with banks failing and the prospect of customers pulling their deposits, lending would tighten. So far, the average cost of borrowing for corporations with poor credit is roughly where it was at the start of the year. Both investment grade and high yield bonds as well as stocks are all showing a high level of comfort with where the economy is going. Financial markets are largely complacent, and financial conditions are easy, exacerbating the Fed's challenge in fighting inflation.

Conclusion:

I highlighted a few concerns – long-term inflation drivers that could make it hard for the Fed to contain inflation, bank liquidity issues tightening lending, the Fed committed to raising rates and keeping them higher than investors are willing to believe for longer, early signs of credit strain, and leading and coincident economic indicators pointing to a recession. While there are always issues generating uncertainty, our current slate of issues do not seem congruent with very high multiples on what appear to be bloated earnings. Investors should always use humility, never believing they know what will happen. Our current situation also warrants a healthy dose of caution.

The answer is probably not to sell everything and invest the proceeds in guns and gold, but it is also not to try to play a reprise of the wild days of 2021. That was driven by extreme and unprecedented fiscal and monetary stimulus, the likes of which we may not see again (let's hope) for a long time. Investors should be prepared for a return to normal conditions where valuation matters and companies that generate good old-fashioned cash flow do better than those that sell dreams. As always, risk is paramount, and having a plan that one can stick with is essential.

Works Cited

- Andrew Haughwot, D. L. (2023, February 16). *Younger Borrowers Are Struggling with Credit Card and Auto Loan Payments*. Retrieved from Liberty Street Economics:
<https://libertystreeteconomics.newyorkfed.org/2023/02/younger-borrowers-are-struggling-with-credit-card-and-auto-loan-payments/>
- Eric Parnell, C. (2023, April 9). *2023 Q2 Outlook*. Retrieved from Seeking Alpha:
https://seekingalpha.com/article/4593025-2023-q2-outlook?mailingid=31109472&messageid=macro_view&serial=31109472.4158&utm_campaign=nl-macro-view&utm_content=macro_view&utm_medium=email&utm_source=seeking_alpha&utm_term=31109472.4158
- IEA. (2023, April 18). *Oil Market Report - March 2023*. Retrieved from [iea.org](https://www.iea.org/reports/oil-market-report-march-2023):
<https://www.iea.org/reports/oil-market-report-march-2023>
- Kotohyrz, J. (2023, March 30). *The Banking Crisis Is Over: Beware What Comes Next*. Retrieved from Seeking Alpha: <https://seekingalpha.com/article/4591077-banking-crisis-is-over-beware-what-comes->

next?mailingid=31006271&messageid=2850&serial=31006271.3195&utm_campaign=rta-author-article&utm_medium=email&utm_source=seeking_alpha&utm_term=31006271.3195

Mauldin, J. (2023, April 1). *Advisor Perspectives*. Retrieved from Disturbing Thoughts: https://www.advisorperspectives.com/commentaries/2023/04/01/disturbing-thoughts?textlink&utm_source=boomtrain&utm_medium=email&utm_campaign=News+Digest+2023-04-06+7199&bt_ee=io1NazPF8AsDnMyT2Qki6Jm%2BI%2BXiLCS7MohoK5FQScN0Fz9x7A8VI5nvNn51nzpJ&bt_ts=168080

Milles, M. P. (2022). *The "Energy Transition Delusion: A Reality Reset"*. Manhattan Institute.

Neuberger Berman. (2023, April 9). *Economic And Market Review: Continue To Recommend Defensive Positioning, Focus On Quality - Q2 2023*. Retrieved from Seeking Alpha: https://seekingalpha.com/article/4593023-economic-and-market-review-continue-defensive-positioning-focus-on-quality-q2-2023?mailingid=31109472&messageid=macro_view&serial=31109472.4158&utm_campaign=nl-macro-view&utm_content=macro_view&utm_medium=email&utm_term=31109472.4158

Park, D. (2023, April 5). *Credit Earthquake Reveals Fault Lines*. Retrieved from Seeking Alpha: https://seekingalpha.com/article/4592504-credit-earthquake-reveals-fault-lines?mailingid=31083939&messageid=macro_view&serial=31083939.7159&utm_campaign=nl-macro-view&utm_content=macro_view&utm_medium=email&utm_source=seeking_alpha&utm_term=31083939.7159

Yates, C. (2023, April 6). *The Case For Secular Inflation*. Retrieved from Advisor Perspectives: https://www.advisorperspectives.com/commentaries/2023/04/06/the-case-for-secular-inflation?textlink&utm_source=boomtrain&utm_medium=email&utm_campaign=News+Digest+2023-04-14+7228&bt_ee=CKcKSStA2m%2BcoKiSxwDFgwiXZGsT0Dzslv41Pr4JCqWglAFv6Wz54SDczu1xwW3q&bt_ts=168080

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