KANOS
CAPITAL MANAGEMENT, LLC

First Quarter 2023 Investor Letter

Portfolio Comments

The first quarter of 2023 featured a resilient stock market, an unusually volatile bond market and an unexpected bank crisis. In a reflexive rally supported by a still-strong job market, the Nasdaq had its best quarter in three years, led by resurgent big tech stocks. Inflation continued to come down, although with the Fed's favorite measure, the core Personal Consumption Expenditures Index (the "core PCE") still more than twice the Fed's target level (+4.6% for February), the Fed is still not expected to lower interest rates anytime soon. The financial markets are surer that the Fed WILL lower interest rates, and sooner rather than later. This back-and-forth between Fed rhetoric and market expectations led to the highest bond volatility in years, and compared to stock volatility, the highest since the 2008-2009 financial crisis. Lower asset prices and rising interest rates finally claimed some high-profile victims in March: startup-centric Silicon Valley Bank and crypto-focused banks Silvergate Bank and Signature Bank all failed in mid-March after large rapid deposit withdrawals led to their insolvencies and subsequent seizures. Other banks teetered but no others have so far failed. The rest of the world followed the lead of the US, with the Chinese economy indicating a budding but sluggish recovery out of its Covid-lockdown lethargy.

Most Kanos portfolios grew slightly during the first quarter as last year's underperformers had a strong quarter, outperforming most 2022 winners. Metals and mining stocks performed very well, led by gold and copper miners; some of our larger positions outperformed like Alamos Gold (+21.1%) and Royal Gold (+15.4%) along with the Copper Miners ETF (+10.4%). Legacy technology stocks bounced back strongly, recovering part of their 2022 losses, like Microsoft (+20.5%) and Alphabet (+17.2%). Last year's winners had a harder go of it: most energy stocks were down, including Chevron (-8.2%), or flat, like ExxonMobil (+0.3%) for the quarter. Pharmaceutical stocks were mostly down, including Merck (-3.5%) as were defense firms, like Lockheed Martin (-2.2%). Many commodity stocks were down for the market, but our main overweight, metals miners, more than made up the difference.

As a whole, markets worldwide performed well during the first quarter, led by the US Nasdaq with a +17% gain (bouncing form a -32.5% loss in 2022), while the S&P 500 gained 7.50% and the Dow Jones Industrial Average struggled with only a +0.93% gain, weighed down with cyclicals (all performance numbers reflected total returns). Sector performances were all over the map, with leaders including Technology (+21.82%), Communications Services (+21.27%) and Consumer Discretionary (+16.16%). The quarter's losing sectors included Financials (-5.56%), Energy (-4.37%), Healthcare (-4.31%) and Utilities (-3.24%) (again, all performances reflect total returns). Fixed income was volatile, but US bond indices, both government and corporate, showed quarterly total returns between 2.00% to 3.50% after a big March rally following the banking crisis. Bond volatility hit its highest level since 2008. The 10-yr US Treasury bond ended at 3.50% while the widely watched 2-yr Treasury note ended at 4.02%. Meanwhile, the US Dollar dropped 1.4% during the quarter. Commodities were mixed with many gaining while others dropped: gold was the best performer

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during the quarter, up +9.6% to $1,969/oz while WTI crude oil dropped much of the quarter, rallying in late March to end -5.72% at $75.67/bbl.

Introduction

The financial markets continue to be unpredictable starting the second quarter, in spite of slightly higher equity markets and lower (but still high) inflation. Many of the changes in direction are attributable to mixed signals about whether the US (and other world economies) are falling into recession soon or whether there is enough economic resilience to keep growing even with higher costs from the last couple of years of rising inflation, the malaise displayed in economic statistics following the burst of activity post-Covid lockdowns and rising geopolitical tensions/recent deglobalization.

Worldwide investors continue to think the US Federal Reserve will be forced to lower interest rates later this year (they did already ease financial conditions in March 2023 when some US banks failed unexpectedly). This view of a forced pivot to lower interest rates has kept a bid in the US equity markets, and to a lesser extent the US debt markets, while keeping pressure on the US dollar.

Economy

The US economy continues to bump along in a slow growth environment, with a very healthy labor environment but increasingly weak (and worrisome) economic statistics.

As we wrote last quarter, "…[i]n addition to the positivity of GDP, employment has continued to hold up remarkably well, with weekly jobless claims printing a multi-decade low, and monthly employment reports showing consistent gains. Many investors (including us) have been waiting for the proverbial "shoe to drop" concerning employment, expecting employment gains to wane or even turn into job losses." The job market continues to be strong, and recently-finalized Q4 2022 GDP was 2.6%, although that was dominated by building inventories but weaker personal consumption.

However, "soft data" has been weaker, signaling recessionary conditions. ISM (Institute of Supply Management) Manufacturing Survey for March dropped to 46.3 (anything below 50 indicates contraction), the fifth consecutive drop and the lowest reading since May 2020, according to "ISM Manufacturing Tumbles to Post-Covid Lows, Employment Slumps", Zerohedge, April 3, 2023. Another measure released the same day, the S&P Global US Manufacturing PMI (Purchasing Managers Index) also showed its fifth straight month of contraction at 49.2 (although up from February's 47.3). ISM's employment index also showed the weakest reading since July 2020, and new orders remain in contraction for the last year. More recently, the number of Americans claiming jobless benefits hit its highest level, at 245,000 since January 2022in the week ended 4/14/23, while continuing jobless claims, at 1.865 million, hit its highest level since December 2021. Other soft data included the Fed's Philadelphia Fed Business Survey, which hit its lowest level in mid-April 2023 since March 2009 (Covid lockdown levels excluded). Other data like existing home sales saw further deterioration, with sales exhibiting the 13th monthly decline in the last 14 months and down 22% year-over-year.

In addition, credit / bank conditions have deteriorated, culminating in the failure of three large regional-size banks in early March, and an adverse change in public and corporate behavior afterwards. Most concerning to many financial observers is the continued drop in deposits at small and regional banks.

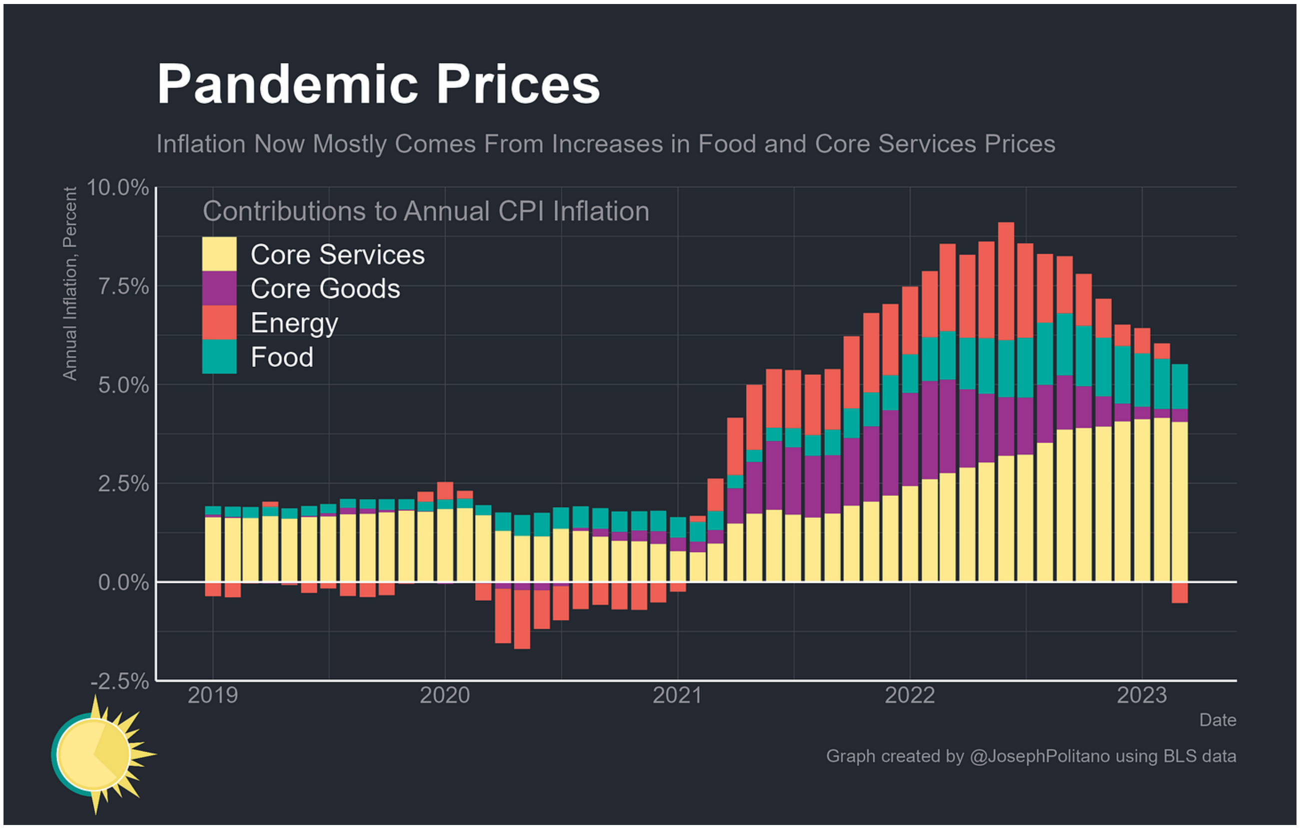
These deposits form the base for lending, and as they move out of the banking system (heading almost certainly for Treasuries, money market funds and other short-term investments with far higher interest rates), financial conditions tighten as banks are unable to extend more loans and their net interest margin (core bank profitability) shrinks as liabilities become more expensive. Commercial bank deposits have fallen for ten straight weeks, with March outflows totaling a massive $275 billion at small banks and $195 billion at large banks!

