

Accelerating Inflation Fuels Asset Price Declines

Stocks and Bonds Record Rare 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. This left investors with few places to hide in an increasingly volatile market.

Rockingstone Performance

We had prepared for higher rates and reduced equity exposure through shorts on the S&P, but single stock volatility and rising correlations more than overwhelmed those moves, as did the sharp reversal in value stocks the final two weeks of the quarter. Our historical annualized returns incl: 1-yr -12.7%; 3-yr +9.6%; 5-yr +8.6%; Inception (7/1/2008) +10.0%.

Monetary Policy Operates with a Substantial Lag of 1 - 2 years

Although we were short equities and international bonds in 2Q22, our regret is not being more aggressive. But with asset classes down significantly and our return work suggesting some upside, at least for the near term, we are cautiously optimistic. Yet we are cognizant of how monetary policy operates with a lag and thus wary of what 2023-2024 portends.

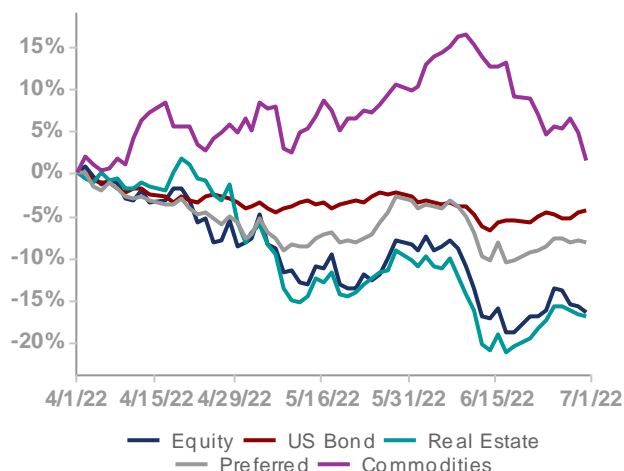
Implications for Portfolios

We are now modestly constructive on equity returns given overwhelmingly bearish sentiment and the potential for peak inflation. Our valuation work shows anticipated positive returns for the S&P 500 for the first time in several years. We recently reduced our underweight in technology and re-visited several stocks we had exited in 2021.

S&P500 Forecast & Other Key Indicators

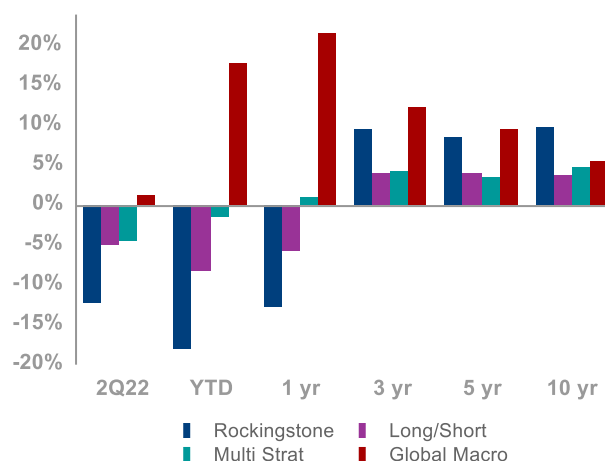
Our forecast includes: EPS (2022/2023: \$217/\$230), S&P500 (2022 year end = 4250), GDP (2022: +1%), Gold (\$1700), Oil (\$120), 10-yr US Bond Yield (3%), Inflation (6%), 5-yr expected CAGR (US Large Cap +2%, US Mid Cap +7%, US Small Cap +9%, Developed +5%, Emerging +8%).

Figure 1: 2Q22 Asset Class Performanceⁱ



Source: FactSet

Figure 2: Rockingstone: 2Q22 & 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

Table of Contents

Update on Inflationary Trends.....	3
Ongoing Inflationary Pressures Driving Aggressive Fed Rate Hiking Cycle	3
Why Equal-Weighted Portfolios?	6
The implications of equal-weight vs. market-cap weight portfolios	6
Forecast: 2022	11
Rockingstone Advisors: Our Latest Forecasts	11
Five Year Asset Value Forecast.....	13
For large caps, our analysis points to muted long-term equity returns	13
Equity Performance Review	15
Widespread Equity Declines, with Growth Underperforming Value	15
Fixed Income Performance Review	16
Bonds Experience Very Poor Performance	16
Commodity Performance Review.....	17
Commodity Reversal	17
Chart Book	18
Leading Indicators	18
Real-time Recession Risk Indicators	19
Labor Market Indicators.....	20
Production and Business Activity Indicators	21
Consumer and Household Activity Indicators	22
Housing and Construction Indicators.....	23
Price Indicators	24
Valuation Indicators.....	25
Valuation and Volatility Indicators	26
Bond Market Indicators.....	27
Liquidity and Other Indicators.....	28
Appendix.....	29
Important Regulatory Disclosures and End Notes.....	29

Update on Inflationary Trends

Ongoing Inflationary Pressures Driving Aggressive Fed Rate Hiking Cycle

Last quarter we noted the outsized role inflationary pressures were having 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. We noted last quarter how inflation is measured, the factors behind its rise, the Fed's determination to raise rates to lower inflationary forces and the implications for financial markets and assets.

We wrote then— and continue to believe now— that the path of inflation is currently the single most important driver of equity, bond and commodity returns in 2022 and 2023. If inflationary pressures continue to persist, the Fed will frankly, in our view, have no option but to push the US economy into recession. Alternatively, if at least some of the drivers of inflation do turn out to be transitory— or at least respond to market signals, then the Fed essentially buys critical time to raise rates in a much more measured cadence. The former will likely prove highly challenging for most financial asset returns while the latter would be a better outcome for most markets, particularly given the steep declines in both fixed income and equities year to date.

Figure 3: YoY Percentage Change, Monthly, for the CPI-U and PCE Indices

Index	11/21	12/21	01/22	02/22	03/22	04/22	05/22	06/22
CPI	+6.8%	+7.1%	+7.5%	+7.9%	+8.6%	+8.3%	+8.6%	+9.1%
PCE	+5.6%	+5.8%	+6.0%	+6.3%	+6.6%	+6.3%	+6.3%	-

Source: Bureau of Labor Statistics; Bureau of Economic Analysis

We continue to believe that price pressure may remain higher for longer given de-globalization, geopolitical tensions (including the potentially long conflict in the Ukraine), labor shortages as large numbers of workers exit the labor force, a shortage of housing stock as the children of the baby boom echo turn 30, and cyclical challenges associated with under-investment in energy.

Offsetting these secular forces, notably, are some important cyclical indications of tempering price levels, although it is still too premature to show up in the monthly inflation data. We believe that the combination of (i) tightening financial conditions, (ii) consumers deferring large purchase decisions (housing, discretionary goods) amid increased "recession" coverage in the media, and (iii) the substantial decline in asset prices over the last six months (thereby creating a negative wealth effect) have begun to have an impact on economic activity.

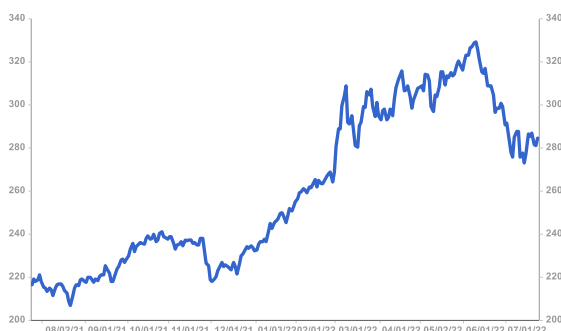
Whether slowing economic activity is an indication of a potential "soft-landing" (taking the speculative froth out of the economy without putting into a recession) or the early stages of "hard-landing" (taking the froth out of the economy by putting the economy into a recession), will take some time to play out.

Are Inflationary Pressures Peaking?

Revisiting several of the macroeconomic inputs that are fueling higher prices, specifically energy, food, freight, housing and labor rates, we note there are some positive trends in the data, although we highlight that it is still very early, and some of the moves could be reversed quickly.

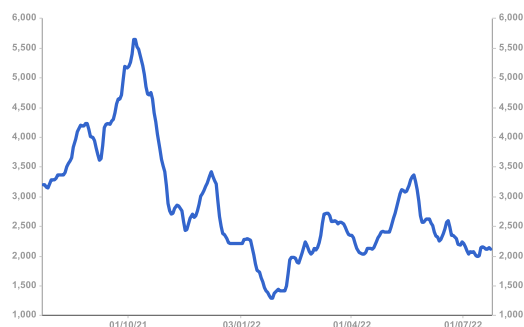
The CRB Index tracks a basket of commodities, made up of about 41% agriculture, 39% energy, 13% base metals and 7% precious metals. As is clear from the figure below, the index peaked in early June of 2022, and has declined almost 20% over the last six weeks. Meanwhile, the Baltic Freight Index is a shipping and trade index created by the Baltic Exchange and tracks the cost of transporting various raw materials, including coal and steel. It too has declined noticeably in 2022.

Figure 4: CRB index



Source: FactSet

Figure 5: Baltic Freight Index



Source: FactSet

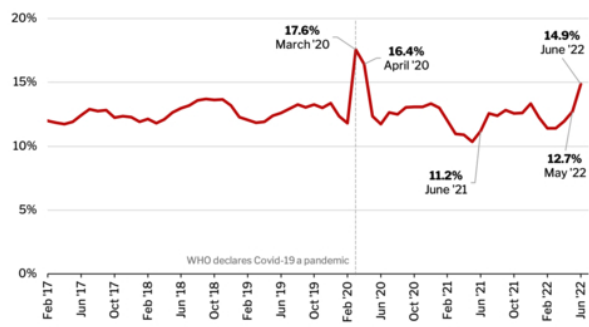
Higher interest rates have pushed mortgage rates higher, which has slowed home sales and increased housing inventory. Home inventories bottomed in February 2022 and have been rising ever since. Meanwhile, the number of monthly pending home sales that have fallen out of contract (effectively cancelled) has risen to nearly 15% of all home sales. DR Horton (DHI) recently announced its cancellation rate in the most recent quarter was 24%, up from 17% in the year-ago period. Other home builders have announced rising cancellation rates.

Figure 6: Housing Inventory (thousands of units)



Source: FactSet

Figure 7: Monthly Pending Home Sales Cancelled (% of total)



Source: RedFin, based on MLS Data

The labor market continues to remain exceptionally tight as employers struggle to fill open positions. However, there are some early signs that at least the pace of hiring is beginning

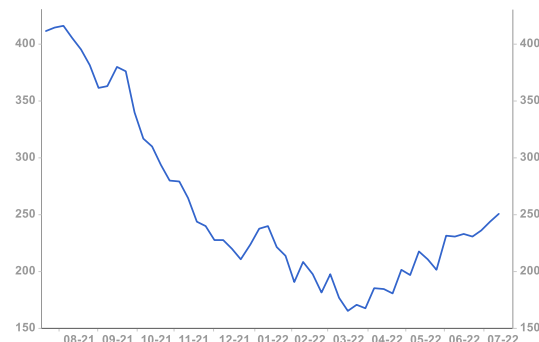
to slow. The year-over-year rate of growth of non-farm payrolls peaked in April 2021 and has been declining steadily over the last several months. Meanwhile, initial unemployment claims bottomed in April 2022, and have been rising steadily over the last 10 weeks, as indicated in the figures below.

