# Navigating Higher Rates, Persistent Inflation, Volatility, and Liquidity Challenges

> Total returns closed the worst year on record with a positive contribution in Q4.

> Yields rose in 2022 across the investment grade market, where investors are finally seeing a prospective return symmetry that has been missing for a very long time.

> From the Fed's recently (Dec meeting) updated "dot chart," the median Fed target rate for the end of 2023 is 5.125% (implying a 5.00 to 5.25% target range) – so another +75 basis points (bps) of tightening is the median expectation for the coming year, but data dependency will be key as inflation remains high. Higher demand for commodities as China's economy re-opens could complicate matters.

> Despite an unexpectedly powerful rally in November, the Bloomberg Municipal Bond Index returned 4.10% for the fourth quarter, bringing the full-year return to -8.53% which outperformed the Bloomberg Aggregate Bond Index (-13.01%), the Bloomberg Corporate Index (-15.76%), and Bloomberg Treasury Index (-12.46%) for the year.

> While inflation and volatility were headwinds, strong demand and limited supply following seasonal strength were tailwinds as retail investors sought to lock in higher rates than they have seen in a while. Rates moved significantly lower during the quarter, benefiting longer duration.

## INVESTMENT GRADE-TAXABLE

### A Modest Reprieve: IG Generates First Positive Quarter of the Year

After three consecutive quarters of higher and higher interest rates, the fourth quarter delivered the first positive total return for the investment grade bond market in 2022. The overall change in interest rates was muted as recapped below:

| | 9/30/22 | 12/30/22 | 4Q22 | 2022 |
|---|---|---|---|---|
| 2 Year | 4.28 | 4.33 | +0.15 | +3.70 |
| 5 Year | 4.09 | 4.01 | -0.08 | +2.74 |
| 10 Year | 3.83 | 3.88 | +0.05 | +2.37 |
| 30 Year | 3.78 | 3.97 | +0.19 | +2.06 |

Source: Bloomberg.

The belly of the curve – as represented by the five-year Treasury – saw a modest decline in yields over Q4, but for the full year longer-term Treasuries (10s/30s) saw yields rise by less than the short and intermediate term yields (2s/5s), according to Bloomberg, leaving the curve inverted for nearly all of the second half of the year.

The Treasury curve (using 2s/10s) inverted further over the quarter to end the year at -55 bps, although the intra-quarter inversion reached -84 bps in early December – levels not seen since the early 1980s.

The Bloomberg U.S. Aggregate Bond Index ("Agg") generated a +1.87% total return in Q4, its best quarterly total return since a similar performance in Q2 2021.

Despite the Q4 reprieve the Agg suffered a -13.01% total return for the year, the worst 12 months by a wide margin since the inception of the index in 1976. The intra-year drawdown peaked on 10/24/22 at -16.82%. The Bloomberg US EQ:FI 60:40 Index (stocks/bonds) ended 2022 with a -16.86% total return. The intra-year drawdown peaked on 10/14/22 at -21.39%.

### Evolution of Q4

The quarter began with solid risk asset performance in October following a dismal September performance, even though interest rates were still rising. October saw an 8.1% gain for the S&P 500® following September's -9.2% drawdown.

Corporate credit sectors generated positive excess returns in October, with a considerable outperformance from high yield credit vs. investment grade credit.

Another stronger CPI update released on October 13th kept the pressure on the Federal Open Market Committee ("FOMC") and solidified the fourth consecutive 75-bps rate hike on November 1.

Despite the inflation data, higher stocks and tighter spreads overpowered higher rates such that financial conditions (as represented by the Goldman Sachs Financial Conditions Index, or GSFCI) "loosened" by 27 bps in October.

### A November to Remember

November saw another strong performance from stocks and an even better performance from the spread sectors of the IG market.

November's performance driver was the downside surprise in the CPI update released on November 10th – the headline rate was below the consensus expectation, and the core CPI saw the slowest advance in over a year.

This fueled a rally in both risk assets (S&P 500 +5.6%) as well as Treasuries (lower rates) with investors anticipating the FOMC would now slow the pace of rate hikes in December.

IG corporate credit generated the strongest month of excess returns (+211 bps) since November 2020 and the strongest total return (+5.18%) since April 2020. Lower rates, higher stocks, and tighter spreads helped ease the GSFCI by 69 bps in November.