These large drops in deposits have contributed to tighter financial conditions and less ability to grant loans. According to the Dallas Fed's latest Banking Conditions Survey, loan "demand" (really, bank's offers of loans) has declined for five straight months, led by a large contraction in consumer loans. In the past two weeks since the banks' collapses, commercial bank loans and leases dropped a large -$105 billion (the highest in years), led by small banks (-$73.6 billion), large banks (-$23.6 billion) and foreign institutions (-$7.5 billion); these are net loan payoffs net of renewals, a rare occurrence. "Small" banks (less than $250 billion in assets) are responsible for 50% of US commercial and industrial (C&I) loans, 60% of residential real estate lending, 80% of commercial real estate lending and 45% of consumer lending – so this shows the credit crunch in real time. Slightly delayed in reporting, February credit card borrowing fell to its lowest level of growth in two years, as reported lending standards continue to tighten and consumer conditions deteriorate – a number of consumers are almost certainly tapped out and cannot borrow more.

Retail sales, a large part of the US economy, continue to weaken, with March retail sales falling -1.0%, with first quarter gains at +2.9% year-on-year, the lowest annualized quarterly rise since June 2020 (during the teeth of Covid), and these are nominal dollar amounts, before adjusting for inflation (meaning even lower volumes than in 2020). The weakening of the consumer is hard to ignore, although many members of the FOMC are trying to do that while fighting inflation, trying to get annualized and expected inflation back to 2%. Fed rhetoric continues to be tough, saying rates will be higher for longer, but deteriorating conditions could lead to pausing any more interest rate hikes in late 2023, and even result in rate cuts this year if economic conditions don't get better soon.

One further measure of US economic weakness is the transportation sector. Railroads have been reporting smaller amounts of cars moved, and trucking has gone from a torrid 2021 to a languid early 2023. In fact, JB Hunt, a large trucker and member of the Dow Jones Transportation Index, missed on first quarter revenues and earnings in mid-April and reported that its volumes and revenues per truckload fell due to the onset of a "freight recession." According to a recent Bloomberg article on trucking, the latest data from American Trucking Association shows the truck tonnage index dropped 5.4% in March versus February, the largest decline since Aug. 2012. These data points indicate a building weakness in the US industrial economy.

Inflation has been improving in the short-term as "base effects" (where the high prices of one year ago roll off, to be replaced by lower recent readings in the average, showing conditions improving). And moderating energy prices have helped the annualized US Consumer Price Index improve from a high of +9.1% to just over +5.1% currently. This is due primarily to improvement in energy prices, which added inflation in 2022 but has just flipped over and is starting to disinflate currently. While this is welcome improvement, we are of the opinion that seasonal factors have pushed down energy prices at this time of year, and the lack of enough investment coupled with difficult regulatory conditions means energy supplies will surprise to the downside, leading to upward pressure on prices later on in 2023. A really illustrative chart that shows inflation, its components, and why we think it will continue to be "sticky" on the upside was produced by Joey Politano of Apricitas Economics in a 4/15/2023 article on www.apricitas.io called "The Disinflationary Process Continues" using BLS data:



This graph vividly portrays the relentless build (with little give-back) of core services inflation (the yellow bars) and food inflation (the green bars). The more cyclical components, energy and core goods, drove the initial push up into higher inflation, but even as they wane, inflation has stayed high because of the way inflation gets built into cost structures in services firms and doesn't recede easily.

UK inflation headlines still high European inflation problems: March UK CPI, expected to drop below 10% for the first time in months, instead dropped less than expected, printing at 10.1%, with core CPI also above expectations by staying at 6.2%, thwarting those predicting a drop in core inflation. Mirroring Europe, most of the recent drops in UK inflation have been due to lower motor fuels and heating fuels, as the milder winter allowed prices to drop from all-time highs. However, consumers were not exposed to the full brunt of utility bills, as utilities across Europe were only allowed to raise prices partially so will have to continue to do so for months and years to cover the costs of extremely high fuel prices of summer/fall of 2022. In Germany, the government shuttered their last three operating nuclear plants in mid-April, but by doing so, robbed their electrical grid of some of its cheapest and most dependable energy. E.ON, the European electric utility based in Germany, announced that June 1st, it would raise electricity rates by 45% in Rhine-Westphalia, one of Germany's largest and most prosperous states. This price increase will soon be incorporated in German CPI, negating the disinflation that lower winter energy prices injected into inflation measures prior to this new inflation. Ongoing adjustments to higher prices in energy due to war constraints, government constraints and a worse mix of energy sources for reliability and pricing will be a constant battle for European consumers and businesses.

Asian economies continue to grow slowly, but they are exhibiting growth that reportedly is higher than other regions. Chinese GDP was just reported in mid-April: they reported GDP reached 4.5%, exceeding 4.0% estimates, for first quarter YoY growth, while QoQ, it grew 2.2% (all coming out of last year's Covid lockdowns). The GDP figure compares to full 2022 growth of 3.0%. Chinese retail sales were also reported to have grown 10.6% in March although industrial output disappointed at only 3.9%, below 4.0% forecasts. Japan began its new fiscal year in April and is only expected to grow 1.5% during fiscal 2023.

Bottom line: US economic statistics show the economy is challenged although so far holding up. Inflation, while dropping around most of the world, has shown persistence in the core measures around the world, and recent levels of energy prices look closer to lows than future highs, meaning inflation is at risk of staying high around the world, hurting economic strengthening. We still believe the US, and thus Europe, will fall into recession in the near future, causing further slowdown in economies in the West and having adverse effects on many capital markets, which have priced a number of assets for soft landings in both North America and Europe. We will continue to look for attractive opportunities after markets better reflect recessionary risks and valuations.

Equities

World equity markets continue to move higher during 2023 as investors see inflation moderating and thus interest rate raising coming to an end; we wrote this last quarter, and it continues to be true, in spite of March's bank turmoil and high bond volatility, usually a precursor to trouble in the equity markets.

The $64 trillion question that everyone is asking is why are equities holding up so well? We see this question in various forms in the financial press daily. The answer is two-fold:

First, a large number of participants in the financial markets continue to believe that it's just a matter of time before the Fed stops raising rates and pivots to lower rates, based on the Fed's past behavior in times of economic weakness. Lower interest rates benefit long-duration assets like high valuation, high growth big tech companies and long-term bonds most, so anticipation of these moves later in 2023 means financial players have built back large positions in big tech, which are still so large in capitalization that they have lifted averages in spite of many smaller companies performing much more poorly.

