Yields Jump, Forcing Asset Prices Lower

Stronger Economic Activity and Rising Oil Prices Drive Interest Rates Higher

Although lower inflation optimism drove equity and digital asset prices higher in 1H23, third quarter economic data, including stronger-than-expected employment, improved retail sales, upward revisions to corporate earnings and higher energy prices fueled a rise in interest rates, driving down the price of most financial assets.

Rockingstone Performance

Across most client-specific benchmarks, we outperformed in 3Q23 as defensive positioning (shorts on VOO, BNDX), higher cash balances than normal and select stock picks helped results. Most asset prices declined, leaving few places to hide. We added to EL on weakness and initiated positions in TSEM (post the INTC purchase failure) and CPNG in select accounts.

Higher Yields and Rising Global Problems Justify Lower Multiples

The good news is that downward revisions to corporate earnings seem to have stabilized; the S&P 500 saw its first upward revision in more than a year. While the 1H23 saw consensus embrace a soft landing, rising yields combined with massive debt levels have now led to further tightening of financial conditions.

Portfolio Implications

Investors seem content to put cash in risk free T-bills earning 5%. It is hard to disagree. We have reduced beta via hedges and remain over-weight energy, industrials, defensives. With a longer-term focus, our bias is to over-weight small caps and value, both of which have underperformed materially vs. large cap and growth.

S&P500 Forecast & Other Key Indicators

We forecast: EPS (2023/2024: $215/$235), S&P500 (2023 year end = 4000), GDP (2023: +3.0%), Gold ($2050), Oil ($95), 10-yr US Bond Yield (5.0%), Inflation (3.5%), 5-yr expected CAGR (US Large Cap +4%, US Mid Cap +7%, US Small Cap +12%, Developed +2%, EM +8%).

ABOUT US

Rockingstone Advisors LLC is a boutique asset management and corporate advisory firm co-managed by Brandt Sakakeeny and Eric Katzman, CFA.

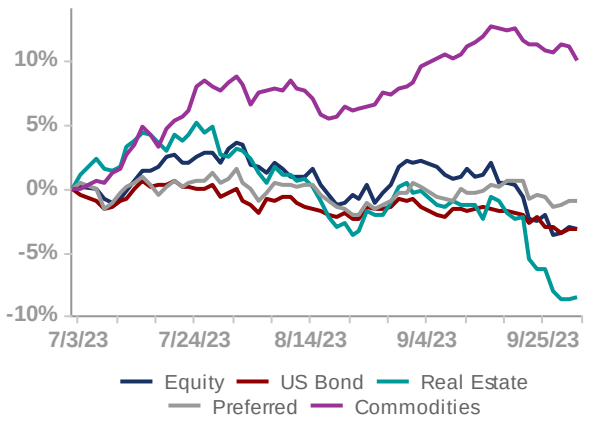
As an SEC-registered investment advisor, we provide multi-asset investment strategies to individuals, families and small institutions through separate accounts.

Our investment strategies attempt to capitalize on pricing inefficiencies across broad asset classes and then across individual securities, with a strong emphasis on fundamental research and analysis.

Thank you for your interest. You can find more information (and some interesting articles) at:

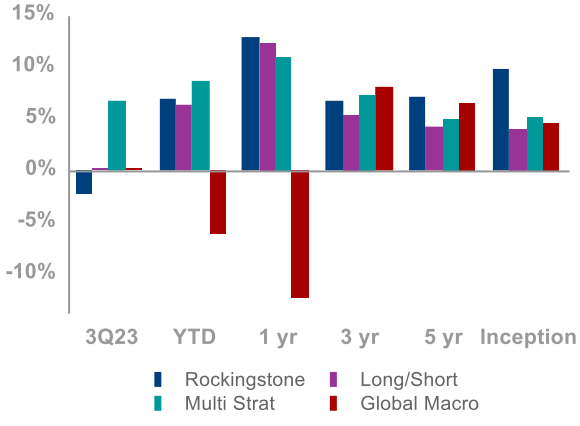
www.rockingstoneadvisors.com

Figure 1: 3Q23 Asset Class Performance[i]



Source: FactSet

Figure 2: Rockingstone: 3Q23 & Historical Annualized Returns[ii]



Source: Rockingstone Advisors, Morningstar, DJ Credit Suisse Indices, Inception = 5/30/2009

Please see our End Notes and Disclosures (pages 27-28 of this Investor Quarterly) for important information regarding performance measures. Form ADV available upon request.

ROCKINGSTONE ADVISORS LLC

Table of Contents

ROCKINGSTONE ADVISORS LLC

Rising Treasury Yields

In our 2Q23 Quarterly, we analyzed the macroeconomic environment and the bullish and bearish forces driving equity and debt markets. This quarter, we look more closely at the US Treasury market, as a large back-up in yields is driving much of the 3Q23 weakness in asset prices.

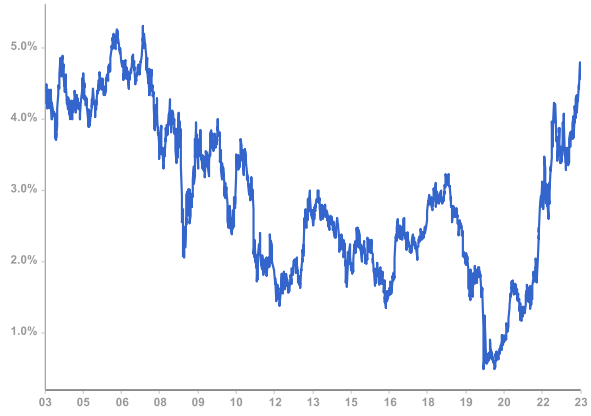
Treasury Yields Cross 5%

Most economists believe the Federal Reserve has few controls over long-duration bond yields. Rather, the Central Bank has levers focused on shorter term maturities. Despite successive increases to the Fed Funds rate from roughly 0% to 5.25%, long term maturities, such as the 10-Year bond, had not risen comparatively to the same degree, resulting in a highly inverted yield curve (where shorter-term maturities have a higher yield than longer-term maturities). But long-term bond yields jumped in the 3Q23 and this is critical to all facets of the economy, whether it is home buyers securing a mortgage, credit card payments or even how much of the US government budget is devoted to interest payments to service its debt.

The benchmark US Treasury 10-year yield started the year at 3.9%, declined to a low of 3.4% at the end of the first quarter, and is currently around 5% today. While a 120 basis point move over 10 months would be problematic for financial assets, the reality is that the bulk of that move has occurred over just the last four months: the 10-year Treasury was yielding 3.8% on July 1, 2023 and crossed 5% on October 20, 2023. Yields have not been this high since the summer of 2007, when the 10-year Treasury yield briefly broke above 5% in June 2007 and then again in August 2007.

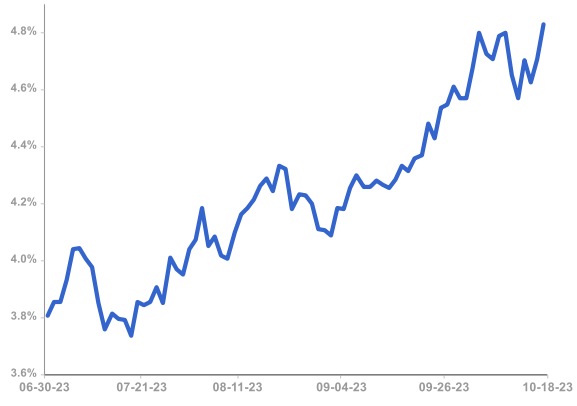
The charts below show that over the last 20 years interest rate moves of this magnitude are relatively rare, but certainly not unheard of. From January 2009 to June 2009 (admittedly emerging from the global financial crisis), yields jumped from 2.2% to 3.8%; from May 2013 to September 2013 yields jumped from 1.7% to 3.0%; from August 2016 to December 2016 yields jumped from 1.5% to 2.6% and then to 3.3% by November 2018. We note that after each successive spike in rates, yields hit new lows, bottoming during the pandemic at 0.6%.

Figure 3: US 10-Year Yield, Constant Maturity, 20 Years



Source: FactSet

Figure 4: US 10-Year Yield, Constant Maturity, 4 Months



Source: FactSet

Factors Behind the Move - Economic Activity

While it is certainly possible that interest rates could make another broad-based move lower, it is unlikely that will happen without a substantial economic downturn. Economic activity had been slowing over the past 12-18 months from the torrid pace of the post-Covid recovery, as evidenced in declines in the Index of Leading Economic Indicators, declining PMIs, lower levels of industrial production, sales growth and employment. According to Treasury spread models, risk of a recession has grown from roughly 5% to more than 25% today (see the Chart Book at the end of this Quarterly to see the historical trends for several key macroeconomic indicators).

But government spending remains stimulative (whether it was prior pandemic relief related spending, pause in various loan payments for individuals, the *Inflation Reduction Act* or ongoing discretionary spending ahead of tax receipts) and higher interest rates are helping savers to generate more income, so economic growth has been able to remain positive, despite higher interest rates.

Moreover, very recent data since July indicate some acceleration in economic activity, including the Atlanta Fed's GDP Now Index. The GDP Now forecast has actually risen from 3.5% at the end of July to more than 5% currently! While this is in contrast to some of the very recent commentary coming from management teams in their quarterly conference calls, the Atlanta Fed indicates that unemployment is lower than had been forecast just a few months ago, along with a consumer that continues to spend.

Figure 5: Atlanta Fed's GDP Now (% Change)

Source: Factset

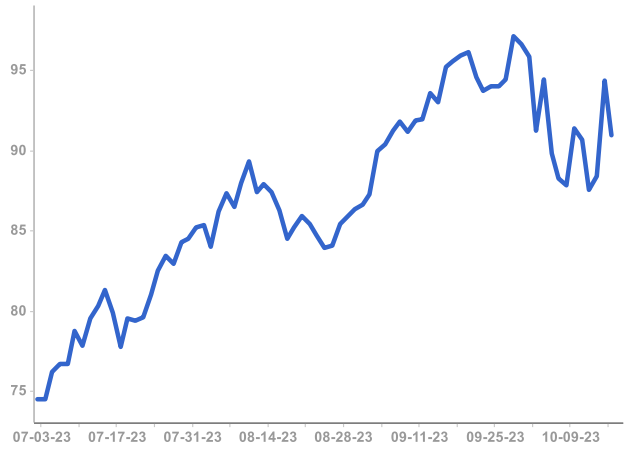
Whether the rise in yields is due to the absence of deteriorating economic conditions, or the fact there is some evidence of stabilization or improvement, is probably unknowable. But it is clear the economy has remained more resilient in 2H23 than we – or others predicted— and that resiliency is helping in part to fuel the recent rise in interest rates.

Factors Behind the Move – Energy Prices and Inflation

Another factor potentially driving rates higher has been OPEC's willingness to cut production to maintain oil price "stability." This move created a tailwind for energy prices, as oil has risen from roughly $75 a barrel at the start of the third quarter to a high of more than $95 a barrel as of last week (see chart on the following page). Part of that move is due to the recent terror attacks in Israel and the risk of a larger conflagration in the Middle East.

As we have noted in our prior Investor Quarterlies, energy is a critical input not just in fuel, but in fertilizer, plastics and many other products whose price changes drive the cost-of-living index and other inflation measures. These factors together are helping to drive higher expectations for forward inflation (see chart). We have long argued that bringing inflation from 7% to 4% is a lot easier than from 4% to 2%, the latter of which is the Fed's target.