The other big driver for markets in November came from growing signs that China was beginning to shift away from its zero COVID strategy – accelerating the potential for a real re-opening that could boost global growth.

### December Faltered

Despite another downside surprise in the CPI update released on December 13 in addition to the FOMC's downshift to a 50-bps hike on December 14, the momentum behind risk assets and Treasuries finally ran out of steam.

Stocks gave back the November gain with a -5.8% decline in December. Interest rates reverted to moving higher again and excess returns for the IG spread sectors were only marginally positive by the end of the month. Higher rates and lower stocks helped tighten the GSFCI by 35 bps in December.

### Japan Surprise

Adding to the higher rate backdrop in December was the very surprising shift by the Bank of Japan (BoJ), announced overnight on December 20, where they widened the trading band on 10-year Japanese Government Bonds (JGBs). While 100% of BoJ watchers (47 surveyed by Bloomberg between December 7–12) predicted no policy change, the BoJ decided to maintain the policy rates (-0.1% for short term and around 0% for 10yr JGB yield) but widen the band of the 10yr yield target from +/-25 bps to +/-50bps.

While the BoJ move was advertised as a technical adjustment to improve market functioning and encourage a smoother formation of the entire yield curve, many investors interpreted it as the beginning of a pivot from the one developed market central bank that was not tightening financial conditions in 2022.

### Total Return Summary

Total returns closed the worst year on record with a positive contribution in the final quarter. Using Bloomberg index data, total returns were:

| | Q422 | YTD 2022 |
|---|---|---|
| Aggregate | +1.87% | -13.01% |
| IG Corporate | +3.63% | -15.76% |
| RMBS | +2.14% | -11.81% |
| CMBS | +1.02% | -10.91% |
| ABS | +0.81% | -4.30% |

Source: Bloomberg. Data as 12/31/22.

Excess returns were also positive for the primary spread sectors (Corporates and RMBS) for the quarter, according to Bloomberg.

> **IG Corporate** credit generated +289 bps of excess, as spreads tightened from +159 bps to +130 bps over the quarter

– Lower quality BBB credits outperformed with +327 bps of excess against single A credits at +255 bps

– Long credit drove the outperformance with +534 bps of excess against intermediate credit at +164 bps

– Despite the solid Q4 excess, for the full year IG corporates still saw -125 bps of excess, not an immaterial underperformance, but much better than where the sector was at the end of Q3, which was -311 bps.

> **RMBS** rebounded after a brutal Q3 to generate +106 bps of excess, as a significant rally in November accounted for more than all the gains for Q4

– PCC (perfect current coupon) – a generic spread proxy for the "production" coupon – tightened from +184 bps to +151 bps, still very wide, but the sector finally generated investor interest after underperforming for most of the calendar year

– Fear of the Fed becoming a seller of RMBS at some point as part of its QT (quantitative tightening or balance sheet runoff) effort has receded somewhat.

– Assuming there is no premature end to QT in 2023, the Fed will eventually be forced to address its RMBS holdings as the runoff there will not keep pace with the Treasury runoff

– Even after the Q4 bounce in excess, for the full year RMBS still suffered its second worst annual performance in excess return terms at -223 bps (2008's financial crisis was slightly worse at -232 bps)

> **CMBS** and **ABS** excess returns were not material over Q4, generating -10 bps and -20 bps, respectively

– For the full year CMBS excess was -120 bps while ABS excess was +30 bps

> The "PLUS" sectors generated impressive total and excess returns over the quarter (Bloomberg index data again)

– High Yield total return came at +4.17% and excess return of +305 bps for Q4

– EMD total return +6.60% and excess return of +573 bps

– High Yield in 2022 was still challenged at -11.19% in total return and -371 bps of excess

– EMD in 2022 suffered -15.26% in total return and -301 bps of excess (all excess data from Bloomberg)

### Broad Financial Conditions Eased

Using the GSFCI, Q4 saw 61 bps of easing, despite another 125 bps of rate hikes in Q4. The GSFCI was 315 bps tighter for the year, an annual move only eclipsed by the 326 bps of tightening in the 2008 global financial crisis (data goes back to 1983). The GSFCI incorporates the Fed's target rate, the 10-year Treasury yield, BBB spreads, stock prices, and the trade-weighted dollar. The changes in all these components have contributed to the tightening.