How much is the outperformance of big cap tech? The Nasdaq 100 has outperformed the Russell 2000 during March by greater than 13%, an outperformance only eclipsed twice in the past few decades: March 2020 and June 2000. Another measure of outperformance is provided by Bianco Research in a 21:34 [military time] tweet on March 30, 2023: "…492 [of the 500 stocks in the S&P 500] are collectively down [~0.5%] on the year. Eight stocks [Meta, Apple, Amazon, Netflix, Alphabet (Google), Microsoft, Nvidia and Tesla] are keeping the YTD gains [~5.0%] in the S&P 500 positive." That herding has acted as a kind of "flight to quality" that used to occur in bonds (when the Fed wasn't still tightening). It also occurred in gold this quarter (see the Commodities section below). But this behavior is not only unhealthy, it is not sustainable, especially if negative surprises continue in the future.

Investors continue to play for the "pivot," but it is a strange behavior – with much of the Wall Street trading cohort being in their 20s and 30s, they have grown up in the business completely during times of Fed largesse – lowering rates whenever there is financial turbulence, leading to another favorable buy-the-dip ("BTD") moment. Naturally, a large number of financial trading organizations (hedge funds, etc.) and traders (both professional and individual) see the shift of the Fed ending their interest rate raises as another good BTD moment.

But, with inflation still hundreds of basis points higher than the Fed's target, any event or combination of events causing the Fed to pivot to lowering interest rates is almost certainly going to be detrimental for economic concerns, costs of materials and almost certainly profit margins. Thus, the constant drumbeat for the Fed pivot and the almost universally expected exuberance to follow is misguided, we believe. Although there will almost certainly be a knee-jerk reaction higher if the Fed is forced to pivot, lower interest rates when core inflation is still near 5% along with continued underinvestment in a large number of natural resources means higher costs, which will lead to much higher prices, negatively impacting economic growth, which is not what traders are expecting or beneficial to their positions.

We believe the Fed WILL keep interest rates at current levels, to continue to fight inflation, just like the 1970s/80s Volcker Fed. That is what Fed Chairman Jerome Powell wants for his legacy: that he fought inflation like his mentor Paul Volcker and won. However, our belief in Fed determination is only up to a point: if some financial downdraft threatens to become systemic, we know the Fed, influenced unfortunately by the politicians in Washington, will cave to the pressure and institute "solutions" meant to avert the crisis but will almost certainly prove to provide "easier" money, thus, potentially goosing inflation and leading to higher costs throughout the economy (look at the recent bank bailout: the new Bank Term Funding Program ("BTFP") combined with banks borrowing from the "last chance" Discount Window totaled $300 billion dollars in the first two weeks after the bank runs, completely undoing all the Quantitative Tightening the Fed had done during 2023 through mid-March! The market senses this will be bullish for risk assets – however, it certainly was NOT bullish for financial companies even as all this new money injected into the banking system emboldened more buying in long duration assets like large tech stocks and long-term bonds. According to Michael Lebowitz of RealInvestmentAdvice.com in his March 29, 2023 article "A Federal Reserve Pivot Is Not Bullish,": "Since 1970, there have been nine instances in which the Fed significantly cut the Fed Funds rate, [t]he average maximum drawdown from the start [to trough] was 27.25%." If things hold true form, the financial markets are facing another 25+% decline after the Fed starts cutting rates.

The second, and less well-recognized, reason equities have held up given the weakening economy is that central banks around the world have been stimulating their economies during the last few months, putting more high-powered money into world economies that are still exhibiting inflationary forces caused by post-Covid stimuli, both monetary and fiscal. China is the biggest to offer stimulus, putting more in during the first quarter than the US supplied during the Great Financial Crisis. Japan is also stimulating by pegging its 10-year JGB note yield at 50 basis points (although it is only trading 46 basis points currently, meaning no stimulus needed currently). And, of course, the US: the promised Quantitative Tightening (QT) announced in March 2022 has been implemented at a much-reduced pace, and much of these "removed" QT funds were reinjected when the Fed again "rescued" the banking system during the bank failures of March 2023.

Others also think the market "should" be lower already. In a note dated March 29, 2023, JPMorgan's Andrew Taylor examines reasons the bank's personnel think the market should be lower. One reason not discussed already in this letter is the tendency for corporate profit margins to adjust lower during recessions. JPMorgan's analysts calculate that in the last four recessions, peak-to-trough forward (estimated) earnings fell -23%. In addition, at troughs, forward P/E averaged only 12x, when today's forward P/E ratio is closer to 16x. These statistics also indicate a market that could drop +/- 25% if it were to act in an average fashion for the current conditions.

Inventories are another concern for us. Supply chain interruptions led to thinning inventories in 2020 and 2021, but 2022 seems to have led to lower sales of over-ordered products from those supply chain concerns, meaning inventories have built over time, as reflected in the 4Q22 GDP, which was positive largely on continued inventory builds.

Now trying to work off excess inventories in retail and intermediate goods may lead to lower final sales going forward. This would lead to a temporary spike in inventories as "normal" economic activity would be below normal, frustrating business' attempts to work off excesses. We see this as another brake on future economic activity, at least for the rest of 2023.

Bulls, on the other hand, point to two big factors for why they see the stock market holding up: 1) it hasn't dropped yet, and everything discussed by the bears is "known" by the market, so there must be some bullish news that is offsetting the bearishness that is not widely known, and 2) sentiment is so one-sided toward bearishness and short positions are at all-time highs that everyone who wants to sell already has, leaving only buyers in the market, who have been selectively buying, keeping the market bid for weeks.

We don't "like" either of those arguments, but the markets are being supported by constant buying, so we cannot dismiss either of these bullish factors. And since this bullishness is more than offsetting the near-record bearishness, we have stayed near fully invested, albeit in more defensive and secular themes, eschewing more traditional risk sectors like consumer discretionary, technology and communications (reconfigured a few months ago to contain some of the larger tech stocks like social media companies). We continue to look for the classic "tells" of the onset of the much-anticipated recession, which could change our minds and our portfolios.

As we look forward, we look to interesting situations developing in healthcare and industrials as our next place we believe we will find attractive situations that we are starting to examine more closely. Healthcare in particular has lagged in recent months, but there are many events happening across the sector, and we plan to spend a lot more time looking for attractive risk/reward situations.

International stocks in general have benefitted from perceptions of better economic activity and, of course, the drop in the US dollar, which allows better returns for international companies selling into the US. Chinese stocks, in particular, have rebounded alongside US growth stocks as China's government has signaled its re-engagement with many companies it formerly shunned as too big and powerful. We have found some Japanese stocks more attractive than the fickle Chinese stocks dependent on government approval for business expansion; the Japanese trading companies facilitate trade in and around Japan and Asia in general, and are at attractive levels, especially since the yen is still relatively low, making Japanese companies pretty good bargains across the board if one sees the Japanese economy thriving.

