

A Peripatetic Market

Asset Prices Rallied on Strong Earnings, Low Discount Rates

Although fixed income had mixed results in 2021, most other assets soared in price. Accommodative monetary and fiscal policy along with strong corporate profits led investors to bid up riskier assets despite concerns over inflation, high debt levels and the pandemic. After two years of equity price gains, we are wary of future return potential.

Rockingstone Performance

In this report we analyze historical performance across our different strategies, examining both short and long term results. Focusing on 4Q21, we had decent returns as a balanced approach (i.e. growth vs. value) helped weather investors' whipsawing between strategies. Our historical annualized returns incl: 1-yr +17.6%; 3-yr +21.4%; 5-yr +15.1%; 10-yr +12.0%.

4Q21 in Review

The last quarter of 2021 was emblematic of investors' peripatetic actions. For example, October saw a jump in equity returns with a growth bias only to see November quickly embrace value-oriented equities. December saw different themes take leadership, depending on the day.

Wary of Prospects for Solid 2022 Asset Returns

Markets appear to be comfortable the latest covid variant will be short lived, the pandemic will shift to be endemic, and growth will resume. We tend to agree but nevertheless fear investor returns will suffer as corporate profit margins get squeezed (due to inflation), and rising interest rates hit valuation multiples (from Fed actions and global indebtedness).

S&P500 Forecast & Other Key Indicators

Our latest forecasts include: EPS (2022: \$215), S&P500 (2022 year end = 4400), GDP (2022: +2.7%), Gold (\$2,000), Oil (\$90), 10-yr US Bond Yield (1.9%), Inflation (5.0%), 5-yr expected CAGR (US Large Cap -3%, US Mid Cap +3%, US Small Cap +5%, Developed +1%, Emerging +3%). We continue to be very cautious for US Large Cap return potential.

ABOUT US

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

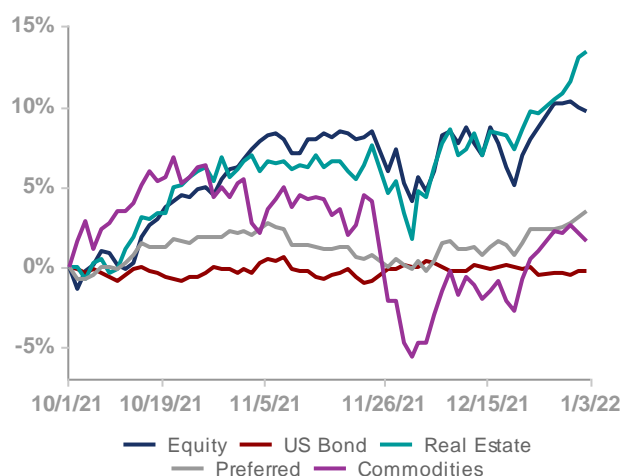
As an SEC-registered investment advisor, we provide multi-asset investment strategies to individuals, families and small institutions through separate accounts.

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:

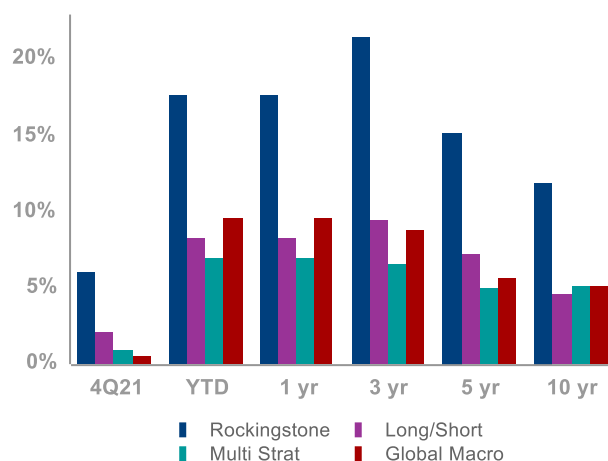
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Figure 1: 4Q21 Asset Class Performanceⁱ



Source: FactSet

Figure 2: Rockingstone: 4Q21 & Historical Annualized Returnsⁱⁱ



Source: Rockingstone Advisors, Morningstar, DJ Credit Suisse Indices

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2022: Numerator or Denominator?

Economic Recovery (the numerator) vs. Interest Rates (the denominator)

We see the next few months as critical to the investment outlook for most, if not all, of 2022. Our thesis is that: (1) omicron will likely be the last major wave in the pandemic and will peak in the next few weeks, (2) humanity will recognize that covid will be endemic and prove to be another seasonal respiratory illness, (3) a return to “normal” will occur by 1Q22 end, including a jump in “re-opening” activity, (4) coincident with the rebound in re-opening activity will be persistent inflation, albeit beginning to trend lower as stimulus checks end and workers return, (5) the US Federal Reserve—along with other central banks—will move more aggressively to raise interest rates to prevent the economy from over-heating, and (6) the yield curve will continue to flatten as the Fed raises rates and long-term growth expectations slow.

Factors to consider impacting the numerator

During the depths of the initial pandemic wave in 1Q20, it was hard to envision a rapid recovery in global economies. But as is well recognized, central banks loosened monetary policy with massive steps to boost liquidity. This was in addition to major fiscal policy initiatives that stimulated the economy. With so much liquidity, along with many parts of the economy readily adapting to the pandemic landscape, corporate profits jumped and valuation multiples expanded. This in turn has led to massive wealth creation, albeit concentrated largely among those who went in to the pandemic with net financial assets. During the economic shutdown, consumers shifted spending from experiences to goods, which fueled rising prices as too much money chased too few goods. Going forward, as fears around omicron subside, we expect consumers to shift their spending from goods to experiences (travel and leisure), which should, at the margin, improve the inflation outlook.

Over the last several decades, inflation has not been a factor in the economy as a whole or a concern for management teams or policy makers. In fact, the Fed and other central banks have been more concerned with the risk of deflation. Yet 2021 witnessed a rapid rise in inflation to 7.1%, as measured by the CPI. Core CPI, which excludes energy and food, rose 5.5%. This was due to a combination of the the aforementioned wealth effect, pandemic-related disruptions to global supply chains, and most importantly, fiscal profligacy associated with the *American Rescue Plan*. Congress passed this \$1.9 trillion spending program, adding \$150 billion in monthly spending, despite a gap in output that was rapidly shrinking from \$50 billion to just \$20 billion a month. This explains why inflation in the US has been so much higher than in Europe or Japan, despite suffering from similar pandemic-related supply chain issues.

As the economy recovers from omicron-related absences (either voluntary or involuntary), consumer and business spending should increase. However, this trend may be offset by the ending of many of the cash handouts, including \$1,400 payments to individuals and \$2,800 payments to married couples. Without this income, the labor supply may begin to return to normal, helping to at least limit the rise in wage rates. Meanwhile, laws limiting eviction are beginning to expire, freeing up housing, which should bring down home prices. Unfortunately, energy prices continue to be stubbornly high due to the suspension of all oil and gas leasing on federal lands in the US. Despite a small release from the strategic petroleum reserve and the Administration’s demand that OPEC increase production, there appears to be little opportunity that consumer prices will be aided by lower energy prices. For these reasons we continue to believe that gross and operating margins are likely to fall from current levels. Hence, we see the need to position portfolio holdings in industries

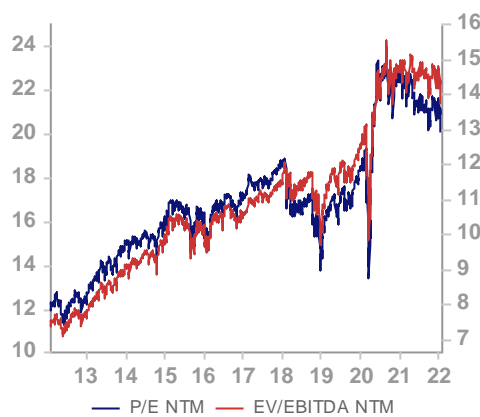
and/or businesses that can benefit from the economic re-opening while also keeping profitability relatively stable.

Factors to consider impacting the denominator

It was somewhat surprising to us that on December 3, 2021, when Fed Chair Jerome Powell announced that inflation was no longer “transitory,” investors did not significantly react, nor did they appear to price down assets on fear of a less accommodative approach to monetary policy. However, when the Fed released its minutes from December 14-15, 2021 meetings on January 5, 2022, investors immediately reacted to the greater likelihood of higher short term interest rates. In fact the market, as we release this newsletter, presently is expecting four rate hikes this year.

To the extent asset prices are based on the discounted value (or present value) of future free cash flows (DCF), a rise in interest rates is a critical input to the denominator of such an equation. The realities of DCF calculations are such that interest rate moves are the most impactful variable on present values. To the extent that the free cash flow an asset generates is more weighted to the future (years 10 through 15, say, rather than 0 to 5), the greater impact on present values any given interest rate move has.

Figure 3: S&P 500 P/E (LHS - blue) & EV/EBITDA (RHS - red)



Source: Factset

In Figure 3 above, it is clear that historical valuation metrics, such as P/E and EV/EBITDA, are towards the high-end of long-term averages. Hence, with the recent rise in interest rates year to date, investors have witnessed a significant rotation out of technology companies (i.e. higher multiple stocks) and into more cyclical businesses, such as financials and energy (i.e. lower valuation stocks). Said another way, investors are changing the composition of their portfolio away from companies whose cash flows are far into the future (tech) for companies whose cash flows are closer to the present (financials and energy). This move is obviously predicated on the assumption that ending bond purchases and raising short-term rates will lead to higher long term rates. In reality, the Fed's actions may be viewed as deflationary or at least disinflationary, putting downward pressure on long-term rates. If this is the case, then the Fed's moves simply flatten the yield.

To this point, while the markets are already reacting to the Fed's pivot on monetary policy, we note investors need to think through the implications of a flattening yield curve. Where short and long-term interest rates ultimately settle is a difficult to predict, but interest rates are generally correlated with growth in the labor market; as individuals retire or exit the labor market, long-term interest rates should act accordingly.

Rockingstone's 2021 Performance

A deep dive into our six portfolio strategies

At the end of each calendar year, we like to review our individual portfolio strategies and relative performance. As a reminder, we do not manage a fund where all of our investors are participating in a single portfolio. Rather, we manage "separate accounts," meaning each account is customized to the individual needs of the client. However we do manage around six distinct broader strategies:

- **Best Ideas** (an all equity portfolio typically benchmarked against the S&P 500);
- **Global Equities** (a global equity portfolio typically benchmarked against the MSCI All-World index);
- **Absolute Return** (a portfolio where we will be more actively short -- albeit with a long bias -- in attempting to achieve 6-8% annual returns with less volatility than in our more aggressive strategies);
- **Balanced** (a broad-based portfolio comprised of equities, preferreds, real estate and debt, typically benchmarked against a retirement date fund or balanced mutual fund);
- **Yield** (a portfolio where we attempt to generate 4-6% annual income without material interest rate risk);
- **ESG** (portfolios constructed to meet environment, social and governance criteria benchmarked against a "balanced" Pax mutual fund).

Lastly we note the portfolio management statistics detailed for each strategy are relative to that specific strategy's benchmark. For example, in our "Global Equities" portfolios we use the alpha and beta figures relative to the MSCI-ACWI.

