

Fear of Fed Overtightening Pressures Markets

Stocks and Bonds Record Another Simultaneous Decline Amid Rout in Financial Assets

An aggressive Fed, determined to reduce inflation, led to a broad-based rout in financial assets, with stocks and bonds falling together, digital assets declining and foreign currencies tumbling against the \$USD. With correlations jumping, this left investors with few places to hide in an increasingly volatile market.

Rockingstone Performance

We covered our relatively meager shorts in early July, benefited from the summer rally, and then re-shortened equity markets at August-end in larger size. We maintained our EU bond short and raised cash via tax loss harvesting. These actions were offset by int'l positions (developed, emerging). Our performance (-2.6%) was respectable vs. most asset classes.

We do not Expect a V-shaped Rebound in Financial Assets

Investors must be patient. After decades of declining interest rates and free money, stocks and bonds may suffer from an extended period of tighter monetary policy and importantly, reduced fiscal largesse, as the developed world grapples with inflation. Price levels are stabilizing, but secular forces may limit the absolute level to which prices return.

Implications for Portfolios

We expect 3Q22 earnings to be relatively solid, perhaps underpinning equity markets for now. However, we continue to believe that monetary policy works with a lag and the major risk is to 2023-24 economic growth. Valuations are more attractive, but S&P EPS forecasts remain too high. These factors keep us cautious while recognizing parts of the market, such as small caps, appear materially undervalued.

S&P500 Forecast & Other Key Indicators

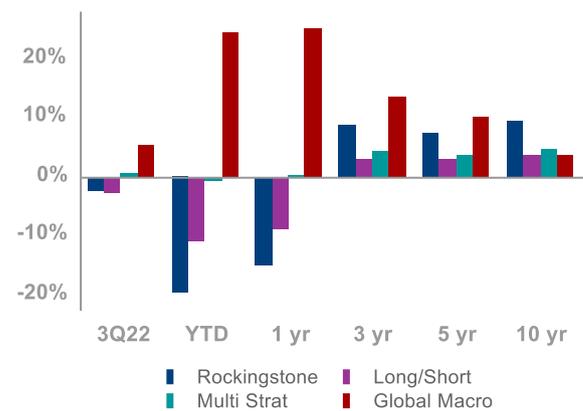
We forecast: EPS (2022/2023: \$215/\$220), S&P500 (2022 year end = 3630), GDP (2022: +1%), Gold (\$1625), Oil (\$90), 10-yr US Bond Yield (4.5%), Inflation (5.8%), 5-yr expected CAGR (US Large Cap +4%, US Mid Cap +7%, US Small Cap +11%, Developed +4%, EM +9%).

Figure 1: 3Q22 Asset Class Performanceⁱ



Source: FactSet

Figure 2: Rockingstone: 3Q22 & Historical Annualized Returnsⁱⁱ



Source: Rockingstone Advisors, Morningstar, DJ Credit Suisse Indices, Inception = 7/1/2008

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

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The Twin Threat of Higher Rates

Much has been written about higher rates and financial assets; very little of late on higher rates and government finances

Market volatility, combined with rising correlations across asset classes, has made plainly clear to investors the outsized role inflationary pressures have on the economy and financial markets. As it has been more than 40 years since inflation rates exceeded 6%, the current price shock has reverberated across the country and throughout global economies.

As we have discussed in previous Investor Quarterlies, higher interest rates lower the value of practically all financial assets (by raising the discount rate and effectively lowering the present value of a future stream of cash flows), and especially those assets that tend to require a large amount of debt financing. Within each asset class, the degree of the impact of higher rates can vary.

For publicly traded securities, such as equities, rising interest rates tend to exert disproportionate pressure on shares of growth stocks vs. value stocks. Within bonds, floating rate interest bonds outperform fixed rate securities, and lower duration assets (shorter maturities) generally outperform higher duration assets. With respect to currencies, higher interest rates tend to increase the value of the currency of the country offering relatively higher yields for its sovereign debt compared to other countries, as buyers seek higher yields (for any given credit risk). This is the primary reason behind the strengthening US dollar relative to a basket of foreign currencies.

Because changes in the prices of financial assets are communicated so regularly and frequently, investors, and the media, tend to focus on the impact of interest rates on stocks, bonds, currencies and commodities. Investors focus less attention on the price changes of assets that do not trade regularly, such as private equity (PE) or venture capital (VC) funds and the value of their underlying holdings and non-traded real estate, to name a few. Because of the lack of frequency of pricing, there is a misperception that these investments are "safer" than public securities in a rising rate environment. They are not; in fact, PE and VC assets may be riskier given their leverage.

In addition to public and private financial assets, there is one critical area when it comes to higher rates, and it is one that does not get much media or investor attention. That lack of attention is because the liabilities are so long term and the accounting so obscure that discussion of this entity's finances is painful even to the closest observers: the US government.

Federal finances and the impact of higher rates

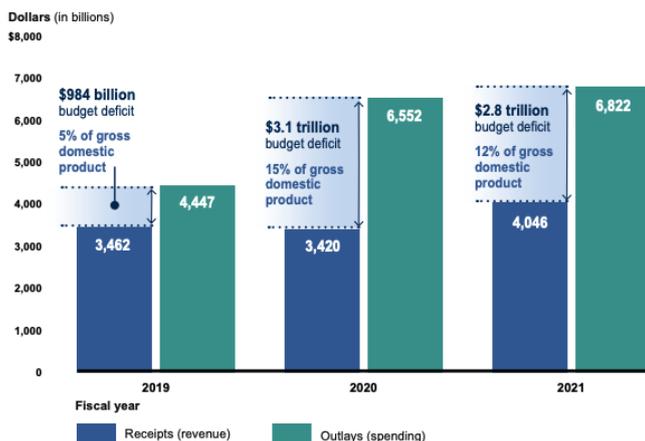
In response to the pandemic, both the Trump and Biden Administrations, along with Congress, passed stimulus packages worth nearly \$5 trillion, of which \$1.8 trillion went to individuals, \$1.7 trillion to businesses, \$745 billion to state and local municipalities and another \$770 billion to health care and other.

The US government 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 is now \$22.3 trillion. US total debt to GDP has risen from 100% of GDP to now more than 120% of GDP, among the worst in the OECD (only Japan has a higher Debt/GDP figure at 260%).

This has been fueled by unprecedented fiscal deficits over the last three fiscal years (as shown in Figure 3) adding to an already high level of debt. Pre-pandemic, the US fiscal deficit ran just under \$1 trillion. During fiscal 2020 the deficit ballooned to \$3.1 trillion and in 2021 to \$2.8 trillion.

Between the Fed’s suppression of short-term rates and quantitative easing, coupled with trillions of dollars of deficit spending, it is easy to see why global economies are facing massive inflationary pressures. As we noted in prior quarterly newsletters, the pull back from global free trade pre-pandemic and the obvious challenges to supply chains during the pandemic have also contributed to upward price pressures.

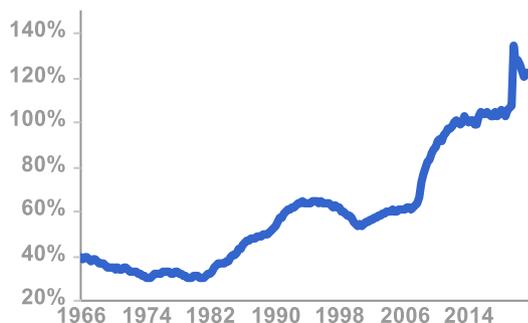
Figure 3: US Budget Deficits for Fiscal Years 2019-2021



Source: Congressional Budget Office and GAO Simulation

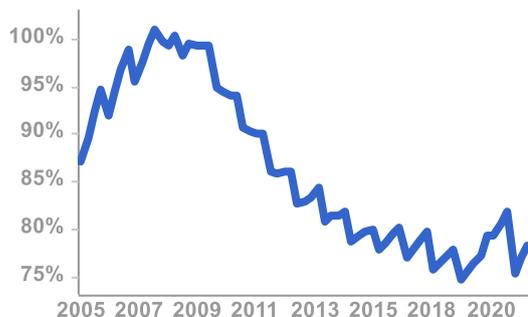
The combination of annual deficit spending is contributing cumulatively to the US debt burden. As a percentage of GDP, debt has now risen past 120%. On a per household basis, fortunately, the debt burden is slightly better, declining from 100% at the time of the Global Financial Crisis to around 80% where it stands today.

Figure 4: US Federal Debt as % of GDP



Source: FactSet

Figure 5: Household Debt to GDP, US

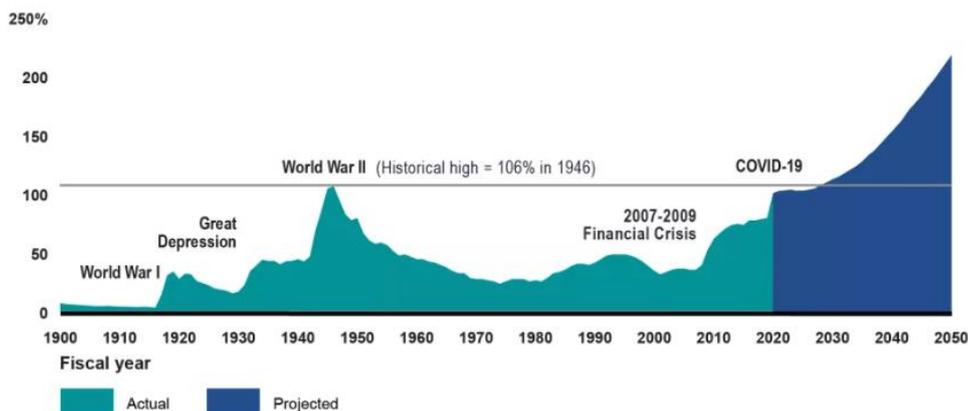


Source: FactSet

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 the economic growth.

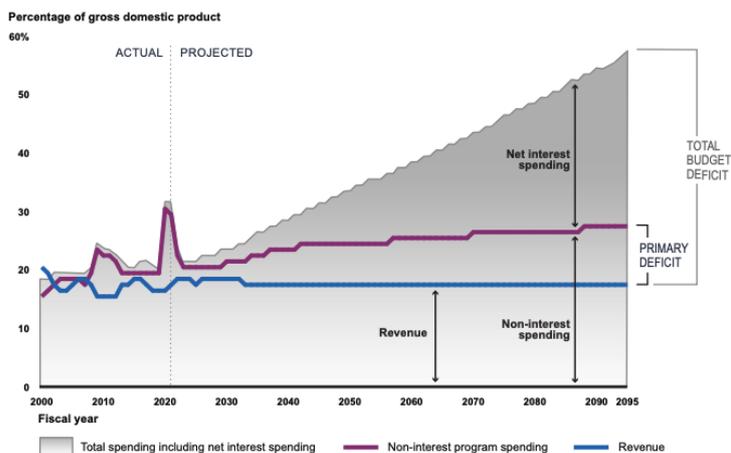
Figure 6: US Debt as a Percentage of GDP, Forecast



Source: Congressional Budget Office and GAO Simulation

The interest burden of servicing the Federal government’s debt is expected to be \$400 billion in fiscal year 2022, or just over 8% of all federal revenue collections. This translates to \$3,055 per American household, eclipsing what the federal government spends in Social Security Disability Insurance, food and nutrition services, housing or transportation.