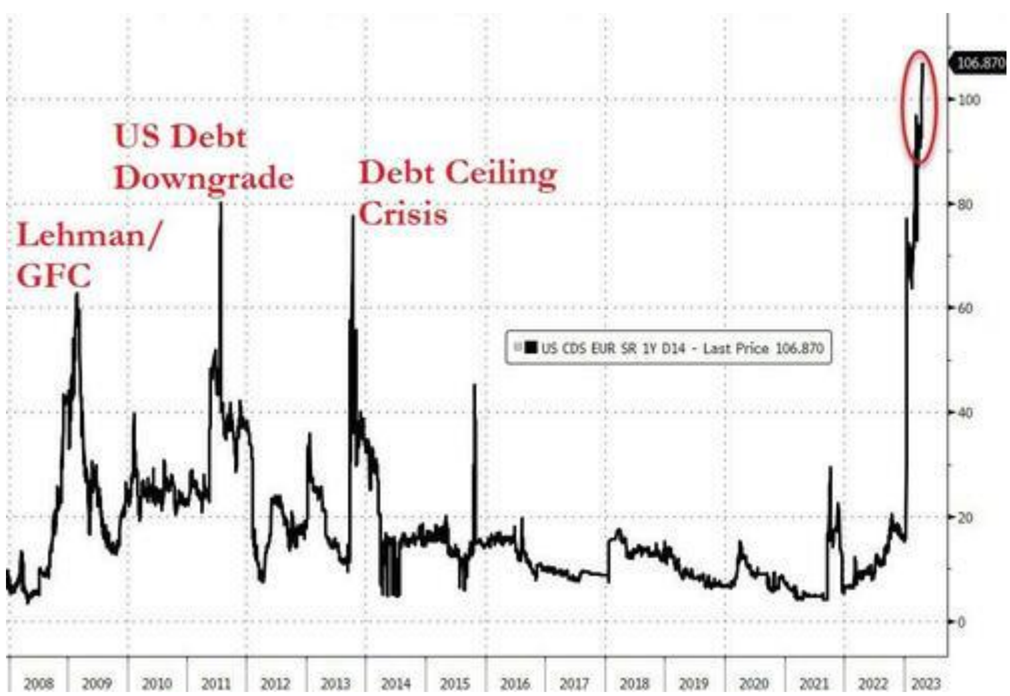
Other emerging markets are slightly higher but have not felt the benefits of a lower US dollar yet. The geopolitical storm of the Russia-Ukraine War and the cold war between the US and China make investing internationally less appealing since shifting alliances and less certain money and trade flows hamper traditional macro relationships. We continue to look at less developed markets/investments but prefer to take advantage of opportunities through US, Canadian or European domiciled companies doing business in those emerging countries.

Bottom line: US stocks continue to hold up, in spite of rampant bearishness, banking system uncertainties and some earnings missing expectations. Our expectation of a coming recession has pushed us to tone-down our risk positions, but with the market holding up, we continue to maintain most investments while considering new positions to enhance portfolios, looking at healthcare and industrial opportunities while watching out for the recession slated to appear sometime during 2023. We will not be shy to lighten up if needed, so we will continue to be vigilant for safety with an eye out for attractive situations.

Bonds

US bonds have been volatile so far in 2023, with the MOVE Index measuring bond volatility exhibiting levels not seen in years. Bond yields climbed twice in the first quarter on worsening inflation fears, but rallied lower each time as poor economic results and then the March bond tumult sent investors running for the historical safety of Treasuries.

However, US Treasury bond yields have been climbing during much of April as investors hear Fed speakers saying short-term rates will stay high for longer and the government continues running very large fiscal deficits. In addition, the debt ceiling debate is growing ever closer, and with a split Congress, there will be a debate about how much and when to raise the debt ceiling. The Biden Administration has so far refused to even start negotiating, making the bond market nervous, which is also helping drive up rates. The other fallout from this looming crisis is the price of credit default swaps (CDSs) for the United States has risen to its most expensive in history, meaning international investors are actually seriously considering that the US will default on some of its debt as a result of a failure to come to some agreement in the next couple of months on the US debt ceiling. The following graph from Zerohedge on 4/21/2023 shows that CDSs are more expensive than during the last three debt crises.



International rates have been mirroring US rate moves, although European rates have been roiled by the near-failure and rescue of Credit Suisse. European still high inflation has weighed on European bond prices, although the ECB's tough talk and continued raising of interest rates has drawn in worldwide capital, moderating the effects of rate rises somewhat. Asian interest rate moves have generally not been making many headlines lately.

Bottom line: Lower US bond rates are predicated on the Fed pausing and then pivoting to rate cuts in 2023. The Fed has shown as much resolve as we've seen in years (decades?) toward either continuing to raise interest rates or at least keeping them at current high levels "for a considerable period of time." If so, and with still high inflation raging, we are not too interested in building a position in long-term bonds. With recession looming, lower rated bonds look like a value trap, so we have confined any buying for customer portfolios to money market funds and short-term Treasury notes as a place to safeguard needed cash while providing a yield that at least confronts the ravages of 5+% inflation still in effect.

Currencies

The dollar was lower again this quarter, but just by -1.4%. In contrast to 2022, currency movements continue to be muted compared to movements in other parts of the financial complex, so we will spend much less time on them in this letter.

However, as we referenced above, we see the US dollar as having peaked last fall as the markets sniff out topping interest rates in the US during the spring/early summer, presumably to be followed by rate cuts in late 2023. We are not so sure that the Fed will cut rates later in 2023 – we think they are serious about staying the course with "high" interest rates into 2024. But as market participants know, if something else "breaks" (just like three banks in March) or the equity market sinks "too much," the Fed will come riding to the rescue with lower interest rates, just as they have after every crisis since the 1987 Crash. If the Fed does this, the US dollar will almost certainly show a lot of weakness, leading to much more volatility in worldwide financial markets.

The ECB continues to talk tough and has a little more room than the Fed to raise interest rates, giving traders a preference for the euro over the dollar presently, keeping a bid under the euro.

The yen has shown some strength as the Bank of Japan (BOJ) shifts to the leadership of their new Chairman Ueda, who has acknowledged in his first briefs that BOJ policy may need to change in the future. Policy has been so easy for so long that any change means tighter policy, which is putting a bid in the yen currently as market participants anticipate the inevitable change.

China's central bank, the Peoples Bank of China (PBOC), has been providing stimulus to its economy, so movements vis-à-vis the dollar have been a non-event, with the exchange staying within a narrow band for the past few months.

Other central banks have slowed down their fight against inflation, with negligible effects on interest rates lately, although most English-speaking countries' currencies rallied versus the dollar during early March, just to give back the gains during the rest of March/early April.

Bottom line: The US dollar has a downward bias, and many traders see it continuing to move down slightly over time due to presumed Fed loosening later in 2023 as well as the US' slipping geopolitical image around the world. The euro and yen probably benefit the most, albeit in minor moves unless some geopolitical upset occurs. We will probably not be taking currency positions with these current circumstances; a weaker dollar will provide better opportunities in other financial products.

Energy

The mild winter in the northern hemisphere has continued to put pressure on heating fuels; natural gas in the United States has fallen below $2.00 per MMBtu, a level some thought might never be seen again, while coal prices and seaborne LNG prices have fallen hard from last year's highs.

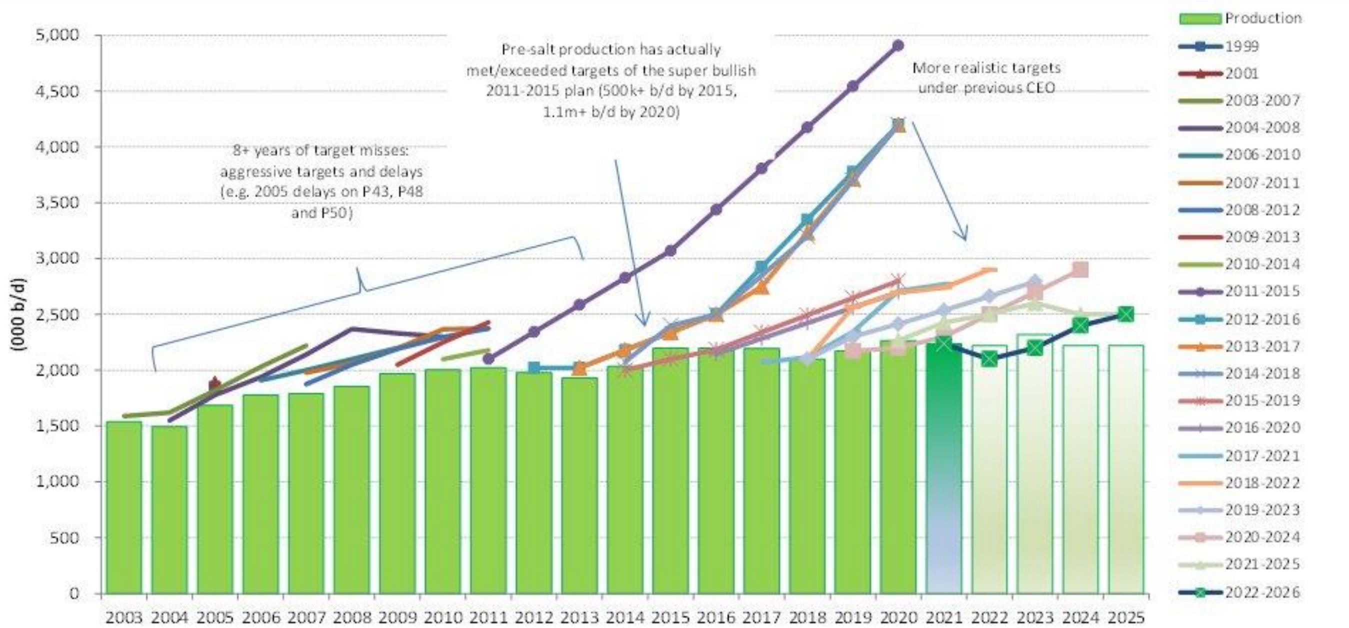
Oil prices fell through much of the first quarter due to China's economic recovery proving to be slower than many thought, higher Russian and African oil supplies than expected and French strikes at many refineries (lower energy demand) plus US refinery maintenance turnarounds. Production surprised at many of the smaller OPEC nations (namely, Nigeria, Angola and Iraq) during the first quarter, alleviating some supply concerns. This combination of higher production and reduced demand in February and March caused inventories to balloon and pundits to say crude is going to stay in the $60s/bbl for a while.