Figure 6: Brent Crude Oil Price (per barrel), Since July 1, 2023



Source: FactSet

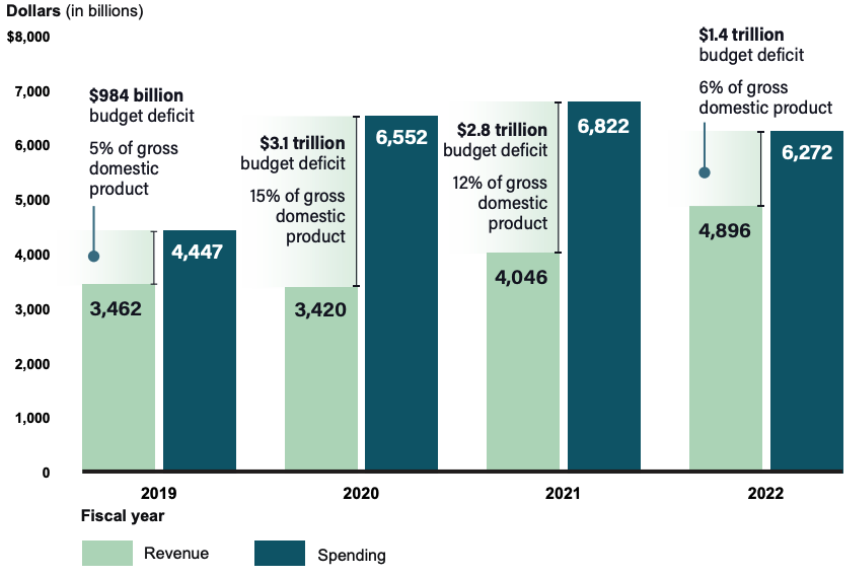
Figure 7: 10-Year, 5-Year Forward Inflation Expectations (Percent)

Source: FactSet

Factors Behind the Move – Treasury Supply and Demand

A third factor driving interest rates higher is ongoing US budget deficits, which, while down sequentially, still remain elevated relative to history. In our *3Q22 Investor Quarterly*, we raised the concern of financing ever larger deficits with ever more expensive capital.

Figure 8: US Budget Deficits for Fiscal Years 2019-2022

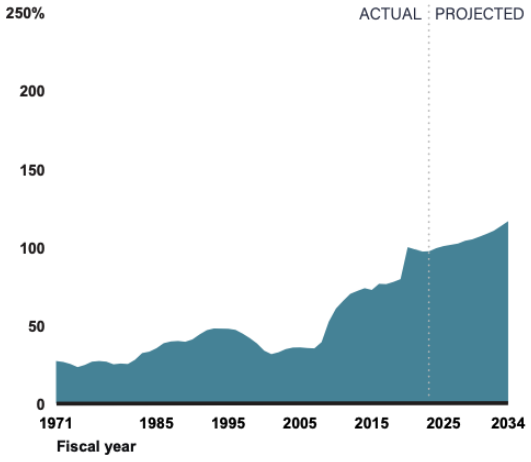


Source: Congressional Budget Office and GAO Simulation

US government spending is now a third larger than its pre-pandemic level, compared to the rest of the world where governments grew by about one fifth on average. Total US debt outstanding is now $24.2 trillion. Meanwhile US total debt to GDP has risen from 100% of GDP to more than 120% of GDP. This is amongst the worst in the OECD (only Japan has a higher Debt/GDP figure at 260%).

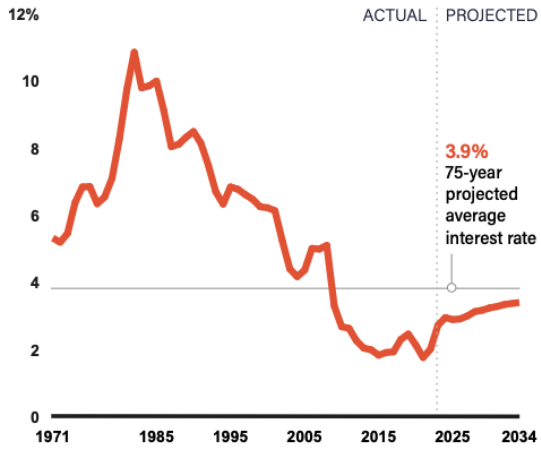
The jump in outstanding US government debt has been fueled by unprecedented fiscal deficits over the last three fiscal years ending 2022 (as shown in Figure 8). The latest estimates for fiscal 2023 indicated the US federal deficit will jump to between $1.5 to $2.0 trillion. The 2023 deficits are a function of materially lower tax receipts and slightly higher federal outlays. In comparison, pre-pandemic, the US fiscal deficit ran just under $1 trillion.

Figure 9: Percentage of GDP



Source: FactSet

Figure 10: Average Interest Rate on Federal Debt

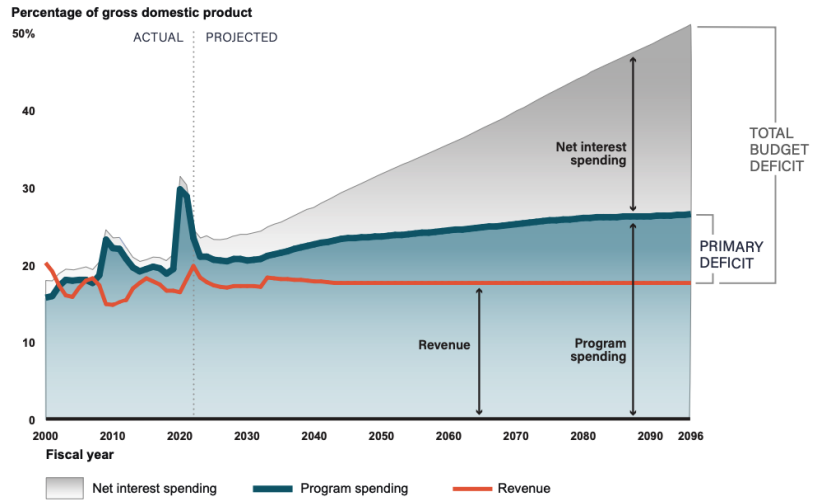


Source: FactSet

Back in the 1980s Democratic Presidential candidate Mondale harangued President Reagan about US Federal deficits. Since then, there has been a general consensus among administrations of both parties (with the exception of the Clinton Administration) that deficits do not matter. The reality has been that with decades of lower interest rates, the excess spending has not mattered. Whether it was Chinese, Japanese, US buyers or the Federal Reserve, the US Treasury had no problem issuing new debt and politicians did not need to deal with interest expense as a meaningful portion of the budget. But those days could be ending (see Figure 11).

Currently with the 10-year bond at 5%, the US is borrowing at a rate materially above its historical interest rate of 3.9%. Moreover, of all US treasuries held by the public, 28% matured this fiscal year, and 70% will mature within the next six years.

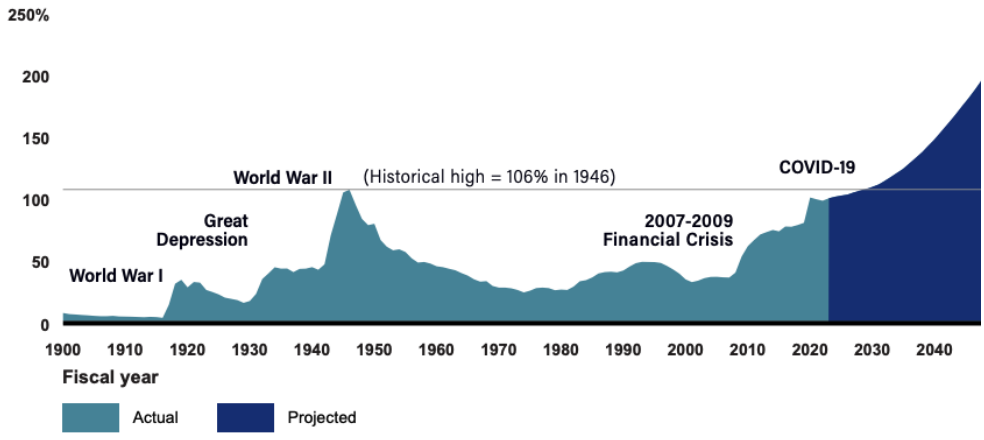
Figure 11: Net Interest Spending as Percentage of Total Budget Deficit



Source: Congressional Budget Office

If the current fiscal climate is not sufficiently depressing, the outlook is even worse. Aging demographics should continue to drive healthcare spending higher and pressure entitlements, such as social security. In the Government Accountability Office (GAO)'s budget simulation, starting in 2024, debt held by the public grows faster than GDP in every year. In most years, debt held by the public grows more than twice as fast as the economy, in real terms. In an environment of low interest rates, rapidly growing debt balances can potentially be managed; however, in a rising rate environment, managing the debt balances becomes an existential threat to economic growth.

Figure 12: US Fiscal Deficit, as a Percentage of GDP



Source: Congressional Budget Office

Conclusion

In summary, there are several factors behind the rise in the benchmark Treasury yields, including a more resilient economic outlook and relatively tight oil supplies amid geopolitical tensions that are boosting energy prices and exerting upward pressure on forward inflation expectations. Decades of low labor cost benefits via free trade (i.e. China as manufacturer to the world) may be ending, which is inflationary and puts an upward bias on prices.

Presently in fixed income markets these factors are exacerbated by the short maturity schedule of Treasuries currently held by the public, coupled with ongoing trillion-dollar annual deficits recorded by the federal government, both of which are driving record new issuance of Treasuries; the anticipated increase in supply may be driving interest rates higher. Lastly, as the Federal Reserve moves to reduce its balance sheet (made up of US Treasury and other securities), the selling of such assets in theory would reduce prices and increase yields.

How does the above analysis impact our view on portfolios? Our analysis suggests US Federal budget deficits could be a major headwind to economic growth and perhaps fuel more volatility in asset prices. Yet we also note the above concerns have been around for more than a decade, and during this time investors have not hesitated to put capital into US government securities. Lastly, we note that while higher interest rates crimp capital investment on the margin, many companies extended their debt maturities at very favorable rates.

ROCKINGSTONE ADVISORS LLC

Forecast: 2023 & 2024

Rockingstone Advisors: Our Latest Forecasts

Each quarter we analyze the macroeconomic environment and update our estimates. As we have noted for the last year or so, there continues to be a material difference between real and nominal figures (which hasn't been the case for the last few decades). In the case of GDP, we forecast real growth. Alternatively, other assets, such as the 10-Yr US Treasury, for example, we predict in nominal terms.

Figure 13: Key Metric Forecast

	Year End December	
Metric	Band	Point
US Real GDP (2023)	+2.5% to +4.5%	3.0%
S&P 500 2023 EPS (RSA/Street)	NA	$215 / $219
S&P 500 2024 EPS (RSA/Street)	NA	$235 / $245
S&P 500 2023 Index	3850-4250	4000
10-Yr US Treasury Yield	4.5% - 5.5%	5.0%
Oil (WTI-2023 End)	$75 - $105	$95
Gold (2023 End)	$1,950 - $2,150	$2,050
Inflation (PCE - NTM)	+3.0% to +4.0%	3.5%

Source: Rockingstone Advisors, The Economist, Standard and Poor's, NYSE Arca, St. Louis Federal Reserve

Select analysis on key forecasts:

1. S&P 500 2023 & 2024 EPS. Final Operating EPS in 2022 were $196. We noted that consensus expectations for EPS declined through most of the 1H23, stabilized over the summer and in the last month or so moved upward. To date corporations have navigated various headwinds and delivered decent profits. As a result, we increase our 2023 EPS estimate to $215 (from $207), suggesting 10% growth. Looking to 2024, we think the 1H will be a challenge but 2H could show signs of an earnings recovery. With a higher base in 2023, we increase our 2024 forecast to $235 (from $225) again implying 9% growth.

2. S&P500 2023 Index. We are maintaining our 2023 S&P target of 4000, which is about 4% below the index's value (as this newsletter is set to publish). Assuming our higher $235 EPS estimate for 2024 is a decent forecast and applying a 17.0x P/E supports our target. The 17.0x multiple is slightly below what we used last quarter, which is due to the jump in long-term interest rates.

ROCKINGSTONE ADVISORS LLC

Five Year Asset Value Forecast[iii]

Limited large cap returns vs. potential in small, mid and emerging stocks

We continue to believe that asset values mean-revert (with respect to margins and P/E multiples) over time. We see no reason to question this hypothesis, regardless of whether investors are analyzing crypto-currency, AI or tulip bulbs. Indeed, financial markets / asset returns are one of the only things in life that are more predictable the longer the period forecasted!

We analyze equities using four variables, including (i) historical sales growth, (ii) corporate profit margins, (iii) dividend yields, and (iv) valuation to determine potential long-term returns. Using valuation as an example, P/Es should theoretically decline (if currently above the historical mean) or expand (if currently below the historical mean) over the long term.

Currently our outlook for total returns points to the "give" of sales growth and dividends to be partly offset by the "take" of mean-reverting margins. Valuation is dependent on the index. We expect sales growth to be relatively close to long-term average performance, although how a potential recession vs. pass-through pricing impacts top line results is unclear. Profit margins are back above historical levels, so they are now broadly dilutive to expected returns, with the exception of Emerging Markets.