Figure 8: Payrolls (% chg., YoY)



Source: FactSet

Figure 9: Initial Unemployment Claims (in thousands)



Source: FactSet

Taking stock of the secular inflationary pressures discussed previously, offset somewhat by near-term cyclical drivers, as well as lapping some of the year-over-year high inflation figures, lead us to believe that current CPI and PCE rates are unsustainably high and while remaining elevated, should begin to trend down in 2H22. Our best current estimate is that inflation stabilizes perhaps in the 4-6% range for CPI and 3-5% range for PCE.

Investment Conclusions

Based on the above analysis, we continue to maintain a “balanced” approach across portfolios. As indicated in our emails to clients in 2022 and our last quarterly newsletter, we believe such an approach (i.e. the relative weighting of value vs. growth stocks) is appropriate at this time, particularly given how difficult it is to predict the market’s reaction should inflation remain high or decelerate.

From a sector standpoint, we remain overweight energy, industrials and consumer defensives while underweight technology, communications and consumer discretionary. However, we recently increased our technology investments modestly as we concluded our accounts had become too under-exposed to the largest sector in the market.

Our philosophy at Rockingstone is to invest using a more equal-weight approach to positioning vs. the typical market-cap weighted index or portfolio. In the next section we detail the reasoning behind our approach. Our analysis, also highlighted later in this report, indicates that small- and mid-cap equities are particularly attractive at this time and offer the best risk-adjusted returns. As a result, client portfolios are a bit more skewed to such market cap weightings.

Why Equal-Weighted Portfolios?

The implications of equal-weight vs. market-cap weight portfolios

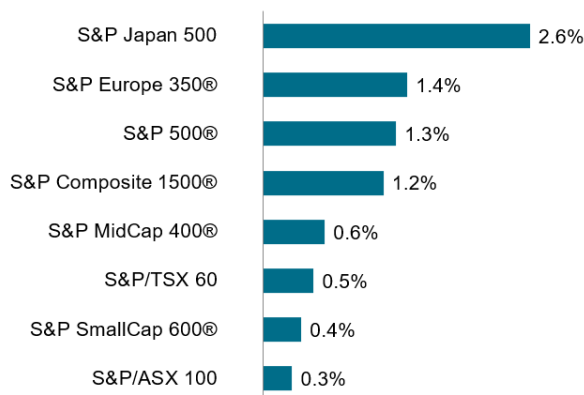
Rockingstone has traditionally equal-weighted its equity investment portfolios, which generally hold approximately 50 individual securities, made up of a combination of single stock ideas and exchange-traded funds (ETFs). The thesis behind such an approach includes: (i) the market is fairly efficient and thus using diversified ETFs allows Rockingstone to capture such efficiency at a low cost, (ii) well researched individual stocks can help add “alpha” to a portfolio, particularly as Wall Street research departments lose funding and experienced analysts, (iii) a diversified portfolio that limits the weighting of any single investment is prudent when managing individual accounts.

A Recent S&P Global Analysis Supports Our Approach

In a recent study by S&P Global, the firm examined equal-weight performance vs. market-cap weighted performance. In light of our strategy, we thought it made sense to do a deeper dive on the distinctions between the two investment approaches and the long-term portfolio implications for our clients.

As is clear from the figure below, over the past 20 years, S&P Global demonstrates that an equal-weight approach yields an excess return vs. its market-cap weighted brethren—and not just in US large-capitalization stocks, but across capitalization levels and multiple geographies. Of course, this is not true over shorter periods of time and specific market cycles, but over the long-term, and even in a market environment that has favored “mega-cap” US companies, the evidence is clear.

Figure 10: Equal-Weight Annualized Excess Total Return (20yr)



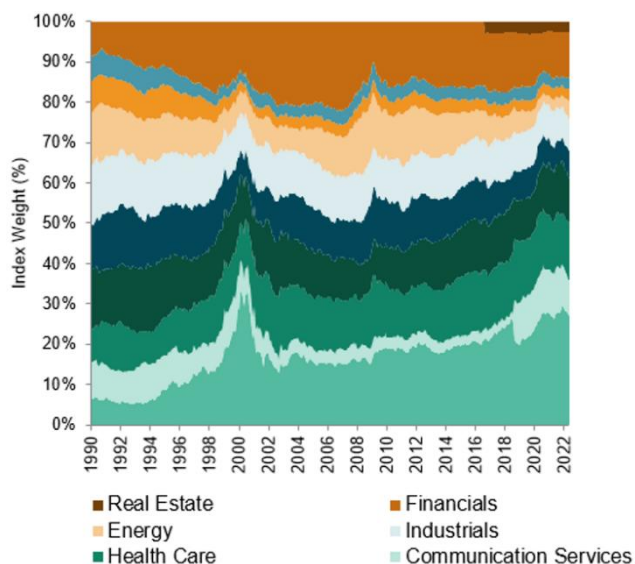
Source: S&P Global

We believe there are three primary drivers behind the outperformance of equal-weight vs. market-cap weight: (i) the momentum factor; (ii) the value factor and (iii) the small company factor. We evaluate each of these factors in more detail.

Avoiding the Momentum Factor

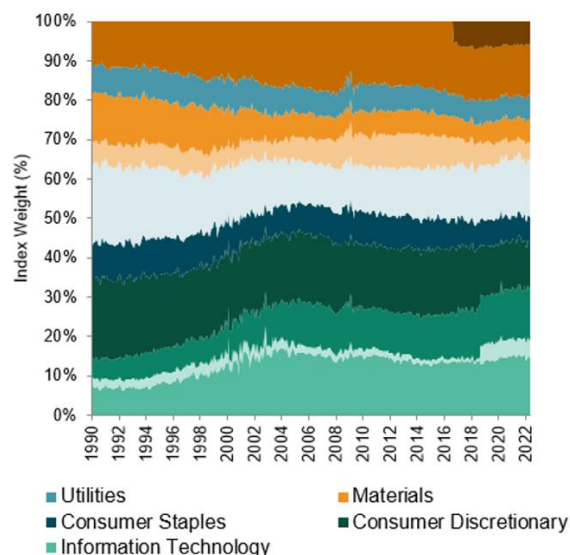
The primary reason that an equal-weight strategy is superior during a period of sector-specific investment bubbles is that the strategy does not rely so heavily on a few large company constituents, essentially avoiding “momentum.”

Figure 11: Market-cap Weighted S&P 500



Source: S&P Global

Figure 12: Equal-Weight S&P500



Source: S&P Global

During periods of significant inflows into passive strategies, an equal weight approach may underperform its market-cap weighted benchmark, as dollars flowing into the market get allocated on a market-cap basis. The flip side, however, is that an equal weight approach also avoids “performance chasing” – effectively dollars chasing momentum stocks and their industries as they grow larger and larger from increasing fund flows, until the sectors collapse under their own weight.

As the two figures above indicate, an equal-weight approach will avoid the large peaks and subsequent valleys of sectors or industries that become investment darlings—whether dot.com stocks in 2000, financial services in 2007 or tech stocks in 2022.

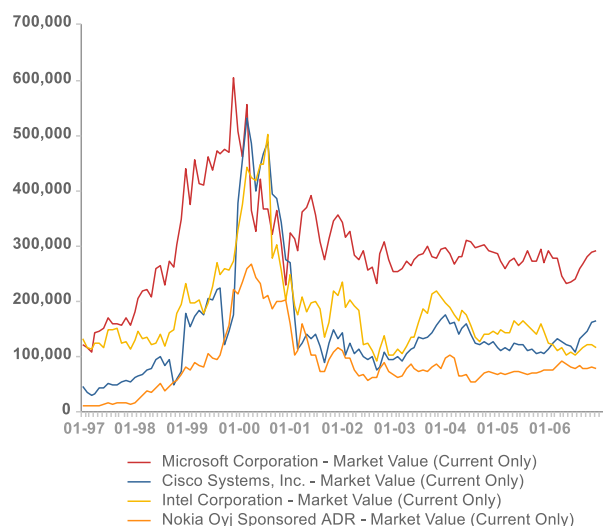
A good example of this dynamic is the investment period that occurred during the “dot.com” bubble of 1997-2001 (see figures below). The market-cap weighted S&P 500 outperformed the equal-weight index as the bubble inflated. But because of the nature of the equal-weight index, it was not as affected by the large weighting for companies such as Microsoft, Cisco, Intel, Nokia and Lucent Technologies. As those large index components saw their equity value deflate, the market-cap weighted index declined disproportionately compared to the equal-weight index, which ending up being the performance winner over the entire cycle.

Applying this concept to Rockingstone’s portfolios, generally each security in our portfolio is weighted between 1-3%, with an average of 2%. Hence, we are, by definition, under-weight the largest components of the index and over-weight the smallest. There are about half a dozen stocks within the S&P 500, for instance, whose weighting in the index currently is 2% or more: Apple (7%), Microsoft (6%), Amazon (4%), Google A&B (4%), Tesla (2%) and Nvidia (2%). This implies we are underweight Apple 3 to 5 percentage points vs. the index (for our S&P benchmarked portfolios).

Figure 13: Market Cap vs. Equal Weight (dot.com Bubble)



Figure 14: Market Cap Tech Leaders (dot.com Bubble)



Benefiting from the Value Factor

By underweighting the top performing companies and over-weighting the poorer performing companies within any given index, an equal-weight approach effectively has an embedded “value” tilt. Rather than continually having to buy more shares of companies that are increasing their market cap, the equal weight approach does the opposite. It sells shares of growing companies in favor of underperforming businesses and sectors. An example would include the selling of large cap technology equities in 2021 in favor of underperforming energy stocks.