As the second quarter progresses, however, supply and demand have re-aligned in a tighter fashion, as many oil analysts have been publishing. The International Energy Agency (IEA), thinktank for the developed OECD countries, projects oil demand to grow this year 2.3%, which includes US growth of just 0.5%, but Chinese and Indian growth both of 5%, Other Asian, Middle East and Africa all up 4% and Latin America up 2.5%, adding up to a world total of 101.89 million bbls/day, up from just under 100 million bbls/day in 2022. One focus point is Chinese usage of jet fuel – this varies with economic vigor in China, and it currently has just exceeded the 2019 pre-Covid high, marking China is back full-force in energy usage.

Supply is where the concern is. Not only are US and other Western government policies impeding full scale expansion of Western petroleum supplies, but as most know, OPEC announced on the first weekend in April a surprise cut of 1.1 million bbls/day of supplies, headlined by Saudi Arabia's 500,000 bbl/day cut. In-depth energy researchers have concluded that OPEC in aggregate had been producing at or above effective production capacity (to capture higher prices this spring), and that the current rate was unsustainable anyway. In addition, Russia has been overproducing and is also reducing production by 500,000 bbls/day, tightening supply further. Non-OPEC supplies were expected to pick up the difference and more, as they are expected to grow 2.2% or 1.4+ million bbls/day. We don't see how this can occur, with Permian supplies (the only real growth area for non-OPEC supplies) only up about 200,000 bbls/day in the past few months.

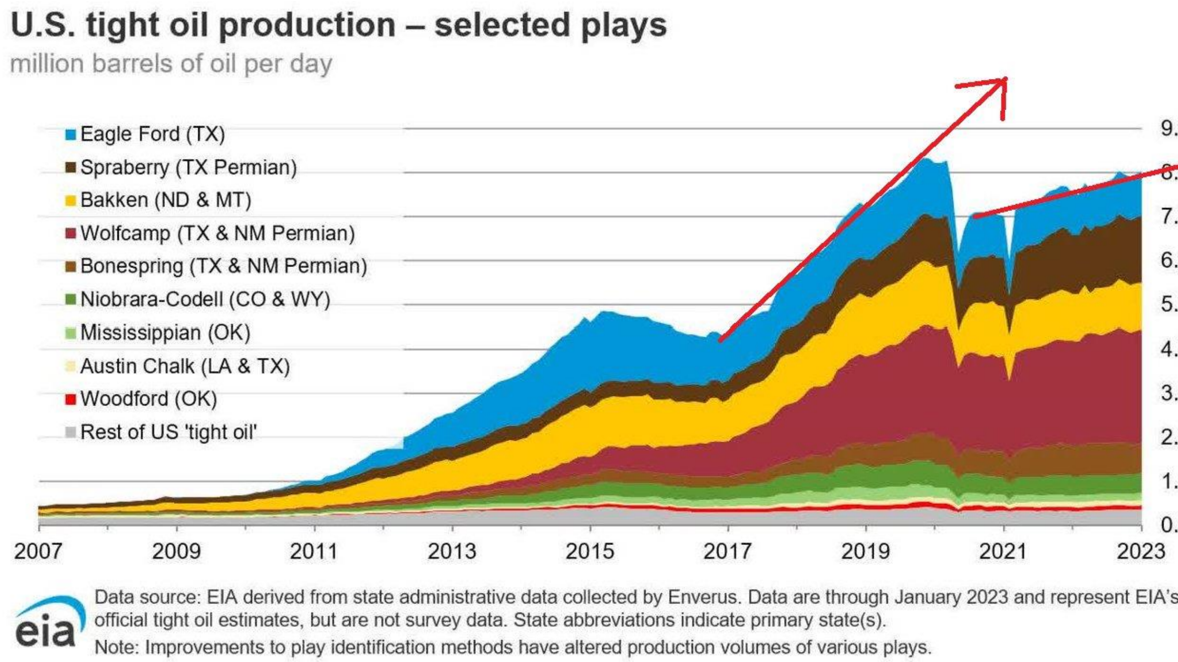
We thought two recent charts we saw on Twitter illustrate the supply situation better than our written description:

The first one is from Josh Young at Bison Interests (@Josh_Young_1) on April 18, 2023 (that he attributes to Sankey Research @crudegusher, but we could not find the original referenced tweet):



This graph illustrates the promises of Brazilian production over the past twenty years, with the various projections of future production advances above the green bars, while the green bars themselves illustrate the actual production. Bottom line: Brazil was expected to more than triple its 2003 production rate by the early 2020s, but as we arrive in 2023, it is up barely 35% over that period, and the latest projection has production falling in 2022 and 2024, projecting realistic production to stay roughly the same for the 2020s, i.e., no growth at all. This shows the challenges of an energy world that needs to replace depletion as well as fuel world GDP growth each year. Brazilian production, just like many other jurisdictions, is hindered by politics, bureaucracies and more and more challenging conditions for replacing supplies of the world's most efficient petroleum-based fuels.

The other graph is from John Arnold (@JohnArnoldFndtn) on April 3, 2023 (via Sankey Research): Arnold says in his tweet: "The [recent early-April] OPEC [production] cut was only possible because of the inability/unwillingness of the US shale oil sector to grow at the same rate as it was in 2016-2020. With much less supply elasticity in the market today, OPEC is less worried about losing market share if it defends higher prices," followed by the following graph. The graph stacks the major shale basins production to show overall US tight oil (mostly from shale) production. The trajectory of production growth during the Trump Administration (see red arrow in the center of the graph) from 2016 through early 2020 showed high growth, growth that led to more and more secure energy supplies for the US (and many allies, due to US exports). Since then, due first to Covid and then the Biden Administration's antipathy for fossil fuels, production and growth are lower, as illustrated by the second red arrow on the right side of the graph. US shale has served as the growth engine for crude oil production for the world since the early 2010s. It is not showing much growth anymore.



These dynamics should impact longer-term prices. However, in the short-run, April is a shoulder month for demand, and it has proven to be a weak month for demand growth, with supply keeping up better than expected, putting pressure on crude prices currently as oil traders continue to think that recessionary pressures in the US will dampen demand sufficiently to overcome supply concerns. Summer months ramp up with travel and better transportation conditions, raising gasoline, diesel and jet fuel usage appreciably; the question is when these higher demand conditions kick in.

With respect to US gasoline, the lack of crude processing and continued refinery turnarounds has led to gasoline inventories dropping almost 20 million barrels in the US to levels not seen since 2014 (when crude prices were $110+/bbl). Gasoline prices appear to have bottomed and just started rising, reacting to current [mid-April 2023] inventory levels that are below last year's levels, when gasoline was at $3.50 per gallon (wholesale) on its way to $4.50 in May 2022. So, all the elements are in place for crude oil prices to resume their rise.