Figure 7: US Debt as a Percentage of GDP, Forecast



Source: Congressional Budget Office and GAO Simulation

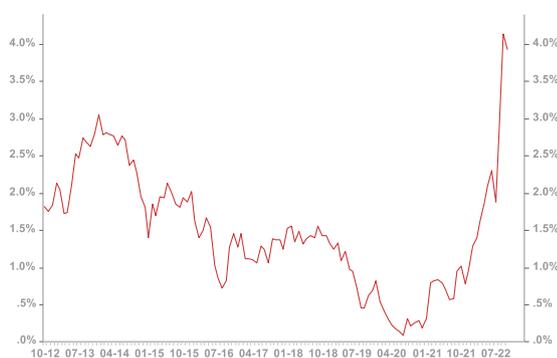
Assuming higher interest rate costs, coupled with larger fiscal deficits and the impact of accumulated debt, GAO’s simulation projects that spending for net interest over the next 30 years may reach 9% of GDP by 2050 and 30% of GDP by 2095. Yet the interest burden has remained relatively low due to the Fed’s intervention in bond markets. As the Fed

tightens and lets its balance sheet run-off, interest rates are rising, materially increasing the cost of servicing debt that continues to grow at a rapid pace.

UK: The Canary in the Coal Mine

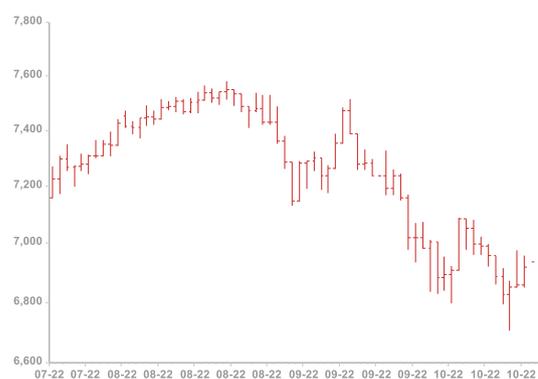
The heightened risk of adverse market reactions to fiscal policy decisions was made patently clear in the UK. There, a new Prime Minister and Chancellor of the Exchequer, Liz Truss and Kwasi Kwarteng, respectively, proposed a budget promising tax cuts and increased borrowing in the hope of boosting economic growth in the UK. The market reaction was swift: UK government bonds sold off, the Pound Sterling plummeted against the dollar and the UK stock market declined. In fact, the move in UK sovereign bonds was so swift, and the impact on UK pension funds so severe, that the Bank of England was forced to buy bonds on three separate occasions to stabilize the market.

Figure 8: Yield, UK Gilts



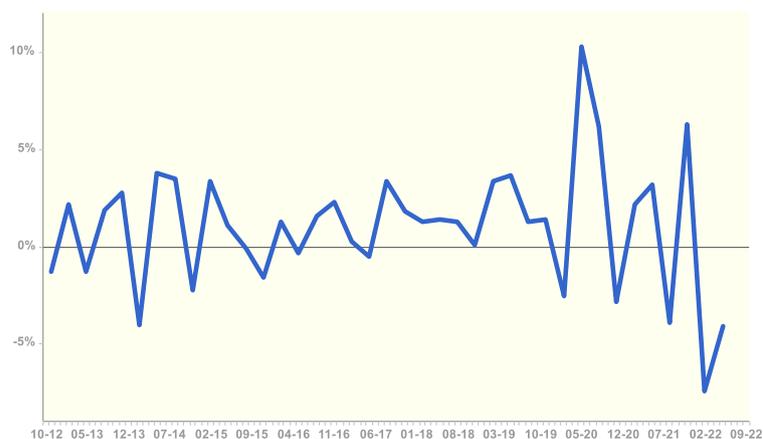
Source: FactSet

Figure 9: FTSE 100



the US can grow its way out of its multi decade in the making fiscal hole. As a developed country with aging demographics, it would take a startlingly massive improvement in productivity and real incomes to shift the deficit curve lower. Unfortunately, productivity is declining, not growing, exerting additional pressure on living standards.

Figure 10: US Productivity Growth



Source: FactSet.

The next two options have the most impact on investors, as decisions to lower spending or to raise taxes affect economic growth rates. In so far as deficit spending effectively “juices” or “stimulates” the economy by increasing near-term consumption at the cost of future consumption, at some point future consumption must pay the price. That price will take the form of slower growth due to fiscal tightening or higher income taxes, which in turn reduces discretionary spending.

While it is unlikely the next economic downturn does not trigger the Pavlovian reflex among politicians to pass a “stimulus” package to soften the economic impact of a downturn, as debt levels and interest expense rises, each subsequent package may be increasingly harder to finance. As noted above, the new UK leadership’s effort to stimulate growth via unfunded debt financing was met with brutal rejection by capital markets.

Historically, the Federal Reserve has been a willing partner in providing monetary stimulus to the US economy in conjunction with fiscal stimulus. However, with inflation currently high and a case to be made that secular shifts in globalization, under-investment in housing and in energy production may lead to generally higher price levels, it is difficult to foresee a Federal Reserve as active on the monetary policy front over the next five to 10-years as it has been in the past.

The reality is that there is no such thing as free money: the bill eventually comes due in the form of lower future spending, higher taxes or inflation.

In summary, investors should expect that the probability of slower economic growth ahead is substantially higher, implying an emphasis on near-term cash generation in the form of dividends; a focus on geographies or regions outside of the US with a more attractive fiscal outlook; and an emphasis on unique single-stock names riding a secular wave— rather than a cyclical one— of higher adoption.

Navigating Markets

How to invest given present conditions

The unsustainable path of US government finances, discussed in the prior section, is particularly sobering. A lack of fiscal and monetary tools will no doubt increase the severity of any economic downturn. That said, it is also important to put these events in proper historical context. Recessions, while painful, are generally helpful to the economy, re-allocating resources and expunging markets of excess. Financial assets generally work through these periods, though we acknowledge not without pain. How much pain to tolerate, and how aggressive to be in defending portfolio values, is the topic of this section.

Given recent market volatility, it is easy to let the price action that has occurred across multiple asset classes influence investment strategy. Few things make investors more bearish than losing money, and the pain of losses this year is particularly widespread, most notably in traditional 60/40 or 70/30 balanced portfolios holding bonds and stocks. In fact, looking back over the last century, the classic 60/40 portfolio has performed this poorly on only two occasions.

The news only seems to be getting worse, yet...

Moreover, the news seems to be getting worse, not better: inflation is proving to be stubbornly high; variants of the pandemic re-emerge with regular frequency; the war in Ukraine is escalating; and political dysfunction and social division evident in upcoming mid-term elections. And as discussed in the prior section, the institutions generally expected to provide a “backstop” from economic conditions deteriorating further— US government and the Federal Reserve— have fewer resources available due to past policy mistakes and rising Federal debt levels.

And yet, despite all the negativity, companies are acquiring businesses and investing in the future, young families are buying new homes, emerging economies are investing in their human capital, researchers are developing new medicines and materials that drive future growth.

So how should investors balance those competing narratives?

Balancing long term perspective with shorter term, tactical action

First, investors must focus on timeline. Near-term events weigh naturally on our thinking, as they are today. But adopting a longer-term perspective has traditionally been a positive investing attribute. That is not to say that the short-term should be ignored; rather, it should be put in proper perspective. Compounding is one of the most powerful forces in investing, and the longer an investment is allowed to compound— particularly if it was acquired during a period of financial stress in which it may be trading at a discount to its intrinsic value— the better.

Moreover, it is important to remember that securities derive their value from their future cash flows discounted to present. Therefore, a stock for instance, is worth the sum of its cash flows in 2022, 2023, 2024, 2025, etc., each subsequent year discounted back to today. Because the bulk of a security’s value is derived not by what it earns next year, or even the year after, but what it earns in perpetuity as an ongoing business, recessions impair value but they generally don’t take it to zero due to the perpetuity nature of a business. Obviously where this goes very wrong is if a business is so levered that it defaults on its debt

as it cannot service its interest payments in a reduced earnings environment. That is why higher leveraged business underperform lower leveraged businesses in a downturn.

Second, in order to take advantage of the market dislocation that occurs in the midst of sustained sell-offs, some short-term actions to defend portfolios are warranted, otherwise it is frankly very hard to capitalize on the opportunities presented if investors have no liquidity. Hence, raising cash in advance of a downturn or at its early stages, either through selective sales or short selling, makes sense. How much cash is a function of the tax exposure and the opportunities presented, but at Rockingstone we estimate this figure to be around 20%-30% of a portfolio's total value. This figure seems large enough to capitalize on dislocation, but small enough where the portfolio remains tax efficient and where longer-term investments can benefit from not having perfectly to time market entry points.

Lastly, some consideration for portfolio positioning must be made in light of the broader investment environment governing price fluctuations over the intermediate term, defined perhaps as somewhere between two years and 15 years. These changes are typically the ones that occur within asset classes. For example, changes to the interest rate regime might lead to the decision to overweight dividend stocks where the cash flows are realized over the next five years vs. overweighting growth stocks where the cash flows may not be realized for 20 years. It could also translate into shifting assets to non-dollar denominated securities if there is evidence of a regime change in the FX markets.

Summary

In summary, the key takeaway to our firm's approach in navigating current markets is not to be all-in on any one strategy nor pigeonholed into a style (i.e. growth vs. value, large cap vs. small cap, US vs. International). As clients know, we maintain diversified portfolios using a combination of ETFs (which are inherently diversified) as well as select individual securities. We do not want to be 100% focused on short-term dynamics, but we also want the flexibility to capitalize on market dislocation and attractive valuations all the while being tax efficient.

We believe the 3Q22 has several clear examples that demonstrate our approach. Looking back to the middle of June 2022, markets started to recover with a surprising move upward by more speculative smaller cap technology names. We had a modest short position at the time and were significantly underweight technology vs. client benchmarks. By mid to late July, we had covered our short positions and added exposure to technology. These actions were done via highly liquid ETFs.

In terms of covering the short, this was a tactical move as we sensed sentiment was becoming increasingly bullish that inflation was moderating. From a long-term perspective, we believed adding back to technology (although still being underweight vs. benchmarks) was prudent given the valuation pullback experienced during the 1H22 and the likelihood that many large cap technology and software companies would deliver on earnings expectations in coming quarters.

We also used the market's dislocation in the 1H22 to reinvest in Appian (APPN), a company we had purchased shortly after their IPO and sold in the summer of 2020. Appian is a software company that uses low code automation to help organizations build processes to improve efficiency. The company recently won a trade secrets case vs. Pegasystems to the tune of \$2+ billion (vs. a market capitalization of \$2.8 billion). The combination of a solid internal fundamentals and the likelihood the legal case is finalized in Appian's favor led us repurchase shares across client portfolios.

As markets rallied through August 2022, we became increasingly wary over the rebound vs. a likely vocal, aggressive Fed, as well as the ongoing back up in interest rates. From both a tax efficiency and tactical approach, we looked across client portfolios and decided to raise cash (i.e. reduce portfolio beta) by selling a number of individual names (NARI, DHR, BKNG) that offered unrealized losses.

We have long argued that monetary policy works with a delay of at least a year and sometimes closer to two years. Based on GDPNow data from the Atlanta Fed, there is some evidence that economic growth is accelerating, not decelerating. Meanwhile, corporate earnings remain solid, valuations (albeit on numbers that are probably too high) look attractive, and sentiment is overwhelmingly bearish. Inflationary pressures appear to be stabilizing, and anecdotal evidence is pointing to a looser labor market. We are also beginning to enter a seasonally strong period for the equity markets. Unfortunately, the bond market is also paying attention to these trends and based on interest rate movements over the last few weeks, it is clear bond investors believe the economy may strengthen before it ultimately weakens.

Taken together, we expect a near-term rally in equity markets to probably take us through 1Q23. At that point, the effect of higher rates will be exerting more pressure on the economy, and we expect to start to see growth slow next summer, and earnings revisions along with it. Equity markets will start to discount lower earnings by next summer and we are forecasting a trough in equity prices some time next fall.