Best Ideas

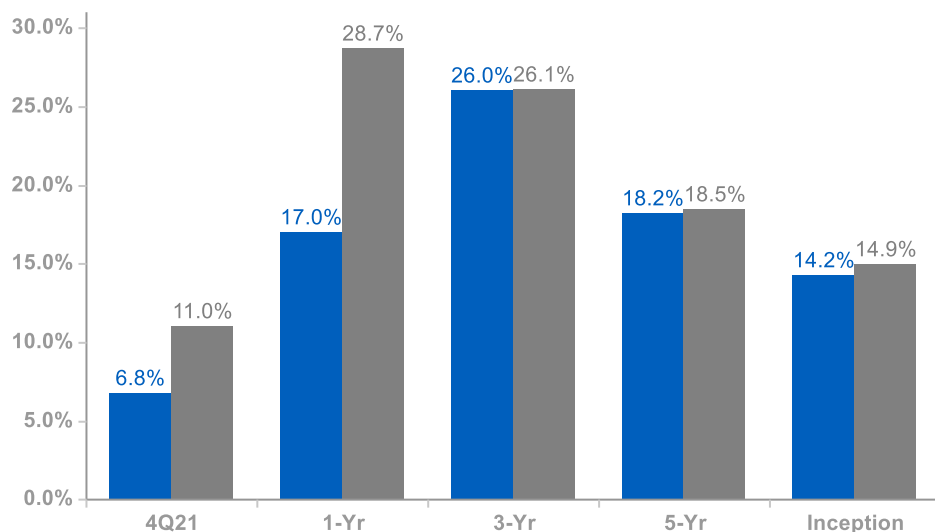
Our "Best Ideas" portfolios use the S&P500 as a benchmark. The S&P500 is a 100% US-based market-cap weighted index with an inherent bias towards large-cap companies. Over the last few years, with large tech companies rising in market cap, the S&P has been dominated by a handful of such companies. For investors comfortable with such tech concentration, the S&P500 has been a rewarding strategy / investment.

Yet our view at Rockingstone is to remain more diversified. A typical Rockingstone portfolio will hold 40-50 positions and our risk management philosophy is generally to pare back any individual stock holding that exceeds 4% of the portfolio. This becomes problematic when, as has been the case the last few years, a few select stocks dominate the S&P500. For example, Apple's weighting has been close to 6% of the S&P, and thus our investment / risk mitigation will force us to be under-weight that particular name.

While our 3- and 5-year performance numbers (see the next page) are reasonable, we admit to being mis-positioned in 2021. We had some non-US exposure (about a 13% weighting) on the thesis the \$US would decline, but in reality the \$US strengthened, which hurt

performance. In addition, about 30% of our positions in 2021 were either small- or mid-cap, which also limited returns vs. the large-cap dominated S&P500 benchmark.

Figure 4: RSA “Best Ideas” (Blue) vs. S&P500 (Gray) Portfolio Performance



Source: Rockingstone Advisors, Morningstar Office.

Leveraging our Morningstar portfolio software, we note the 3- and 5-year beta for our “Best Ideas” portfolio has been 0.81 and 0.89, respectively. We have roughly matched the S&P500 over those time periods yet with only 80-90% of the risk. This resulted in significant alpha generation of 5.13 over the last three years and 2.48 over the last five years. As a reminder, “alpha” is used to measure the excess return created by a portfolio manager above whatever return is generated by the market / benchmark.

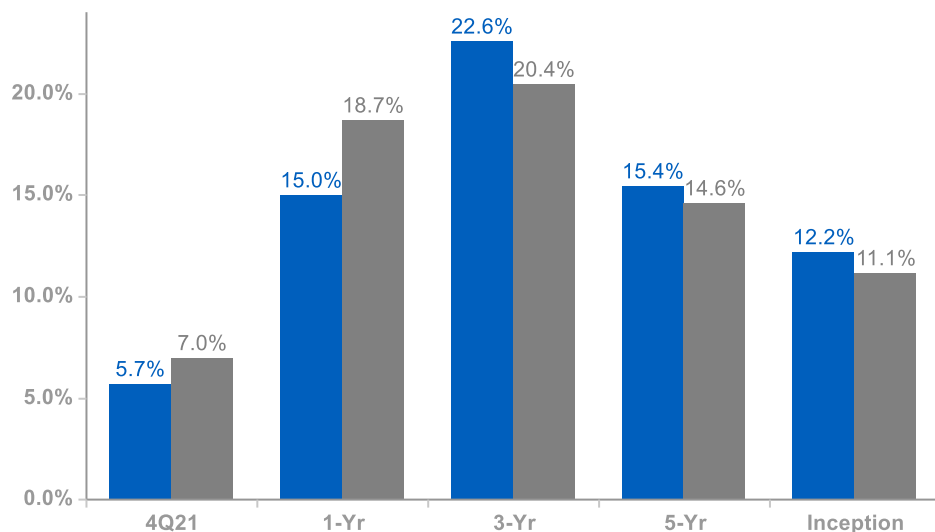
Although our approach is generally to hold a roughly equal weight of ETFs and individual stocks, our “Best Ideas” portfolios often have a greater exposure to the latter. At the end of 2021, our top 5 individual stock investments included: (1) Amazon, (2) NVIDIA, (3) Alphabet, (4) Apple, (5) The Trade Desk. Meanwhile our top 5 ETFs included: (1) XLV – Health Care, (2) VFVA – US Value Factor, (3) SPY – S&P500, (4) XLK – Technology, (5) IWM – Russell 2000.

Global Equities

Our “Global Equities” portfolios use the MSCI All-Country World Index (ACWI) as a benchmark. The MSCI includes a fairly aggressive non-US stock weighting of approximately 39%. Specifically, the geographic exposure includes 18% Europe, 17% Asia and 65% Americas.

While our portfolios under-performed the benchmark in 2021 (see next page), we note long term results, both in absolute and on a risk-adjusted basis, remain compelling. In 2021 our relative performance was helped by being under-weight non-US holdings. However, our individual small- and mid-cap holdings limited relative performance. Although we exited all China-based equities in the 1H21, our ownership of VWO, the emerging market ETF (which has about a 50% weighting to China), also limited returns.

Figure 5: RSA "Global Equity" (Blue) vs. Benchmark MSCI-ACWI (Gray) Portfolio Performance



Source: Rockingstone Advisors, Morningstar Office.

Using our Morningstar portfolio software, we note the 3- and 5-year beta for our "Global Equities" portfolio has been 0.83 and 0.88, respectively. This suggests our portfolios have about 80-90% of the risk of holding the MSCI-ACWI alone. As a result, our alpha generation over the last three years and five years has been 5.60 and 3.10, respectively.

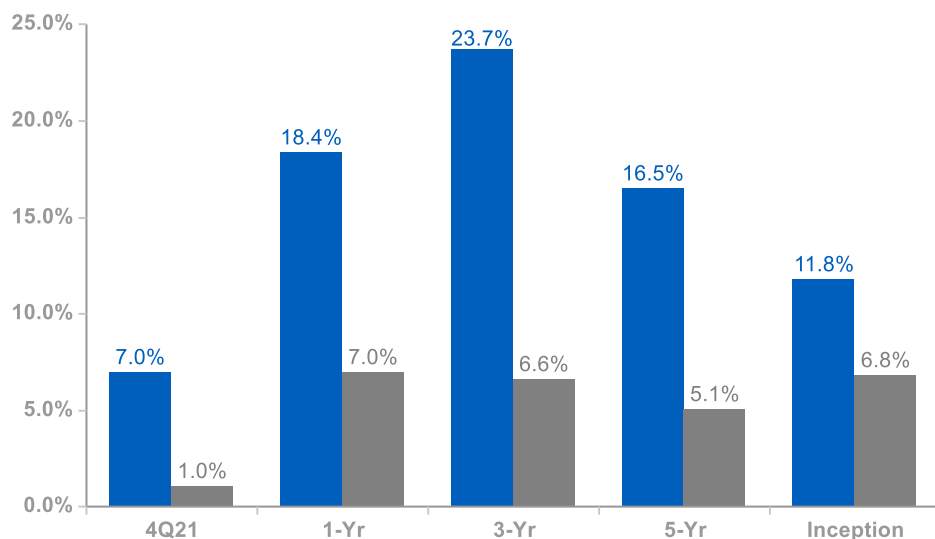
We tend to hold greater ETF exposure in our "global equity" portfolios as compared to the "best ideas" portfolio. At the end of 2021, our top 5 individual stock investments included: (1) Apple, (2) Amazon, (3) The Trade Desk (4) Microsoft, (5) Constellation. Meanwhile our top 5 ETFs included: (1) VEA – Developed Markets, (2), VGK – Europe, (3), VWO – Emerging Markets, (4) IWM – Russell 2000, (5) KRE – US Regional Banks.

Absolute Return

Our "Absolute Return" portfolios use the Credit Suisse Multi-Strategy Index as a benchmark. In these portfolios our objective is to use an unconstrained strategy to generate the highest, risk-adjusted return possible. For example, in the "Absolute Return" strategy we may short more aggressively or have greater exposure to commodities or potentially use options to enhance returns. That said, because we believe stocks markets generally go up, our bias is to be long and to use shorts selectively to manage through events we believe may lead to a sustained period of equity declines. Our portfolios may be as conservative as market neutral; we are very rarely net short.

Our allocation reflects the following: 74% US stocks, 16% non-US stocks, 10% other (including cash, bonds and/or hybrids). Based on our Morningstar portfolio software, we note the 3, 5 and 10-year beta for our "absolute return" portfolio has been 1.34, 1.47 and 1.48, respectively. As noted in the past and given we do not hedge nearly as much as the benchmark index, it isn't too surprising to see our volatility measure relatively high. Importantly, however, we emphasize that even with the high beta, our alpha generation has been solid: 3-year = 14.43, 5-year = 9.80, 10-year = 4.16. This is another way of calculating that investors have been well rewarded for the risk taken in the portfolio.

Figure 6: RSA "Absolute Return" (Blue) vs. CS Multi-Strategy (Gray)



Source: Rockingstone Advisors, Morningstar Office.

At the end of 2021, our top 5 individual stock investments included: (1) Google, (2) Apple, (3) S&P Global, (4) Estee Lauder, (5) NVIDIA. Meanwhile our top 5 ETFs included: (1) SPY – S&P500, (2) VFVA – US Value Factor, (3) VEA – FTSE Developed Markets, (4) XLV – Health Care, (5) PHO – Water Resources.

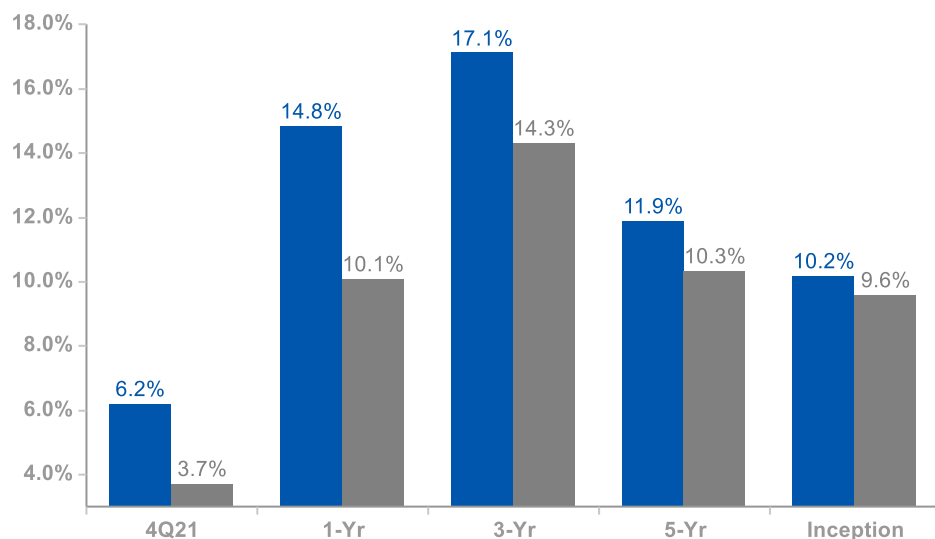
Balanced

Our "balanced" portfolios include a combination of global equities, fixed income and hybrids. For comparison purposes, the main benchmark we use for clients is the Vanguard LifeStrategy Moderate Growth Fund (VSMGX). VSMGX has an allocation of 37% US stocks, 23% non-US Stocks, 38% bonds and 2% cash.