Figure 15: Price-Earnings Ratio (P/E)

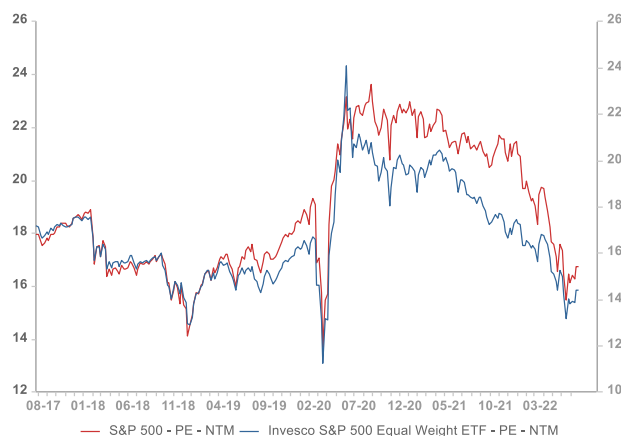
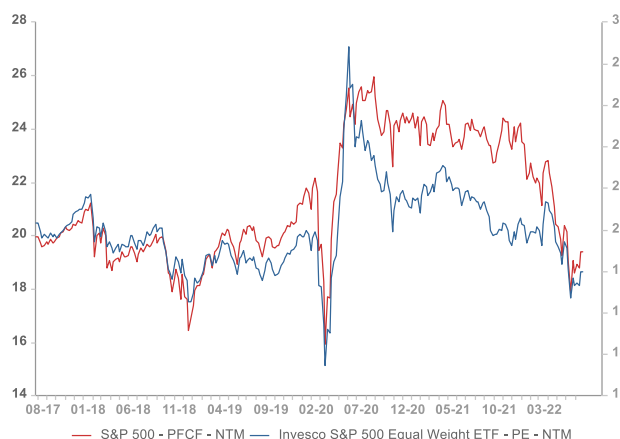


Figure 16: Price-to-Free Cash Flow (P/FCF)



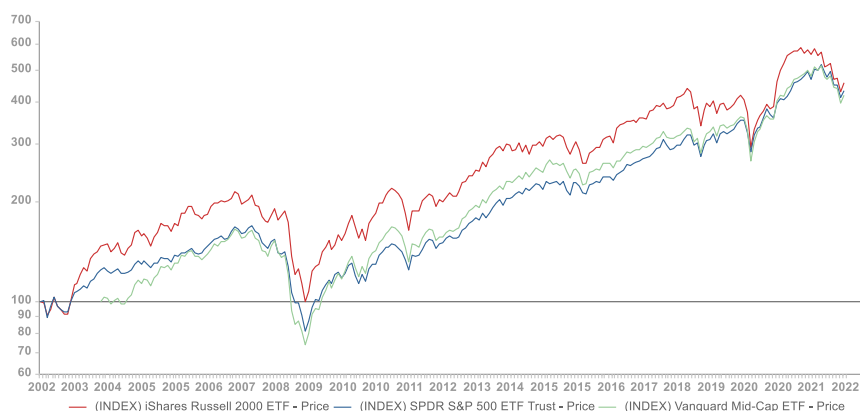
As the two figures above demonstrate, during the summer of 2019, the market-cap weighted S&P 500's Price/Earnings (P/E) and Price to Free Cash Flow (P/FCF) witnessed a material re-rating higher than the equal-weight S&P 500. That premium peaked in January

of 2022 and has subsequently been narrowing, bringing the two indices close to parity on these metrics.

The Small Company Factor

The third potential factor that explains the out-performance of an equal-weighted index is that in general, over time, smaller companies outperform larger ones due primarily to their more favorable growth characteristics. By equal-weighting the S&P 500, a portfolio naturally skews to the smallest names of the S&P 500, in effect mimicking aspects of a market-cap weighted mid-cap index.

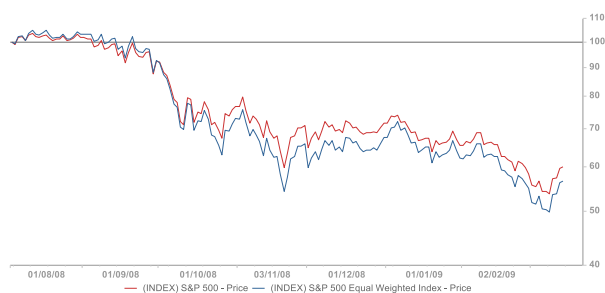
Figure 17: Small-Cap vs. Mid-Cap vs. Large-Cap Performance (20 years)



Source: FactSet

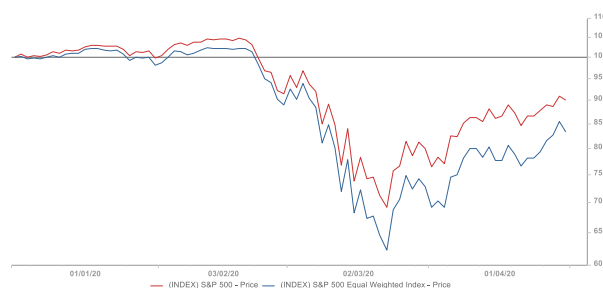
The above graph indicates a sustained period of small cap outperformance vs. large cap (the gap between the red and blue lines). Admittedly the gap has narrowed dramatically over the last few years, but for the bulk of the 20-year analysis, small caps have materially outperformed larger cap indices.

Figure 18: Equal-weight vs. Market-Cap Weight (2008-09)



Source: FactSet

Figure 19: Equal-weight vs. Market-Cap Weight (2020)



Source: FactSet

Conditions for Outperformance Versus Underperformance

While there is clear evidence that over a 20-year period an equal-weight index outperforms a market-cap index, this is not necessarily true all the time. We note that during periods of heightened market volatility, investors generally seek the largest, most liquid stocks and sectors in which to hide or weather the storm. It may also be the case that during periods

of higher volatility that large cap companies have a better capacity to repurchase shares and/or increase dividends, thus leading investors away from small to mid-cap investments.

Summary

As S&P Group demonstrates, an equal-weight approach should lead to long-term outperformance vs. a market-cap approach, though certainly during periods of market stress, this is unlikely to be the case. In general, though, investors should benefit from an equal-weight approach due to its avoidance of momentum (i.e. inflated market cap sectors or securities), its value bias and exposure to faster growing smaller companies.

** Rockingstone Advisors would like to thank our Summer Interns, Cole Lovejoy and Tom Conley, for their help in researching and writing the previous section and for their work on this 2Q22 Quarterly Newsletter.*

Forecast: 2022-23

Rockingstone Advisors: Our Latest Forecasts

We have updated our forecasts to reflect Rockingstone's outlook for 2022 and next year. Over the last several years as inflation remained muted, there was not necessarily a material difference between nominal and real (i.e. adjusted for inflation) figures. However, with PCE running around 6%, the delta between real and nominal has become stark. Our forecasts below represent nominal figures. Upward revisions to these figures have historically been bullish; today, the bulk of upward revisions could in fact be due to higher inflation, rather than higher real growth rates.

Figure 20: 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	\$217 / \$221
S&P 500 2023 EPS (RSA/Street)	NA	\$230 / \$246
S&P 500 2022 Index	4150-4350	4250
10-Yr US Treasury Yield	2.75% - 3.25%	3.0%
Oil (WTI-2022 End)	\$90 - \$120	\$120
Gold (2022 End)	\$1,650 - \$1,950	\$1,700
Inflation (NTM)	+5.5% to +6.5%	6.0%

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

A few observations and comments:

- S&P 500 EPS.** Final 2021 S&P 500 EPS were \$198 (as reported; operating earnings were \$208). The current EPS consensus for 2022 of \$221 implies just shy of 12% growth (or about 6% real) in S&P 500 earnings vs. last year. Our earnings forecast is \$217 for 2022, down from \$220. We lower our 2023 S&P 500 earnings estimate to \$230 from \$235, which implies flat real growth. We emphasize our 2022 forecast is about \$4 below the Street's 2022 estimate and \$5 below the Street's 2023 estimate. Our expectations are for about 8% growth in EPS (or about 2% real), which is more in line with history and reflects our caution around the risk of operating margin compression associated with higher wage rates and residual supply chain issues.
- S&P 500 2022 Index.** The Index is currently trading 10% below our previous year-end price target of 4400. Slowing economic growth, rising costs and fears of a looming recession have caused the stock market to fall nearly 20% from its January high. As inflation continues to rise alarmingly fast—CPI increasing 9.1% in June, the fastest pace of inflation in 41 years—we have cut our forecast for the year-end price target to 4250, which reflects a P/E multiple assumption of 18.5x our 2023 S&P 500 forecast of \$230.
- 10-Yr US Treasury Yield.** While yields have fallen over the past month from 3.13% to 2.75% currently, given our view of higher inflation for longer (albeit at inflation rates lower than today), we continue to expect a 10-year Treasury yield of around 3%, which would imply a 25 basis point increase from current levels.

4. Oil. We maintain our forecast of \$120 barrel for WTI, up about 20% from current levels. Energy prices remain volatile, particularly in light of actions in Ukraine. Indeed, Russia's decision to limit natural gas deliveries through the Nordstream 1 pipeline, suggests a reckoning for Europe's energy supplies. On the other hand the prospect of potential demand destruction exists given high energy prices and the longer term impact of higher interest rates slowing the economy.
5. Inflation. A tight labor market, ongoing supply disruptions, the substantial lag effect of monetary policy should all conspire to keep inflation rates above historical averages. We revised our expected PCE to run around 6%, dropping slightly from first quarter. We expect it to decline in 2H22 to 3-5%. Both the CRB and Baltic Freight Index peaked in June and have since started to fall, although we anticipate inflation growth to decline only slightly as monetary policy slowly catches up to current market conditions.

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/Es 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.

Our latest calculation for long-term returns suggests that asset allocation across geographies and capitalization is particularly important today. As evidenced in the table below, there is a significant disparity. Based on our work, US large cap stocks appear to offer the lowest long-term return potential from current levels. Company valuation and margins for the S&P500 are above historical means; if both mean revert, muted returns are expected. Conversely, we note that US small-caps (using the S&P 600) appear to offer far better returns given low current operating margins and valuations that are attractive vs. long term averages.

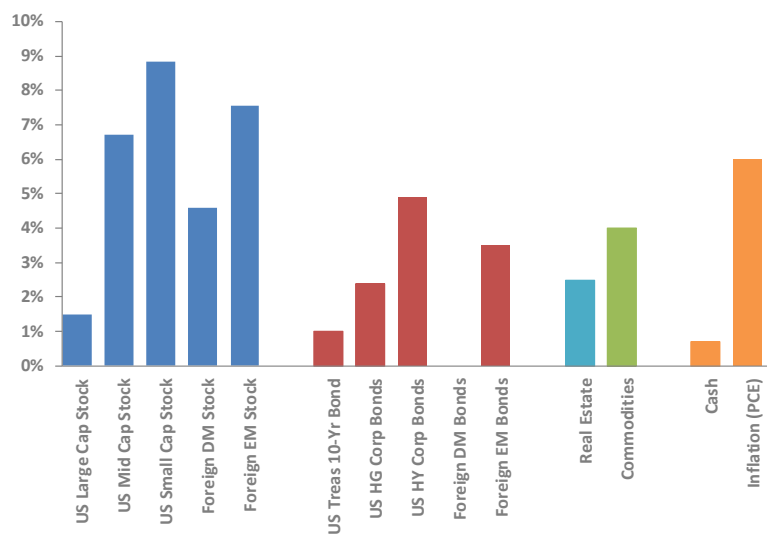
Figure 21: Five-Year Total Equity Return Calculations (Incremental Contribution)

<u>Asset</u>	<u>Index</u>	<u>LT Exp. Return</u>		<u>Sales</u>		<u>Profit Margin</u>		<u>Div.Yield</u>		<u>Valuation</u>
US Large Cap Stock	S&P500	1.5%	=	4.7%	-	3.6%	+	1.7%	-	1.4%
US Mid Cap Stock	S&P400	6.7%	=	4.3%	-	5.3%	+	1.9%	+	5.8%
US Small Cap Stock	S&P600	8.8%	=	5.8%	-	4.8%	+	2.0%	+	5.8%
Foreign DM Stock	MSCI-EAFE	4.6%	=	1.8%	-	3.9%	+	3.6%	+	3.1%
Foreign EM Stock	MSCI-EM	7.5%	=	4.6%	-	2.1%	+	3.4%	+	1.6%

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 a recovery and inflation up tick. 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 22: Five-Year Asset Class Total Return Forecast



Source: Rockingstone Advisors

Equity Performance Review

Widespread Equity Declines, with Growth Underperforming Value

Following a slight rebound in March 2022, global equities resumed their prior quarter declines in April, led by a bearish combination of consistently higher inflation figures, rising interest rates, slowing economic data, and a new Covid lockdown in China.