We believe it is a combination of the above strategic and tactical moves that may allow Rockingstone to deliver positive risk-adjusted returns for clients. But as noted earlier in this report, the challenging macro investing environment reinforces the importance of times and overall strategy to investors.

Forecast: 2022-23

Rockingstone Advisors: Our Latest Forecasts

We have updated our forecasts to reflect Rockingstone’s outlook for what remains of 2022 and for full year 2023. As we noted last quarter, there is a stark difference now between real and nominal figures. 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. For investors, deciphering how markets react to such stark differences will be another important factor.

Figure 11: Key Metric Forecast

Metric	Year End December	
	Band	Point
US Real GDP (2022)	+0.5% to +1.5%	1.0%
S&P 500 2022 EPS (RSA/Street)	NA	\$215 / \$207
S&P 500 2023 EPS (RSA/Street)	NA	\$220 / \$235
S&P 500 2022 Index	3410-3850	3630
10-Yr US Treasury Yield	4.0% - 5.0%	4.5%
Oil (WTI-2022 End)	\$80 - \$100	\$90
Gold (2022 End)	\$1,600 - \$1,700	\$1,625
Inflation (NTM)	+5.5% to +6.5%	5.8%

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

A few observations and comments:

1. **S&P 500 EPS.** Final 2021 S&P 500 EPS were \$198 (as reported; operating earnings were \$208). By late July, the EPS consensus of \$221 implied close to 12% growth (or about 6% real) in S&P 500 earnings vs. last year. But that expectation has come down significantly to \$207 EPS or 4-5% growth in nominal terms. Over the last few years, we have been below consensus, but our 2022 EPS forecast is now for \$215. We note as this newsletter goes to print, of the S&P companies reporting quarter to date, more than 80% have exceeded expectations. Thus, we actually see corporations surprising to the upside as 2022 comes to an end. However, our outlook for 2023 is much more conservative. We now forecast EPS of just \$220 in 2023 or just 2% nominal vs. the 13-14% growth expected by the consensus! We think the specter of margin pressure due to inflation in 1H23 and risk of recession in 2H23 make for a tough EPS period for S&P companies.
2. **S&P500 2022 Index.** We have significantly lowered our S&P500 EPS target to 3630 or roughly in line with the Index today. The primary culprit in our reduction is due to much higher interest rates. From a P/E perspective and factoring in rates, expected EPS growth, the Index’s dividend yield (about 4% and in line with the 20-year average), we believe investors will assign a 16-17x multiple on 2023 EPS of \$220. Thus, we don’t see much near-term appreciation potential for the S&P as 2022 comes to a close.
3. **Oil.** Although Oil has dropped materially over the last few months to around \$90 a barrel (which is where we expect prices to end 2022), we are wary over supply not matching demand and thus have a bias that oil prices could move up materially in 2023. While recession could lead to demand waning, the actions by OPEC+ to

constrain production, limited capital spending in past years and the premium assigned to geo-political risk (for example sabotage of Nordstream in the EU), suggest upside to oil prices.

4. Inflation. As we wrote last quarter, tight labor markets, ongoing supply disruptions, the substantial lag effect of monetary policy should all conspire to keep inflation rates above historical averages. We have kept our outlook for PCE to around 6% for the next 12 months. The Fed is likely to aggressively raise rates as 2022 comes to a close to get control over inflation. There are certainly signs that inflation could rollover as demand is more limited for new and used cars, farmers react to higher prices which in turn could push agricultural input cost down, recession hits select other commodities (such as lumber which is now below its pre-pandemic levels) and public policy limits select healthcare prices.

Five Year Asset Value Forecastⁱⁱⁱ

For large caps, our analysis points to muted long-term equity returns

Our main assumptions regarding capital markets are that asset values mean-revert (with respect to margins and P/E multiples) over time. We see no reason to question this axiom. We note it currently makes for more volatility in expected returns, particularly when low profitability is factored into our calculus. 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/E's should theoretically decline (if currently above the historical mean) or expand (if currently below the historical mean) over the long term.

As usual based on our outlook for total returns, we expect the “give” of sales growth, valuation and dividends to be partly offset by the “take” of mean-reverting margins. 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 dilutive to expected returns.

Based on our latest work, US large cap and Developed market stocks appear to offer the lowest long-term return potential from current levels. In past reports we noted that both margin pressure and valuation was working against positive returns but that has changed with only profitability (i.e. margins) limited returns. Meanwhile our work continues to suggest that US mid cap, US small cap and Emerging Market equities offer the best returns with valuation being particularly compelling for the first two asset classes.

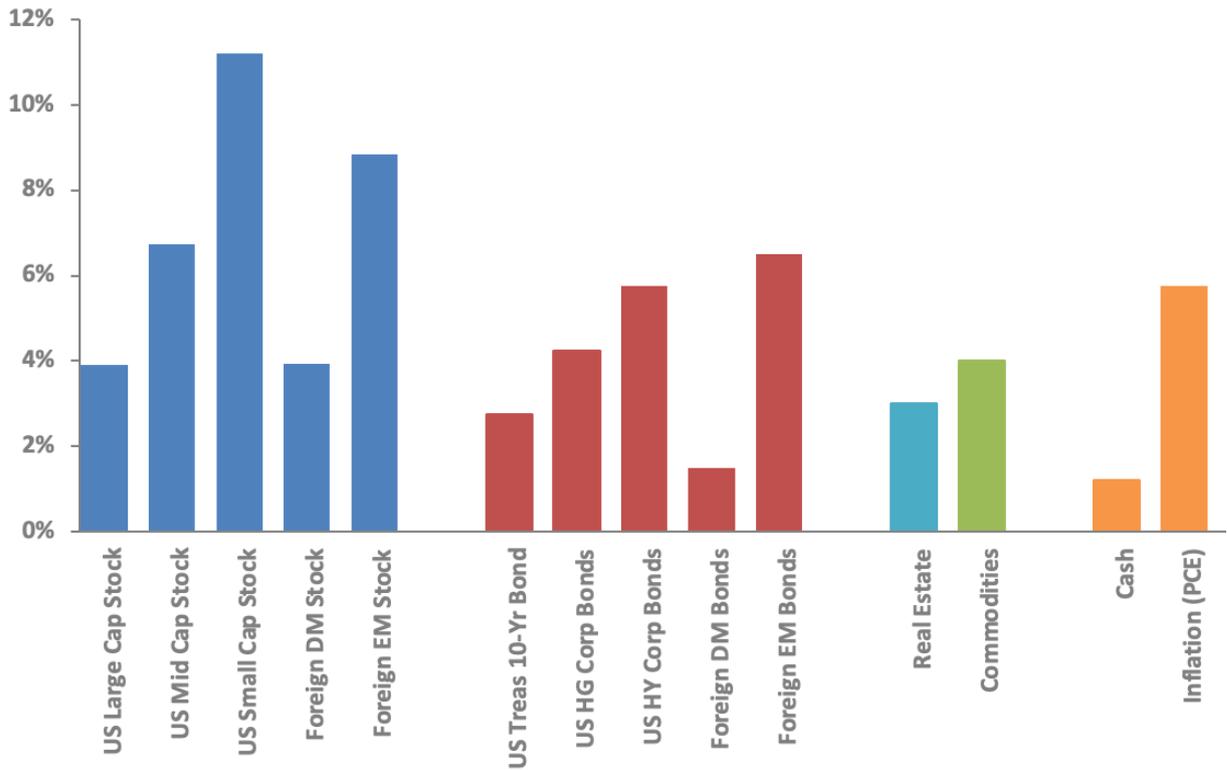
Figure 12: Five-Year Total Equity Return Calculations (Incremental Contribution)

Asset	Index	LT Exp. Return		Sales		Profit Margin		Div.Yield		Valuation
US Large Cap Stock	S&P500	3.9%	=	4.9%	-	3.2%	+	1.9%	+	0.3%
US Mid Cap Stock	S&P400	6.7%	=	4.6%	-	5.2%	+	1.8%	+	5.5%
US Small Cap Stock	S&P600	11.2%	=	6.2%	-	4.1%	+	2.2%	+	6.9%
Foreign DM Stock	MSCI-EAFE	3.9%	=	1.6%	-	4.0%	+	3.6%	+	2.8%
Foreign EM Stock	MSCI-EM	8.8%	=	4.8%	-	1.7%	+	3.7%	+	2.0%

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, both of which are below their historical mean. Indeed, rates have moved up materially in the last quarter as markets start to factor in Fed activity and inflation. Of course, short-term returns may not necessarily match our longer-term return predictions; markets are significantly more random over the short-run than the long-run.

Figure 13: Five-Year Asset Class Total Return Forecast



Source: Rockingstone Advisors

Equity Performance Review

Widespread Equity Declines, with Growth Underperforming Value

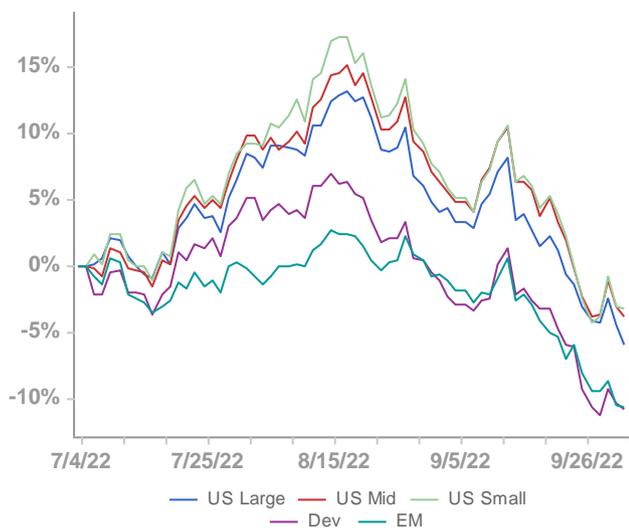
As evidenced in the figure below, equity prices experienced significant volatility in 3Q22. Investors started to perceive that inflation had peaked which would in turn allow the Fed to become less aggressive in raising interest rates. The quick turn in consensus as 2Q22 ended is evident as equities jumped into mid summer.

While companies reported generally mixed 2Q22 earnings in late July and early August, investors nevertheless pivoted to focusing on Fed activity. Thus, when Chairman Powell presented at the Fed’s annual meeting in Jackson Hole, WY, both bond and equity price weakness occurred as it was clear there would be no relief from a hawkish Fed.

With the above backdrop, it is not surprising to see higher beta equities such as small caps too quickly give up the gains that had been achieved earlier in the quarter. But as is true in most bear markets, correlations increased with all equities declining precipitously.

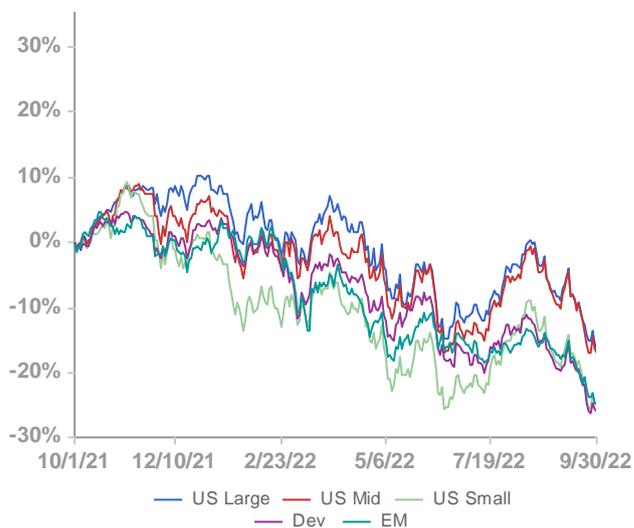
We highlight the following performance regarding 3Q22 and 12M22, respectively, results: US large-cap (-5.9% and -16.3%), US mid-cap (-5.4% and -20.3%), US small-cap (-3.2% and -24.7%), Developed (-10.8% and -25.2%), Emerging (-10.6% and -24.2%).