We remained over-weight US stocks and under-weight bonds as well as non-US stocks vs. the benchmark in 2021. At the end of last year, we note the average Rockingstone "balanced" portfolio had 65% US Stock, 16% non-US, 11% bonds and the remainder in cash (including the cash from being short non-US bonds). We continue to be cautious on bonds as an asset class, viewing them as generally expensive in both absolute and relative terms.

Hence, we have to supplement our bond position with defensive equities (low-beta, low volatility names from relatively acyclical industries), which increases the ostensible equity allocation, but it is the composition of the equity allocation that really matters. In addition to low-volatility equities, we will also own preferreds, BDCs and convertible bonds. Additionally, we will sometimes deploy call-write strategies, or we will own ETFs that do so, such as JEPI or QYLD.

Figure 7: RSA "Balanced" (Blue) vs. Benchmark Vanguard Life Strategy (Gray) Portfolio Perf.



Source: Rockingstone Advisors, Morningstar Office.

It is worth noting that for many years, the "balanced" portfolio (i.e. a 60/40 equity/fixed income split) has been viewed as the right mix for a conservative investing approach. Yet with inflation surging, expensive yields combined with relatively high valuation multiples for stocks, "balanced" investors may be caught by surprise in terms of future performance.

For Rockingstone, we emphasize our relative out-performance was achieved with more limited portfolio risk during the last three and five years and equal risk over the 10-year period. During those periods the "balanced" portfolios had a beta of 0.85, 0.93, and 1.00, respectively. In terms of alpha generation, we note the following statistics: 3-year = 5.00, 5-year = 2.66 and 10-year = 2.36.

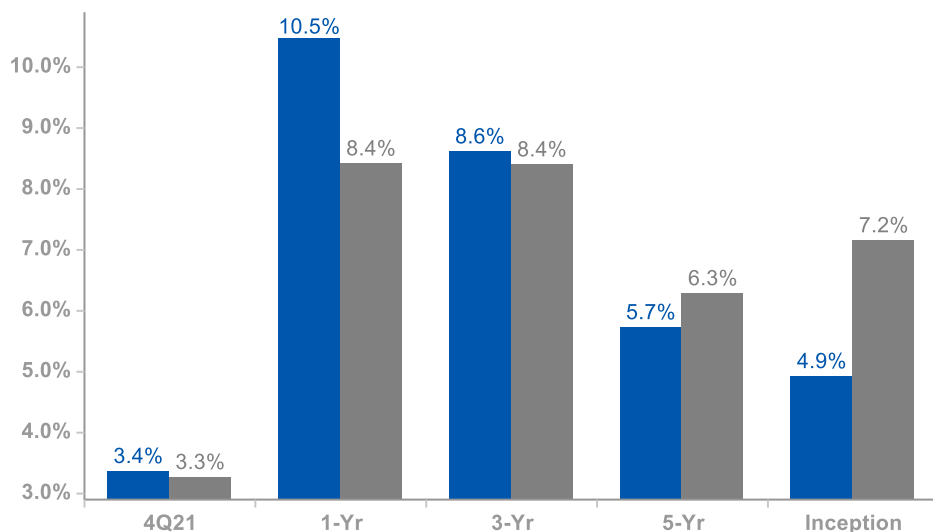
At the end of 2021, our top 5 individual stock investments included: (1) New Mountain Finance Corp, (2) Apple, (3) Estee Lauder, (4) Microsoft, (5) Facebook. Meanwhile our top 5 ETFs included: (1) VEA – Developed Markets, (2) SPY – S&P500, (3), PFF – Preferreds, (4) JPST – JP Morgan Ultra-Short Income, (5) XLV – Health Care Select.

Yield

For retirement accounts and those investors interested in generating income, we construct portfolios using a combination of high dividend yielding stocks and ETFs, select bond ETFs as well as hybrid ETFs. Our goal with these portfolios is to generate an absolute annual return of 4-6%, with the bulk of that return coming from dividends / income. As most investors recognize, the record low interest rates across the globe make a goal of 4-6% income-derived returns somewhat challenging, particularly if interest rates rise from current levels, which tends to adversely impact the price of yield-driven assets.

With inflation unexpectedly strong, central banks, including the US Fed, have signaled a more hawkish stance. This could lead to a flatter yield curve as the US Fed pushes interest rates up on the short end while concerns over a slower economy limit yields on the long end. We believe that being over-weight financials, having exposure to commodity-oriented equities and floating rate notes should continue to allow our "yield" portfolios to deliver on the 4-6% annual target.

Figure 8: RSA "Yield" (Blue) vs. Simple Global Yield Benchmark (Gray) Portfolio Performance



Source: Rockingstone Advisors, Morningstar Office.

Over the last 3, 5 and 10-year periods, we have largely reached the goals behind the "yield" portfolio with 8.6%, 5.7% and 5.1% returns, respectively. Our top 5 holdings at the end of 2021 included: (1) JPST – Ultra Short Income, (2) NMFC – New Mountain Finance Corp, (3) FLRN – Investment Grade Floating Rate Notes, (4) PFF – Preferreds, and (5) SPY – S&P500.

ESG

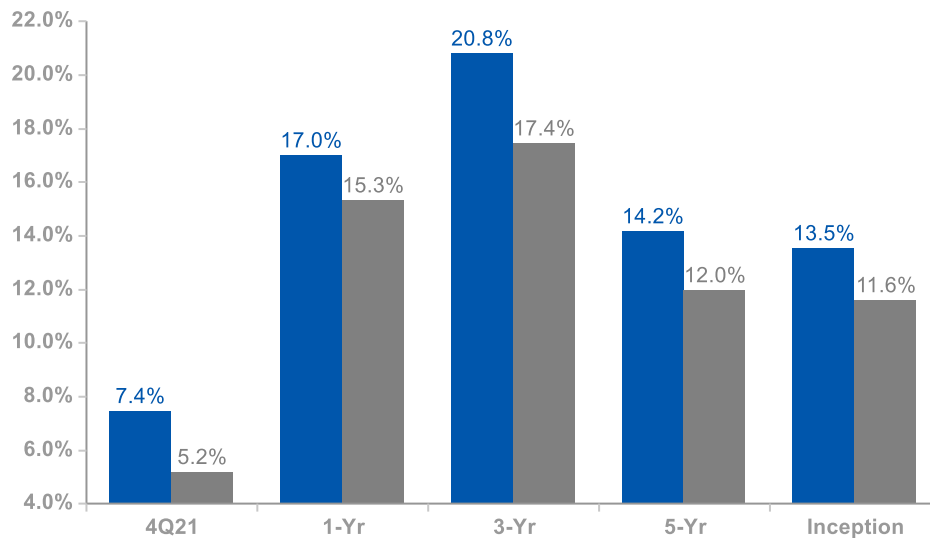
Regarding investments with an Environmental, Social and Corporate Governance (ESG) screen, we construct portfolios that use the Pax Sustainable Allocation Fund (PAXWX) as a benchmark. The benchmark is a balanced fund, i.e. it includes US stocks (49% weighting), non-US stocks (12%) as well as bonds (31%) and cash (8%). Similar to our other portfolios, for ESG we use a combination of ETFs and individual stocks.

Looking broadly at investing trends, ESG continued to gain assets in 2021. But for the first time in an extended period, ESG portfolios that did not hold energy were challenged, as that sector in particular rallied last year. For example, XLE (the energy ETF) was up 53% in 2021 well ahead of the S&P's 29% gain.

Yet screening criteria for ESG remains challenging as some investors may view carbon-based energy as problematic while others view tobacco or gambling as uninvestable. We acknowledge that it is difficult to dissect ETFs. ETFs can often hold 100+ individual stocks and thus our bias is to use more ESG-oriented ETFs but will use non-ESG ranked ETFs if necessary, for sufficient asset allocation and portfolio diversification.

The issue of individual stock investments from an ESG perspective is also somewhat challenging. For example, there is no question that tobacco usage causes harm and the industry has been penalized for numerous misdeeds. Yet Philip Morris (MO) has now replaced about 1/3 of its volume with IQOS, essentially a cleaner nicotine delivery vehicle vs. combustible cigarettes. As IQOS becomes a majority of volume, does that make MO no longer ESG problematic?

Figure 9: RSA "ESG" (Blue) vs. PAX Sustainable Allocation (Gray) Portfolio Performance



Source: Rockingstone Advisors, Morningstar Office.

Using our Morningstar portfolio software, we note the 3 and 5-year beta for our "ESG" portfolio has been 1.27 and 1.28 respectively. This indicates there is 25-30% more volatility in our ESG portfolio vs. the benchmark. This is a function of holding significantly less bond exposure than the benchmark, which is in part related to the limited availability of ESG-oriented ETF bond funds, as well as our general belief that bonds are an expensive asset class. While our performance has exceeded the benchmark in absolute terms, we acknowledge alpha generation has been -0.99 for the last 3-years and -0.67 for 5-years.

Our top 5 individual stock investments at 2021-end included: (1) Estee Lauder, (2) Costco, (3) Linde, (4) Apple, (5) S&P Global. Meanwhile our top 5 ETFs included: (1) KLD – MSCI Social 400, (2) SPYX – S&P500 excluding Fossil Fuels, (3) XLK – Technology, (4) VT – Vanguard Total World Index, (5) VEA – Vanguard Developed Market Index.

NB: We note portfolio analytics generated by our Morningstar software, specifically alpha and beta referenced in the above section, are based off of gross return calculations.

Forecast: 2022

Rockingstone Advisors: Our Latest Forecasts

We have updated our forecasts to reflect Rockingstone's outlook for 2022. Questions around the pandemic becoming endemic, global central bank policies, fiscal stimulus, and supply chain efficacy make forecasting particularly difficult. Nevertheless we use the following table to aid us in our asset weighting and positioning.

Figure 10: Key Metric Forecast

Metric	Year End December	
	Band	Point
US Real GDP (2022)	+1.5% to +3.5%	2.8%
S&P 500 2021 EPS (RSA/Street)	NA	\$200 / \$203
S&P 500 2022 EPS (RSA/Street)	NA	\$215 / \$221
S&P 500 2022 Index	4300-4700	4400
10-Yr US Treasury Yield	1.8% - 2.0%	1.9%
Oil (WTI-2022 End)	\$75 - \$100	\$90
Gold (2022 End)	\$1,850 - \$2,050	\$2,000
Inflation (NTM)	+4.0% to +6.0%	5.0%

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.** It looks as if 2021 EPS will come in around \$203, which is somewhat amazing given that during the height of the pandemic some investors thought earnings could be as low as \$125! Assuming the final earnings numbers for 2021 come in around \$200, Street consensus for 2022 implies about 10% growth to \$221 per share in S&P 500 earnings. Despite the market's volatility in early 2022, it is interesting that 2022 EPS consensus has actually moved upwards over the last few months. Our expectations are for about 6% growth in EPS, 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. For this reason, our earnings forecast is \$215 for 2022.
2. **S&P500 2022 Index.** As we get ready to publish this newsletter, the tech-heavy S&P index has been under significant pressure. This move is somewhat consistent with our view—expressed in several of our recent newsletters—of modest future returns for the S&P500 in 2022 and over the next several years. Currently we expect the S&P to end 2022 around 4400, which implies 20.5x the \$215 EPS.

Five Year Asset Value Forecastⁱⁱⁱ

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

Our main assumptions regarding capital markets is 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 such as (1) historical sales growth, (2) corporate profit margins, (3) dividend yields, and (4) 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 presently the economy suggests lowered expectations are likely prudent. Profit margins are now below their recent history, so they are now additive to valuation.

Our latest calculation for long-term returns suggests that asset allocation across geographies and capitalization is very important right now. As evidenced in the table below, there is a significant disparity. It should not come as a surprise to investors that US large cap stocks appear to offer the lowest long-term return potential from current levels. Valuation for the S&P500 is well above its historical mean as are margins; if both mean revert, muted returns should be 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 more modest headwinds from valuation.