Our analysis points to US Large Cap and Non-US Developed Market stocks offering the lowest long-term return potential over the next five years. For the former, it is a combination of margin and valuation pressure; for the latter it is a function of slow historical sales growth and profit pressure. The remaining equity indices we forecast offer more attractive returns. Across market cap and geographies, profit margins appear set to be a drag across returns, sales are broadly incremental as are yields, although valuation is a mixed picture.

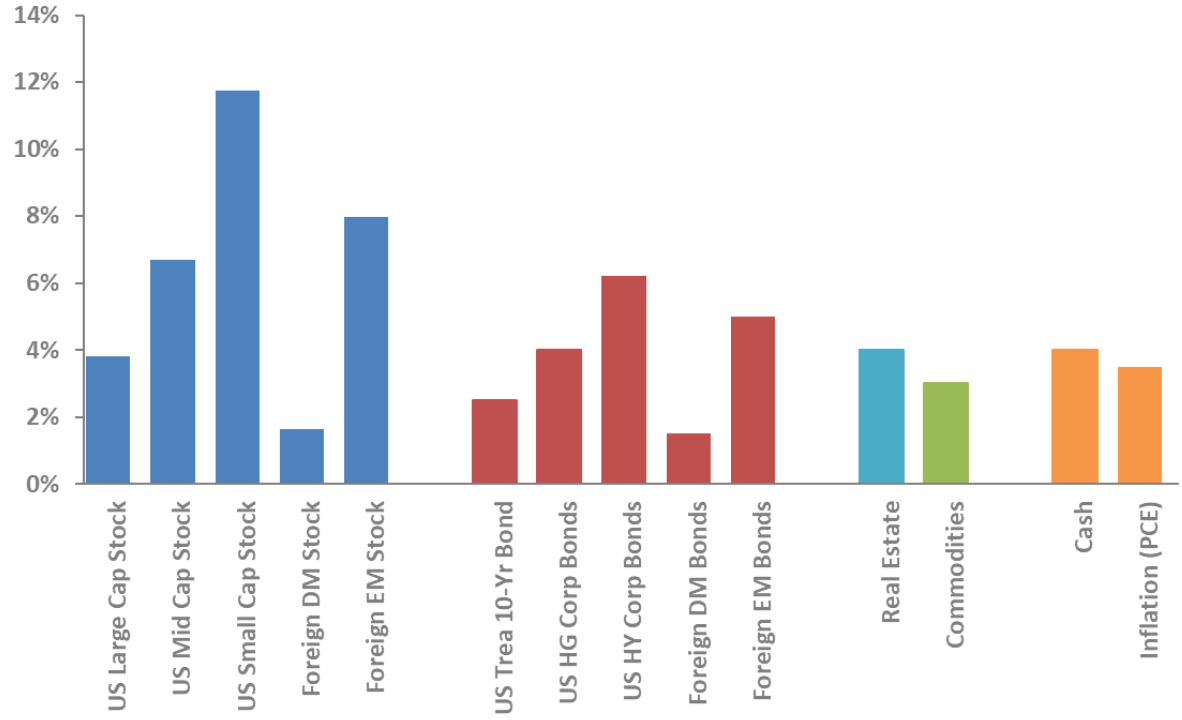
Figure 14: Five-Year Total Equity Return Calculations (Incremental Contribution)

Asset	Index	LT Exp. Return		Sales		Profit Margin		Div.Yield		Valuation
US Large Cap Stock	S&P500	3.8%	=	6.0%	-	1.3%	+	1.7%	-	2.6%
US Mid Cap Stock	S&P400	6.7%	=	4.9%	-	3.3%	+	1.9%	+	3.3%
US Small Cap Stock	S&P600	11.8%	=	6.3%	-	0.8%	+	2.1%	+	4.2%
Foreign DM Stock	MSCI-EAFE	1.7%	=	0.9%	-	3.6%	+	3.4%	+	0.9%
Foreign EM Stock	MSCI-EM	8.0%	=	4.7%	+	0.4%	+	3.0%	-	0.1%

Source: Rockingstone Advisors

In fixed income (see the next page for various assumptions), we expect the "give" of coupons will be exceeded by the "take" of mean-reverting inflation and real rates. As noted previously in this newsletter, yields have jumped and look set to continue to move upward. If correct, higher yields will drive bond prices lower and thus reduce returns. Hence our assumption that most fixed income instruments deliver a lower return vs. what is implied in the current 30-day SEC yield.

Figure 15: Five-Year Asset Class Total Return Forecast



Source: Rockingstone Advisors

Equity Performance Review

Equities Decline in 3Q23 As Yields Surge

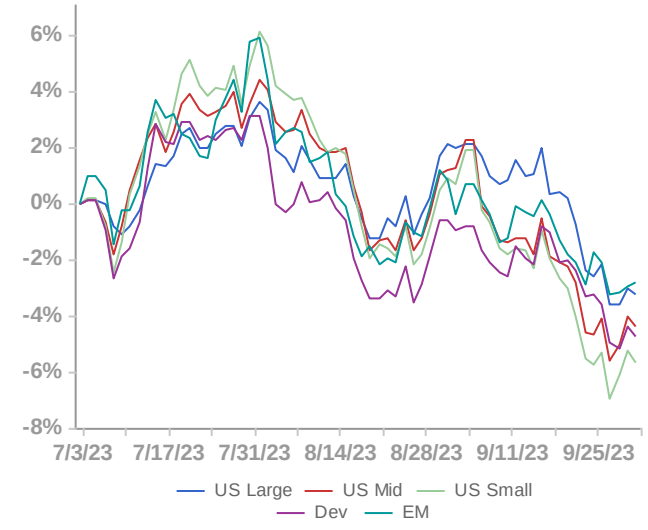
For the first nine months of the year, the S&P500 jumped 13.1%, which is a solid result albeit on the back of very poor 2022 performance. Despite the respectable YTD returns, the S&P500 weakened in 3Q23 by 3.3%. Corporate earnings for 2Q23 and mid-year guidance showed signs of stability, which by itself would be viewed positively by investors. Yet as previously noted, the yield curve moved up across maturities which, not surprisingly, resulted in broad-based weaker equities.

From a sector perspective during the quarter, Energy (XLE) and Communications (XLC) were the only major industries to record price gains. Technology (XLK) and Industrials (XLI) declined about 6% and 5%, respectively. Interestingly, defensive type investments, including Utilities (XLU -9%) and Consumer (-7%) fell significantly. Meanwhile from a style perspective, we emphasized previously in this newsletter the massive YTD differential with Growth (VUG) jumping 28% while Value (VTV) is close to flat! The gap in the 3Q23 was more contained, including VUG declining close to 4% vs. Value (VTV) down only about 2%.

Looking outside the US during the quarter, Non-US Developed Markets (VEA) declined 3.9%, which was better than the S&P500. Over the same period Emerging Markets (VWO) dropped 3.5% and Frontier Markets (FM) gave up 3.9%. In addition to the impact of currencies, we note non-US markets have underperformed the US for an extended period and so valuation and assumed reversion to the mean could have helped performance.

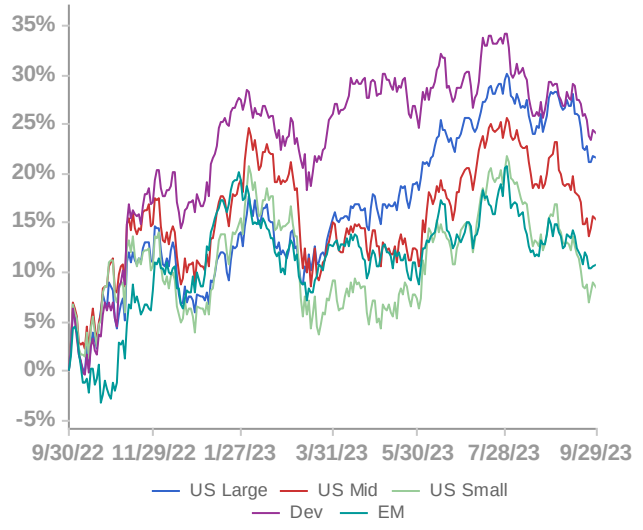
We note the following performance regarding 3Q23 and 12M23, respectively, results: US large-cap (-3.2% and +21.6%), US mid-cap (-4.0% and +15.2%), US small-cap (-5.1% and +8.3%), Developed (-4.7% and +24.1%), Emerging (-2.8% and +10.8%).

Figure 16: 3Q23 Equity Performance [iv]



Source: FactSet

Figure 17: 12M23 Equity Performance



Source: FactSet

ROCKINGSTONE ADVISORS LLC

Fixed Income Performance Review

Yields Jump, Bond Prices Decline and Spreads Widen

The pain that fixed income investors experienced in 2022 moderated during the 1H23. But last quarter, with yields surging, investors experienced a renewal of bond price weakness across fixed income sectors. As a reminder, fixed income prices move down as yields rise, and vice versa.

We have written extensively in prior newsletters about too much debt across the globe. Whether it is US annual deficits only adding to the nation's accumulated debt or private sector problems in China, the globe is awash with leverage. Despite inflation moderating, yields jumped during 3Q23. We believe the combination of global leverage, higher inflation expectations and stabilizing economic outlook may be the primary drivers of higher US yields.

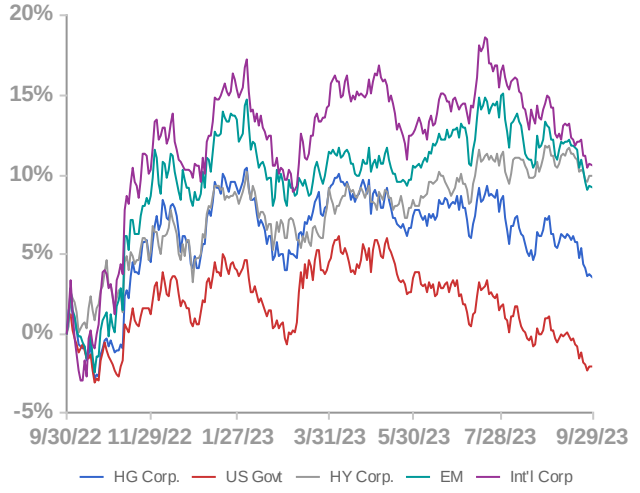
From a sector perspective, every bond ETF (used as a proxy for bond prices) we track fell in 3Q23. Corporates (LQD) declined close to 5%, although High Yield (JNK) declined less than 1% on improved economic data. Preferreds declined 1%, while Emerging Market bonds dropped over 3%.

We note the following performance numbers for 3Q23 and 12M23, respectively: US High Grades (-4.7% and +3.8%), US Governments (-4.5% and -2.3%), US High Yield (-0.1% and +9.4%), International Developed (-3.3% and +10.7%), Emerging Markets (-3.5% and +9.3%).

Figure 18: 3Q23 Fixed Income Performance[v]

Source: FactSet

Figure 19: 12M23 Fixed Income Performance



Source: FactSet

Commodity Performance Review

Mixed Results Across the Commodity Complex

As noted in our last newsletter, the commodity complex continues to be influenced by a variety of macroeconomic and geopolitical forces. Last year witnessed massive swings in agriculture and energy commodities. During the 3Q23, Energy (DBO) surged 25% while Gold (GLD) and Silver (SLV) dropped 4% and 3%, respectively.

The combination of global geopolitical distress coupled with supply reductions by OPEC+ and continued US GDP growth, it isn't surprising to see energy related commodities jump. Our over-weight position in energy hurt client portfolio performance in the 1H23 but helped in 3Q23.

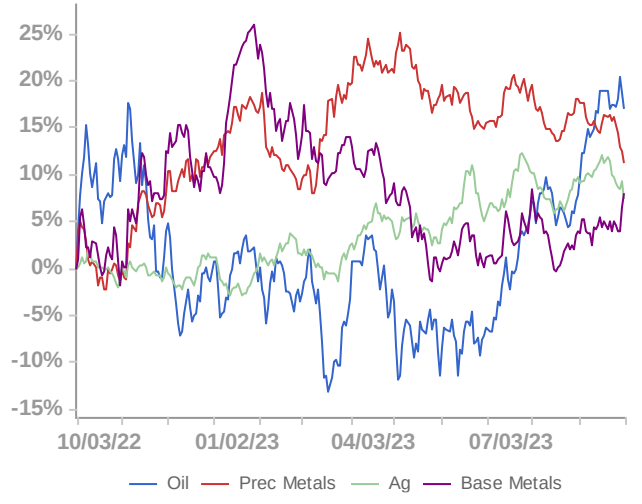
We note Agriculture (DBA) was only up 2% in 3Q23 but has jumped 6% YTD. Meanwhile when looking at the metals complex, Precious Metals (DBP) posted losses in the quarter of 4%. Base Metals, those used more for industrial purposes, increased close to 7% in 3Q23 although are down 1% for the YTD.