As Figure 23 shows, small-cap stocks led declines, under-performing their larger-cap US brethren and Emerging Market stocks in the second quarter. There was a short-lived relief rally beginning in the middle of May as Covid cases declined and the port of Shanghai began to open. Moreover, the market reacted positively to a regular Fed meeting and comments around interest rates and inflation.

However, those late-May gains were short lived when the May CPI report was published on June 10th, indicating that inflation was increasing at an accelerating pace. Combined with the Fed raising the Fed Funds rate another 75 basis points, this once again triggered a sell-off in equity markets.

Foreign Developed and Emerging Markets outperformed the US equity markets due to expectations the \$USD strength was possibly ebbing, some relief in China around regulatory initiatives, and relatively low valuation multiples vs. history.

We highlight the following performance regarding 2Q22 and 12M22, respectively, results: US large-cap (-16.4% and -11.0%), US mid-cap (-17.4% and -16.2%), US small-cap (-18.2% and -25.8%), Developed (-14.7% and -18.0%), Emerging (-10.8% and -20.3%).

Figure 23: 2Q22 Equity Performance^{iv}

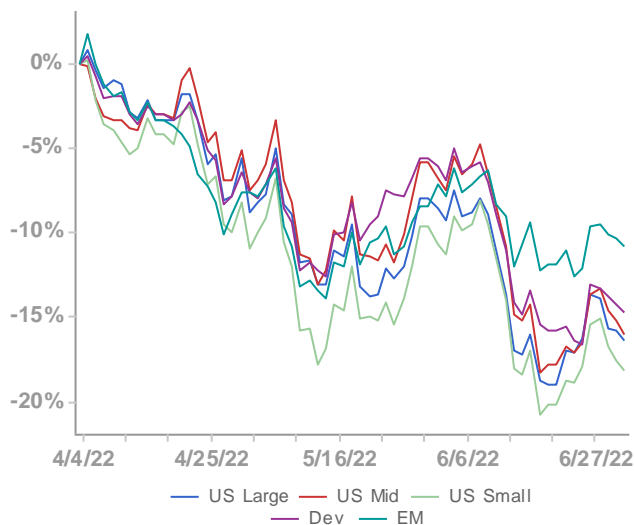


Figure 24: 12M22 Equity Performance



Fixed Income Performance Review

Bonds Experience Very Poor Performance

Fixed income markets declined again for the second consecutive quarter, albeit less significantly than the declines recorded in 1Q22. Positioned in many portfolios to add ballast and limit the risk of an all-equity portfolio, bonds not only failed to do so, but exacerbated 2Q22 equity declines in blended portfolios. That said, the one bright spot in the quarter was that bonds finally appeared to stabilize and bounced off of their mid-June lows as commodity prices began to decline, driving the 10-year from 3.5% on June 14th to just below 3% by the close of the quarter.

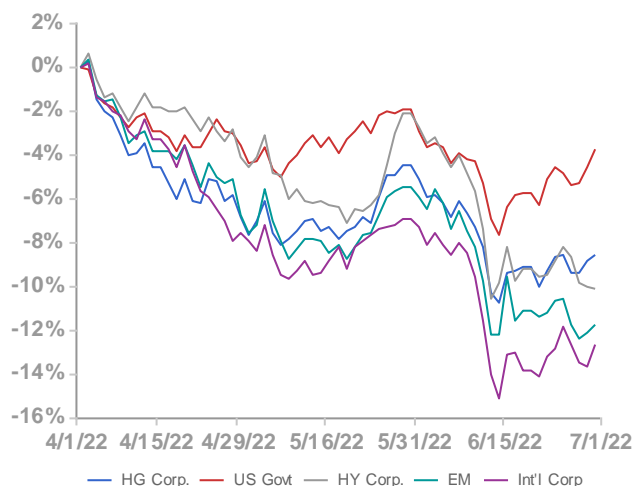
The yield curve flattened slightly during the quarter, with 10-2s starting the quarter at a spread of 3.73 bps and ending it at a spread of 2.42. Perhaps of more importance is that the curve turned negative over the last three weeks in July, potentially signaling a recession is close at hand. Spreads also widened across high grade and high yield bonds. Triple BBB spreads rose 55 bps from 1.49% to 2.04% while triple CCC spreads rose 463 bps from 7.27% to 11.9%

Emerging markets bonds recorded losses of 12.0% while foreign developed bonds declined 5.2% 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 2Q22 and 12M22, respectively: US High Grades (-8.7% and -15.8%), US Governments (-3.8% and -10.4%), US High Yield (-10.4% and -13.4%), International Developed (-5.2% and -9.7%), Emerging Markets (-12% and -20.3%).

Figure 25: 2Q22 Fixed Income Performance^v



Source: FactSet

Figure 26: 12M22 Fixed Income Performance



Source: FactSet

Commodity Performance Review

Commodity Reversal

The second quarter witnessed a reversal of the 1Q22 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 base metals.

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 2Q22 and 12M22, respectively: Oil (+3.5% and +39.8%), Precious Metals (-9.1% and -5.4%), Agriculture (-6.2% and +10.3%), Base Metals (-25.6% and -2.9%).

Figure 27: 2Q22 Commodity Performance^{vi}



Source: FactSet

Figure 28: 12M22 Commodity Performance

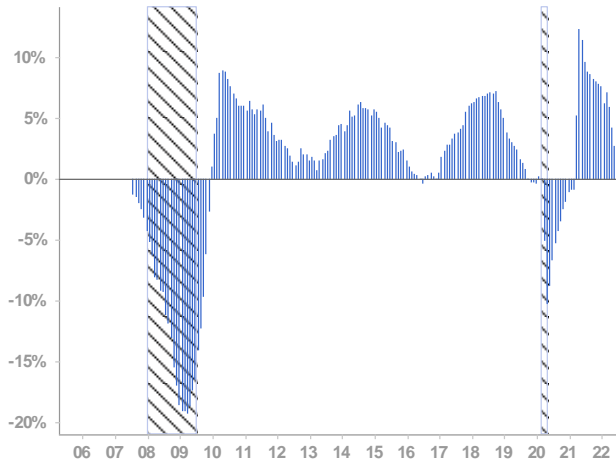


Source: FactSet

Chart Book

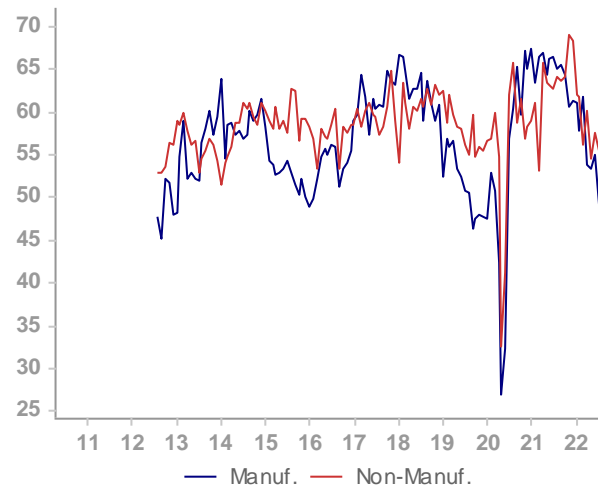
Leading Indicators

Figure 29: Index of Leading Economic Indicators



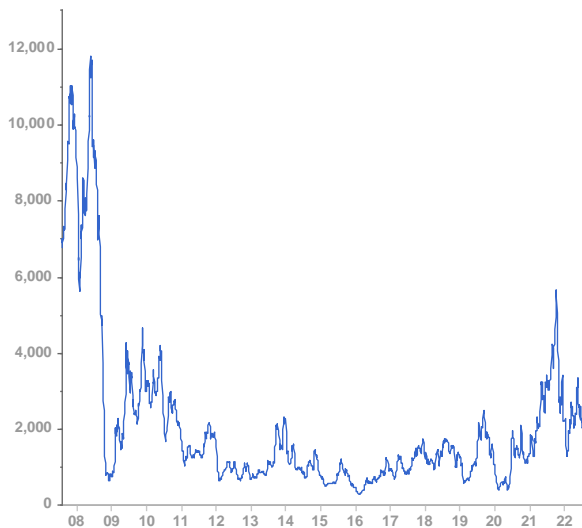
Source: FactSet

Figure 30: ISM New Orders



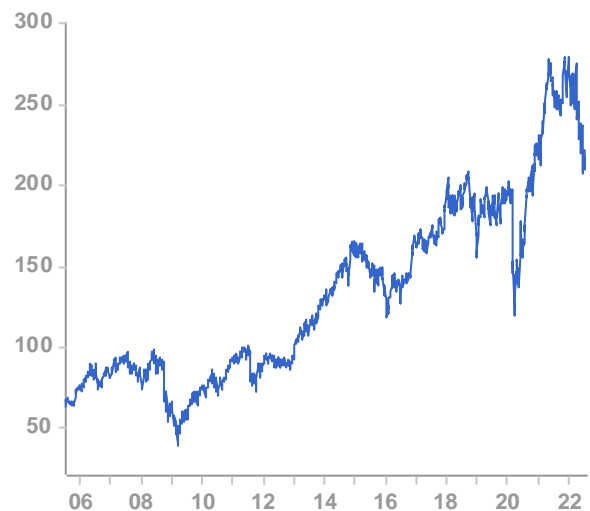
Source: St. Louis Federal Reserve, FRED Database