Outside of the US, both Foreign Developed and Emerging Market shares seem to offer decent return potential in the mid-single digits. We note that these returns assume a constant dollar; if we see additional material \$US depreciation, foreign markets could offer double digit returns.

Figure 11: Five-Year Total Equity Return Calculations (Incremental Contribution)

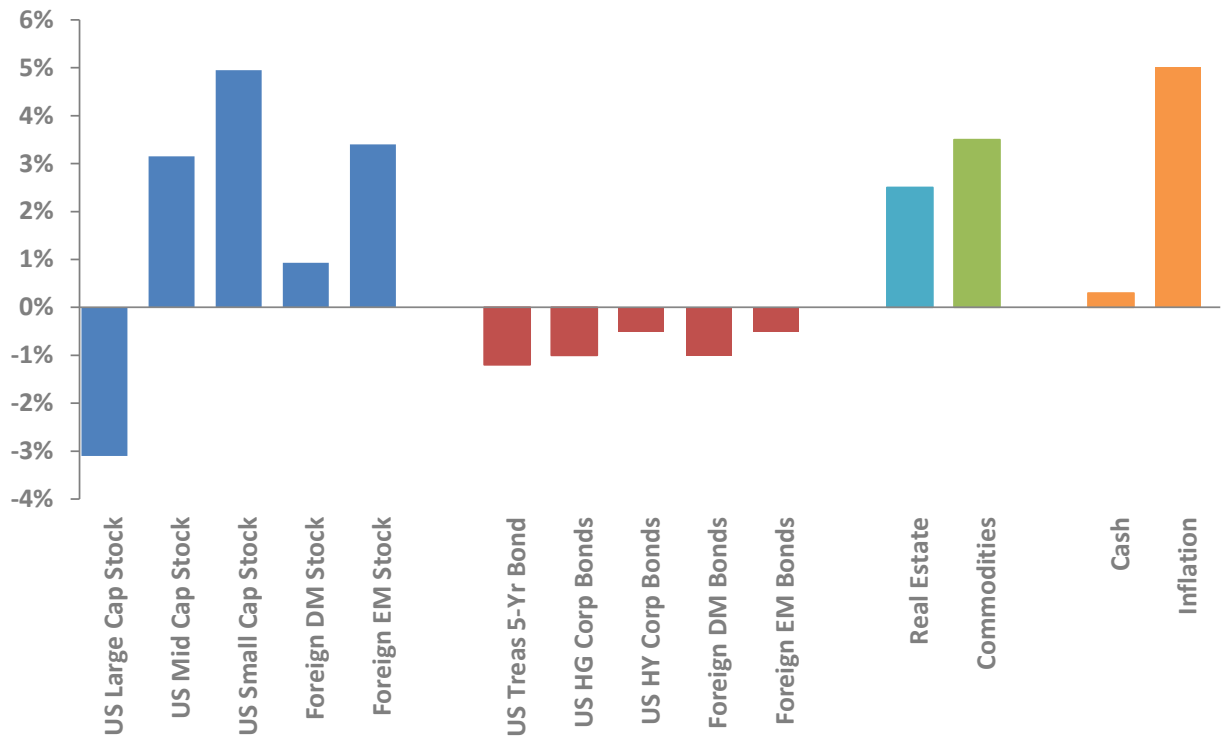
Asset	Index	LT Exp. Return		Sales		Profit Margin		Div. Yield		Valuation
US Large Cap Stock	S&P500	-3.1%	=	4.4%	-	3.8%	+	1.4%	-	5.1%
US Mid Cap Stock	S&P400	3.2%	=	3.8%	-	4.5%	+	1.6%	+	2.3%
US Small Cap Stock	S&P600	5.0%	=	5.4%	-	5.1%	+	1.8%	+	2.9%
Foreign DM Stock	MSCI-EAFE	0.9%	=	2.1%	-	3.5%	+	3.0%	-	0.7%
Foreign EM Stock	MSCI-EM	3.4%	=	4.4%	-	3.2%	+	3.0%	-	0.8%

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 12: Five-Year Asset Class Total Return Forecast



Source: Rockingstone Advisors

Equity Performance Review

Strong Developed Market Equity Returns

With the exception of Emerging Markets, which were down 0.2% in 4Q21 and only up 1.2% in 2021, other equity markets enjoyed strong returns, notably US large caps. Better-than-expected corporate profits, combined with high valuation multiples, helped developed market equities continue to march higher in 2021, even after a solid year in 2020.

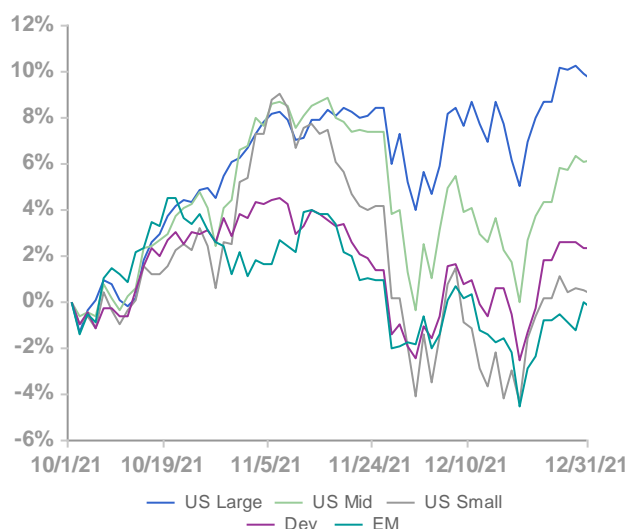
As noted in the figure below, US large caps surged almost 29% last year almost wholly on the performance of the largest stocks in the index. In the last six months of 2021, the S&P 500 outperformed the equal-weight index by 400 basis points. In fact, according to the WSJ, there have been only 11 other instances since 1980 where market breadth narrowed as sharply as it did between April and October 2021.

In addition to the narrowing of the market, the peripatetic nature of the investment themes was evidenced by volatility surrounding the relative moves between growth vs. value, large vs. small-cap and US vs. non-US markets. Each of these factors would witness a multi-day performance run, only to reverse course the next.

Looking more closely at emerging markets, there was an even greater divergence between China and most other markets. For example, one of the largest ETFs for emerging markets is VWO. Due to China equity weakness, VWO was only up about 1% last year as about half of the ETF weighting is in China equities. This is compared to frontier markets (ETF FM), which represents a more diversified portfolio of economies (albeit even more emerging), which was up around 20%!

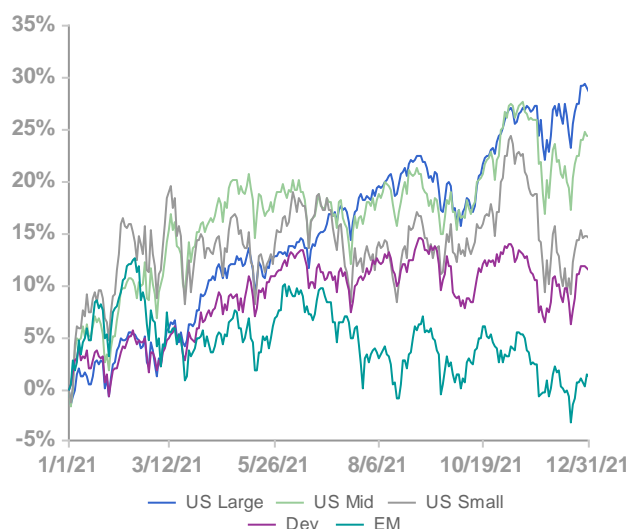
We highlight the following performance regarding 4Q21 and 12M21, respectively, results: US large-cap (+9.7% and +28.8%), US mid-cap (+6.2% and +24.6%), US small-cap (+0.4% and +14.5%), Developed (+2.4% and +11.6%), Emerging (-0.2% and +1.2%).

Figure 13: 4Q21 Equity Performance ^{iv}



Source: FactSet

Figure 34: 12M21 Equity Performance



Source: FactSet

Fixed Income Performance Review

A Challenging Year

Many of the fixed income markets had a challenging 4Q21 and full year 2021. With the exception of preferreds (using ETF PFF which was up 6.9% in 2021) and high yields (JNK +3.9%), bonds recorded broadly negative total return during the year. As we have noted in past newsletters, record level accommodation by global central banks has led to negative real interest rates. With inflation rising rapidly in 2021, it is not surprising that many fixed income investments generated negative returns.

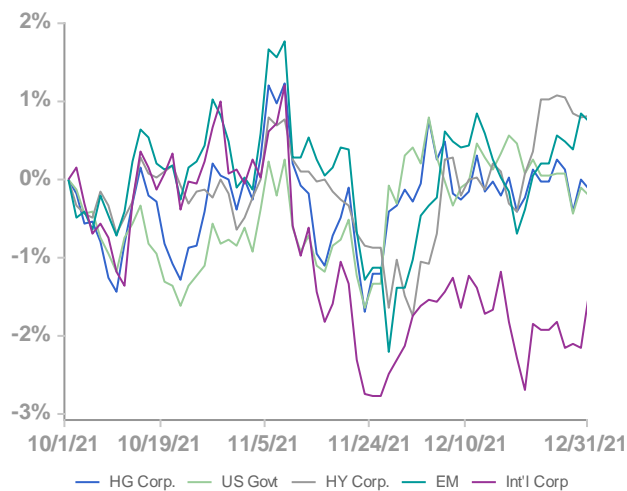
In a rising economic environment, “spread products,” that is, those bonds that trade on spreads (corporates, high yield, etc.) vs. treasuries, tend to outperform “rate” products, which are generally treasury notes and bills, but will also include agency debt. In a slowing economy, the inverse holds true, with rate products outperforming spread products.

Preferred stock is not technically a bond, but a perpetual stock that is higher in the capitalization table than common stock, but below fixed income securities, including high yield.

Investors benefitted in 2021 from increased exposure to spread products, as the economy expanded. Preferreds performed well as bank stocks rose, and high yield posted an exceptionally strong year due to oil’s price rise (energy companies are common high yield issuers due to the capital intensive nature of their industry).

Aside from a flight to safety, it is hard to justify much exposure to fixed income. 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 4Q21 and 12M21, respectively: US High Grades (-0.2% and -1.8%), US Governments (-0.2% and -3.3%), US High Yield (+0.8% and +4.0%), International Developed (-1.3% and -7.7%), Emerging Markets (+0.7% and -2.2%).

Figure 45: 4Q21 Fixed Income Performance^v



Source: FactSet

Figure 56: 12M21 Fixed Income Performance



Source: FactSet

Commodity Performance Review

Inflation On Display

With the exception of precious metals in 2021, most commodities surged in value, reflecting a combination of supply challenges and a recovery in demand (vs. 2020's unusual pandemic impact). In particular, oil jumped close to 60%, although it is worth recognizing the energy complex was very weak in 2020. With global supply chains disrupted and ever-challenging weather events, it also is not a surprise to see agricultural goods being priced higher as well.

It is interesting to us that precious metals, typically viewed as offering one of the best inflation hedges, were actually down for all of 2021. Perhaps the market now sees cryptocurrencies as a better hedging tool, although it is also possible that precious metals are signaling inflation will be transitory.

Taking a step back, we emphasize investors should normally expect greater volatility in commodity prices relative to equities or bonds. This is due to the fact that 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 4Q21 and 12M21, respectively: Oil -2.5% and +60.7%, Precious Metals (+3.6% and -7.0%), Agriculture (+1.8% and +22.4%), Base Metals (+6.4% and +29.0%).