Rockingstone typically invests in commodities via ETFs and the below graphs display what we view as representative performance for the underlying commodities. We highlight the following returns during the 3Q23 and 12M23, respectively: Oil (+25.0% and +18.8%), Precious Metals (-3.8% and +11.1%), Agriculture (+1.6% and +9.4%), Base Metals (+6.7% and +8.0%).

Figure 20: 3Q23 Commodity Performance[vi]

Source: FactSet

Figure 21: 12M23 Commodity Performance



Source: FactSet

ROCKINGSTONE ADVISORS LLC

Digital Asset Performance Review

Weak Pricing In 3Q23 But YTD Still Compelling

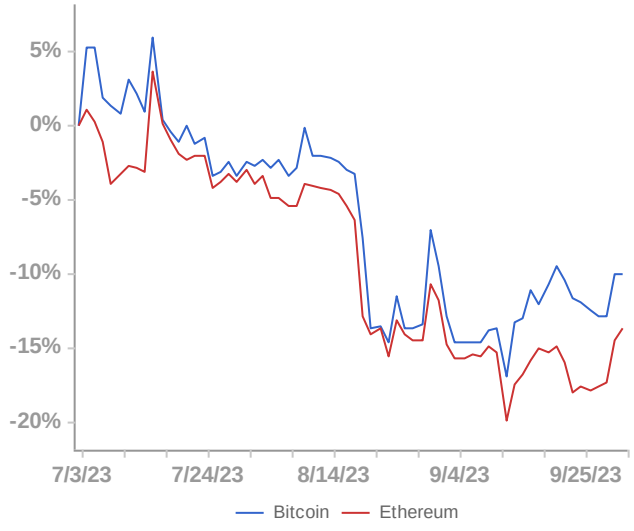
As noted in prior writings, we do not believe digital assets are a substitute for equities or bonds or other cash flow-driven securities. Indeed, there is no cash flow associated with the asset class, and as value investors, we generally prefer to acquire a stream of free cash flow.

Yet it is worth recognizing that many assets do not generate cash flows but are widely recognized as being stores of value, including art or precious metals or coins or rare books. All of these "non-cash flow generating" assets trade with intermittent price discovery, albeit through Dutch or private auctions.

It is not surprising to see a new asset class experience materially higher volatility than a more established asset, especially if that asset that does not cash flow. And digital assets have proven just that, with 60%+ declines in 2022. Yet 2023 has been a better year, despite numerous industry participants (such as FTX) coming under regulatory scrutiny and judicial action.

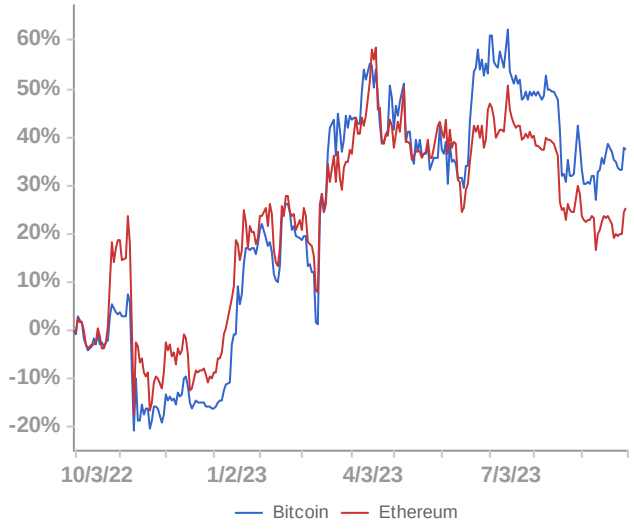
We do not know the future for digital assets, but emphasize that having no exposure is taking a stance vis a vis portfolio management. We have encouraged clients to consider having a modest 1-2% of net worth position for the long term. We note the following performance regarding 3Q23 and 12M23, respectively, results: Bitcoin (-10.0% and +37.5%) and Ethereum (-13.7% and +25.5%).

Figure 22: 3Q23 Digital Asset Performance [vii]



Source: FactSet

Figure 23: 12M23 Digital Asset Performance



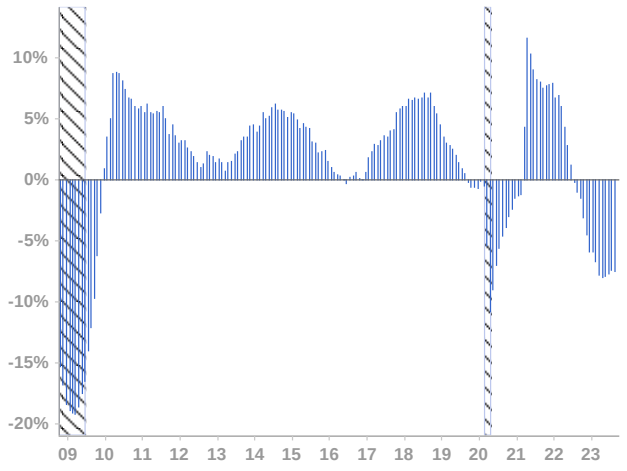
Source: FactSet

ROCKINGSTONE ADVISORS LLC

Chart Book

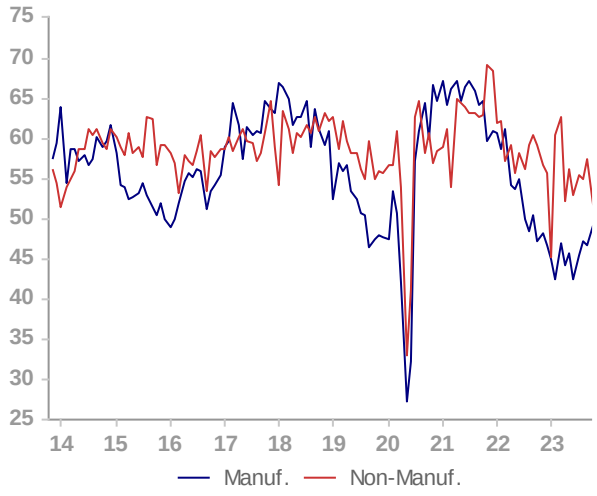
Leading Indicators

Figure 24: Index of Leading Economic Indicators



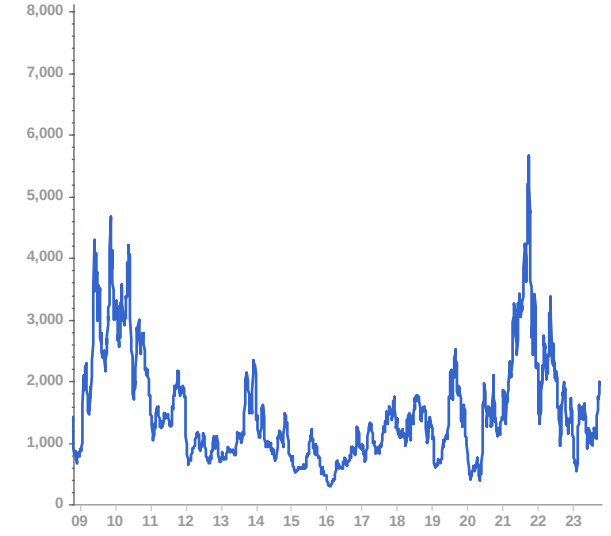
Source: FactSet

Figure 25: ISM New Orders



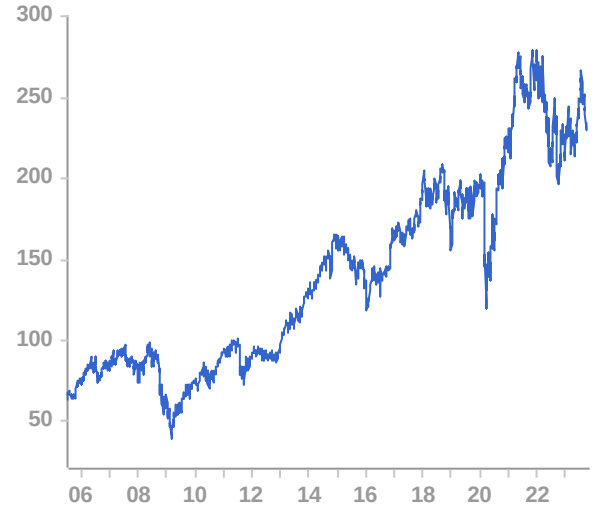
Source: St. Louis Federal Reserve, FRED Database

Figure 26: Baltic Freight Index



Source: FactSet

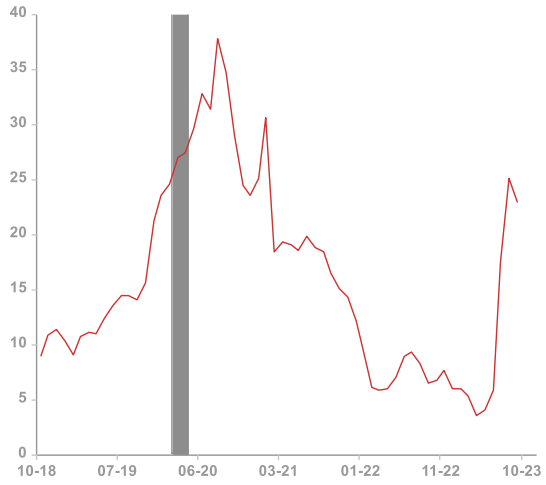
Figure 27: DJ Transports



Source: FactSet

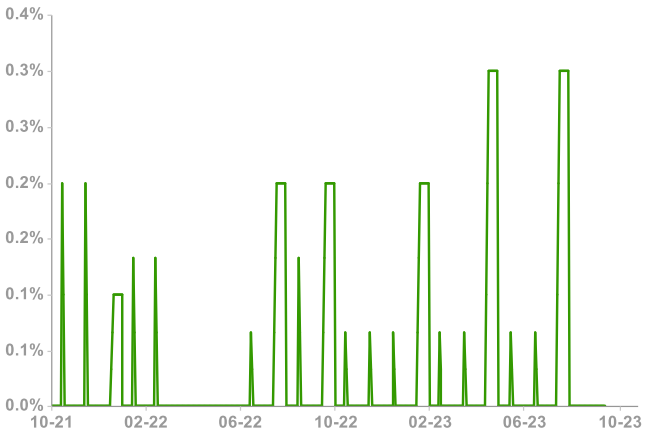
Real-time Recession Risk Indicators

Figure 28: Treasury Spread Recession Predictor



Source: FactSet, FRED Database

Figure 29: Sahm Real-time Recession Predictor

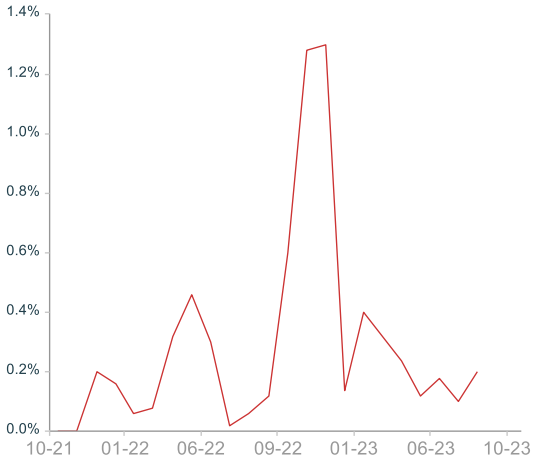


Source: St. Louis Federal Reserve, FRED Database

Figure 30: GDP Now (Atlanta Fed)