Figure 14: 3Q22 Equity Performance^{iv}



Source: FactSet

Figure 15: 12M22 Equity Performance



Source: FactSet

Fixed Income Performance Review

Bonds Experience Very Poor Performance

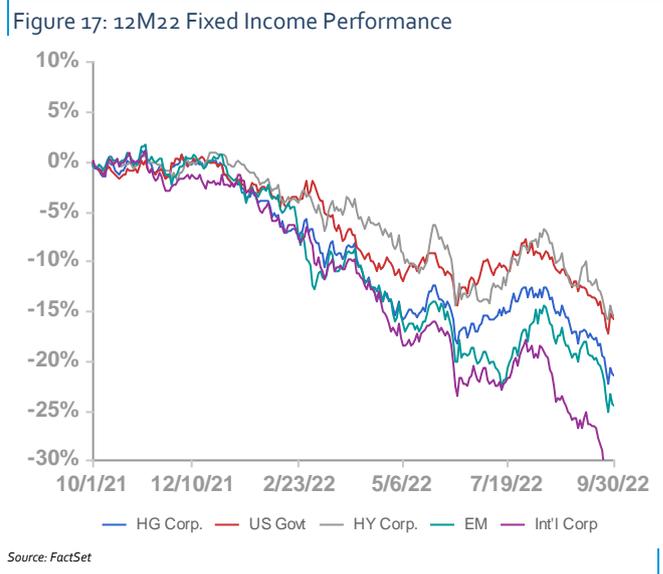
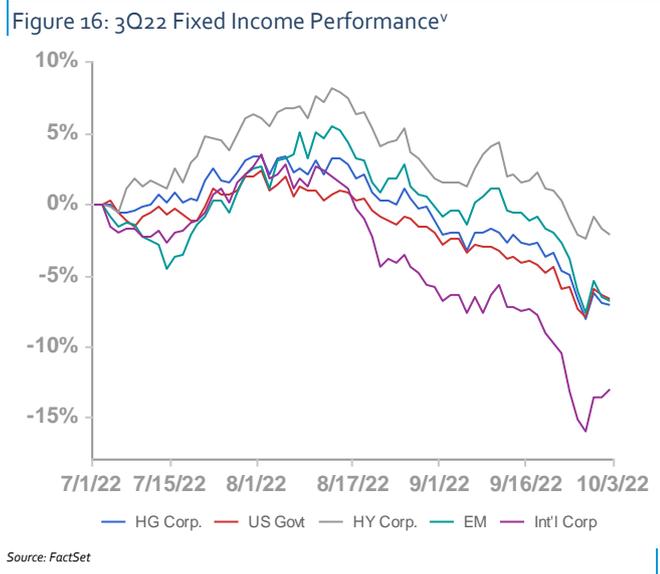
Fixed income markets declined again for the third consecutive quarter as interest rates rose and spreads widened. As we have noted in the past, bonds are positioned in many portfolios to add ballast and limit the risk of an all-equity portfolio. Not only has this not been the case YTD, but exacerbated 3Q22 equity declines in blended portfolios.

The yield curve inverted during the quarter, with 10-2s starting the quarter at a spread of 242 bpts and ending it at a spread of -404. Spreads also widened slightly across high grade and high yield bonds. Triple BBB declined in the first half of the quarter, bottoming in mid-August before rising again and ending the quarter roughly flat (2.06% vs. 2.04% as of June 30th). Triple CCC spreads followed a similar pattern, closing at 12.8% after starting the quarter at 11.9%.

Emerging markets bonds recorded losses of 7.1% while foreign developed bonds declined 4.0% for the quarter. Much of the decline in non-dollar denominated bonds was due to \$USD strength, as the trade-weighted dollar rallied sharply during the quarter.

We have long argued that given low yields, it is hard to justify much exposure to fixed income and have been underweight US bonds (vs. benchmarks) and short European bonds. Between the specter of central bank rate increases and inflation, many measures of valuation suggest bonds are more expensive than equities.

We note the following performance figures for 3Q22 and 12M22, respectively: US High Grades (-7.3% and -21.2%), US Governments (-6.7% and -15.8%), US High Yield (-2.5% and -15.4%), International Developed (-13.0% and -30.6%), Emerging Markets (-7.1% and -24.1%).



Commodity Performance Review

Commodity Reversal

The third quarter witnessed a reversal of the 1H22 performance, as fears of demand destruction from higher interest rates and slower global growth led to concern that commodity prices would be subject to slower demand and excess supply. This was most evidenced in the double-digit declines recorded in energy and single digit declines in base metals and precious metals. Ag was relatively flat.

As has been noted earlier, oil and natural gas find their way into many end products, including clothing, plastics and fertilizer, so the rise in energy prices also helped to fuel a major increase in soft commodities, especially agriculture. Given that Ukraine and Russia are together two of the world’s largest exporters of agricultural commodities, the war between the two countries exacerbated an already-tight supply picture.

Taking a step back, we emphasize investors should normally expect greater volatility in commodity prices relative to equities or bonds. This is because unlike stocks and bonds, commodities do not generate a stream of cash flows that can be discounted back to present value. Commodities are also frequently susceptible to sudden supply and demand shocks impacting their price. Lastly, because commodities are most often priced in \$US and traded globally, they are considered a store of value, especially if the dollar declines.

Rockingstone typically invest in commodities via ETFs and the below graphs display what we view as representative performance for the underlying commodities. We note the following returns during the 3Q22 and 12M22, respectively: Oil (-17.9% and +9.3%), Precious Metals (-7.8% and -9.3%), Agriculture (+0.2% and +3.2%), Base Metals (-7.2% and -14.4%).

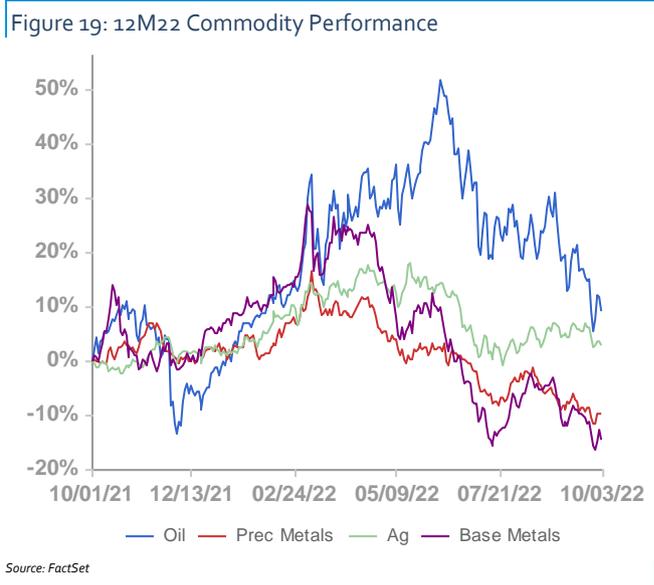
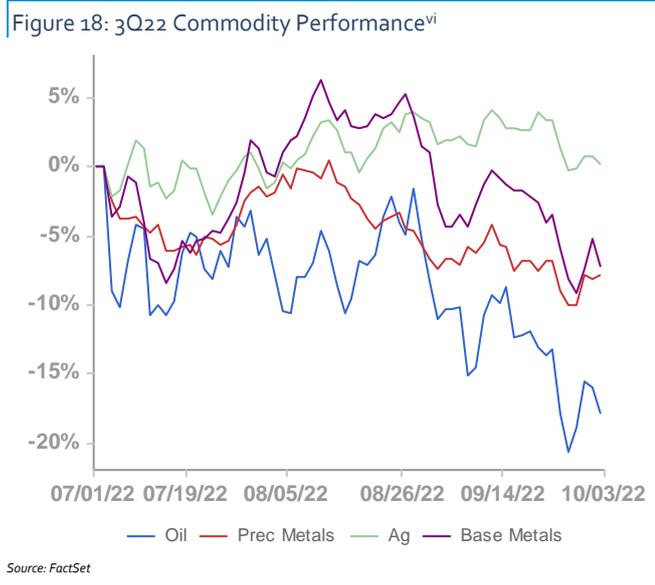
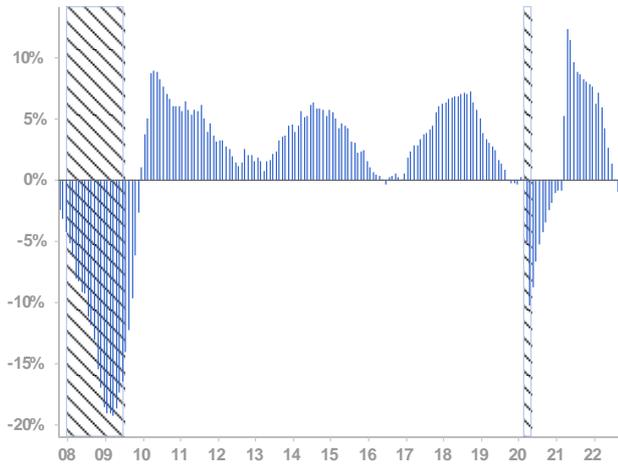


Chart Book

Leading Indicators

Figure 20: Index of Leading Economic Indicators



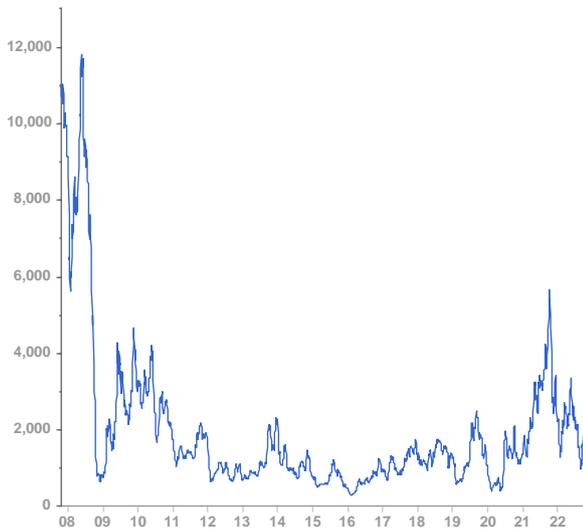
Source: FactSet

Figure 21: ISM New Orders



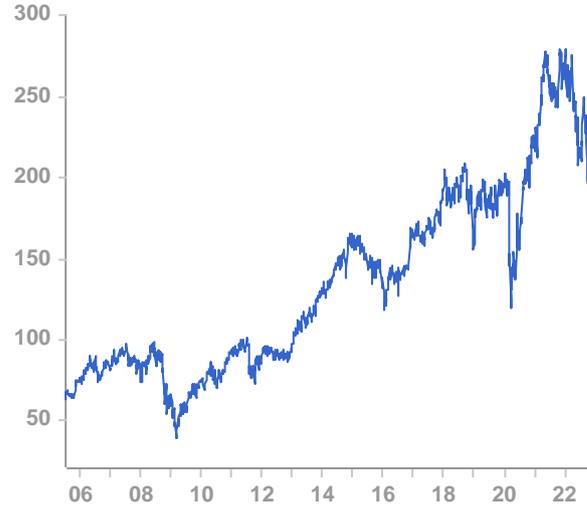
Source: St. Louis Federal Reserve, FRED Database