Figure 67: 4Q21 Commodity Performance^{vi}



Source: FactSet

Figure 18: 12M21 Commodity Performance

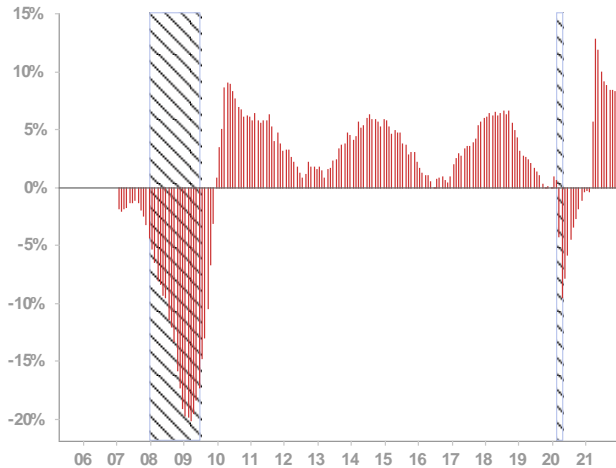


Source: FactSet

Chart Book

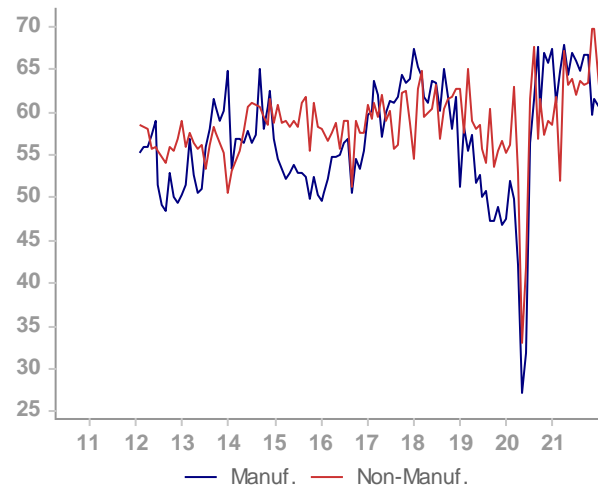
Leading Indicators

Figure 79: Index of Leading Economic Indicators



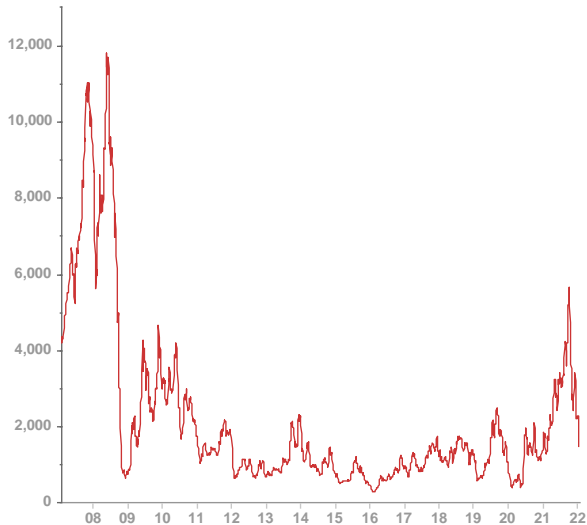
Source: FactSet

Figure 20: ISM New Orders



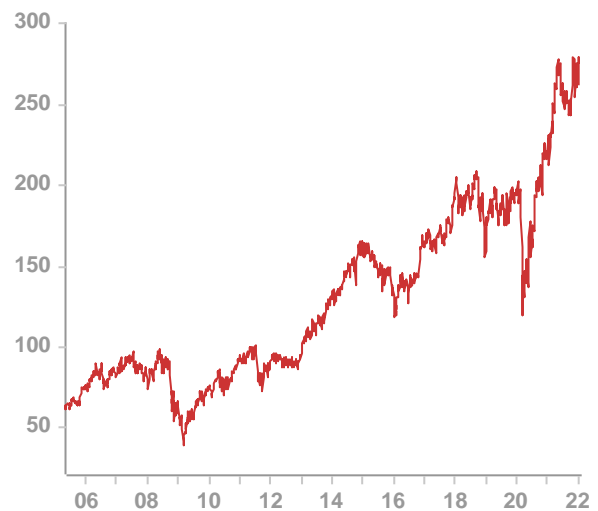
Source: St. Louis Federal Reserve, FRED Database

Figure 81: Baltic Freight Index



Source: FactSet

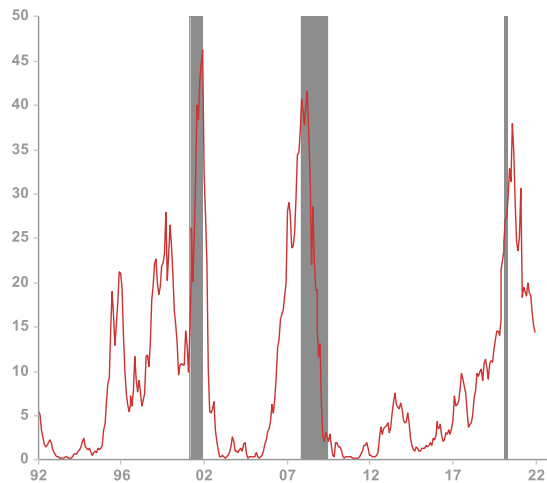
Figure 92: DJ Transports



Source: FactSet

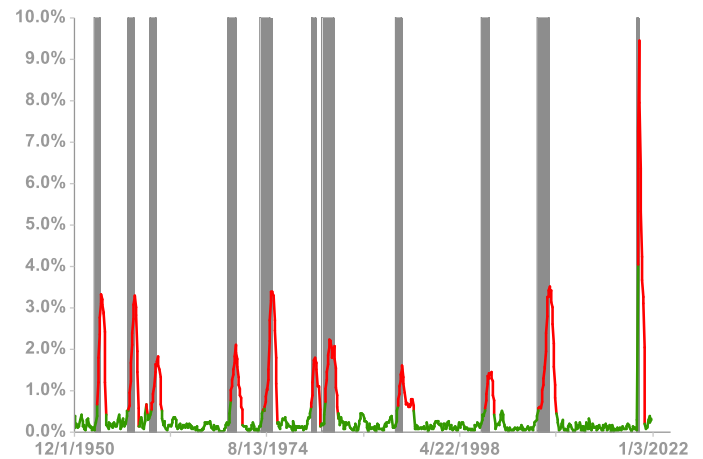
Real-time Recession Risk Indicators

Figure 23: Treasury Spread Recession Predictor



Source: FactSet, FRED Database

Figure 24: Sahm Real-time Recession Predictor



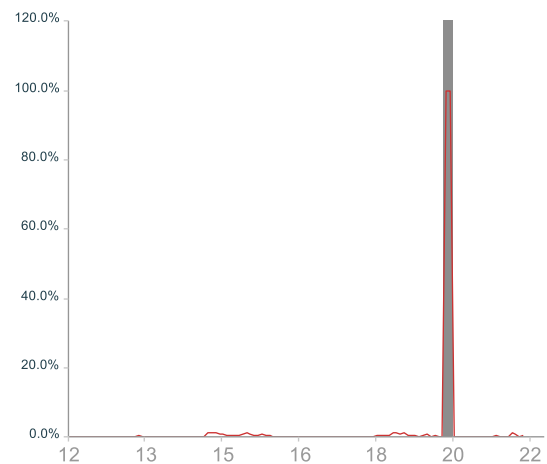
Source: St. Louis Federal Reserve, FRED Database

Figure 105: GDP Now (Atlanta Fed)



Source: FactSet, FRED Database

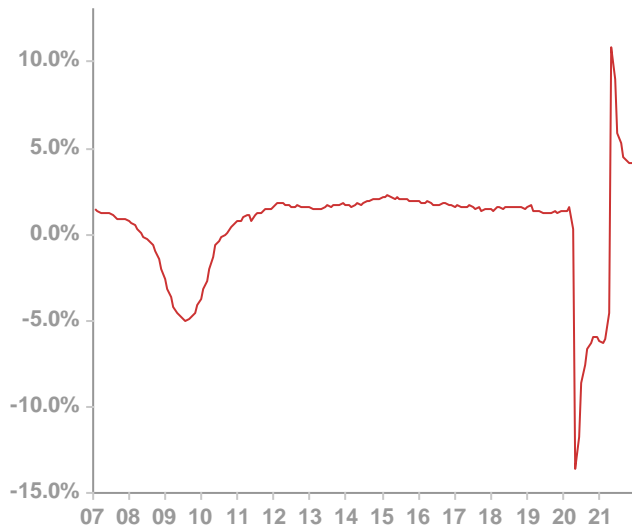
Figure 116: Smoothed US Recession Probabilities



Source: FactSet, FRED Database

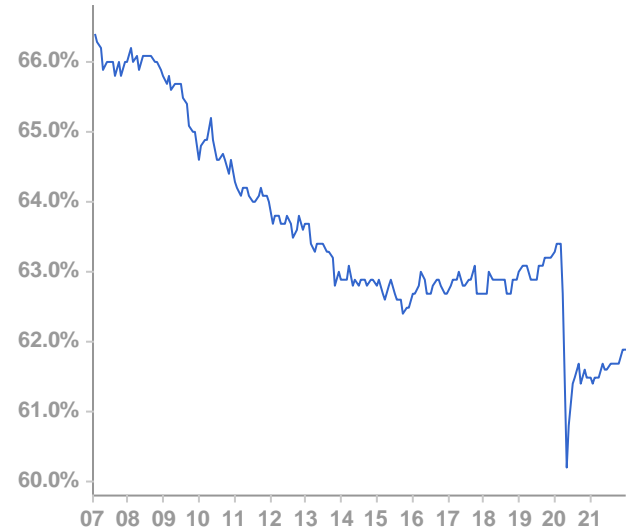
Labor Market Indicators

Figure 127: Payroll Growth (Establishment Survey, % Chg YoY)



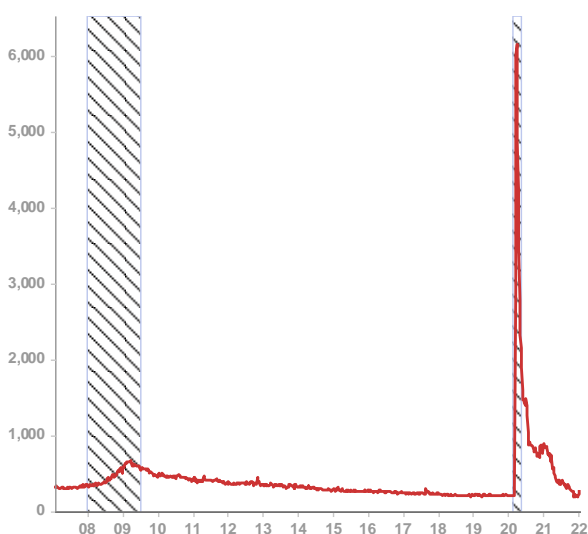
Source: FactSet

Figure 138: Labor Participation Rate (% of Workforce)



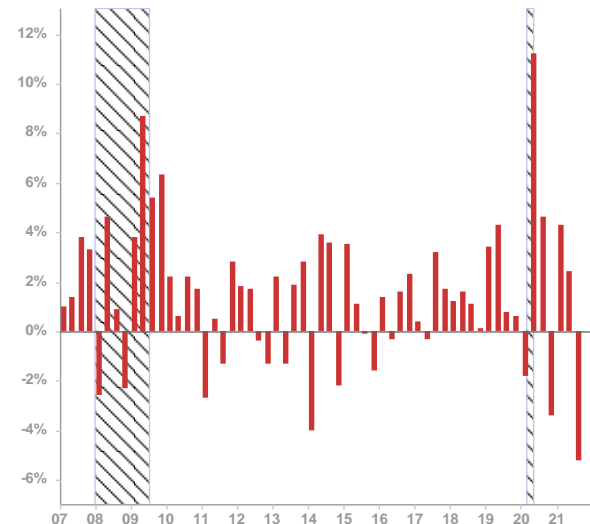
Source: FactSet

Figure 149: Initial Unemployment Claims



Source: FactSet

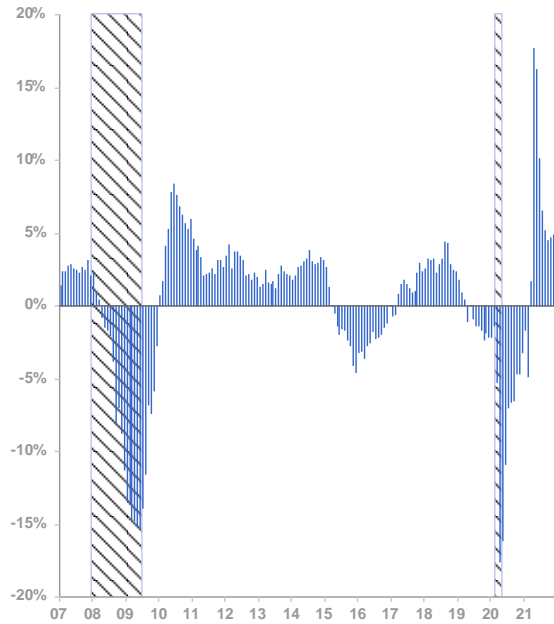
Figure 30: Non-Farm Productivity (% Chg YoY)