The FOMC expressed concern that the easing of financial conditions could be driven "by a misperception by the public of the Committee's reaction function." This was the most explicit reference from the committee that the broader easing seen since the November FOMC meeting was unwelcome, which suggests any further easing would face push back from the FOMC in both rhetoric and action.



continued

### Looking Forward

> From the Fed's recently (December meeting) updated "dot chart," the median Fed target rate for the end of 2023 is 5.125% (implying a 5.00 to 5.25% target range) – so another +75 bps of tightening is the median expectation for the coming year.

> While the FOMC median for the terminal rate is 5.125%, the market has consistently priced for a lower terminal value. The "dot chart" also implies no rate cuts until 2024 and 2025 – not 2023, as the rates market continues to anticipate.

> Data dependency will remain the primary overriding theme the Fed attaches to any forward-looking policy guidance – and they remain steadfast that the updated dots are only the current opinions of all FOMC members – not a formal forecast or explicit forward guidance.

### Channeling the Volcker Fed

While this tightening cycle persists, the +425 bps of tightening over a 9-month window is unprecedented and harkens back to the Volcker Fed of the early 1980s. Chair Paul Volcker's tightening cycle targeted monetary aggregates (specifically non-borrowed reserves in the banking system) as opposed to the explicit rate targeting that has been conducted by the FOMC since its 1994 inception under Chair Alan Greenspan. Rate targeting was not new to the 1994 tightening cycle, but the formal announcement by the FOMC of the target rate was a Greenspan Fed change.

### Getting Real About Rates and Financial Repression

Treasury rates moved sharply higher last year, and as a result benchmark yields across the investment grade market followed suit. The Bloomberg Aggregate yield-to-worst (y-t-w) ended 2022 at 4.68% – up from 1.75% at the end of 2021.

Given a decade of financial repression, the 2010s saw the Bloomberg Aggregate y-t-w average of ~2.5%, which was down considerably from the ~5% average of the 2000s.

The return of inflation has forced yields to return to levels that represent the "old normal" as opposed to the low rates that permeated the "new normal" in the post-global financial crisis era. As a result, the investment grade market finally offers a prospective return symmetry that has been missing for a very long time.

While the rate move has been substantial, spread changes for the primary spread sectors have been far more muted. Spreads have widened – hence the negative excess returns for the primary spread sectors – but the move has been exceptionally orderly considering the magnitude of the rate shift, the sell-off in the stock market, and the consensus expectation of imminent recession in 2023.

### Pumping the Brakes on the Economy Warrants Caution

The economic slowdown that has been underway is expected to persist in 2023. The policy induced near 6% GDP of 2021 looks likely to slow to around 2% in 2022. The current consensus for 2023 – using the Bloomberg economic survey from December – anticipates a further GDP slowdown to barely 0.5%.

It is this relatively muted response, in corporate credit in particular as opposed to the already considerable pain the RMBS market has endured, that warrants ongoing caution and more defensive positioning entering 2023.

Policy tightening comes with long and variable lags, so the full impact of the Fed's cumulative tightening will play out over 2023.

**REAL GDP AND UNEMPLOYMENT RATE PROJECTIONS (%)**

| | | Change in Real GDP | | Unemployment Rate[a] | |
|---|---|---|---|---|---|
| **Source** | **Date of Forecast** | **2023** | **2024** | **2023** | **2024** |
| CBO's Likely Range[b] | Nov. 2022 | -2.0 to 1.8 | 0.7 to 4.2 | 3.8 to 6.4 | 3.2 to 6.4 |
| Survey of Professional Forecasters' Middle Two-Thirds[c] | Nov. 2022 | -0.4 to 1.8 | n.a. | 4.0 to 5.0 | n.a. |
| Federal Reserve's Central Tendency[d] | Sept. 2022 | 0.5 to 1.5 | 1.4 to 2.0 | 4.1 to 4.5 | 4.0 to 4.6 |
| **Memorandum** | | | | | |
| CBO's Most Recent Baseline | May 2022 | 2.2 | 1.5 | 3.6 | 3.8 |

Data sources: Congressional Budget Office; Federal Reserve Bank of Philadelphia, "Fourth Quarter 2022 Survey of Professional Forecasters" (November 14, 2022), https://tinyurl.com/3ftuwcf7; Board of Governors of the Federal Reserve System, "Table 1. Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, Under Their Individual Assumptions of Projected Appropriate Monetary Policy, September 2022" (September 21, 2022), https://tinyurl.com/ycx5pchd; Congressional Budget Office, *The Budget and Economic Outlook: 2002 to 2032* (supplemental data, May 2022), www.cbo.gov/publication/57950#data.