Figure 22: Baltic Freight Index



Source: FactSet

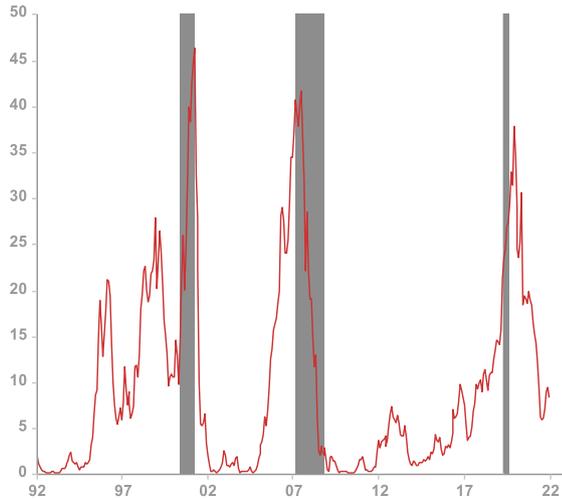
Figure 23: DJ Transports



Source: FactSet

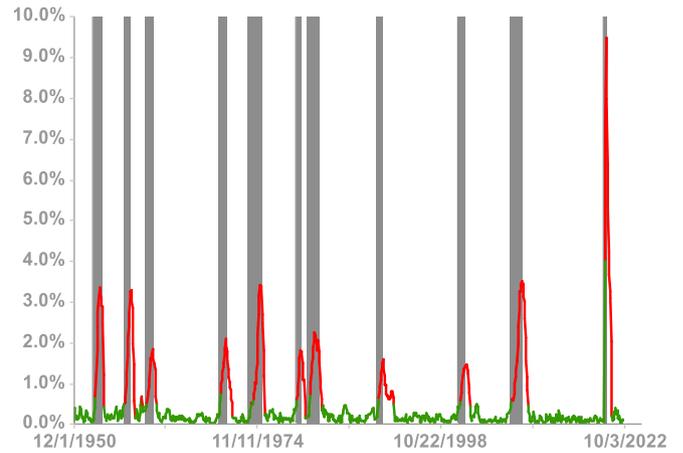
Real-time Recession Risk Indicators

Figure 24: Treasury Spread Recession Predictor



Source: FactSet, FRED Database

Figure 25: Sahm Real-time Recession Predictor



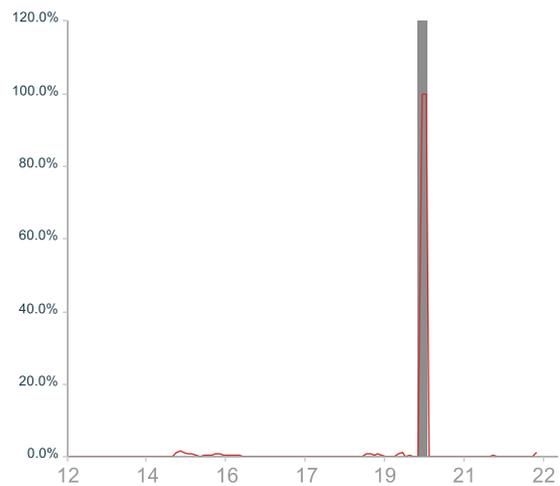
Source: St. Louis Federal Reserve, FRED Database

Figure 26: GDP Now (Atlanta Fed)



Source: FactSet, FRED Database

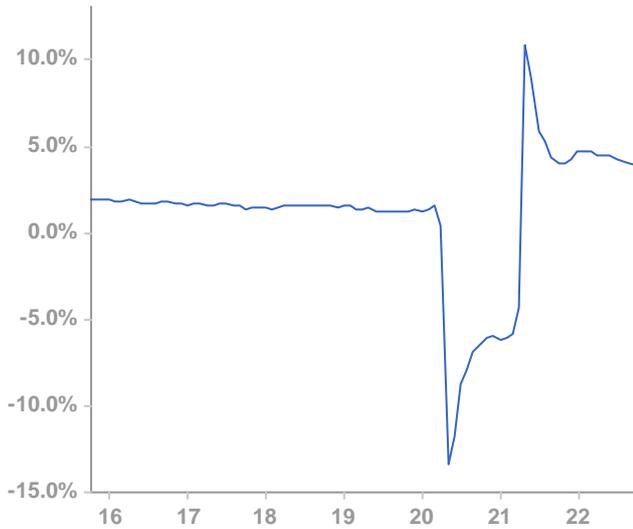
Figure 27: Smoothed US Recession Probabilities



Source: FactSet, FRED Database

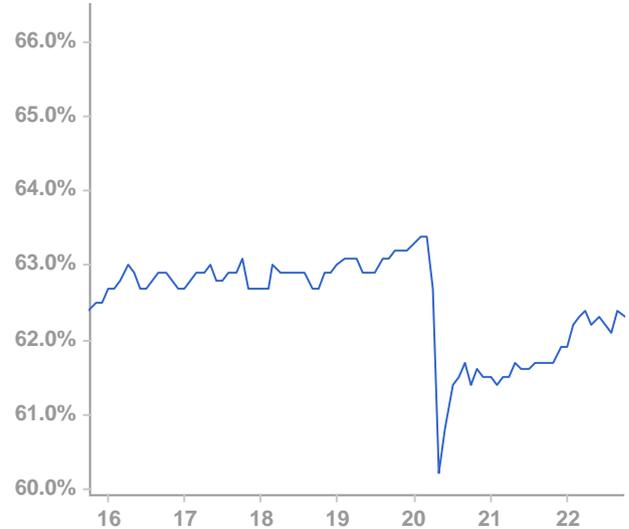
Labor Market Indicators

Figure 28: Payroll Growth (Establishment Survey, % Chg YoY)



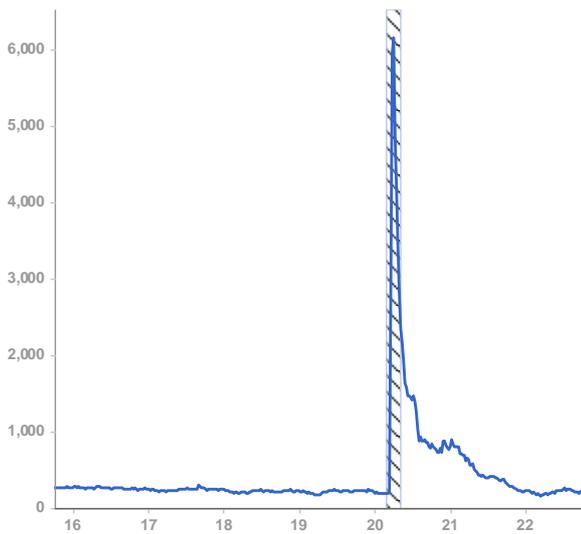
Source: FactSet

Figure 29: Labor Participation Rate (% of Workforce)



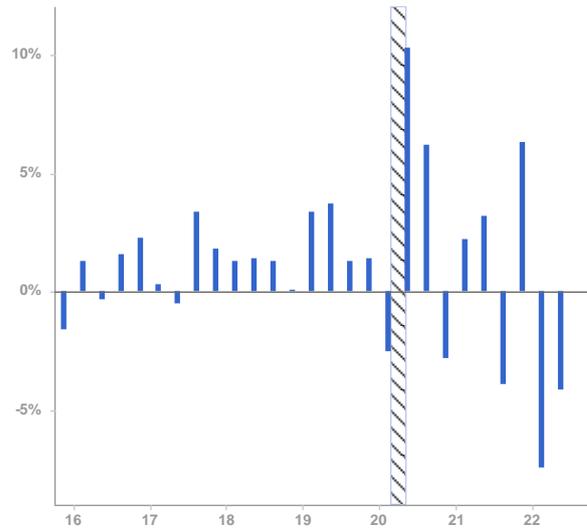
Source: FactSet

Figure 30: Initial Unemployment Claims



Source: FactSet

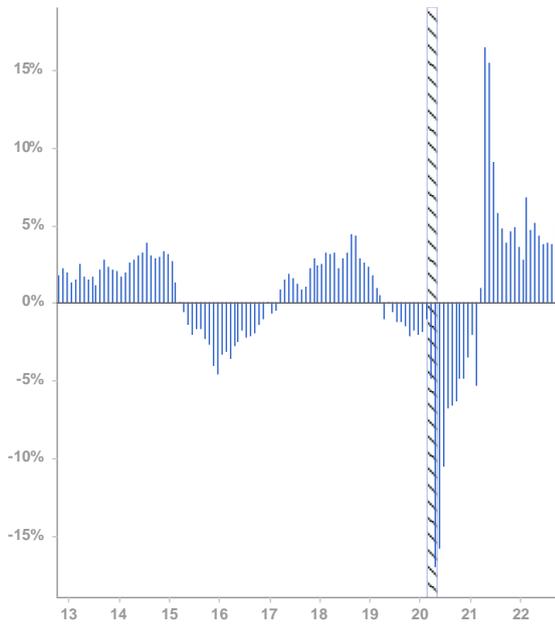
Figure 31: Non-Farm Productivity (% Chg YoY)



Source: FactSet

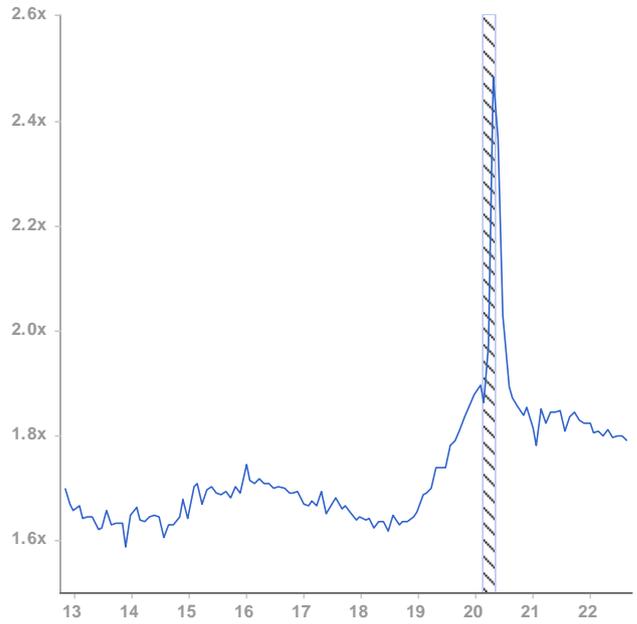
Production and Business Activity Indicators

Figure 32: Industrial Production (% Chg YoY)



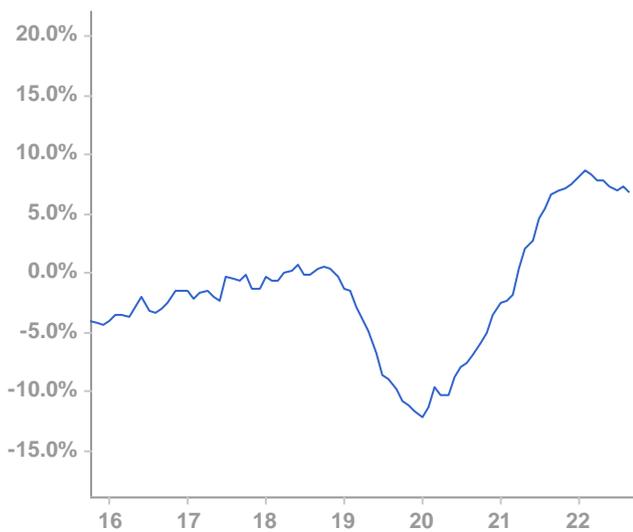
Source: FactSet

Figure 33: US Inventory to Shipment Ratio



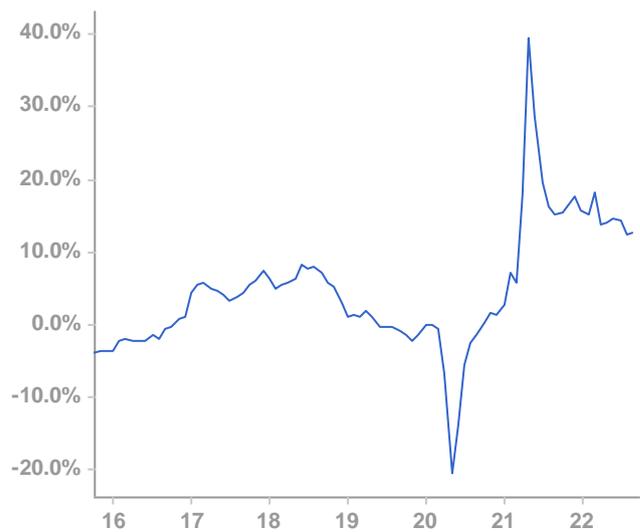
Source: FactSet

Figure 34: Unfilled Orders (% Chg. YoY)