Figure 31: Baltic Freight Index



Source: FactSet

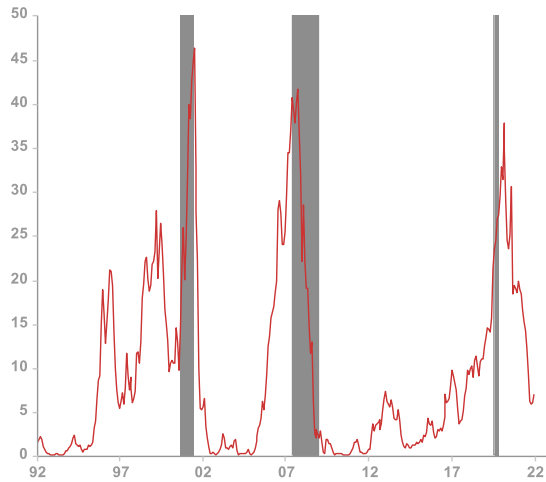
Figure 32: DJ Transports



Source: FactSet

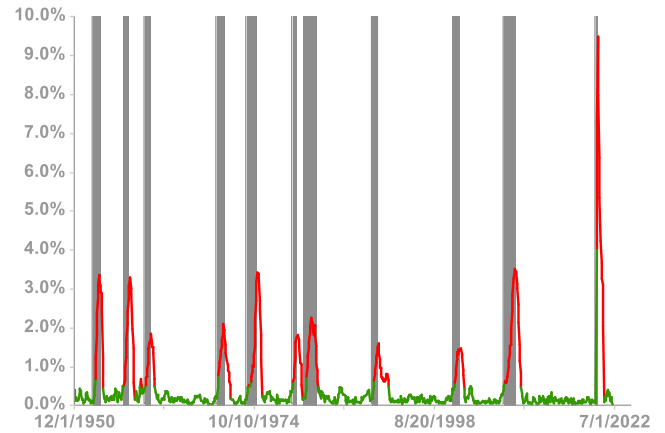
Real-time Recession Risk Indicators

Figure 33: Treasury Spread Recession Predictor



Source: FactSet, FRED Database

Figure 34: Sahm Real-time Recession Predictor



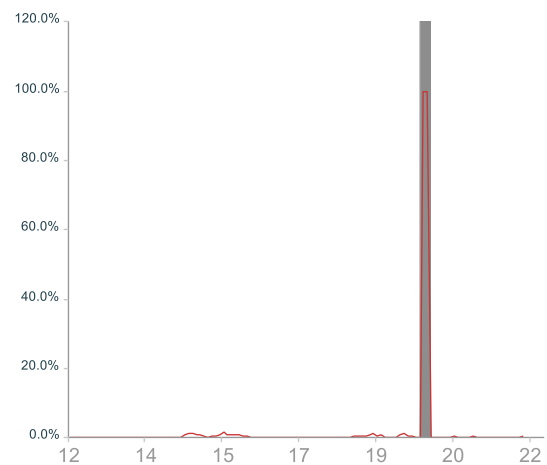
Source: St. Louis Federal Reserve, FRED Database

Figure 35: GDP Now (Atlanta Fed)



Source: FactSet, FRED Database

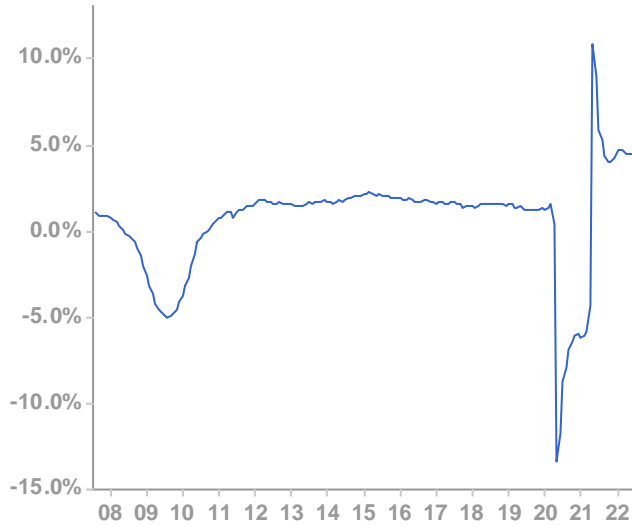
Figure 36: Smoothed US Recession Probabilities



Source: FactSet, FRED Database

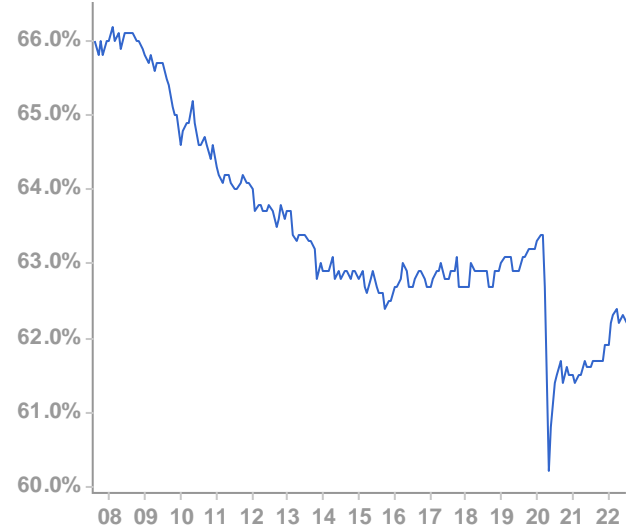
Labor Market Indicators

Figure 37: Payroll Growth (Establishment Survey, % Chg YoY)



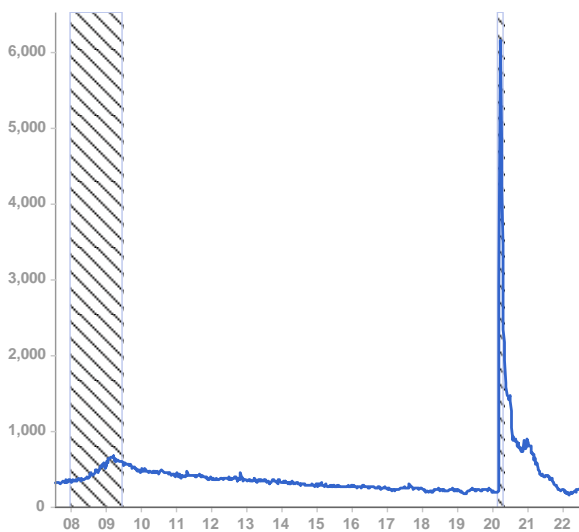
Source: FactSet

Figure 38: Labor Participation Rate (% of Workforce)



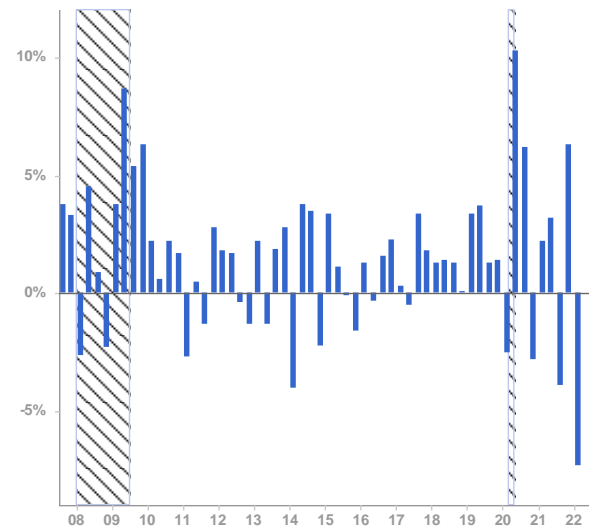
Source: FactSet

Figure 39: Initial Unemployment Claims



Source: FactSet

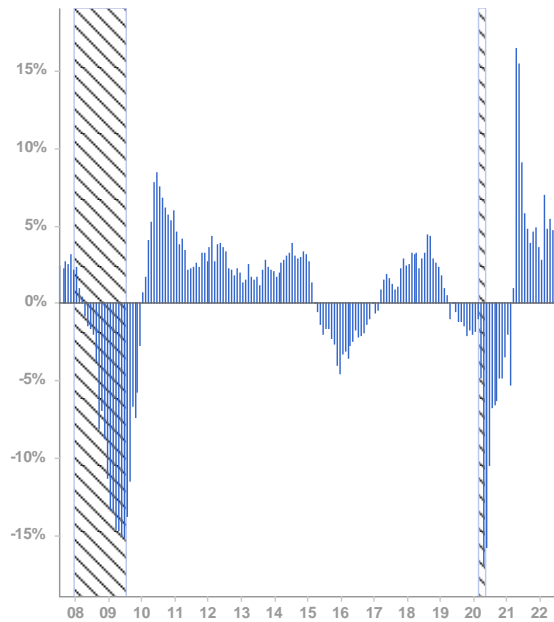
Figure 40: Non-Farm Productivity (% Chg YoY)



Source: FactSet

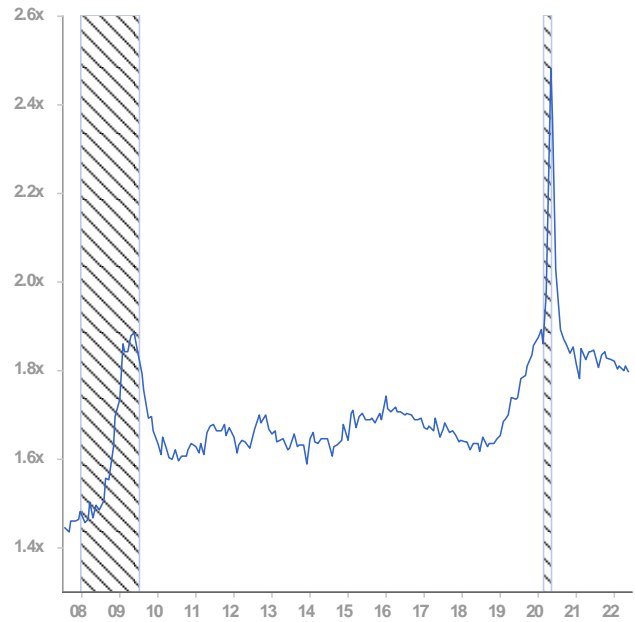
Production and Business Activity Indicators

Figure 41: Industrial Production (% Chg YoY)