Change in real GDP is measured in the fourth quarter of the year indicated relative to the fourth quarter of the previous year. The unemployment rate is measured in the fourth quarter of the year. Real value are nominal values that have been adjusted to remove the effects of changes in prices.

a. The unemployment rate is the number of people not working who are available for work and are either seeking work or expecting to be recalled from a temporary layoff, expressed as a percentage of the labor force.
b. CBO estimates that there is a roughly two-thirds chance that the actual value will fall within the range shown. The agency plans to publish a new baseline, showing point estimates, early in 2023, updating its most recent baseline, which was published in May 2022.
c. Values for the Survey of Professional Forecasters are in the middle two-thirds of the full range–which is formed by removing the highest and lowest one-sixth of the projections. For example, 38 forecasters reported real GDP growth in the survey, and the six highest and six lowest estimates were removed.
d. Values for the Federal Reserve are the central tendency–which is, roughly speaking, the middle two-thirds of the full range, formed by removing the three highest and three lowest of the 16 projections by the Board of Governors and the presidents of the Federal Reserve Banks.

GDP = gross domestic product; n.a. = not available.



continued

**The Inflation Conundrum**

> Inflation remains high, and while energy price declines and mild winter weather at the start of 2023 will help keep headline inflation from reaccelerating in the near term, core inflation remains uncomfortably high

> If China's economy amps up, especially with recent policy initiatives that seem far more geared to promoting growth versus the discipline that they were inflicting on several industries for the past few years, that will pressure inflation higher from the commodity side

> The era of cheap labor, capital, goods, and energy may be over in the post pandemic world

– Even pre-pandemic, the trade war highlighted the danger of being overly dependent on one country for manufacturing and supply chain management

– Greater diversity and limited onshoring represent a move away from the lowest cost option that made China the primary manufacturing destination for the last 20+ years

– The pandemic further illustrated the weakness of supply chains dependent on one country

- No longer will the lowest cost "just in time" location suffice
- Greater diversity for sourcing products as well as an element of "just in case" is now relevant

– The supply/demand imbalance in the labor market has empowered labor to demand better wages

- 2023 will see an important auto industry contract negotiation, with the potential to see considerable wage gains highlighting this changing dynamic and labor's improved bargaining position

– The green energy transition underway will further pressure inflation, as a poorly executed shift away from fossil fuels promotes chronic underinvestment, leaving the economy vulnerable in the short run to tighter energy supply conditions periodically

- As the EU pivots away from Russian natural gas, more liquid natural gas facilities will be built
- Natural gas will transition to a more globally traded commodity and pressure prices higher over time

> All of these influences represent a pivot from forces of disinflation to inflation and forecasts for an orderly return back to the 2% price stability objective seem overly optimistic

## INVESTMENT GRADE-TAX EXEMPT

**Continued Focus on Quality Despite Disappointing Total Returns and Record Outflows**

Despite an unexpectedly powerful rally in November, the Bloomberg Municipal Bond Index, a broad measure of the municipal market, returned 4.10% for the fourth quarter, bringing the full-year return to -8.53%, which outperformed the Bloomberg Aggregate Bond Index (-13.01%), Bloomberg Corporate Index (-15.76%), and Bloomberg Treasury Index (-12.46%) for the year.

While inflation and volatility were headwinds, strong demand and limited supply following seasonal strength were tailwinds as retail investors sought to lock in higher rates than they have seen in a while. Rates moved significantly lower during the quarter, benefiting longer duration. The 2-year yield moved lower by 49 bps, the 5-year by 60 bps, the 10-year by 67 bps and the 30-year was lower by 32 bps. Longer duration benefited the most on these moves as was seen in the total returns for the quarter. The return on the 1-year was 1.23% while the 10-year posted 4.49% and the 30-year returned 5.19%. From a credit quality perspective, higher quality prevailed as the AAA Index returned 4.29% versus the Baa at 3.88%.