Source: FactSet

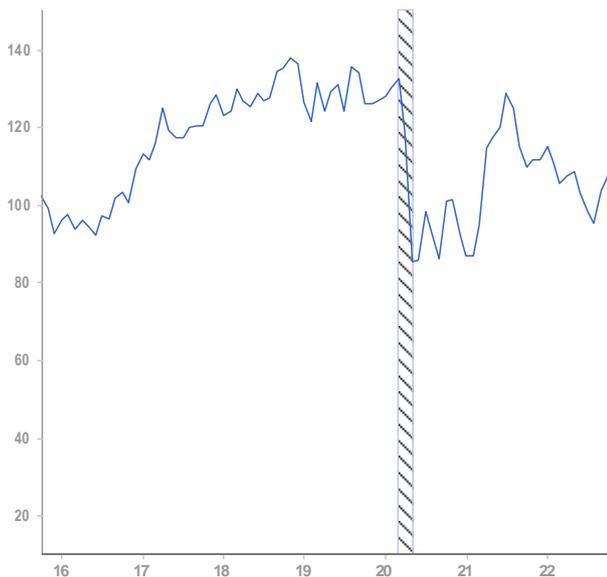
Figure 35: Business Sales (% Chg. YoY)



Source: FactSet

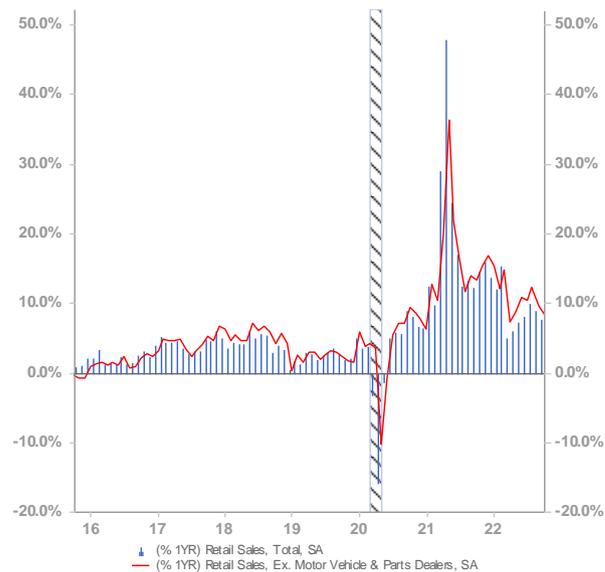
Consumer and Household Activity Indicators

Figure 36: University of Michigan Consumer Sentiment



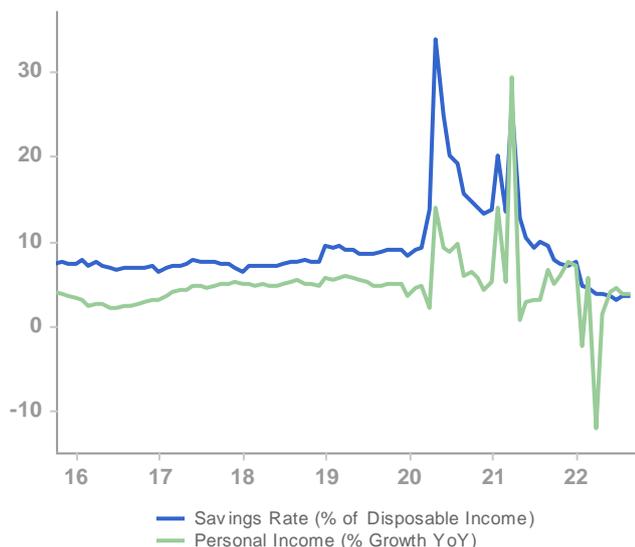
Source: FactSet

Figure 37: Retail Sales



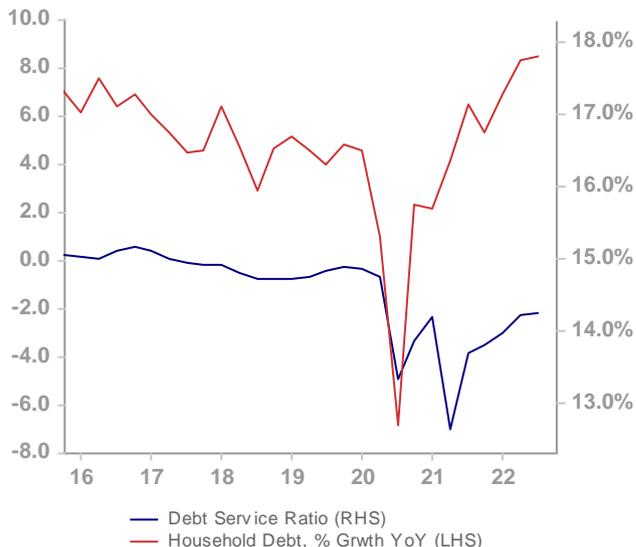
Source: FactSet

Figure 38: Personal Income and Savings Rate



Source: FactSet

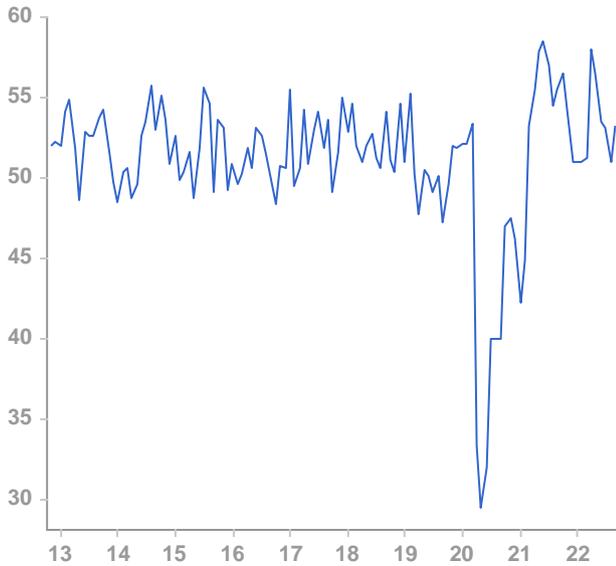
Figure 39: Household Debt



Source: FactSet

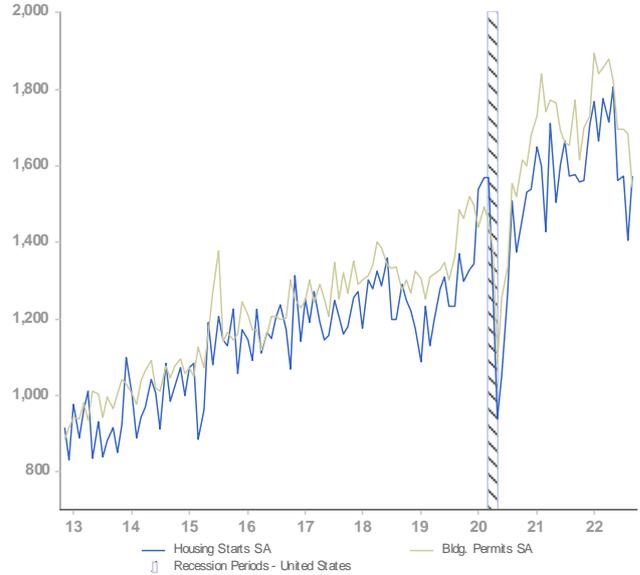
Housing and Construction Indicators

Figure 40: Architecture Billings Index



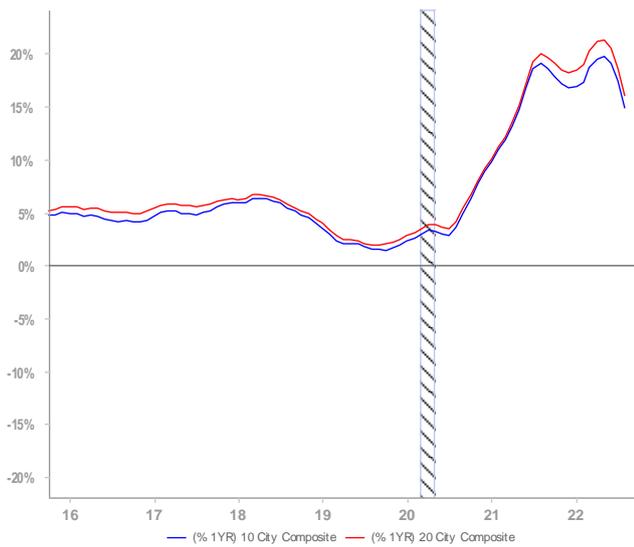
Source: FactSet

Figure 41: Housing Starts and Building Permits



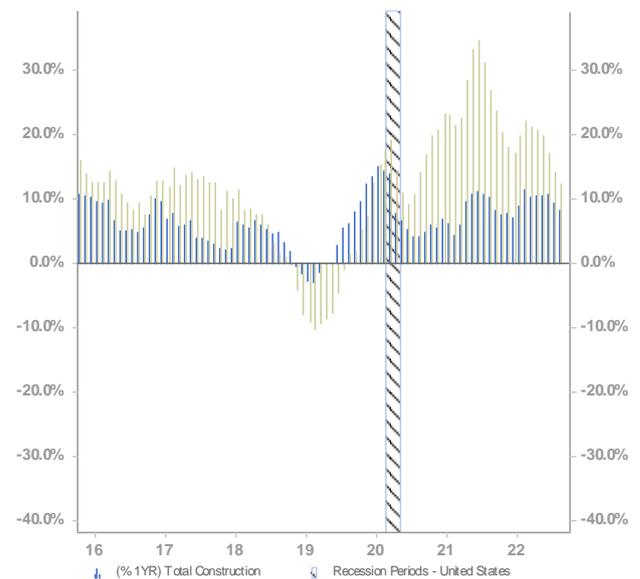
Source: FactSet

Figure 42: Case-Shiller 20-City & 10-City Index, % Chg YoY



Source: FactSet

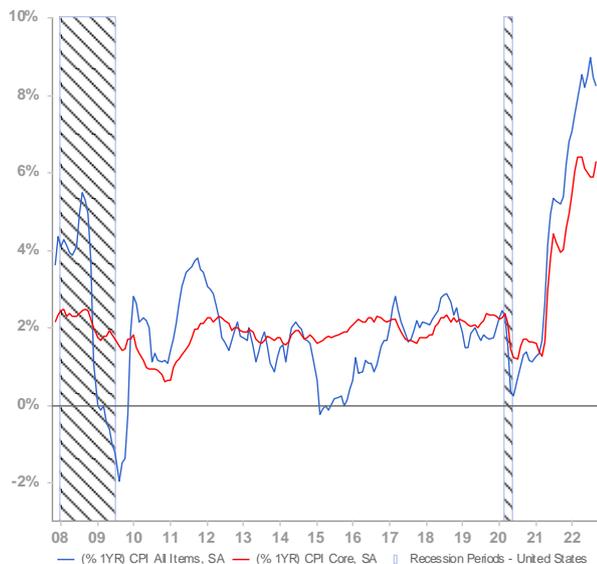
Figure 43: Private and Total Construction (% Chg YoY)