Source: FactSet

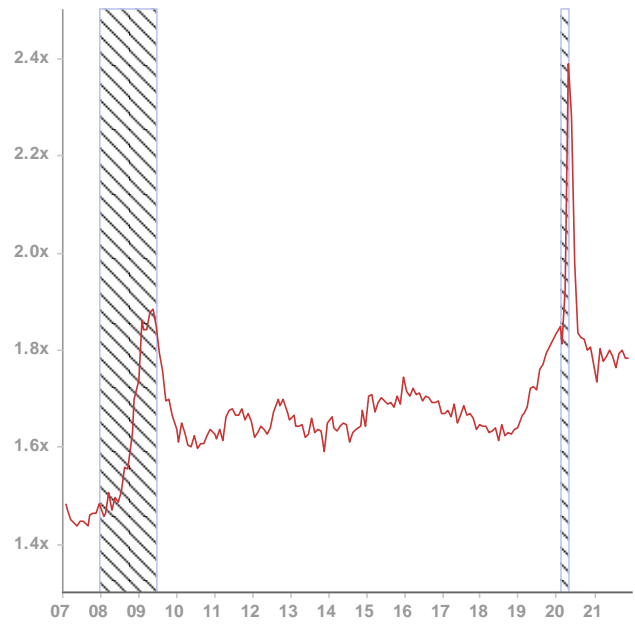
Production and Business Activity Indicators

Figure 31: Industrial Production (% Chg YoY)



Source: FactSet

Figure 152: US Inventory to Shipment Ratio



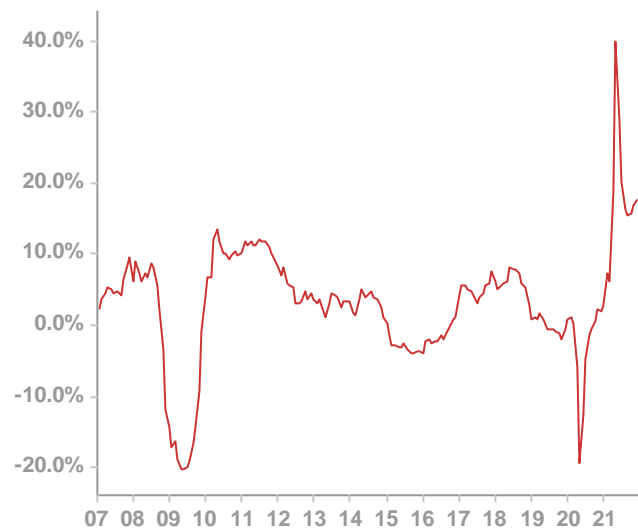
Source: FactSet

Figure 163: Unfilled Orders (% Chg. YoY)



Source: FactSet

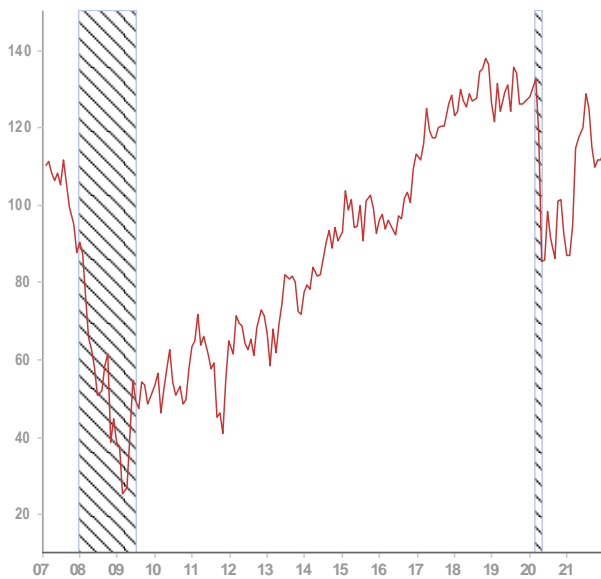
Figure 174: Business Sales (% Chg. YoY)



Source: FactSet

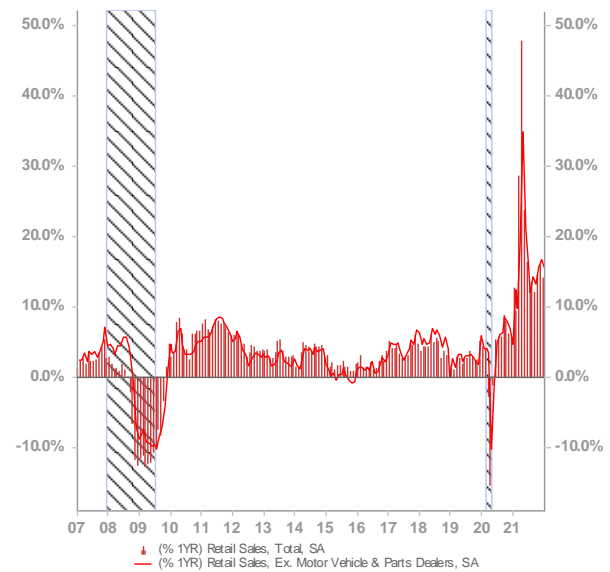
Consumer and Household Activity Indicators

Figure 185: University of Michigan Consumer Sentiment



Source: FactSet

Figure 196: Retail Sales



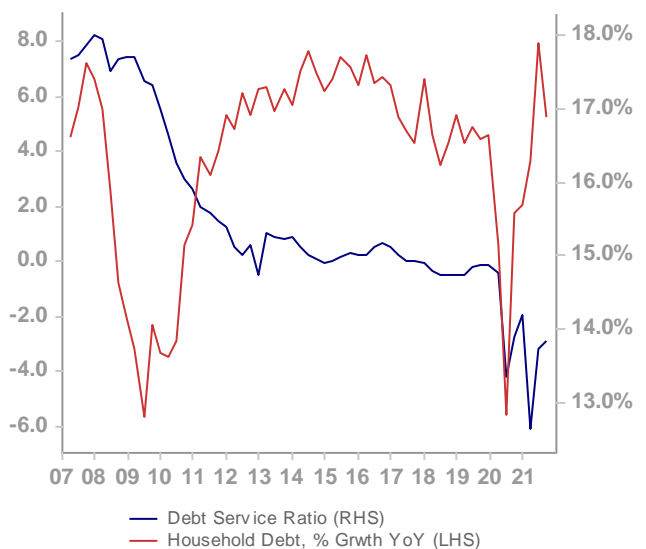
Source: FactSet

Figure 37: Personal Income and Savings Rate



Source: FactSet

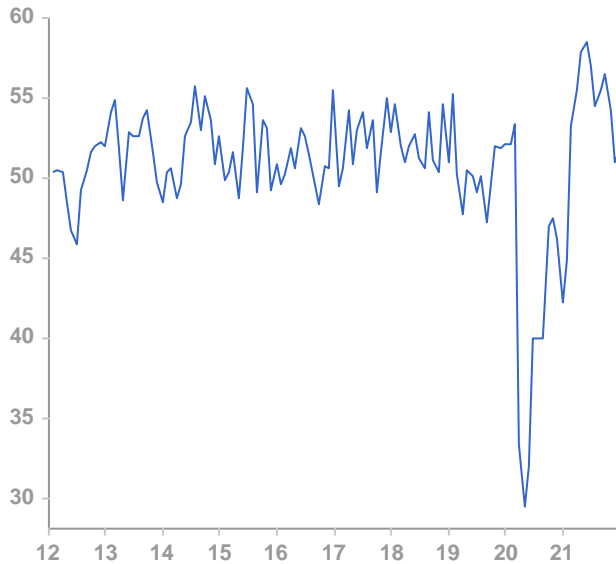
Figure 38: Household Debt



Source: FactSet

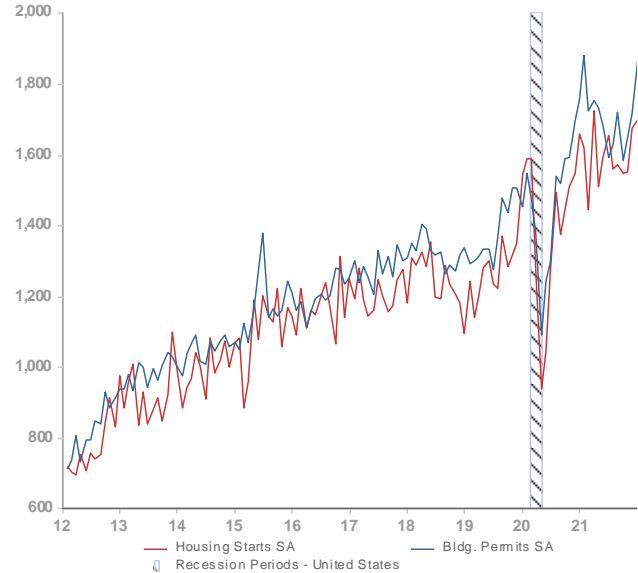
Housing and Construction Indicators

Figure 209: Architecture Billings Index



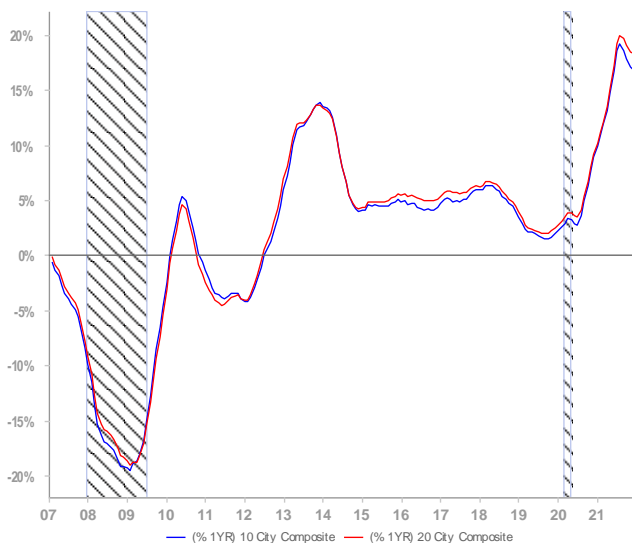
Source: FactSet

Figure 40: Housing Starts and Building Permits



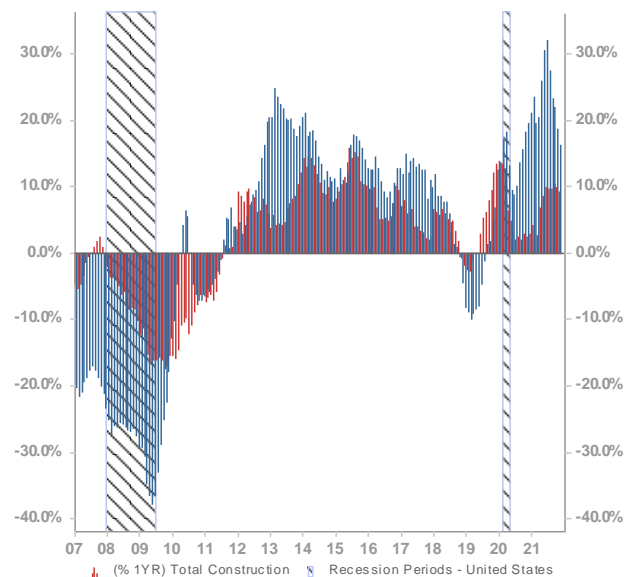
Source: FactSet

Figure 41: Case-Shiller 20-City & 10-City Index, % Chg YoY



Source: FactSet

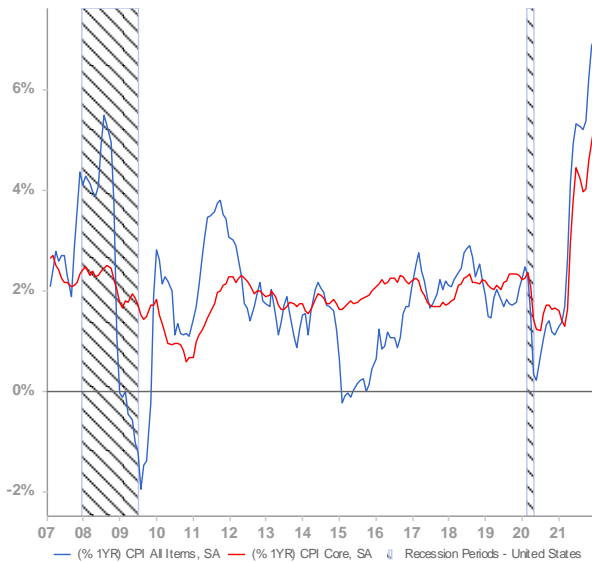
Figure 212: Private and Total Construction (% Chg YoY)