European energy, while dodging the proverbial bullet in the just concluded mild winter of 2022-23, has already started to react to possible shortages for the winter of 2023-24. French power prices have risen over the past two months, with power for the first quarter of 2024 selling at 416 euros/MWh, compared to only 169 euros/MWh in Germany for the same 1Q 2024 time period. This premium appears to be based on continuing problems with the large French nuclear power fleet of plants which supplies much of the country's power. French nuclear plants have had a large number of shutdowns due to maintenance concerns, and in 2022, they produced only 77% of the average supplied in 2020 and 2021.

US natural gas prices have stayed low throughout 2023 so far as a mild winter has combined with ample supplies, especially from associated gas produced from shale oil wells. LNG export terminals are back at full capacity in March, so presumably future surpluses can be exported to higher value markets. However, natgas prices remain in the low $2.00s/MMBtu range, indicating plentiful supplies during April's shoulder period of reduced demand and forward.

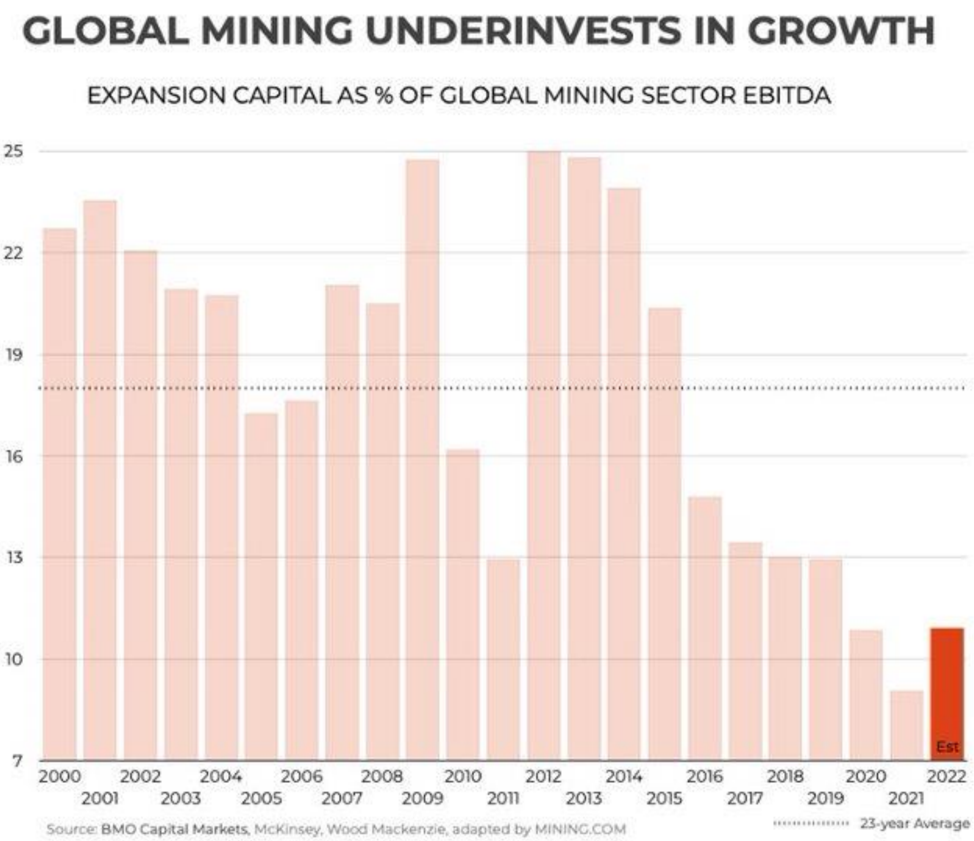
Bottom line: We continue to favor oil and gas investments, including supermajors, independent producers, refiners and pipeline companies. We also own some coal companies as Europe and Asia continue to grow their worldwide coal consumption in aggregate. We believe lower drilling activity, continued high demand and lack of any significant new discoveries will allow these investments to pay very attractive current yields while leading to additional capital appreciation over time as prices rise.

Commodities

Precious metals have led the commodities complex since early March, boosted by gold's safe haven status when the US banking system had its recent crisis, causing the Fed to inject hundreds of billions into the financial system. The precious metals have stayed strong since, with gold hovering around the $2,000/oz and silver up to $25/oz, although they are correcting their overbought status currently.

Longer-term, both precious and base metals appear to have very favorable fundamentals: demand is still decent in most products. One example is silver, which according to the 2022 Year in Review by The Silver Institute, demand rose 18% in 2022, with industrial demand (especially for green uses like in photovoltaics) climbing to a record high. Supply of silver was roughly flat, with mine output down 0.6% for the year, leading to a market supply-demand deficit of 19% of 2022 usage.

Longer-term, we think supply side underinvestment and geopolitical tensions underpin prices of base/ industrial metals. Underinvestment is vividly illustrated in the following graph from a mining.com 3/30/2023 article "Demand is soaring, but global mining is not expanding" (which they sourced from BMO, McKinsey and Wood Mackenzie).



As shown in the table above, underinvestment is a serious problem. Booming demand from China in the 1990s/2000s after China joined the World Trade Organization led to a constant bid for metals of all kinds, culminating in 2005-06, when a number of mega-mines were greenlighted. The long lead time for permits, financing and construction led to those mines coming online 2012-2015, when demand had already peaked. In addition, many of the mines were only marginally economic at the high prices of 2010-2012 and development costs went sky-high, meaning companies tried to cut corners any way possible, to keep economics attractive. The result was higher output but at much higher costs, meaning many of the mines were disappointments, yielding less than predicted (lower grade) at much higher costs (poor economics). These mines have been run at the highest capacities possible, but later investments were considered unattractive by capital markets, and the result is investment since 2015 at roughly half the rate previously. Meanwhile, world demand for all kinds of metals is set to rise for years during the green revolution of electrification of the West and eventually the whole world. The massive underinvestment illustrated in the above graph signals that prices will have to go higher to incentivize enough new mines/mine expansions to occur to produce the planned transformation.

However, the ugly side of this boom in metals is that many of these ore bodies are in developing countries that want to reap the majority of the value of these deposits. Many are starting to turn to "resource nationalism" or the seizing of mines from private hands by the host government. The problem is that private interests have secured a concession from the government for development, paying the government by an agreed-upon formula, then raised the capital, developed the property, set up operations, later to have it seized by the government, either wholly or for far more attractive contract terms. This situation just occurred on 4/21/2023 when Chile, the largest exporter of lithium in the world and home to ~40% of all worldwide lithium reserves, announced it was going to re-do all its lithium contracts to be public-private partnerships going forward, with the private companies having to bid to run the operations (no longer own). Current contracts are going to be renegotiated on a voluntary (or involuntary) basis in the near future. Mexico, with far fewer reserves, announced the same thing last year, and Indonesia banned the export of nickel ore (another key battery metal) in 2020.

This type of resource nationalism will lead to higher prices, less efficient operations and slower development, meaning the green revolution will occur ever slower each time a country pulls this. And it's not just these "green"-oriented metals – Papua New Guinea told Barrick Gold that it was unilaterally pulling the mining permit for Barrick's large Porgera mine there a couple of years ago, only reinstating it when Barrick gave much better terms to PNG. This "resource nationalism-lite" is a constant risk for mining companies doing business in less savory jurisdictions and can spread as countries see others being successful in their re-trading. We make a conscious effort to invest in mining companies doing business in countries with more predictable rule of law, like the US, Canada, Australia and a few others on the edge, like Mexico, Bolivia, Argentina and Peru.

Demand could also be concern for these metals in the case of a US and/or worldwide recession. Certainly, prices weakening in the past few months has been a combination of: 1) less concern for supplies since the onset of the Ukraine-Russia war after witnessing reduced but adequate worldwide supplies in the past few months, and 2) recession concerns building in the US and Europe. However, building government mandates throughout the West should actually lead to higher demand for most metals, industrial metals like iron ore, copper and nickel included, due to the increased demands of the green revolution. Any financial conditions relief from central banks due to falling economic growth should increase demand for precious metals, due to increased inflation concerns and safe haven demand as other investment demand stumbles. Thus, onset of more recessionary conditions could lead to short-term demand drops and resultant price drops, but we expect fiscal and monetary stimuli will have an outsized impact on demand and thus prices for all these metals.