Source: FactSet

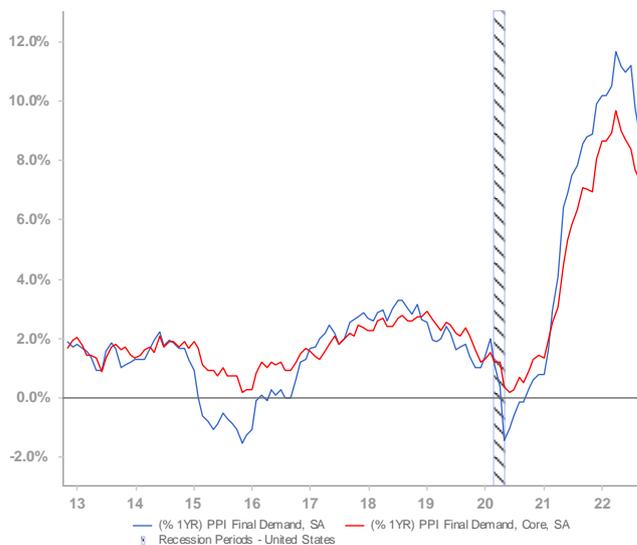
Price Indicators

Figure 44: Consumer Price Index



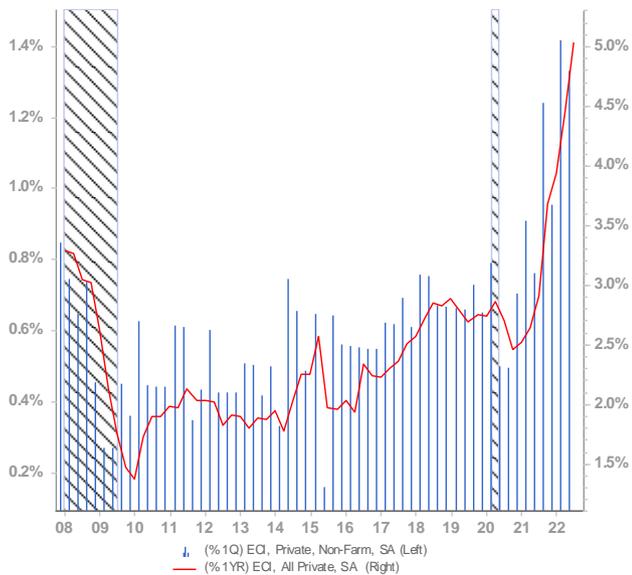
Source: FactSet

Figure 45: Producer Price Index



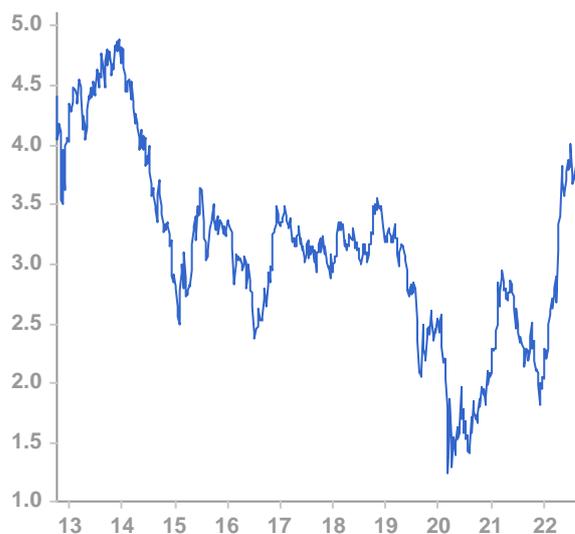
Source: FactSet

Figure 46: Employment Cost Index



Source: FactSet

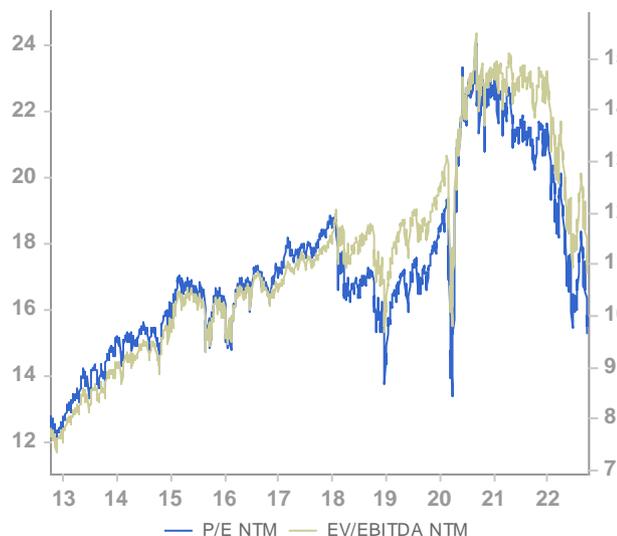
Figure 47: 10-Year, 5-Year Forward Inflation Expectations



Source: FactSet

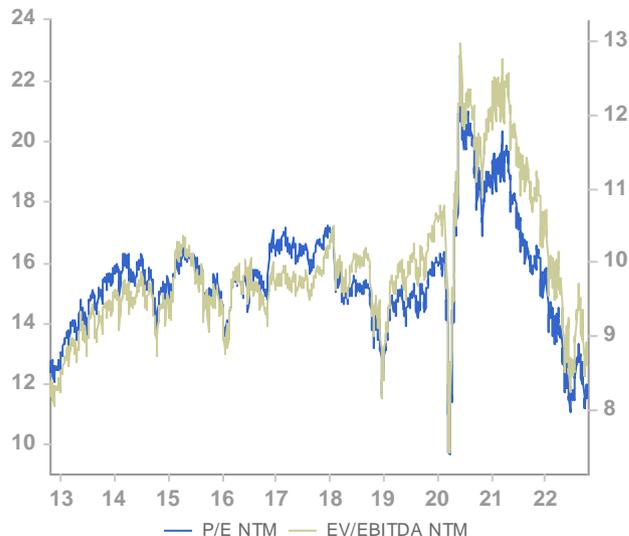
Valuation Indicators

Figure 48: S&P 500 P/E (LHS) & EV/EBITDA (RHS)



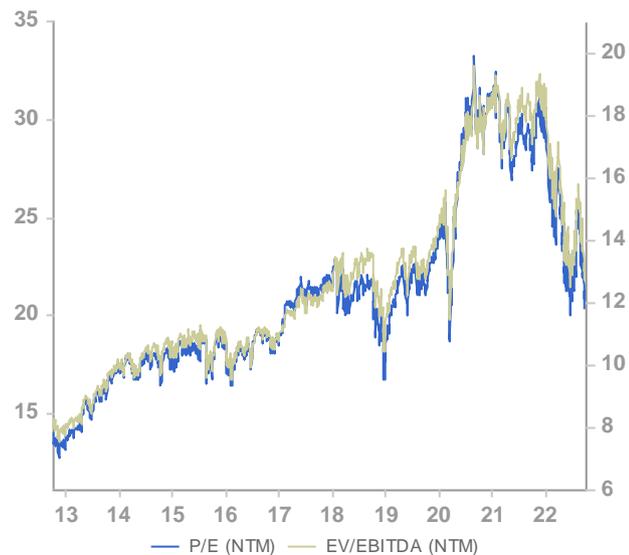
Source: FactSet

Figure 49: S&P Midcap 400 P/E (LHS) & EV/EBITDA (RHS)



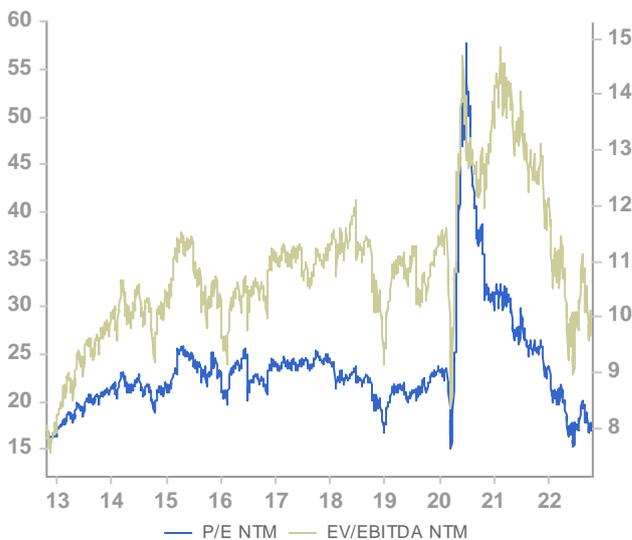
Source: FactSet

Figure 50: Nasdaq 100 P/E (LHS) & EV/EBITDA (RHS)



Source: St. Louis Federal Reserve, FRED Database

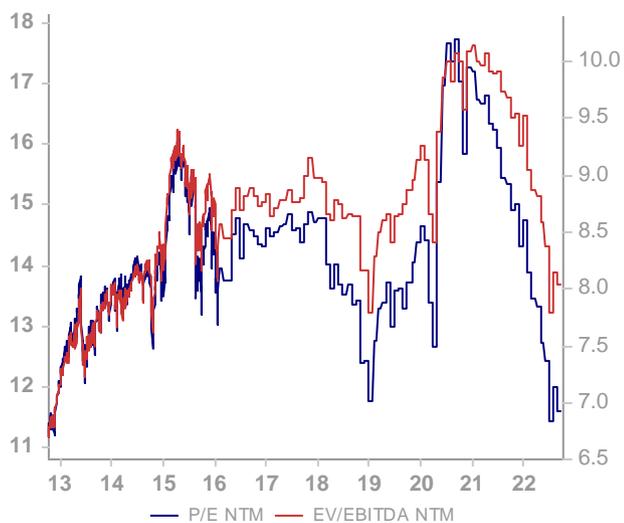
Figure 51: Russell 2000 P/E (LHS) & EV/EBITDA (RHS)



Source: St. Louis Federal Reserve, FRED Database

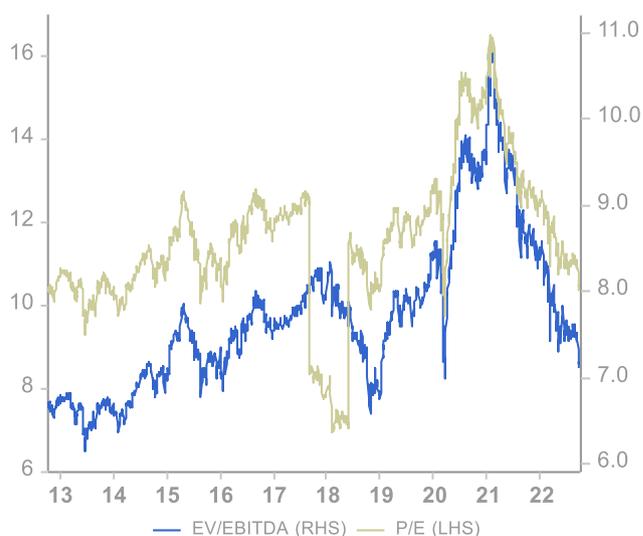
Valuation and Volatility Indicators

Figure 52: Intl Developed P/E (LHS) & EV/EBITDA (RHS)