Source: FactSet

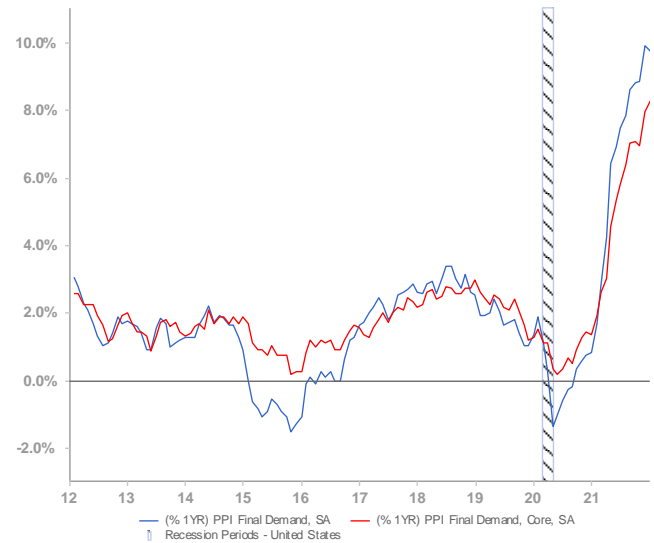
Price Indicators

Figure 223: Consumer Price Index



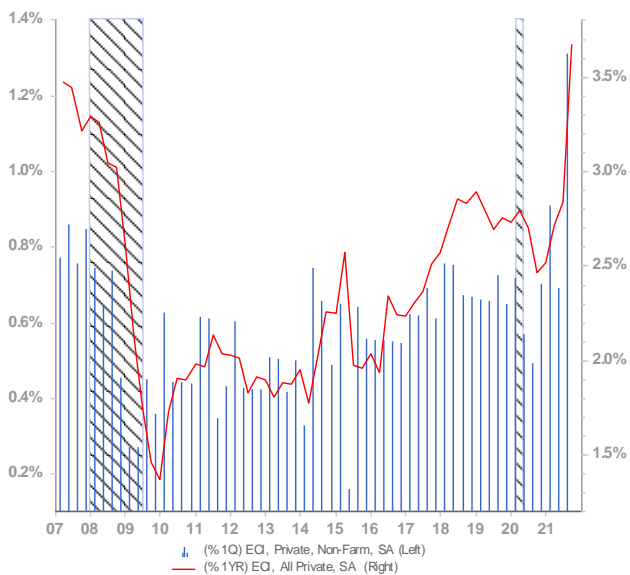
Source: FactSet

Figure 234: Producer Price Index



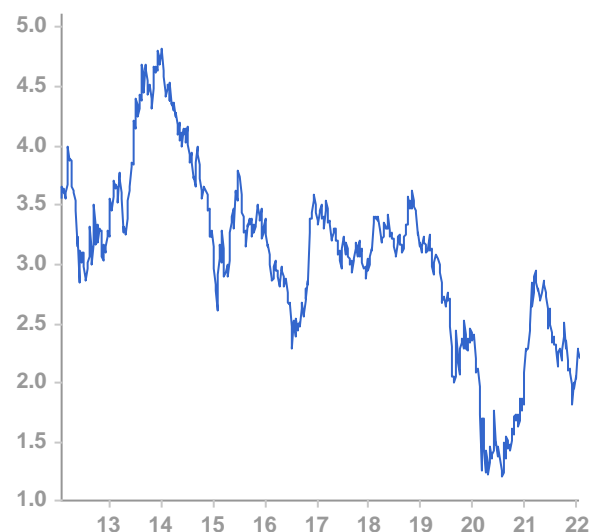
Source: FactSet

Figure 245: Employment Cost Index



Source: FactSet

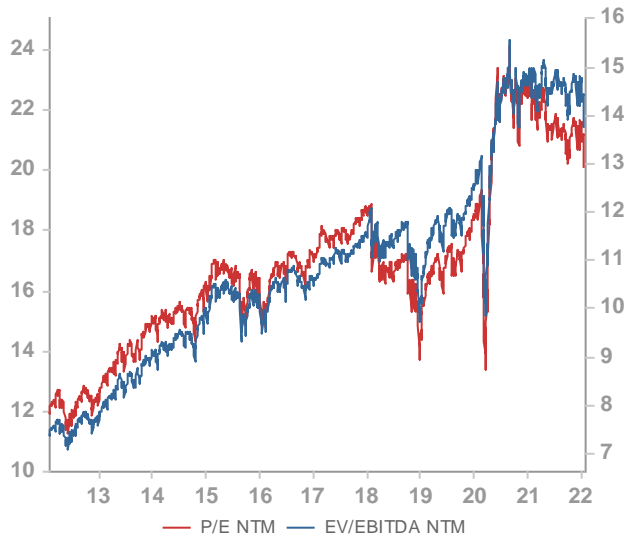
Figure 256: 10-Year, 5-Year Forward Inflation Expectations



Source: FactSet

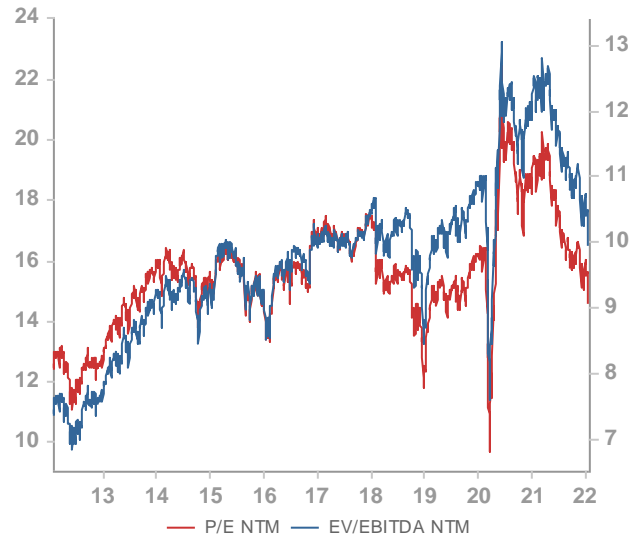
Valuation Indicators

Figure 47: S&P 500 P/E (LHS) & EV/EBITDA (RHS)



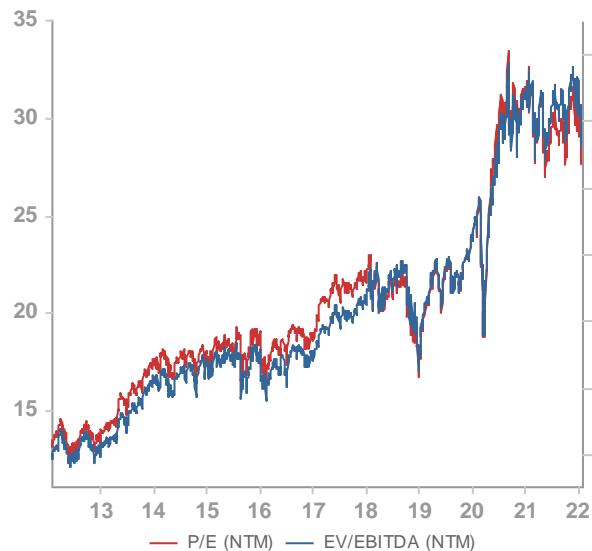
Source: FactSet

Figure 268: S&P Midcap 400 P/E (LHS) & EV/EBITDA (RHS)



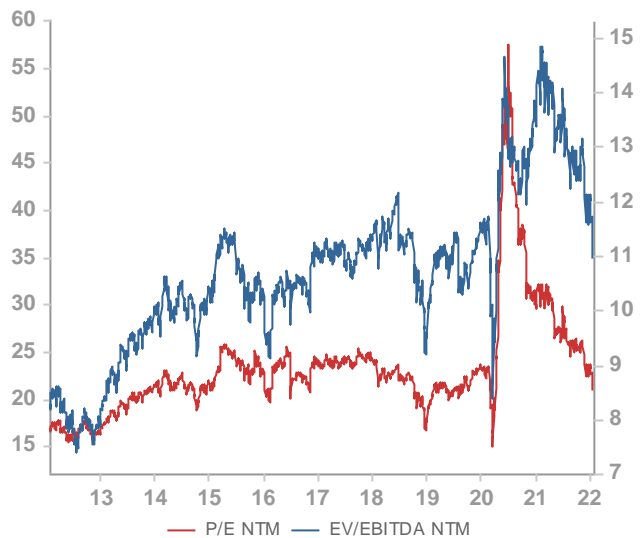
Source: FactSet

Figure 279: Nasdaq 100 P/E (LHS) & EV/EBITDA (RHS)



Source: St. Louis Federal Reserve, FRED Database

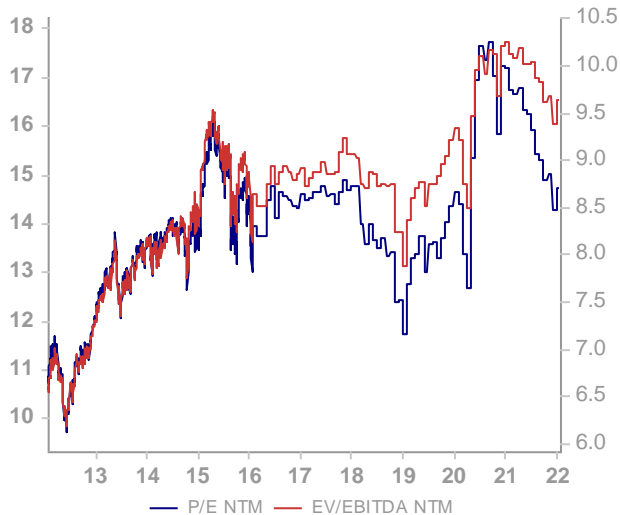
Figure 50: Russell 2000 P/E (LHS) & EV/EBITDA (RHS)