Bottom line: We continue to like both precious and industrial metals and metals mining companies. We also still like fertilizer, chemical companies and agricultural producers & trading companies, although their fundamentals are not as good as those of miners. We believe China's reopening and the war in Ukraine in the short-term, along with continued underinvestment and resource nationalism in the longer-term, make these commodity companies attractive now and into the future. We will likely keep constant our exposure to these companies until we see whether recessionary conditions do hit the US and the rest of the world, and see how markets react to these conditions.

Summary

The weakening of the US economy and the surety that the Fed will come to markets' rescue underlie both the US equity and debt markets currently. This give-and-take between opposite forces have kept equity index levels and interest rates in relatively narrow ranges, and we expect these conditions to remain as long as the economy keeps expanding and the Fed doesn't make big noises about raising interest rates further than their current rhetoric signals.

Underinvestment and geopolitical detriments on development of supplies keep energy, commodities and many industrial businesses attractive to us, in spite of the probable onset of recessionary conditions, because governments and businesses are in grave need of updating, upgrading and expanding infrastructure that has been neglected for too long, resulting in a lack of supply to ultimately meet growing demand. In addition, the green revolution drives so many of the US and other Western governments' decision processes, so the building and transformation of transportation, energy and other systems will take trillions of dollars over the next few years, and energy and metals will be at the heart of these developments.

In addition, we continue to look for attractive opportunities in other sectors and currently think that healthcare and industrials are two places that bear further examination for attractive opportunities within the framework of the economy and markets presented above. As other opportunities arise, we will look to recast the portfolios for the most attractive opportunities, including adding many more traditional US stocks if they start to reflect more attractive valuation fundamentals as prices adjust to forecasted recessionary conditions and resultant valuations.

Kanos Quarterly Commentary 1

The Fourth Turning

Many aspects of American life seem to be changing, some at a rapid and bewildering pace, in ways that most of us have had a hard time keeping up with, much less predicting. There seems to be a lot more conflict among people, especially in politics, but also in civility, manners and shared sacrifices. Most are sensing these things, but most don't have a real explanation about how and why it is occurring. In our ongoing studies, we discovered a series of books that we think merit your attention about why these things are happening and what may occur next.

In the 1980s, social scientists William Strauss and Neil Howe started collaborating on a theory of a generational framework for civilization that involves series of twenty-year generations, of which four form a series, that then start over. This 80-year, four generation cycle became known as the Strauss-Howe Generational Theory and culminated in the 1991 publishing of a book: Generations: The History of America's Future, 1584 to 2069. The book goes through the four generations that make up each series, and highlight that the fourth generation is almost always chaotic, leading to radical change and then a renewal in the subsequent first generation of the next series.

Their studies and the success of Generations led them to follow up with another book, 13th-GEN, and then another far more successful book, The Fourth Turning: What the Cycles of History Tell Us About America's Next Rendezvous With Destiny. The book details that American history can be divided into generations that occur in sequence: 1st - rebirth, 2nd - blooming, 3rd - maturing/overdoing and, 4th - conflict and reformulation. This fourth generation is the "fourth turning" where the series ends and a new one begins. The book highlights the Fourth Turnings of the past in American history: the American Revolution (1770s-1780s), the American Civil War (1860s), the Great Depression/World War II (1930s-1940s) and now. They predicted in 1997 that we would have increasingly conflicting political, economic and social conflict starting in the mid-2000s and lasting until sometime in the mid-2020s.

Their theories and books make a lot of sense to us, not only because the data fits pretty neatly, but it makes sense to us as historians and economic historians: nations seem to forget hard lessons learned by earlier generations and must go through the resolution of built-up conflicts with new leaders and new frameworks.

The book is still a good read, but having read it pretty thoroughly, we are heartened that America will get through all of these conflicts we are experiencing now, although not without going through pain, potentially a lot of it before we get through this latest Fourth Turning and move into the rebirth phase.

Note: Strauss and Howe expanded their studies and believe it applies to other Western civilizations too: in Great Britain, they had the War of the Roses, the Spanish Armada Crisis, The Glorious Revolution, etc. Unfortunately, William Strauss died in 2007 at age 60 of pancreatic cancer, so Neil Howe has continued the studies without him, and he has a new book on its way out this summer updating conditions of this Fourth Turning.

Also: Geopolitical strategist George Friedman, the Hungarian-American founder and former chief of political strategy firm Stratfor, wrote a book in 2009 called The Next 100 Years: A Forecast for the 21st Century. In it, he details the amazing advantages that America possesses: the best waterway system in the world (the Mississippi-Ohio-Missouri river system and the Great Lakes-St. Lawrence Seaway that allows hugely advantageous transportation of goods, amazingly diverse and abundant energy and mineral resources and the largest swath of arable land (the American Midwest) in the world. Coupled with the Constitutional rule of law, America's history of immigration and incorporation and finally, having two large oceans to protect borders on the east and west while having friendly neighbors to the north and south, means that the United States of America has all the makings of an extremely bright future with getting through the Fourth Turning as our big challenge.

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Kanos Quarterly Commentary 2

Only 37 More Years?

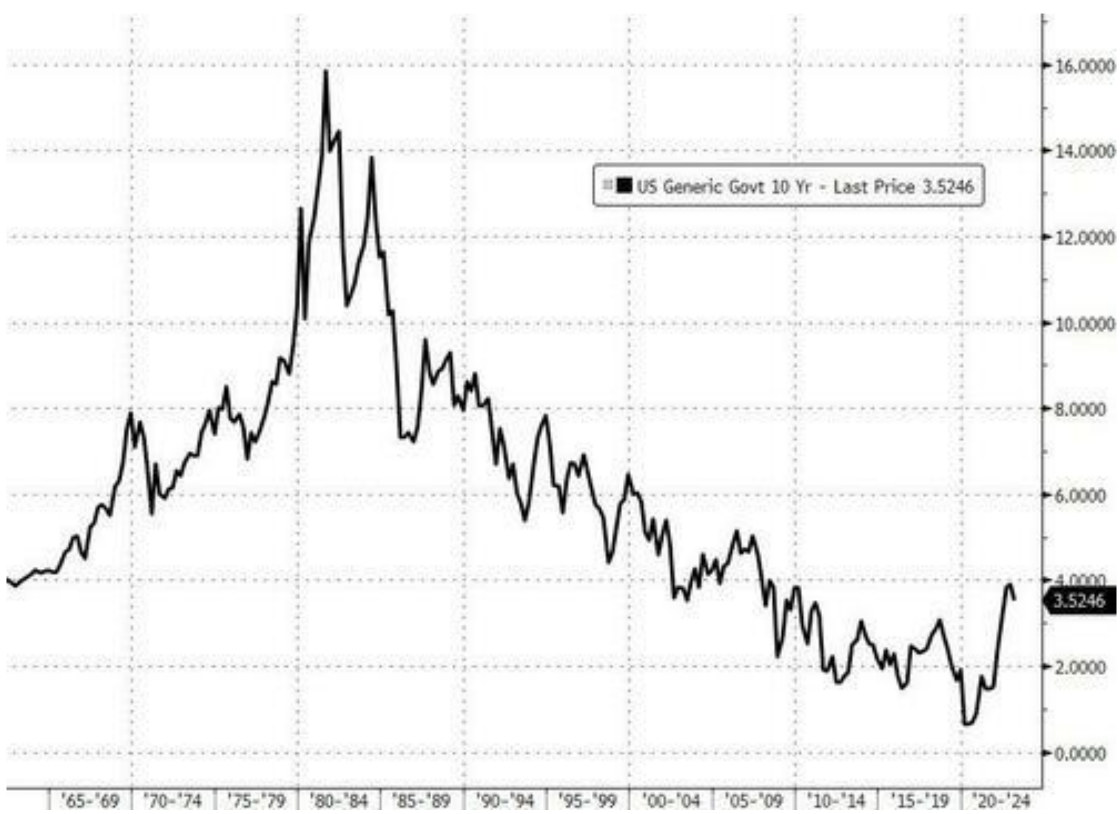
We very rarely find articles that we want to reproduce whole cloth. We have found one that we looked at multiple times and decided that you, our customer, would benefit from reading, lock, stock and barrel.