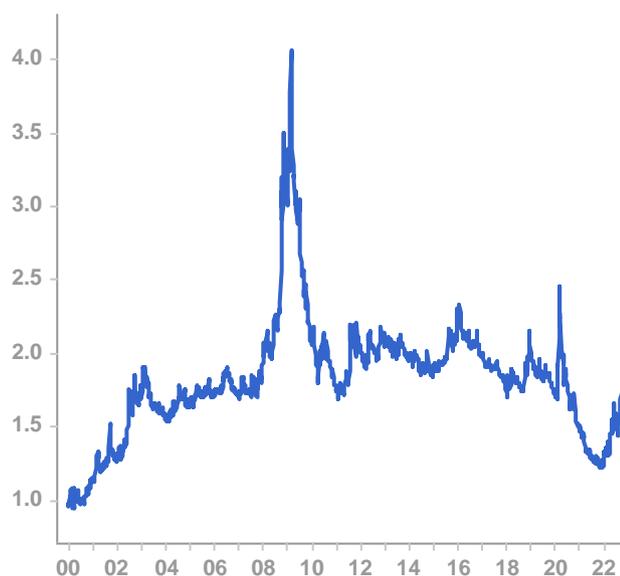
Source: Robert Shiller, Yale University, Rockingstone Advisors, Standard & Poor's

Figure 53: Emerging Markets P/E (LHS) & EV/EBITDA (RHS)



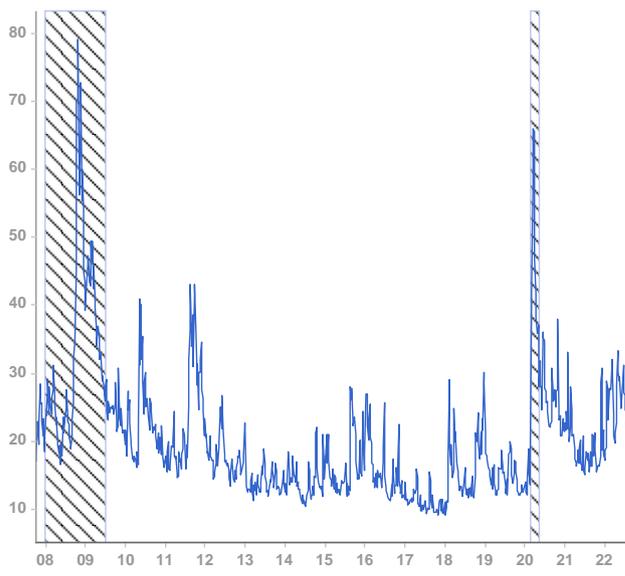
Source: Robert Shiller, Yale University, Rockingstone Advisors, Standard & Poor's

Figure 54: S&P 500 Dividend Yield



Source: FactSet

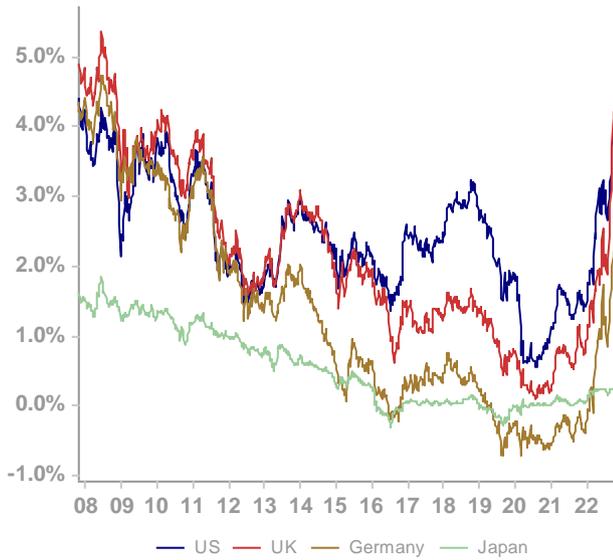
Figure 55: CBOE Volatility Index



Source: FactSet

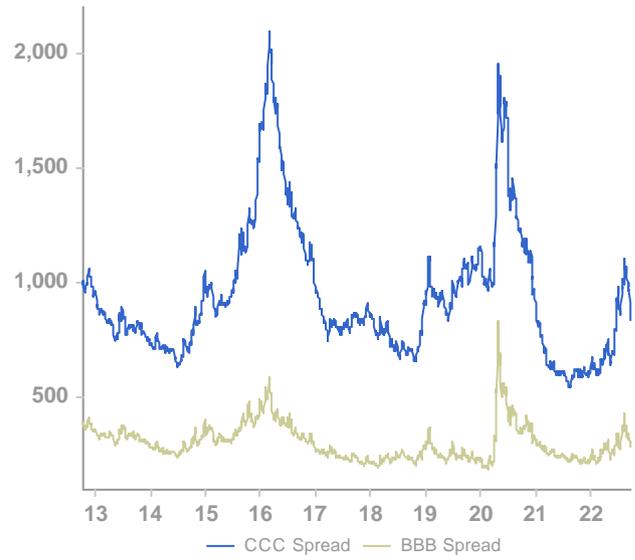
Bond Market Indicators

Figure 56: 10-Year Global Bond Yields



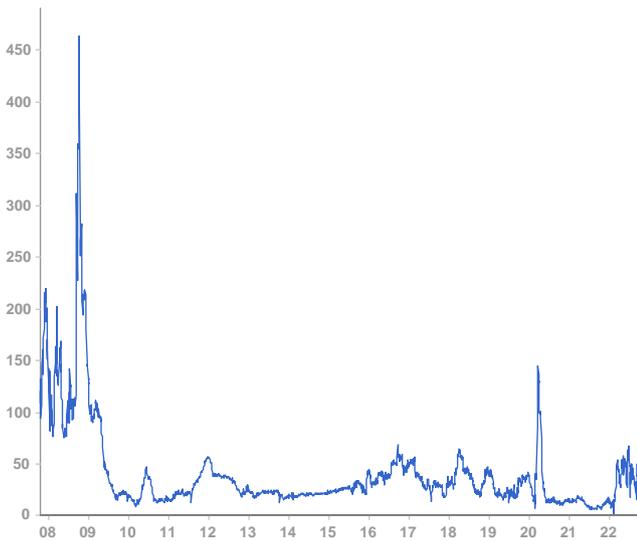
Source: FactSet

Figure 57: CCC and BBB Spreads (Option Adjusted)



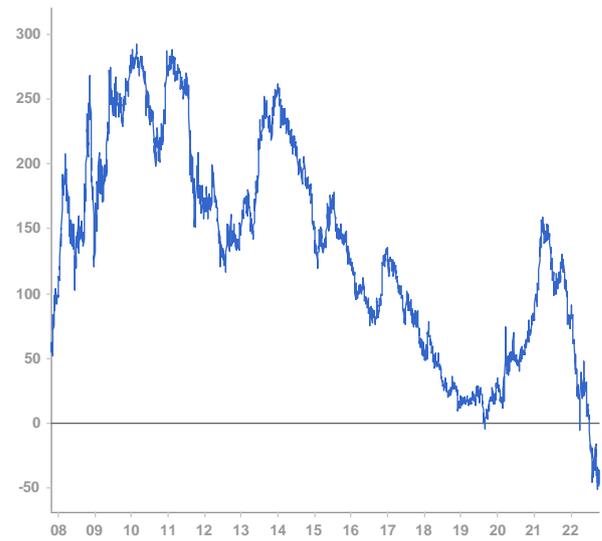
Source: FactSet

Figure 58: TED Spread (bps)



Source: FactSet

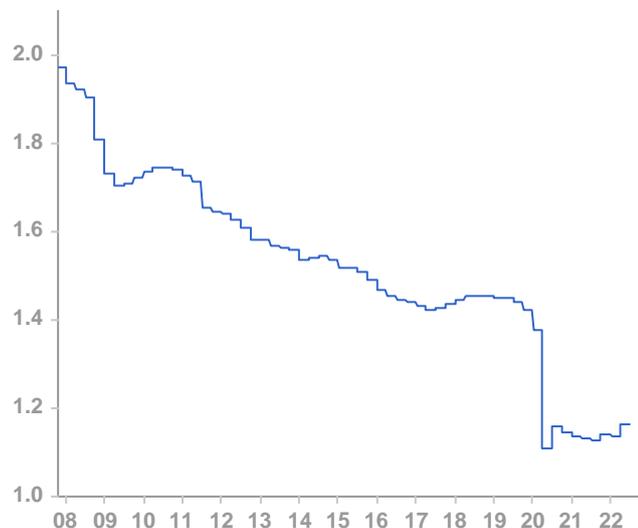
Figure 59: 10-Year Minus 2-Year Treasury



Source: FactSet

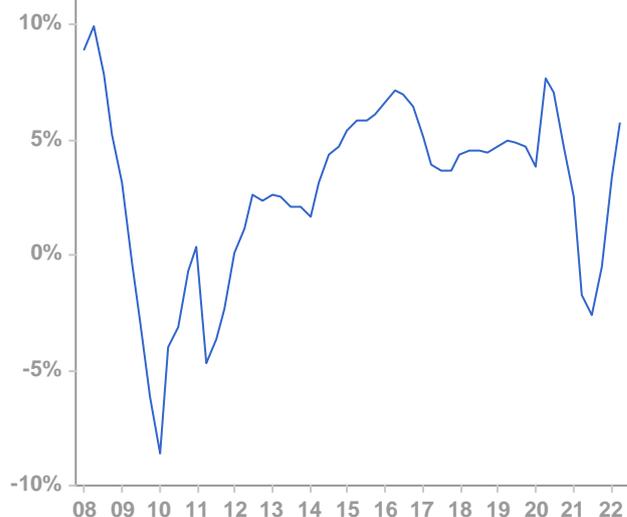
Liquidity and Other Indicators

Figure 60: Velocity of M2 Money Stock



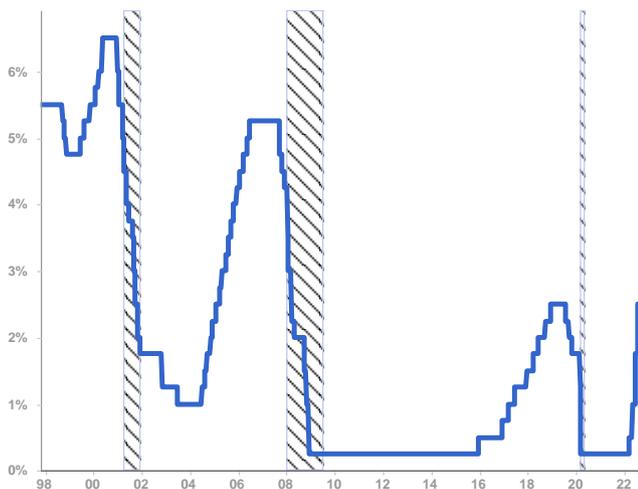
Source: FactSet

Figure 61: Loan Growth (Non-Financial, Private Sector)



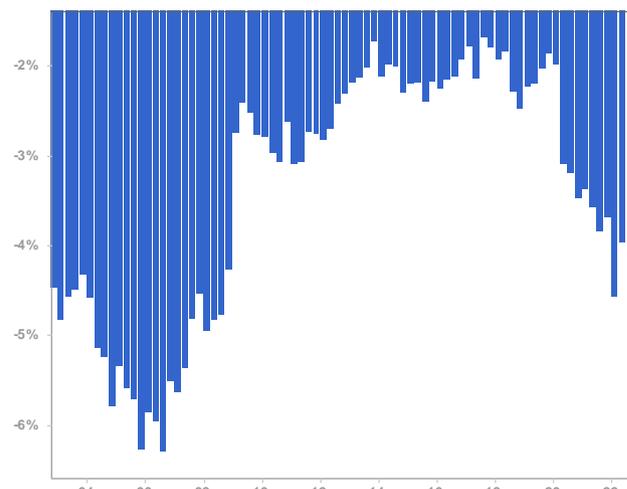
Source: FactSet

Figure 62: Fed Funds Target Rate



Source: St. Louis Federal Reserve, FRED Database

Figure 63: Current Account Deficit (as % of GDP)



Source: St. Louis Federal Reserve, FRED Database

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, 2022; most other prices and yields are as of October 20, 2022.

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. 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.