Source: FactSet; FRED Database

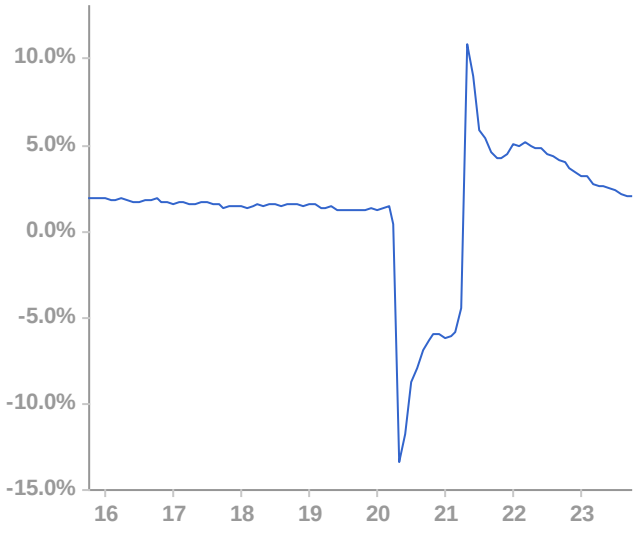
Figure 31: Smoothed US Recession Probabilities



Source: FactSet; FRED Database

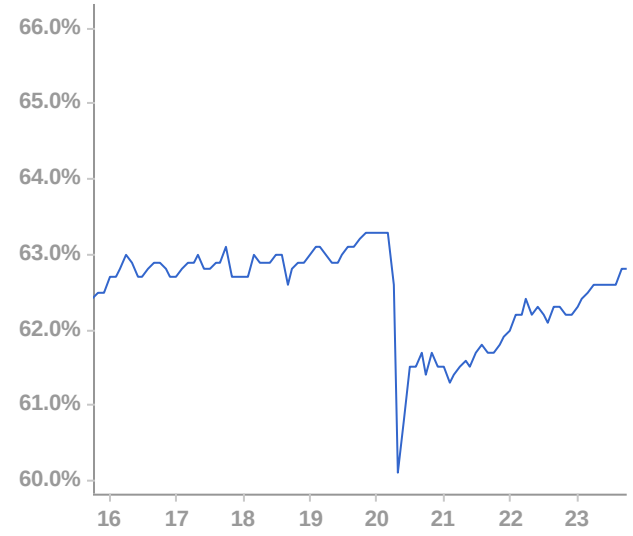
Labor Market Indicators

Figure 32: Payroll Growth (Establishment Survey, % Chg YoY)



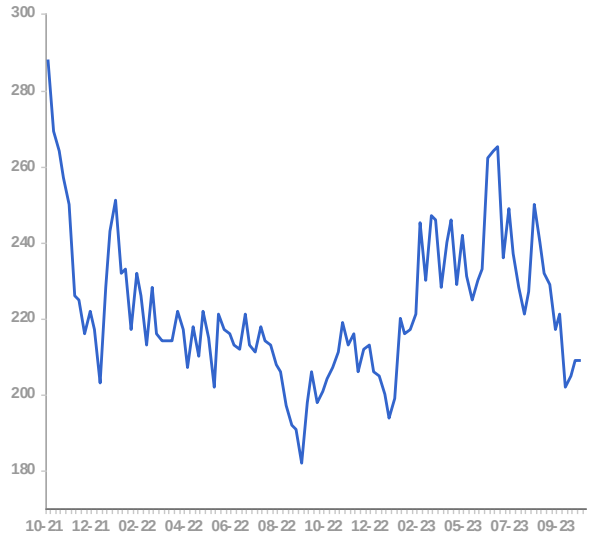
Source: FactSet

Figure 33: Labor Participation Rate (% of Workforce)



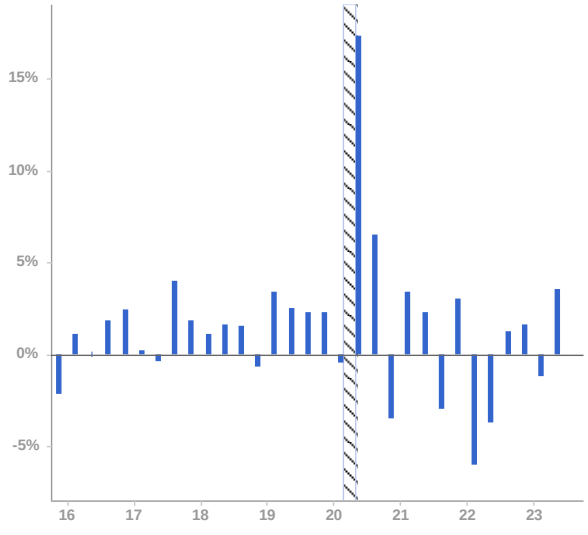
Source: FactSet

Figure 34: Initial Unemployment Claims



Source: FactSet

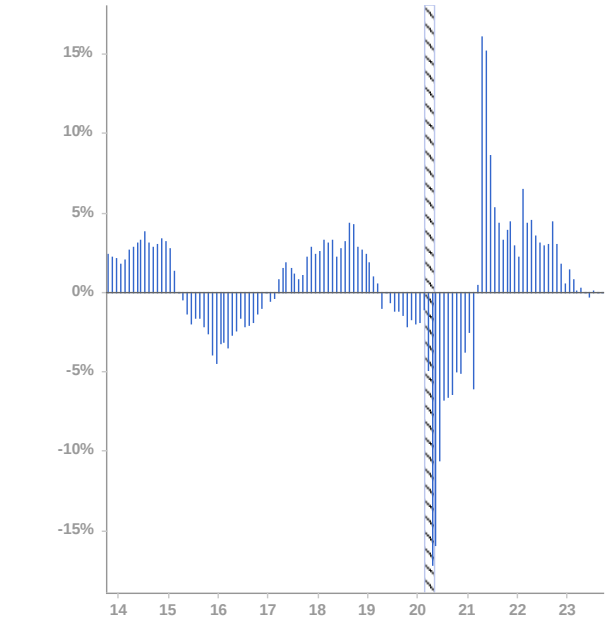
Figure 35: Non-Farm Productivity (% Chg YoY)



Source: FactSet

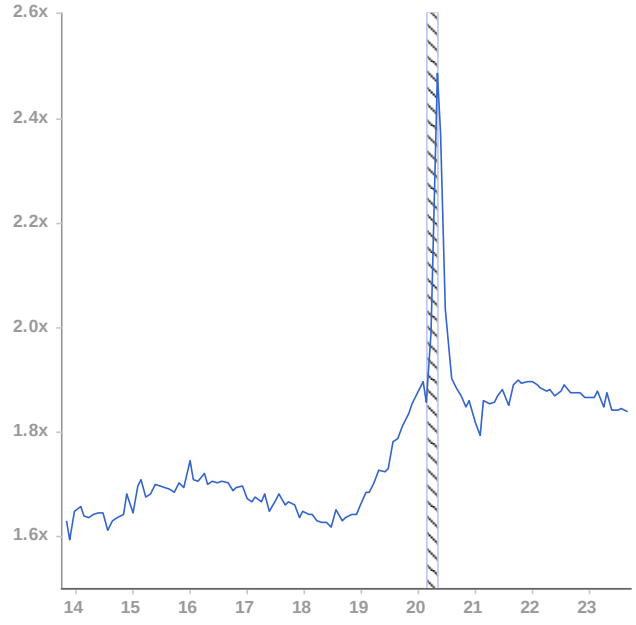
Production and Business Activity Indicators

Figure 36: Industrial Production (% Chg YoY)



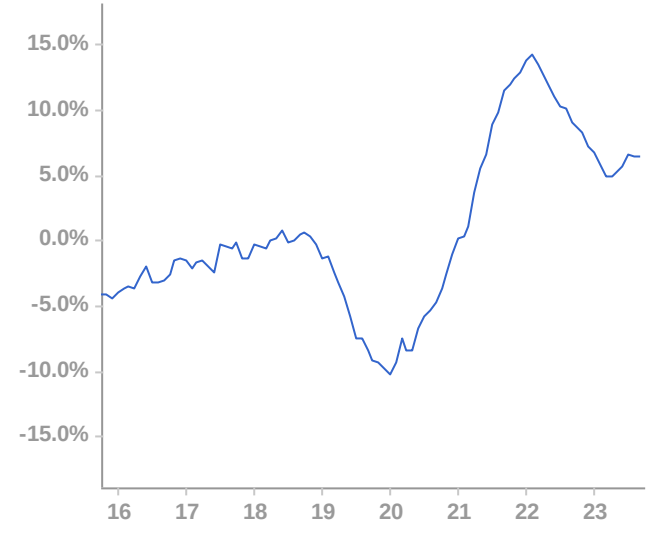
Source: FactSet

Figure 37: US Inventory to Shipment Ratio



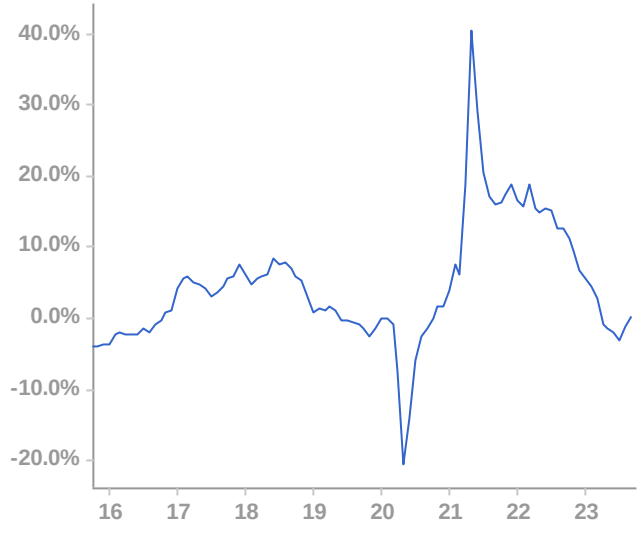
Source: FactSet

Figure 38: Unfilled Orders (% Chg. YoY)



Source: FactSet

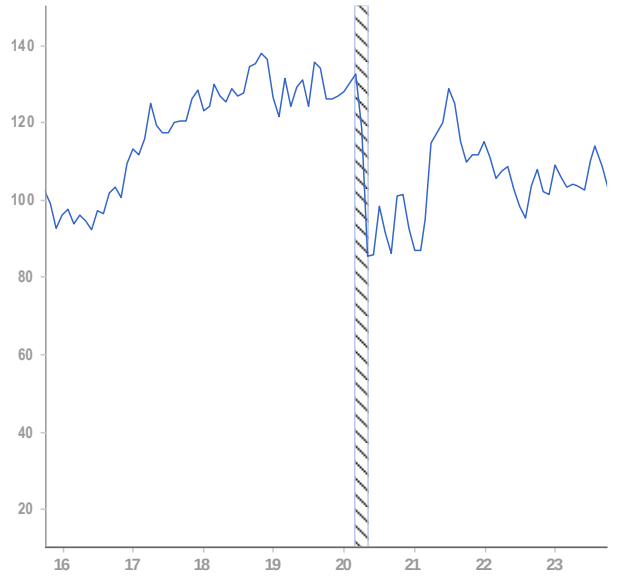
Figure 39: Business Sales (% Chg. YoY)



Source: FactSet

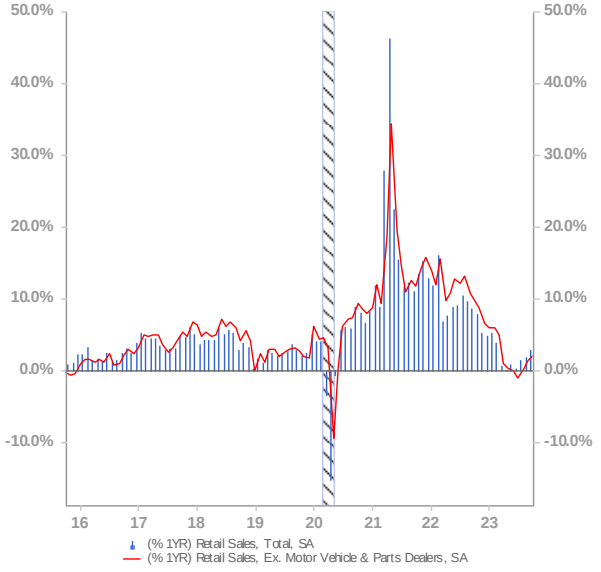
Consumer and Household Activity Indicators