The article is called **Mission Accomplished?** and was written by MN Gordon who runs the Economic Prism website. It is located at [Mission Accomplished? | Economic Prism]

Mission Accomplished?

Posted on February 3, 2023 by MN Gordon

About the time the most trusted man in America, Walter Cronkite, signed off from the CBS Evening News for the last time, something momentous happened in the U.S. credit market. Few people, apart from Bill Gross and A. Gary Shilling, understood what was going on. Hindsight is always 20/20. And looking at a chart of U.S. interest rates several decades later it all seems so obvious. Specifically, that the rising part of the interest rate cycle peaked out in 1981.



This one thing, in essence, changed everything. Over the next 39 years interest rates fell as mega-asset bubbles were puffed up and floated across the land.

The relationship between interest rates and asset prices isn't complicated. Tight credit generally produces lower asset prices. Loose credit generally produces higher asset prices.

When credit is cheap and plentiful, individuals and businesses increase their borrowing to buy assets they otherwise couldn't afford. As cheap credit flows into various assets, it balloons their prices in kind.
For example, individuals may use cheap credit to take on massive jumbo loans. This allows them to bid up house prices. Businesses, flush with a seemingly endless supply of cheap credit, may borrow money and use it to buy back shares of company stock. This has the effect of inflating share prices, and the value of executive stock options.

When credit is tight, the opposite happens. Borrowing is reserved for activities that promise a high rate of return; one that exceeds the high rate of interest. This has the effect of deflating the price of financial assets.

More Pain to Come

In 1981, following a great wave of Federal Reserve manufactured inflation, credit was expensive. At the same time, stocks, bonds, and real estate were cheap. For example, in 1981, the interest rate on a 30-year fixed mortgage reached the unimaginable high of 18.45 percent. That year, the median sales price for a U.S. house was about $70,000.
By comparison, in December 2020, the 30-year fixed mortgage rate dropped to a historical low of 2.68 percent. Rates remained below 3 percent for most of 2021. This allowed many borrowers to refinance or buy houses at extreme low rates.

Thus, the median sales price for a U.S. house peaked at $468,000 in Q3 2022. Along the Country's east and west coasts prices inflated much higher.

In 2022, as the Fed commenced hiking the federal funds rate in an attempt to contain the raging consumer price inflation of its making, the 30-year fixed rate mortgage spiked up to over 6.5 percent. Consequently, U.S. house prices are now deflating and likely have much further to fall to complete this boom-and-bust cycle.

Similarly, the Dow Jones Industrial Average (DJIA) was roughly 900 points in 1981. Then, on January 4, 2022, the DJIA hit its all-time closing high of 36,799. That comes to over a 3,988 percent increase. Since then, however, as interest rates have increased, the DJIA has started deflating to its recent close of 34,053. Like house prices, we believe the DJIA also has much further to fall.

Without question, the 39-year run of cheaper and cheaper credit had something to do with ballooning stock and real estate prices. Asset prices and other financialized costs, like college tuition, have been grossly distorted and deformed by nearly four decades of falling interest rates.

The gap between high asset prices and low borrowing costs have positioned the world for a great reckoning. Certainly, 2022 was a difficult year for stock and bond investors. Nonetheless, there is plenty more pain to come.

Only 37 More Years to Go

The Fed has strong influence over credit markets through its open market operations. But it is not the credit market's ultimate master. The fact is, Fed credit market intervention plays second fiddle to the overall rise and fall of the interest rate cycle.

From a historical perspective, today's 10-Year Treasury note yield of 3.39 is still extraordinarily low. But if you consider just the last two years, it's extraordinarily high.

The yield on the 10-Year Treasury note bottomed out around just 0.62 percent in July 2020. At 3.39 percent today, the yield has increased dramatically. In fact, the yield on the 10-Year Treasury note has increased over 446 percent over the last 31 months. Quite frankly, it's amazing there hasn't been a major blow up of a major investment fund – *yet*.
The last time the interest rate cycle bottomed out was during the early-1940s. The low inflection point for the 10-Year Treasury note at that time was a yield somewhere around 2 percent. After that, interest rates generally rose for the next 40 years.

No one can predict the future. But looking to past interest rate cycles for guidance provides a startling realization. We may be less than three years into a 40-year period of rising interest rates. In other words, everything the world has come to know and love about financial markets since 1981 has been stood on its head.

Between 1981 and 2020, each time the economy went cold, the Fed cut interest rates to juice financial markets. In this disinflationary environment, asset prices increased while incomes stagnated. Moreover, aided by an abundance of cheaply made goods from China, increases to consumer prices over this period were moderate.

The Fed, while conflating apparent success with luck, thought it had somehow tamed the business cycle. Congress also discovered it could spend printing press money without consequences. These takeaways couldn't be further from the truth.

Your Broker Has No Clue

Not many people are still alive who remember how drastically different the effects of the Fed's policy adjustments are during the rising part of the interest rate cycle than during the falling part of the interest rate cycle.

During the rising part of the interest rate cycle, as demonstrated in the 1970s, after the U.S. defaulted on the Bretton Woods Agreement, Fed interest rate policy became increasingly damaging. Fed policy makers demonstrated they are politically incapable of staying out in front of rising consumer prices. Their efforts to hold the federal funds rate artificially low, to boost the economy, no longer had the desired effect.

In this scenario, monetary inflation brought about consumer price inflation. Fed policies were policies of disaster.

In July 2020, roughly 39 years after it last peaked, the credit market finally bottomed out. Yields are rising again. In truth, they may rise for the next three to four decades.

This means the price of credit will increasingly become more and more expensive well into the mid-21st century. Hence, the world of perpetually falling interest rates – the world we've known since the early days of the Reagan administration – is over.

This is something most politicians, consumers, and investors have little comprehension of. Your broker also likely has no clue what has happened.

Many investors, having little experience beyond two decades, let alone four decades, are enamored with the vaunted salvation of a forthcoming Fed pivot. This limited focus will compel them into strategic mistakes. They may unwittingly put their hard-earned savings and wealth in a place of great danger.

Mission Accomplished?

Fed Chair Jay Powell has studied the on again off again inflation of the 1970s. He knows how quickly consumer price inflation can flare-up if the Fed does not fully snuff it out. He recognizes the dangers of taking his foot off the brake too soon. He doesn't want a repeat of another decade of high consumer price inflation.

Still, Powell is human just like you. He's subject to influence. Specifically, political influence.

After this week's 25 basis points rate hike, the federal funds rate is now at a range of 4.5 percent to 4.75 percent. Another 25-basis point rate hike in March will take the top end of the federal funds rate to 5 percent for the first time in 17-years.
Will that be the end of it? Will it be mission accomplished? Will the Fed then pause? Will it then pivot?

Investors, the foolish ones, seem to think so. This week, following the Fed's rate hike and subsequent press conference, investors went all in on a variety of companies. On Thursday, Grainger jumped over 30 percent, followed by Align Technology (up over 27 percent), Coinbase (up nearly 24 percent), and Meta (up over 23 percent).

What gives?

The U.S. economy appears to be slipping and sliding into a recession. Consumers are tapped out. They've maxed out their credit cards. Technology workers are getting massively RIFed. The depth and intensity of the economic contraction will test the Fed's courage to act.

The political pressure applied to Powell may become too much to resist. The Fed may, in fact, cut rates later this year. This is what the fools are banking on. Though the result may not be what they expect.

Because the Fed will be cutting the federal funds rate in an environment of rising interest rates. The last time the Fed tried this, in the 1970s, the results were disastrous.

Certainly, yields on Treasury notes may periodically fall during periods of recession. For example, they could fall over the coming months. However, the long-term trend is up.

The experience of 2022 will repeat several times per decade until the cycle has concluded. By our estimation, that will be sometime around 2060 – give or take a few years.

Investment decisions should be made accordingly.

The Managers of Kanos Capital Management