Despite the strength of the quarter, it was not enough to lift the deeply negative returns earned for the year. The broad market Bloomberg Municipal Index was down 8.53%, the 5-year -5.26%, the 10-year -6.57%, and the long bond returned -15.58%. Higher quality bonds provided the most protection

**INFLATION PROJECTIONS (%)**

| | | PCE Inflation | | Core PCE Inflation | |
|---|---|---|---|---|---|
| **Source** | **Date of Forecast** | **2023** | **2024** | **2023** | **2024** |
| CBO's Likely Range | Nov. 2022 | 2.2 to 4.7 | 1.3 to 4.2 | 3.6 to 5.8 | 2.1 to 6.2 |
| Survey of Professional Forecasters' Middle Two-Thirds | Nov. 2022 | 2.5 to 4.3 | n.a. | 2.6 to 3.7 | n.a |
| Federal Reserve's Central Tendency | Sept. 2022 | 2.6 to 3.5 | 2.1 to 26 | 3.0 to 3.4 | 2.2 to 2.5 |
| **Memorandum** | | | | | |
| CBO's Most Recent Baseline | May 2022 | 2.3 | 2.1 | 2.5 | 2.2 |

Data sources: Congressional Budget Office; Federal Reserve Bank of Philadelphia, "Fourth Quarter 2022 Survey of Professional Forecasters" (November 14, 2022), https://tinyurl.com/3ftuwcf7; Board of Governors of the Federal Reserve System, "Table 1. Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, Under Their Individual Assumptions of Projected Appropriate Monetary Policy, September 2022" (September 21, 2022), https://tinyurl.com/ycx5pchd; Congressional Budget Office, *The Budget and Economic Outlook: 2002 to 2032* (supplemental data, May 2022), www.cbo.gov/publication/57950#data.

Inflation is measured as the change in the price index in the fourth quarter of the year indicated relative to the fourth quarter of the previous year. Core PCE inflation excludes prices for food and energy.

For definitions of CBO's likely range, the Survey or Professional Forecasters' middle two-thirds, and the Federal Reserve's central tendency, see the notes to Table 1.

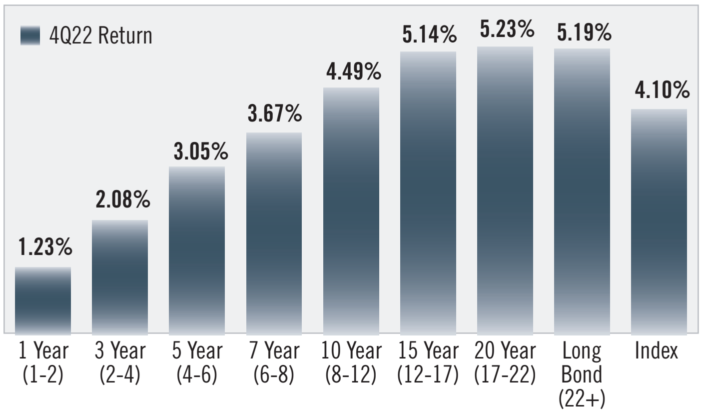
PCE = personal consumption expenditures; n.a. = not available.



continued

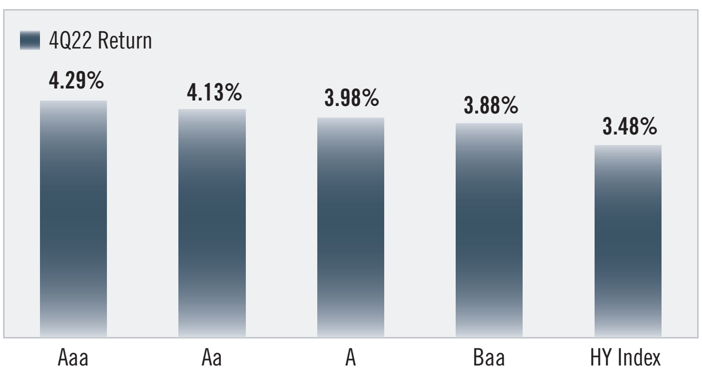
this year as the AAA Index was down 7.93% compared to the -11.63% returned posted by the Baa index. Quality and curve positioning were key to performance in 2022.

**BLOOMBERG MUNICIPAL INDEX
RETURNS BY MATURITY DISTRIBUTION**




As of December 31, 2022. Source: Bloomberg.

**BLOOMBERG MUNICIPAL INDEX
RETURNS BY RATINGS DISTRIBUTION**




As of December 31, 2022. Source: Bloomberg.