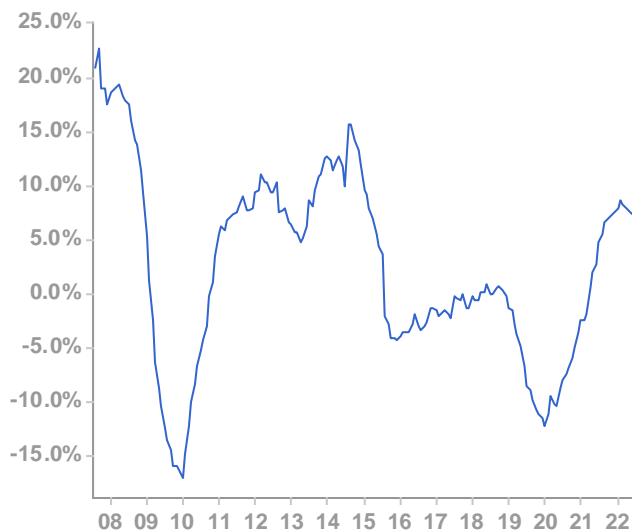
Source: FactSet

Figure 42: US Inventory to Shipment Ratio



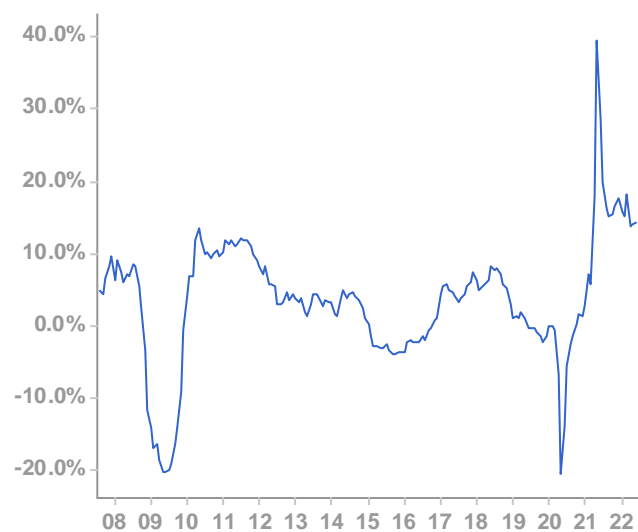
Source: FactSet

Figure 43: Unfilled Orders (% Chg. YoY)



Source: FactSet

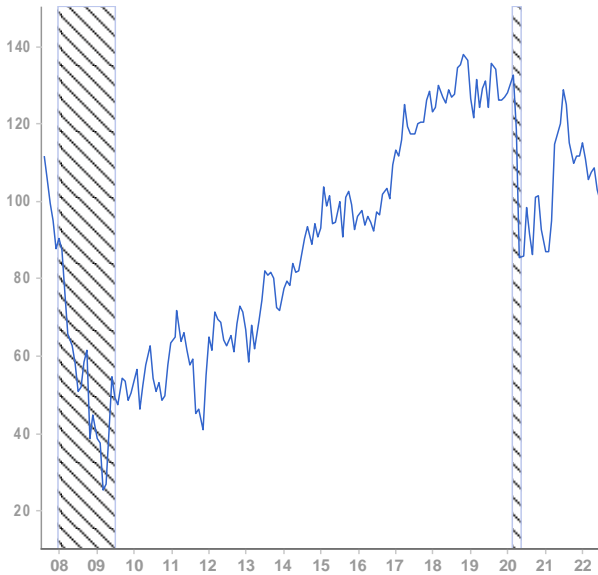
Figure 44: Business Sales (% Chg. YoY)



Source: FactSet

Consumer and Household Activity Indicators

Figure 45: University of Michigan Consumer Sentiment



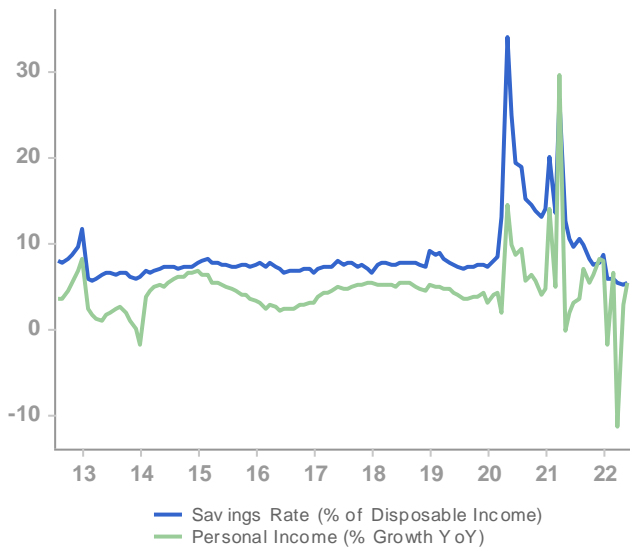
Source: FactSet

Figure 46: Retail Sales



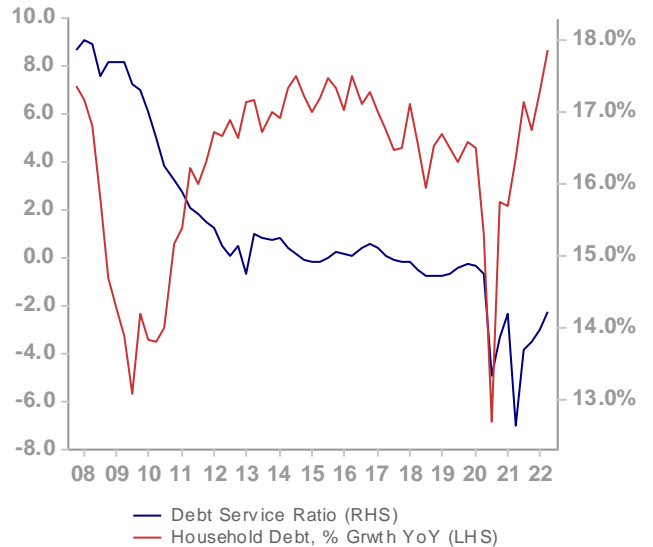
Source: FactSet

Figure 47: Personal Income and Savings Rate



Source: FactSet

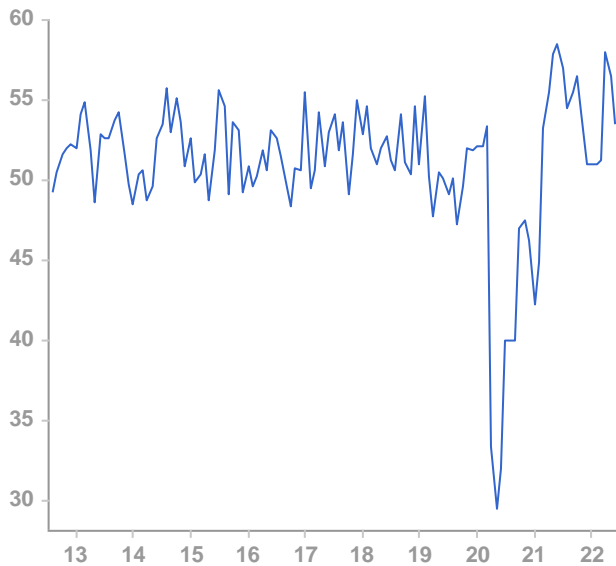
Figure 48: Household Debt



Source: FactSet

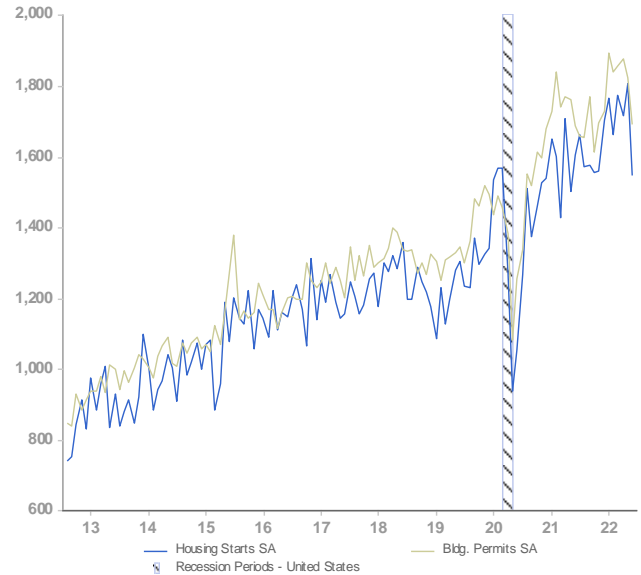
Housing and Construction Indicators

Figure 49: Architecture Billings Index



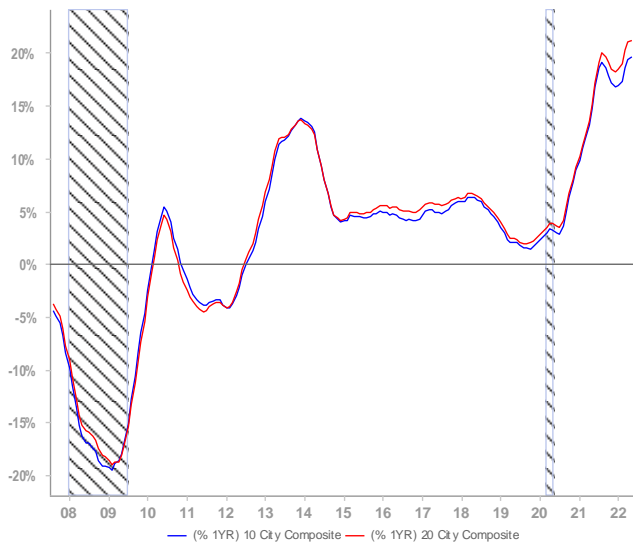
Source: FactSet

Figure 50: Housing Starts and Building Permits



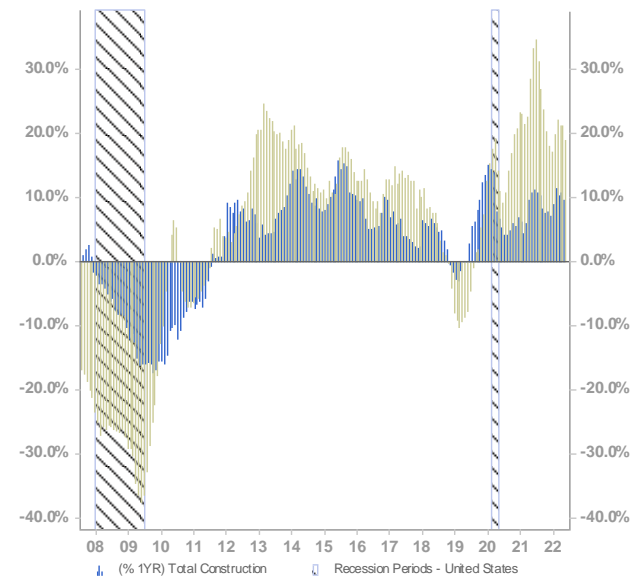
Source: FactSet

Figure 51: Case-Shiller 20-City & 10-City Index, % Chg YoY



Source: FactSet

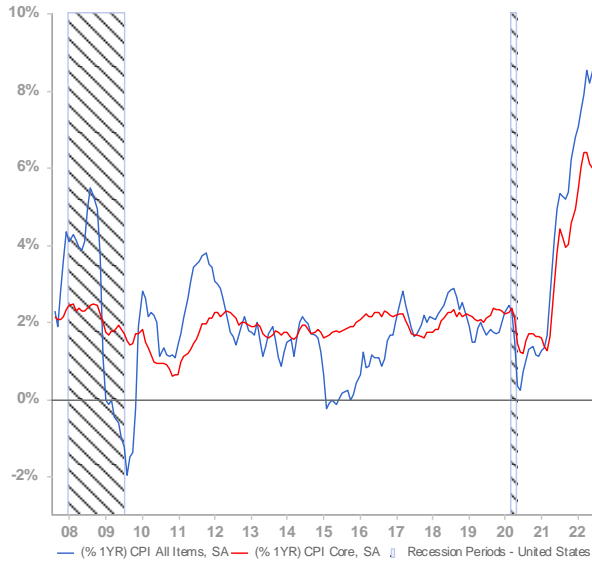
Figure 52: Private and Total Construction (% Chg YoY)