Figure 40: University of Michigan Consumer Sentiment



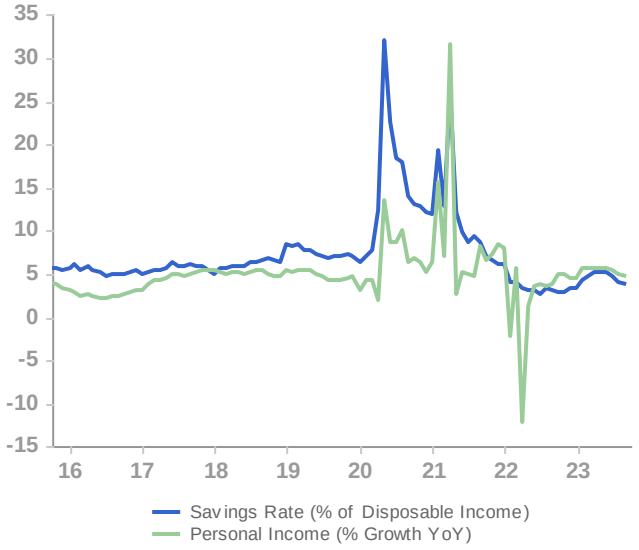
Source: FactSet

Figure 41: Retail Sales



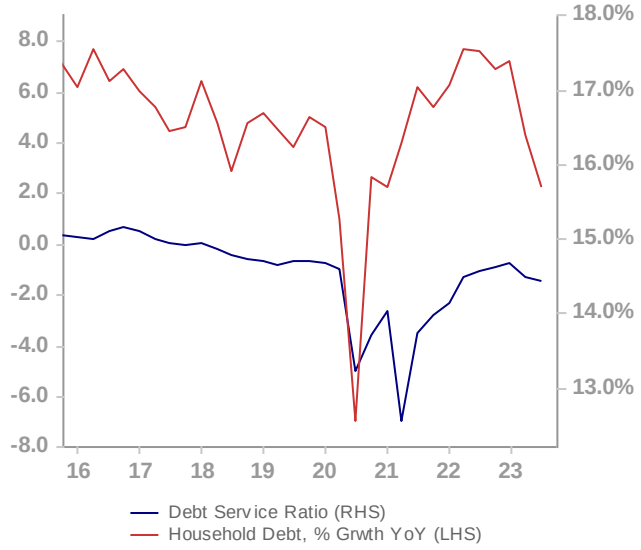
Source: FactSet

Figure 43: Personal Income and Savings Rate



Source: FactSet

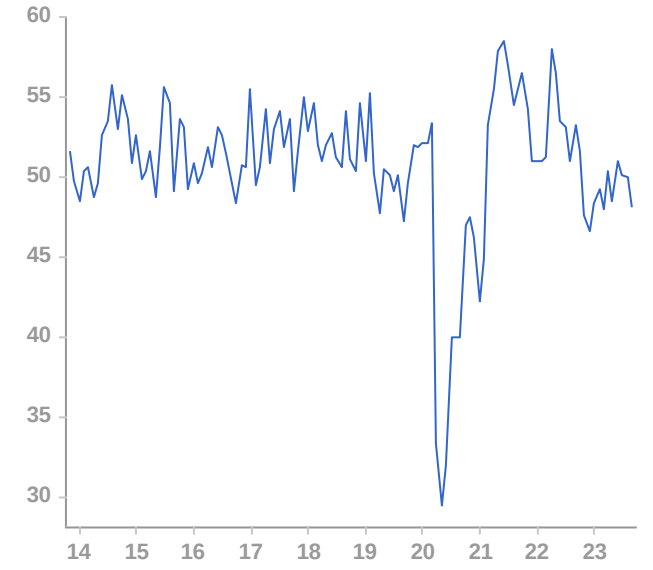
Figure 43: Household Debt



Source: FactSet

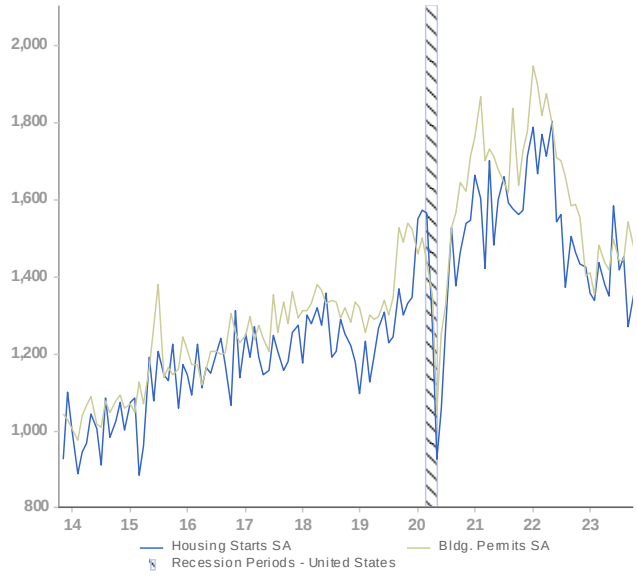
Housing and Construction Indicators

Figure 44: Architecture Billings Index



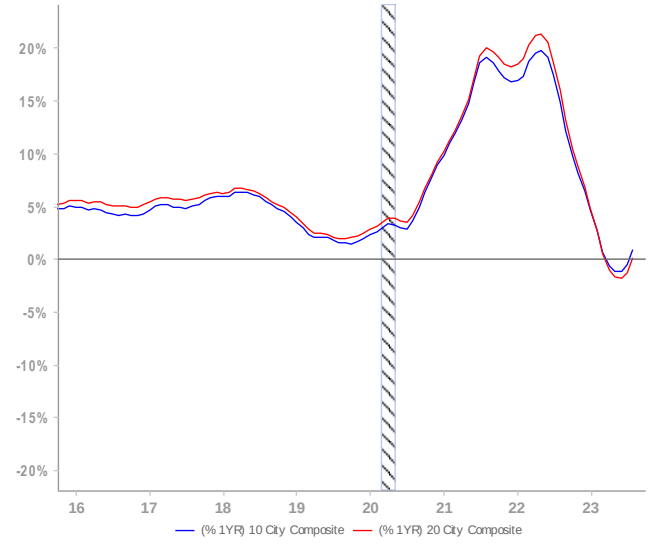
Source: FactSet

Figure 45: Housing Starts and Building Permits



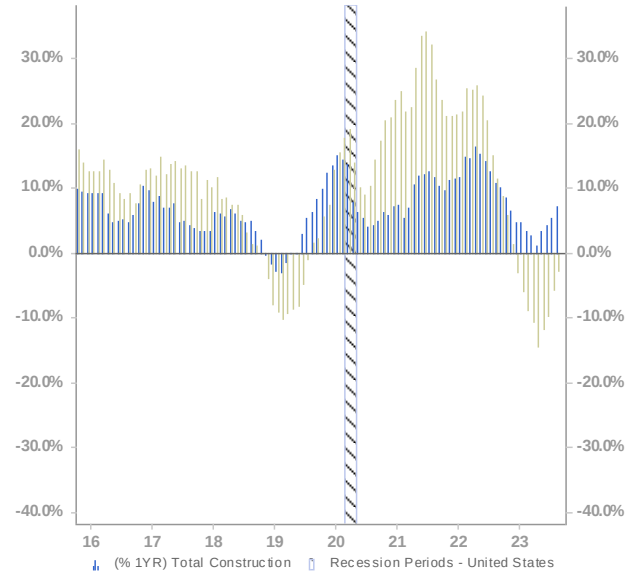
Source: FactSet

Figure 46: Case-Shiller 20-City & 10-City Index, % Chg YoY



Source: FactSet

Figure 47: Private and Total Construction (% Chg YoY)



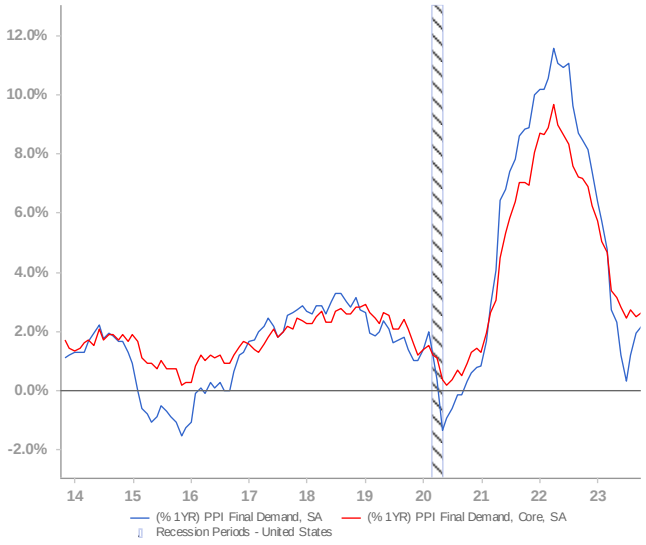
Source: FactSet

Price Indicators

Figure 48: Consumer Price Index

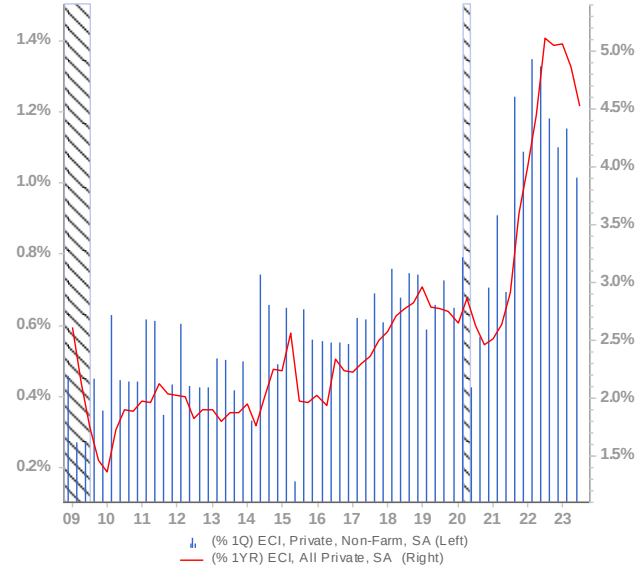
Source: FactSet

Figure 49: Producer Price Index



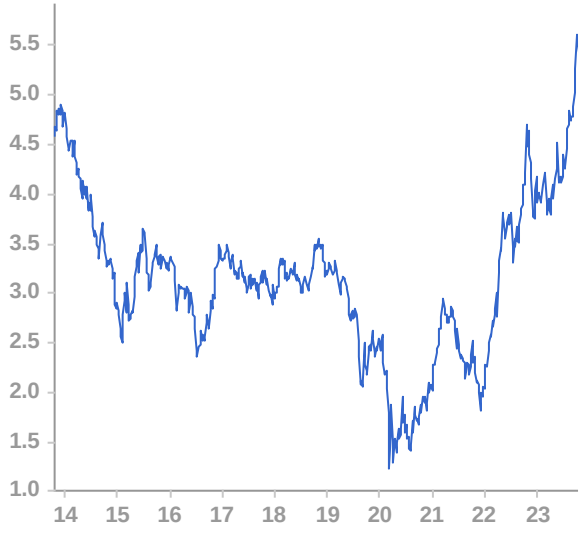
Source: FactSet

Figure 50: Employment Cost Index



Source: FactSet

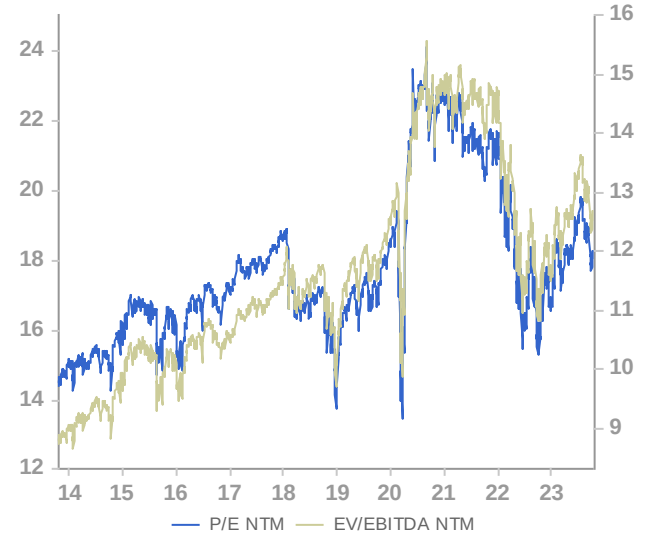
Figure 51: 10-Year, 5-Year Forward Inflation Expectations