## Technicals

For full-year 2022, we saw approximately $371 billion of total issuance, roughly 23% less than 2021. Tax -exempt issuance was 9% less than the previous year while taxable municipal issuance was down more than 58% year-over-year. Rate volatility and lack of refunding opportunity were impediments to taxable issuance. For 2023, volume estimates range from $375 billion (pretty much flat) to as much as $500 billion. The latter estimate is based upon the premise that we have a tremendous rally (lower yields), and the Federal Reserve kills inflation by the first half—a very optimistic scenario.

Outflows set a record: $121.6 billion through 12/28, making for quite a challenging market as retail investors withdrew from long mutual funds and renewed their interest in ETFs. This shift in vehicle preference added to the volatility as some funds were forced to dump bonds to meet redemptions.

## Outlook

We believe volatility will not be as high in 2023. However, a lot depends on the Federal Reserve, inflation, the economy, and geopolitics.

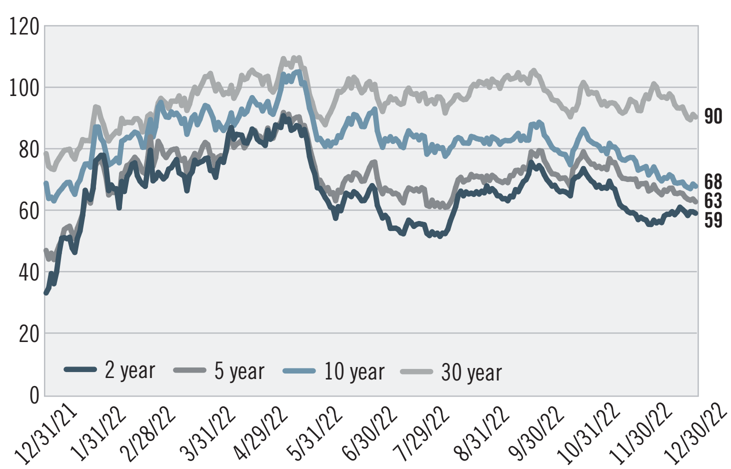
For the beginning of 2023, the municipal market should stay very firm because of the lack of supply. Usually by mid-February, seasonality starts to change as investors begin to focus on taxes, not as much money is returned to them in the form of interests and maturity payments and supply begins to build. Selling for tax payments can also add additional pressure to valuations during this time.

Looking farther ahead, we believe the outlook for the municipal asset class is extremely favorable. After a year of $122 billion of mutual fund outflows and a significant increase in yields, retail investors should return to municipals. On a tax-equivalent basis the yields should be very compelling. When that shift happens, demand will likely outstrip supply.

Consider the current Muni-Treasury ratio: if you compare the yields on a five-year AAA-rated municipal to a five-year Treasury, for example, the ratio is rather expensive at 63%. It suggests that investors in the 36% tax bracket could buy a Treasury, have more liquidity, and have the same after-tax yield. With the ratio at 63% (versus the 5-year average of 78%) some municipal investors may wait for five-year Treasury to rally, (increasing the ratio) a scenario that does not appear likely anytime soon.

Against that backdrop, the overall municipal asset class remains in demand. We are cautiously optimistic about 2023; we anticipate a more stable market environment and most likely will not see the outflows witnessed in 2022. If the much-anticipated recession is mild, demand for municipals is probably going to be quite strong and the asset class could outperform. We expect lesser quality paper would come under pressure in a recessionary era, but as of early January, lesser quality paper has been dramatically outperforming on a relative basis. Some of that may be attributed to the attractive tax-equivalent yields found on lesser quality paper.

**HISTORICAL RATIOS (%)**




As of December 31, 2022. Source: Bloomberg.

**Sector Views**

Our strategy is still focused primarily on AAA and AA issues. Credit analysis is going to be very crucial. One sector of concern is hospitals which are under pressure from higher wage demands and increased costs of supplies while certain services have not rebounded to pre-COVID levels.

Through that lens, we tend to focus on big hospital systems that are diversified in different states, which are very well run, and have the technology resources needed to be efficient, as opposed to single-site hospitals that are looking to merge with bigger systems to stay in existence.

The same logic applies to the higher education sector, where smaller colleges are squeezed between declining enrollments and higher costs. As a result, we tend to look at elite institutions that are very strong financially but might be trading a little cheaper because of sector weakness and/or recession concerns.

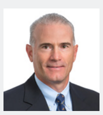
**Duration**

Going into the new year, the strategy is more focused on the 10- to 15-year area of the curve, with some exposure in the 20-year and 30-year areas. While little relative value can be found in the 5-year area the strategy continues to maintain exposure given the high liquidity available in the shorter end of the curve.