Source: FactSet

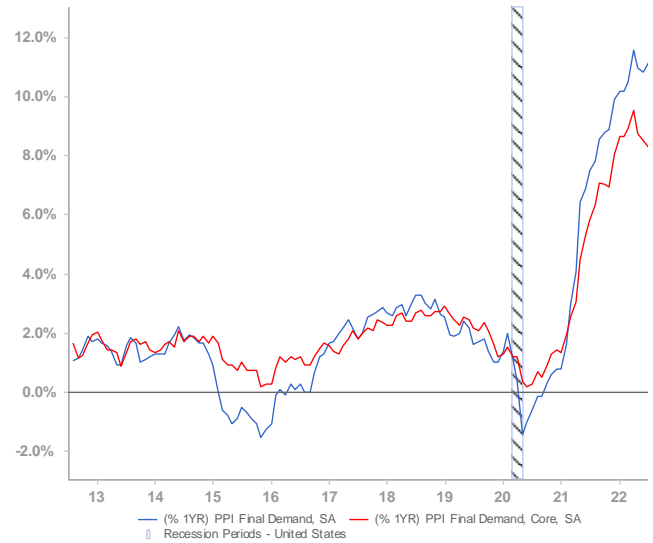
Price Indicators

Figure 53: Consumer Price Index



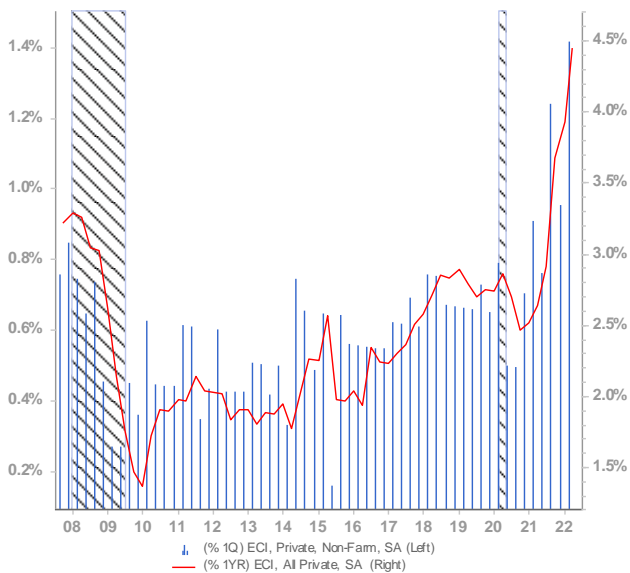
Source: FactSet

Figure 54: Producer Price Index



Source: FactSet

Figure 55: Employment Cost Index



Source: FactSet

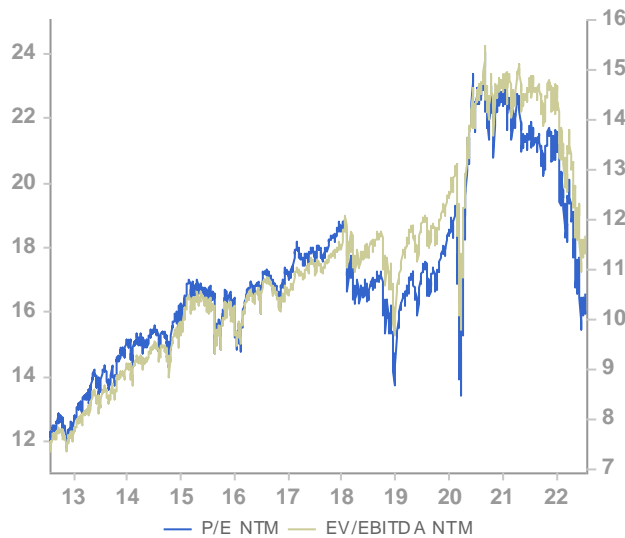
Figure 56: 10-Year, 5-Year Forward Inflation Expectations



Source: FactSet

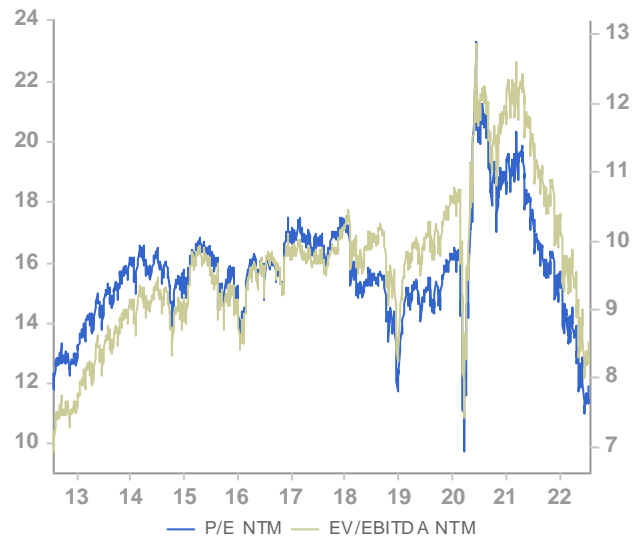
Valuation Indicators

Figure 57: S&P 500 P/E (LHS) & EV/EBITDA (RHS)



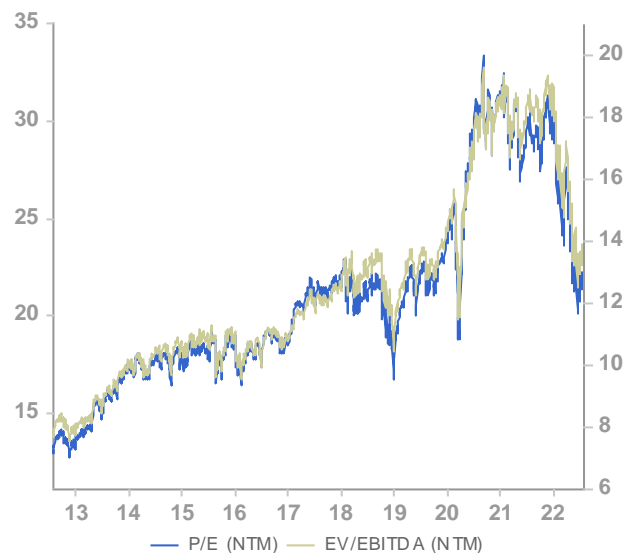
Source: FactSet

Figure 58: S&P Midcap 400 P/E (LHS) & EV/EBITDA (RHS)



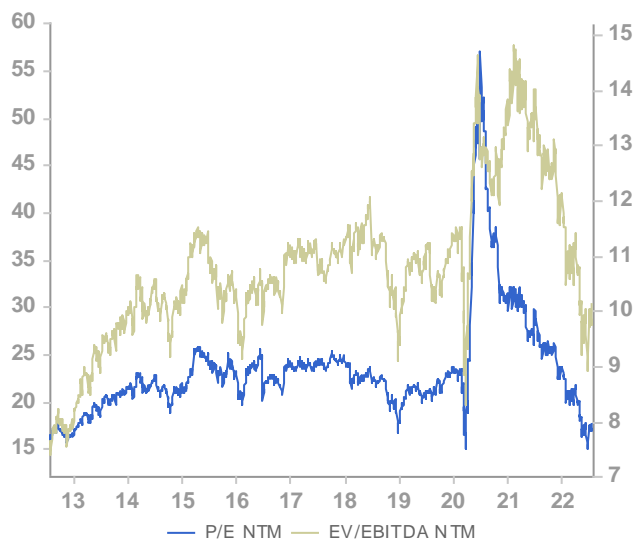
Source: FactSet

Figure 59: Nasdaq 100 P/E (LHS) & EV/EBITDA (RHS)



Source: St. Louis Federal Reserve, FRED Database

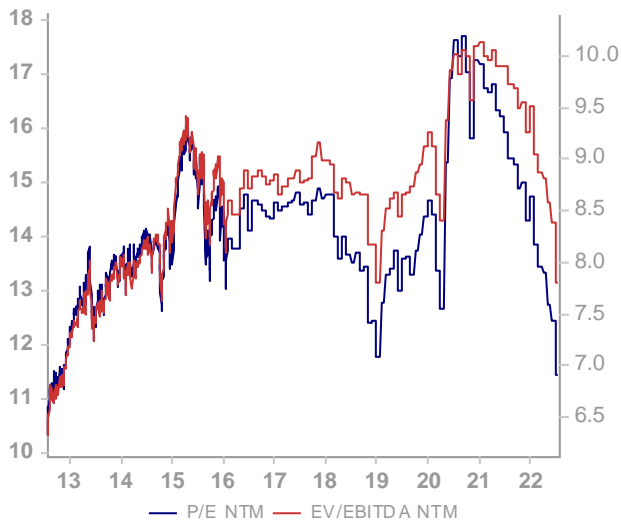
Figure 60: Russell 2000 P/E (LHS) & EV/EBITDA (RHS)



Source: St. Louis Federal Reserve, FRED Database

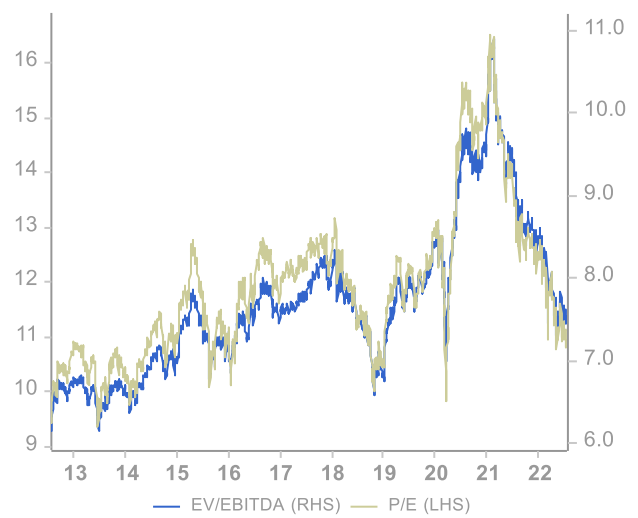
Valuation and Volatility Indicators

Figure 61: Intl Developed P/E (LHS) & EV/EBITDA (RHS)