Source: FactSet

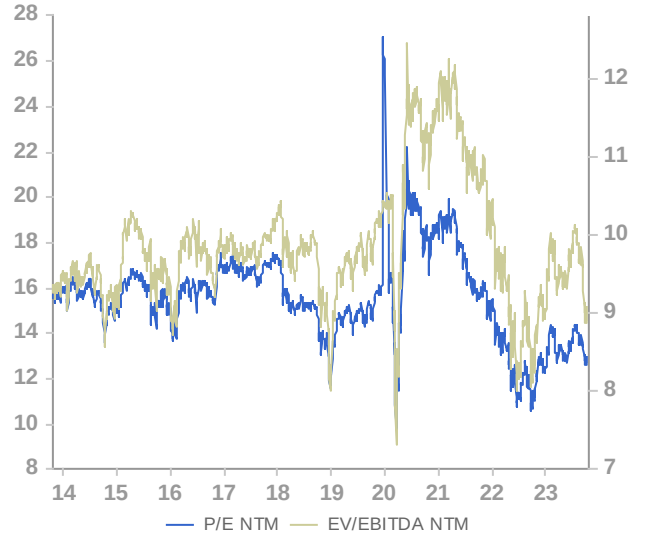
Valuation Indicators

Figure 52: S&P 500 P/E (LHS) & EV/EBITDA (RHS)



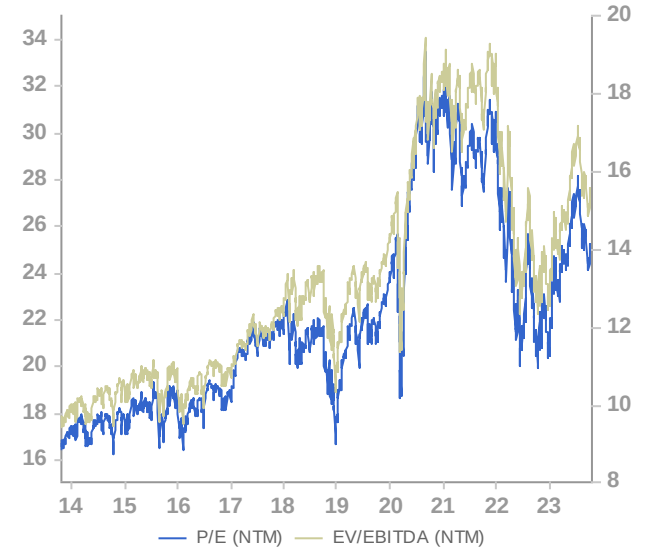
Source: FactSet

Figure 53: S&P Midcap 400 P/E (LHS) & EV/EBITDA (RHS)



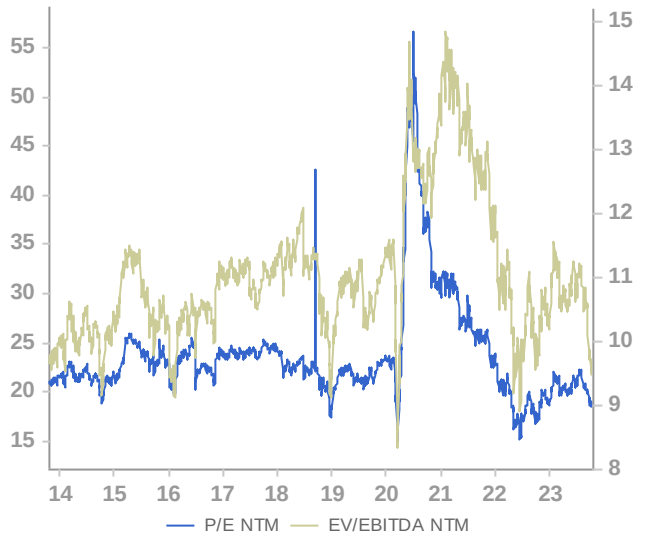
Source: FactSet

Figure 54: Nasdaq 100 P/E (LHS) & EV/EBITDA (RHS)



Source: St. Louis Federal Reserve, FRED Database

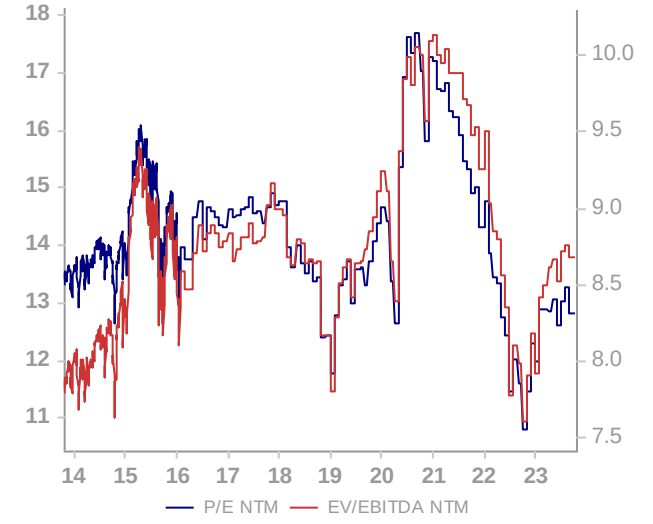
Figure 55: Russell 2000 P/E (LHS) & EV/EBITDA (RHS)



Source: St. Louis Federal Reserve, FRED Database

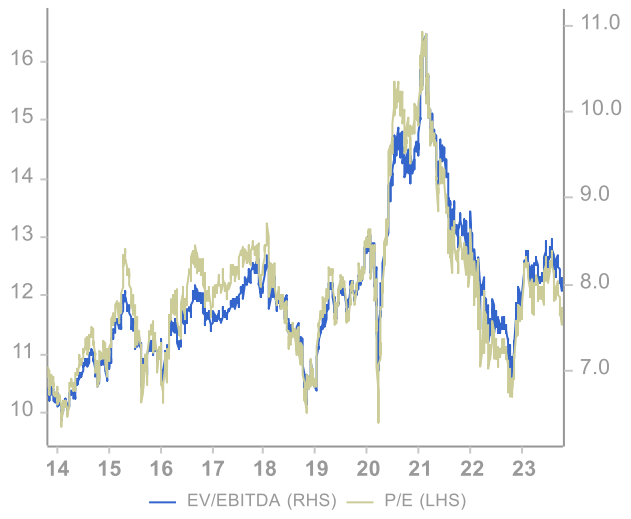
Valuation and Volatility Indicators

Figure 56: Intl Developed P/E (LHS) & EV/EBITDA (RHS)



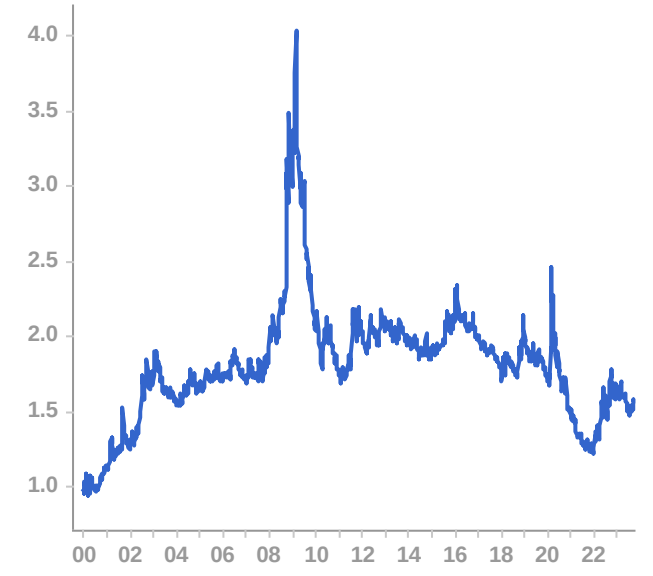
Source: Robert Shiller, Yale University, Rockingstone Advisors, Standard & Poor's

Figure 57: Emerging Markets P/E (LHS) & EV/EBITDA (RHS)



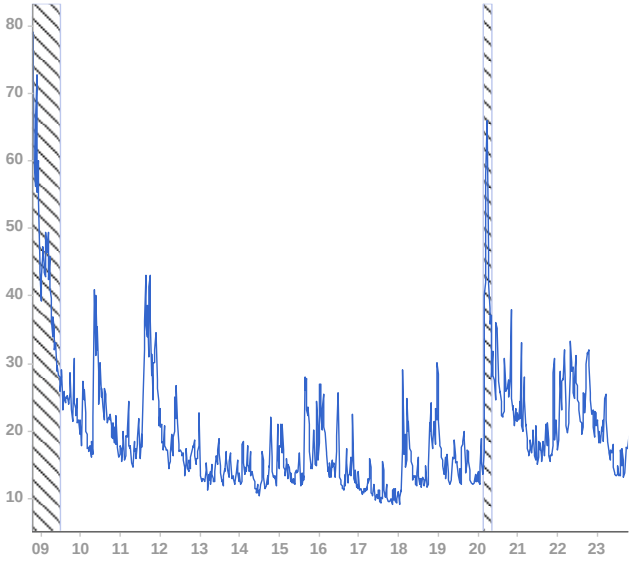
Source: Robert Shiller, Yale University, Rockingstone Advisors, Standard & Poor's

Figure 58: S&P 500 Dividend Yield



Source: FactSet

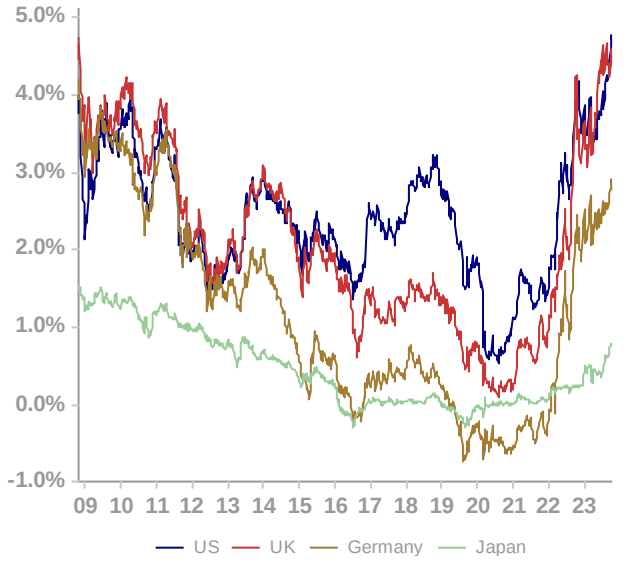
Figure 59: CBOE Volatility Index



Source: FactSet

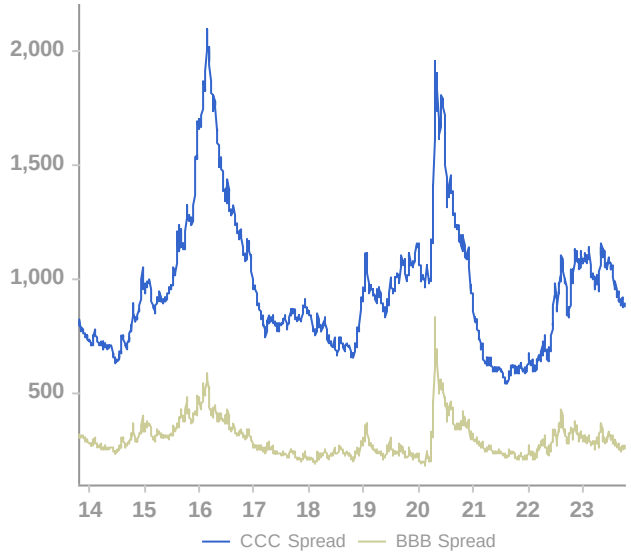
Bond Market Indicators

Figure 60: 10-Year Global Bond Yields



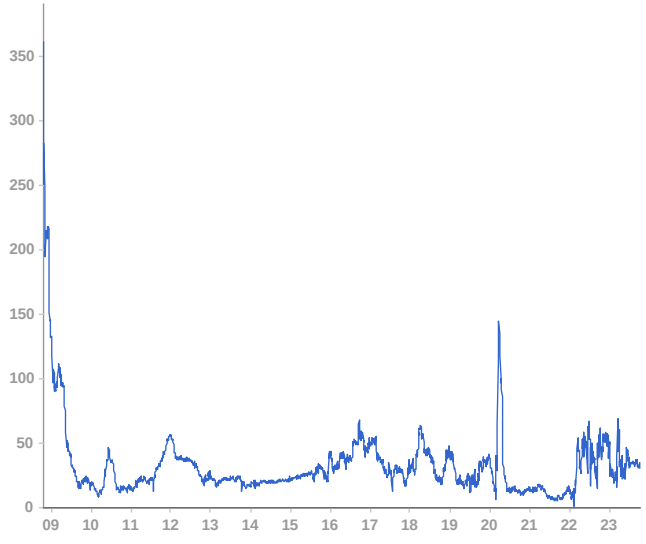
Source: FactSet

Figure 61: CCC and BBB Spreads (Option Adjusted)