The question that remains is whether the market is leading the Fed on rates policy as if inflation will decline sooner than later. Reducing inflation from 8% to 6% (or even 4%) will be hard enough, but to go from 4% to the Fed's targeted 2% could bring a lot more pain than what we have seen. Will the Fed remain that hawkish? That will be the challenge of the year. Some inflation metrics have softened. We are seeing more and more announced layoffs, but we will have to see a lot more. It could be another difficult year ahead.

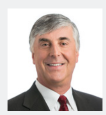
**Authored by:**

**Investment Grade – Taxable**

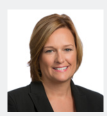


**Perry Troisi**
Managing Director, Head of Investment Grade,
Senior Portfolio Manager
Seix Investment Advisors

**Investment Grade – Tax-Exempt**



**Ronald H. Schwartz, CFA**
Managing Director, Senior Portfolio Manager
Seix Investment Advisors



**Dusty Self**
Managing Director, Senior Portfolio Manager
Seix Investment Advisors

Seix Investment Advisors, a division of Virtus Fixed Income Advisers, LLC, is an investment management boutique focused exclusively on managing fixed income securities since 1992. Seix seeks to generate competitive absolute and relative risk-adjusted returns over the full market cycle through a bottom-up focused, top-down aware process. Seix employs multi-dimensional approaches based on strict portfolio construction methodology, sell disciplines, and trading strategies with prudent risk management as a cornerstone.

The **Bloomberg U.S. Aggregate Bond Index** measures the U.S. investment grade fixed rate bond market. The index is calculated on a total return basis. The **S&P 500® Index** is a free-float market capitalization-weighted index of 500 of the largest U.S. companies. The index is calculated on a total return basis with dividends reinvested. **Bloomberg U.S. Corporate Investment Grade Bond Index** measures performance of investment grade corporate bond funds. The index is calculated on a total return basis. **Bloomberg Municipal Bond Index** is a capitalization weighted bond index created by Bloomberg Barclays intended to be representative of major municipal bonds of all quality ratings. The **Bloomberg High Yield Municipal Bond Index** covers the universe of fixed rate, non-investment grade debt. The **Bloomberg Municipal 1-Year Index** is designed to track the U.S. short-term tax-exempt bond market, including state and local general obligation bonds, revenue bonds, pre-refunded bonds, and insured bonds. The **Bloomberg Long Bond Index** is designed to track the U.S. long-term tax-exempt bond market. The **Bloomberg AAA Index** tracks AAA-rated municipal bonds. The **Bloomberg Baa Index** tracks Baa-rated bonds. The **Bloomberg US 60:40 Index** is designed to measure cross-asset market performance in the U.S. The index rebalances monthly to 60% equities and 40% fixed income. The equity and fixed income allocation is represented by Bloomberg U.S. Large Cap Index and Bloomberg U.S. Aggregate Bond Index, respectively.

The indexes are unmanaged, their returns do not reflect any fees,expenses, or sales charges, and are not available for direct investment.

A **Basis Point (bp)** is equal to 0.01%. **Average Coupon** is the weighted average coupon (annual rate of interest on the bond's face value that the issuer agrees to pay the holder until maturity) of all the securities in a fund.

**Credit Ratings** noted herein are calculated based on S&P, Moody's and Fitch ratings. Generally, ratings range from AAA, the highest quality rating, to D, the lowest, with BBB and above being called investment grade securities. BB and below are considered below investment grade securities. If the ratings from all three agencies are available, securities will be assigned the median rating based on the numerical equivalents. If the ratings are available from only two of the agencies, the more conservative of the ratings will be assigned to the security. If the rating is available from only one agency, then that rating will be used. Ratings do not apply to a fund or to a fund's shares. Ratings are subject to change.

The commentary is the opinion of Seix Investment Advisors. This material has been prepared using sources of information generally believed to be reliable; however, its accuracy is not guaranteed. Opinions represented are subject to change and should not be considered investment advice or an offer of securities.

**Past performance is no guarantee of future results.**

All investments carry a certain degree of risk, including possible loss of principal.

Mutual Funds, ETFs, and Virtus Global Funds are distributed by **VP Distributors, LLC**, member FINRA and subsidiary of Virtus investment Partners, Inc.



VIRTUS INVESTMENT PARTNERS