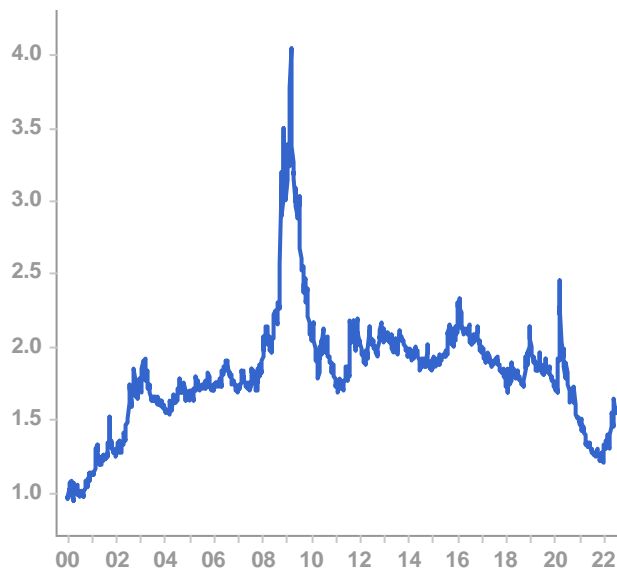
Source: Robert Shiller, Yale University, Rockingstone Advisors, Standard & Poor's

Figure 62: Emerging Markets P/E (LHS) & EV/EBITDA (RHS)



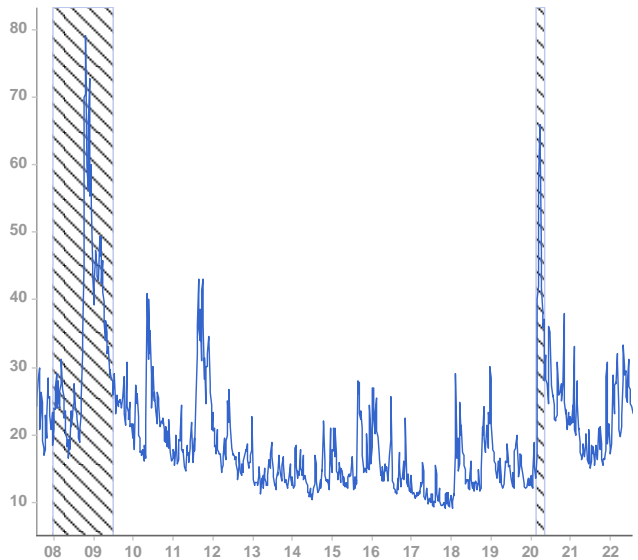
Source: Robert Shiller, Yale University, Rockingstone Advisors, Standard & Poor's

Figure 63: S&P 500 Dividend Yield



Source: FactSet

Figure 64: CBOE Volatility Index



Source: FactSet

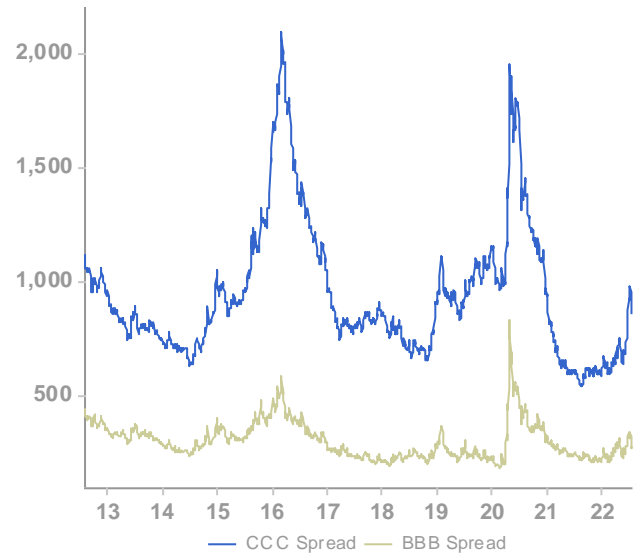
Bond Market Indicators

Figure 65: 10-Year Global Bond Yields



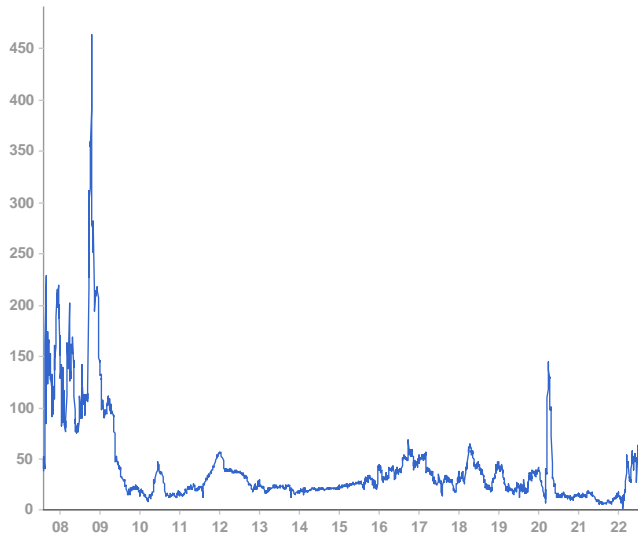
Source: FactSet

Figure 66: CCC and BBB Spreads (Option Adjusted)



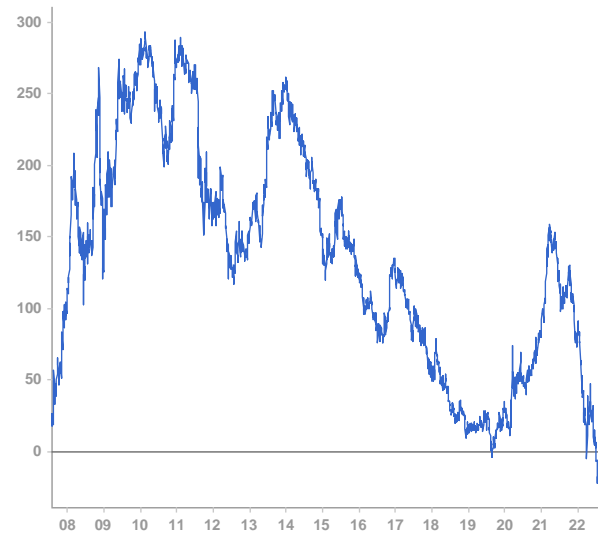
Source: FactSet

Figure 67: TED Spread (bps)



Source: FactSet

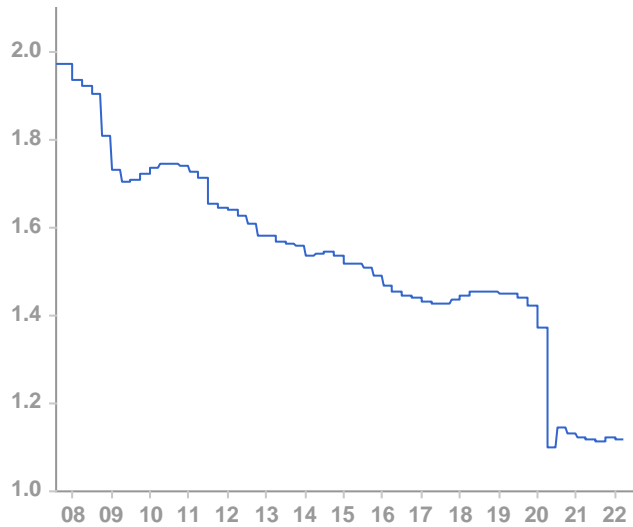
Figure 68: 10-Year Minus 2-Year Treasury



Source: FactSet

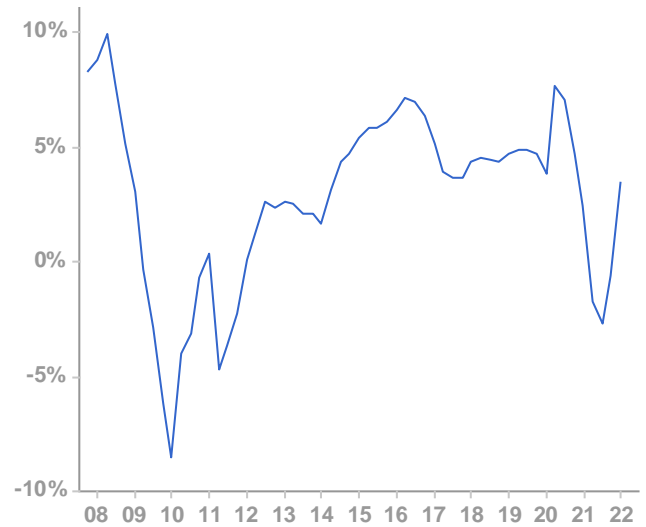
Liquidity and Other Indicators

Figure 69: Velocity of M2 Money Stock



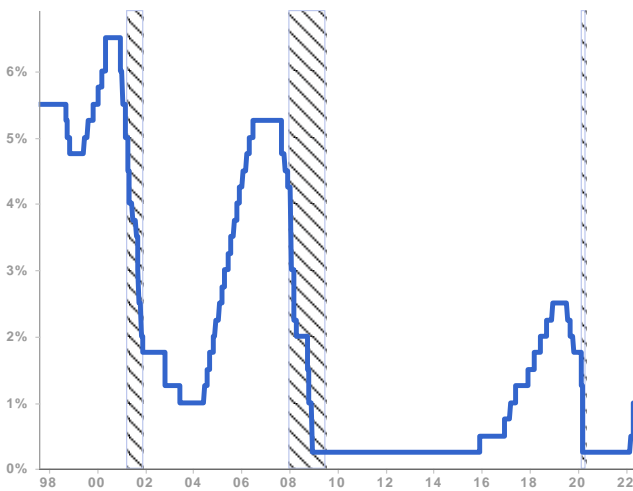
Source: FactSet

Figure 70: Loan Growth (Non-Financial, Private Sector)



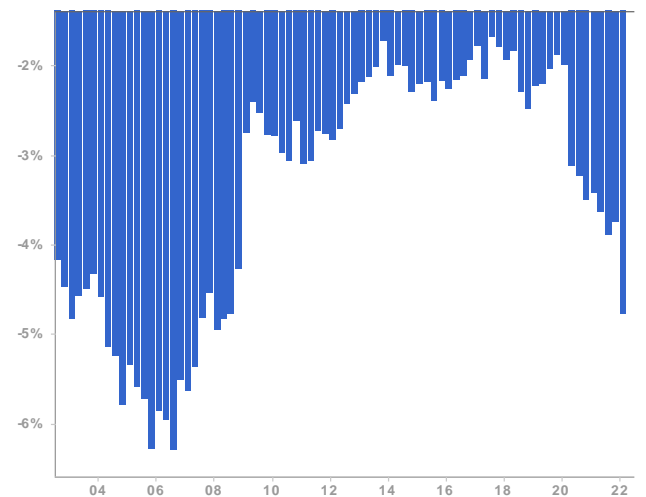
Source: FactSet

Figure 71: Fed Funds Target Rate



Source: St. Louis Federal Reserve, FRED Database

Figure 72: 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 June 30, 2022; most other prices and yields are as of July 26, 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.

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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.