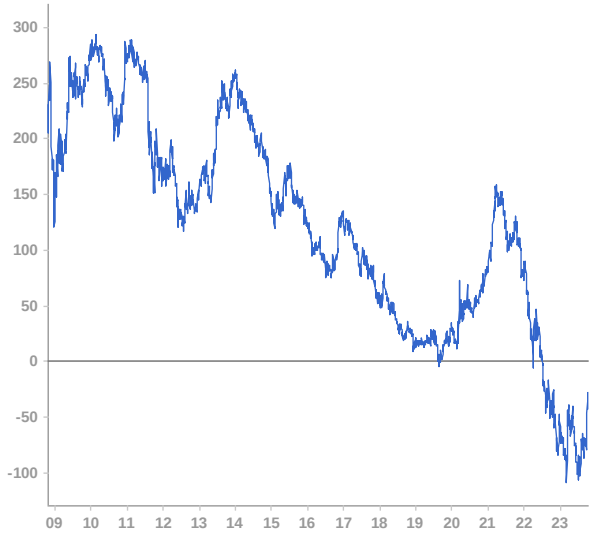
Source: FactSet

Figure 62: TED Spread (bps)



Source: FactSet

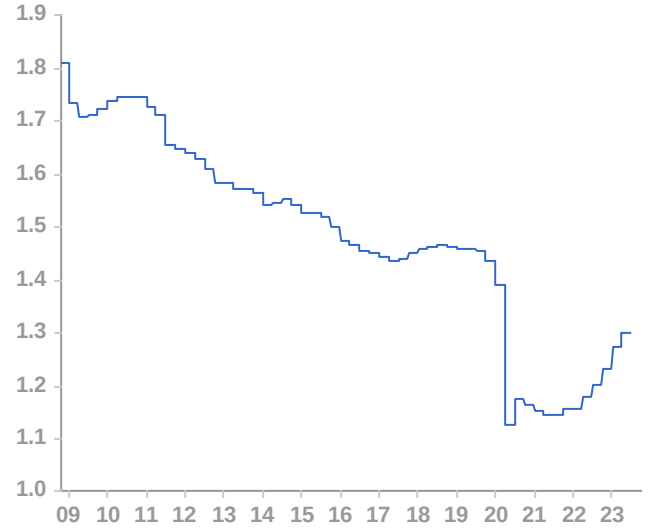
Figure 63: 10-Year Minus 2-Year Treasury



Source: FactSet

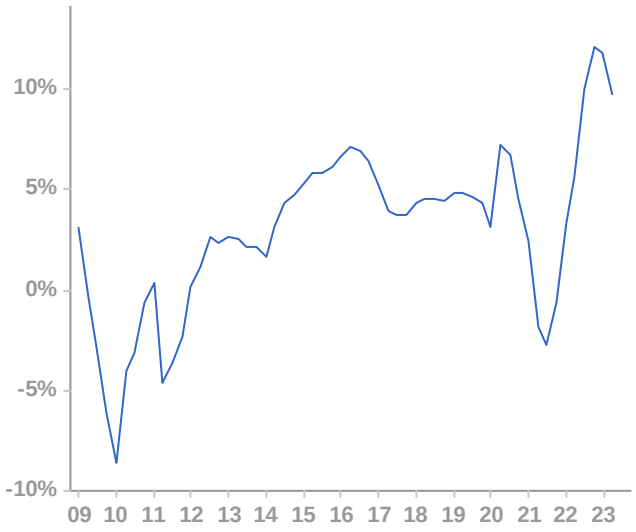
Liquidity and Other Indicators

Figure 64: Velocity of M2 Money Stock



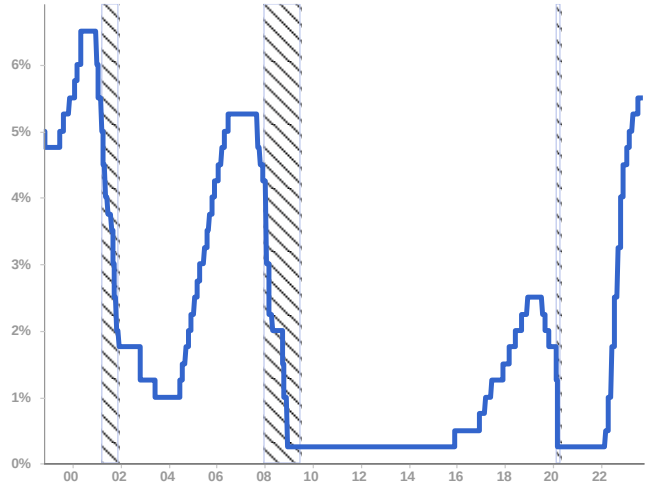
Source: FactSet

Figure 65: Loan Growth (Non-Financial, Private Sector)



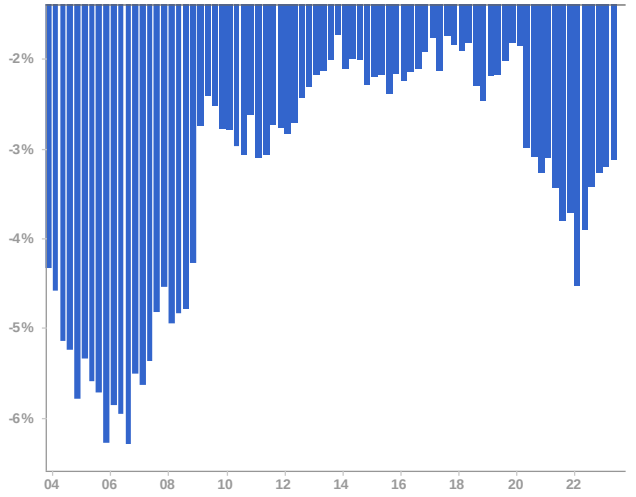
Source: FactSet

Figure 66: Fed Funds Target Rate



Source: St. Louis Federal Reserve, FRED Database

Figure 67: Current Account Deficit (as % of GDP)



Source: St. Louis Federal Reserve, FRED Database

ROCKINGSTONE ADVISORS LLC

Appendix

Important Regulatory Disclosures and End Notes

Form ADV available upon request. This quarterly is only for informational purposes and not a solicitation to buy or sell securities or as a source of specific investment, legal or tax recommendations.

Rockingstone Advisors is solely responsible for the content of this Quarterly. The information and statistical data contained herein have been obtained from sources we believe are reliable but cannot guarantee.

Rockingstone Advisors performance charts depict the mean aggregate return of all accounts invested with a similar objective and risk tolerance during the entire return period; individual account performance may materially differ according to strategy and portfolio composition. Returns are calculated using time-weighted method (TWM) and are weighted by portfolio assets. Returns can be influenced not only by the actual performance of the underlying portfolios, but by the mix (composition) of portfolios in any given year and the number of portfolios within the sample set. Public equity returns are calculated by Morningstar based on information received from our custodian(s). Other investment returns, including private equity and real estate investments are calculated based on valuation data from parties other than Rockingstone Advisors or at cost. Fixed income returns generated by private notes are recognized when the cash coupon is paid, rather than on an accrued interest basis (except for PiK securities). Annualized return is based on portfolios invested as of June 1, 2009. The sample set of portfolios within each annual cohort has increased over time and the mix changes every year. Our investment returns may reflect investment opportunities that are unavailable to all of our clients, for reasons including: (i) certain funds in which we have invested are now closed to new investors, (ii) certain clients may not meet "accredited investor" standards, (iii) certain investments are available only to officers or directors of a business, and /or (iv) we may believe that historical returns most likely will not be generated by a specific security or strategy and thus are no longer allocating new capital to a specific security or strategy. Past performance is neither indicative of-- nor a predictor of-- future performance. Mean reversion is a powerful force, meaning periods of outperformance are typically followed by periods of underperformance. All figures are net of fees and expenses. Rockingstone's performance must be assessed in light of not just how we performed relative to the benchmarks, but how much risk we assumed in generating portfolio returns.

Quarterly Data prices are as of September 30, 2023; most other prices and yields are as of October 21, 2023.

We are happy to provide the raw data and source links for any of the charts or tables in this Quarterly. We are also happy to provide individual account performance data by annual cohort or by IRR (instead of TWM) so you can better understand the range of portfolio returns. We thank you for your interest and always appreciate any feedback.

Our contact information:

Brandt Sakakeeny & Eric Katzman, CFA
Rockingstone Advisors LLC
212-430-2240

brandt@rockingstoneadvisors.com
eric@rockingstoneadvisors.com

[i] Asset class performance charts depict Equity (SPY ETF), Bonds (BND ETF), Commodities (DBC ETF), Preferred (PFF ETF) and Real Estate (VNQ ETF) price change plus dividends and interest during the selected period.

[ii] Rockingstone Advisors performance charts depict the mean aggregate return of all accounts invested with a similar objective and risk tolerance during the entire return period; individual account performance may materially differ according to strategy and portfolio composition. Returns are calculated using time-weighted method (TWM) and are weighted by portfolio assets. Returns can be influenced not only by the actual performance of the underlying portfolios, but by the mix of portfolios in any given year. Public equity returns are calculated by Morningstar based on information received from our custodian(s). Other investment returns, including private equity and real estate investments are calculated based on valuation data from parties other than Rockingstone Advisors. Such returns may be delayed in their reporting. Alternative investment returns custodied at Charles Schwab in tax deferred accounts may be subject to erroneous reporting. Fixed income returns generated by private notes are recognized when the cash coupon is paid, rather than on an accrued interest basis. Annualized return since inception is based on portfolios invested as of June 1, 2009. The sample set of portfolios within each annual cohort has increased over time. Our investment returns may reflect investment opportunities that are unavailable to all of our clients, for reasons including: (i) certain funds in which we have invested are now closed to new investors, (ii) certain clients may not meet "accredited investor" standards, (iii) certain investments are available only to officers or directors of a business, and /or (iv) we may believe that historical returns most likely will not be generated by a specific security or strategy and thus are no longer allocating new capital to a specific security or strategy. Past performance is not indicative or a predictor of future performance. Mean reversion is a powerful force, meaning periods of outperformance are typically followed by periods of underperformance. All figures are net of fees and expenses. Rockingstone's performance must be assessed in light of not just how we performed relative to the benchmarks, but how much risk we assumed in generating portfolio returns.

[iii] Our Five-Year Forecast is updated quarterly and reflects our best judgment on future performance based on current valuations relative to historical valuations, as well as our outlook for earnings and macroeconomic conditions. We caution that predicting outcomes is inherently risky and subject to change.

[iv] Equity performance charts depict U.S. large-cap (SPY ETF), U.S. mid-cap (VO ETF), U.S. small-cap (IWM ETF), International Developed (VEA ETF), and Emerging Markets (VWO ETF) price change plus dividends and interest during the selected period. We note that Vanguard highlighted a trading glitch in the shares of VO during March 31, 2015 that led to prices materially higher than underlying NAV. Hence you should assume VO's valuation and total return was inflated as of the end of the first quarter.

[v] Fixed income performance charts depict Intermediate Government (IEF ETF), High Yield Corporates (JNK ETF), High Grade Corporates (LQD ETF), International Corporates (PICB), and Emerging Markets bonds (EMB ETF) price change plus interest income earned over the selected period.

[vi] Commodity performance charts depict Precious Metals (DBP ETF), Base Metals (DBB ETF), Oil (DBO ETF), and Agriculture (DBA ETF) price change.

[vii] Digital asset performance charts depict the price changes of Bitcoin (BTC) and Ethereum (ETH) over the selected time frame.