Source: St. Louis Federal Reserve, FRED Database

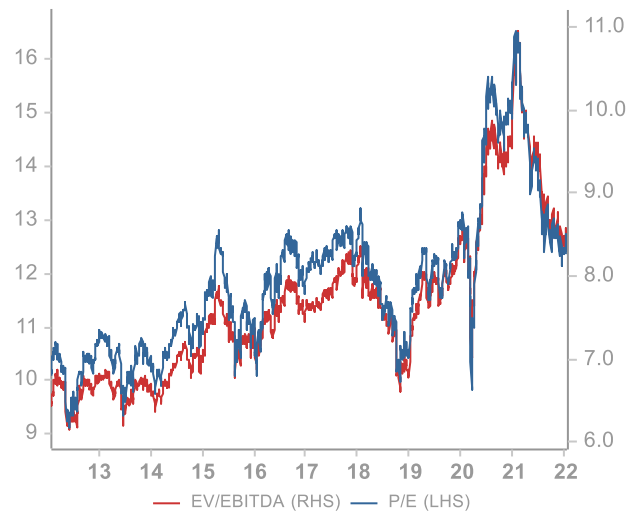
Valuation and Volatility Indicators

Figure 281: Intl Developed P/E (LHS) & EV/EBITDA (RHS)



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

Figure 52: Emerging Markets P/E (LHS) & EV/EBITDA (RHS)



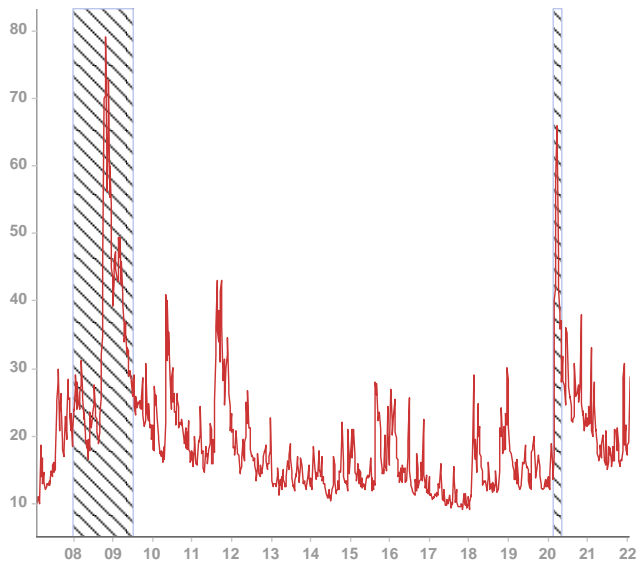
Source: Robert Shiller, Yale University, Rockingstone Advisors, Standard & Poor's

Figure 293: S&P 500 Dividend Yield



Source: FactSet

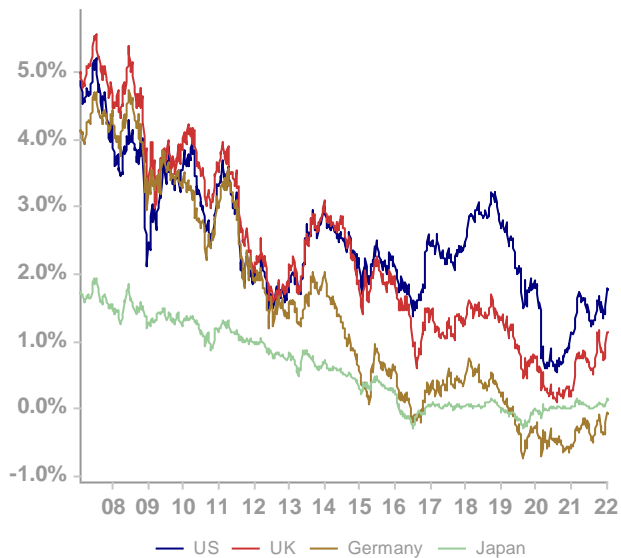
Figure 304: CBOE Volatility Index



Source: FactSet

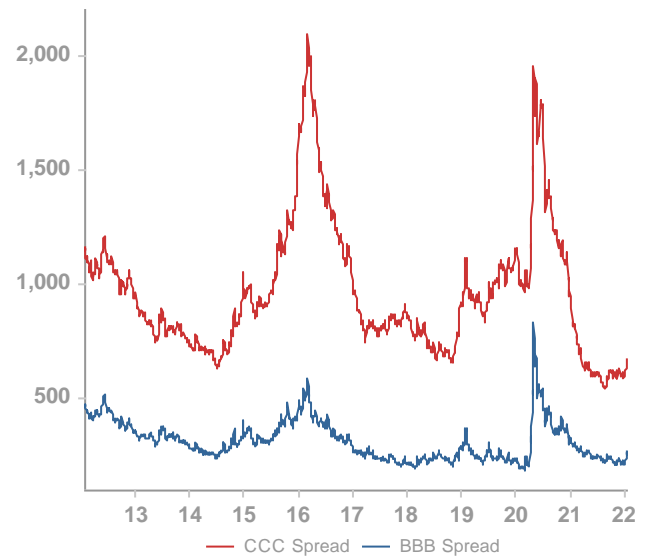
Bond Market Indicators

Figure 315: 10-Year Global Bond Yields



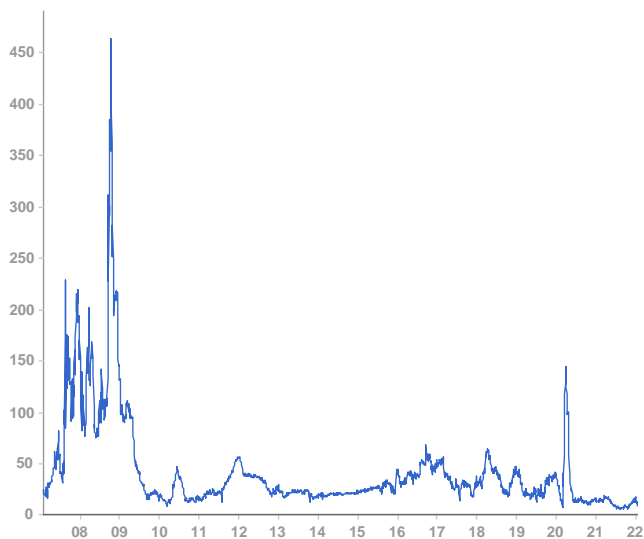
Source: FactSet

Figure 326: CCC and BBB Spreads (Option Adjusted)



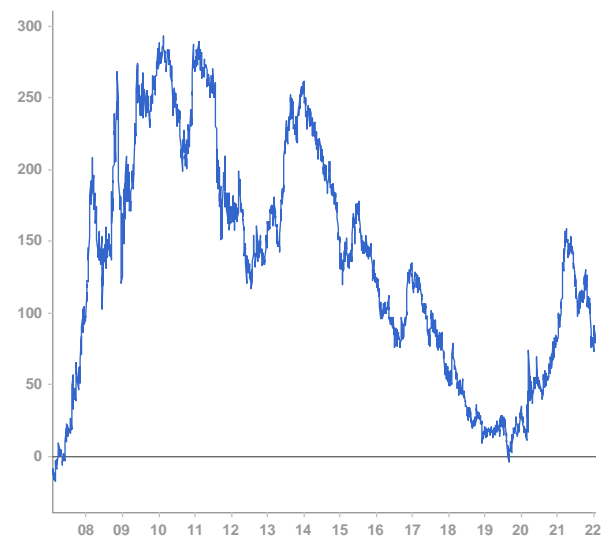
Source: FactSet

Figure 337: TED Spread (bps)



Source: FactSet

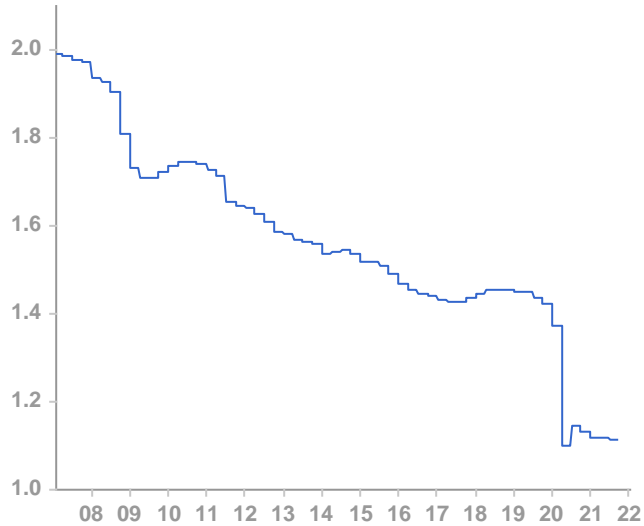
Figure 348: 10-Year Minus 2-Year Treasury



Source: FactSet

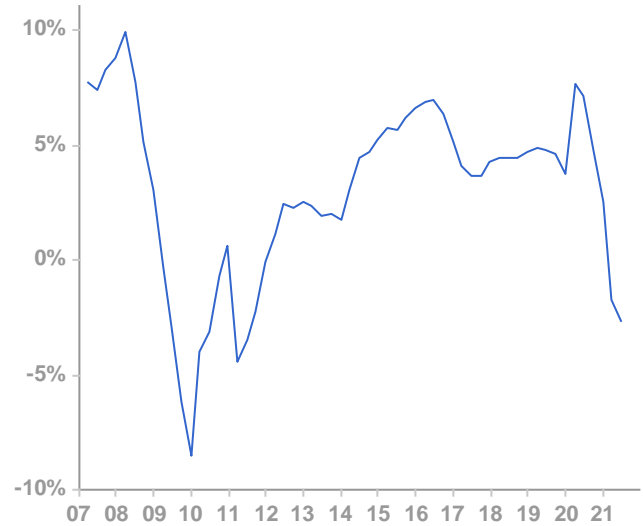
Liquidity and Other Indicators

Figure 359: Velocity of M2 Money Stock



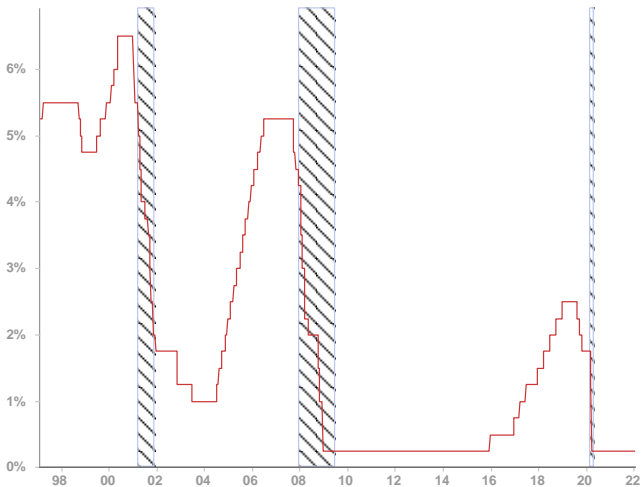
Source: FactSet

Figure 60: Loan Growth (Non-Financial, Private Sector)



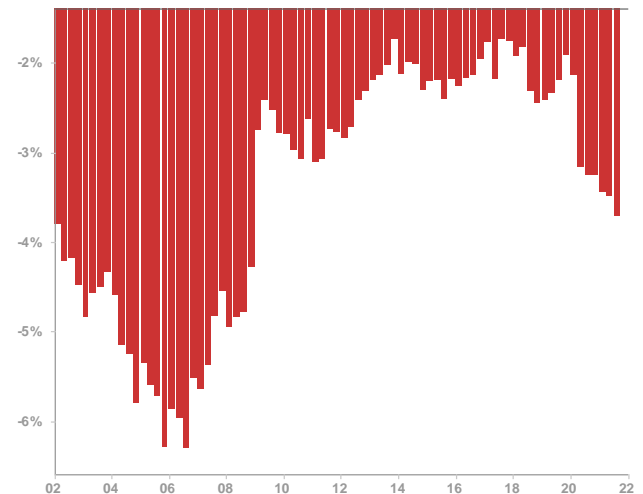
Source: FactSet

Figure 361: Fed Funds Target Rate



Source: St. Louis Federal Reserve, FRED Database

Figure 62: 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 December 31, 2021; most other prices and yields are as of January 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.

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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.