

CHIEF INVESTMENT OFFICE

# Fixed Income Strategy

## Global Monetary Policy and U.S. Fiscal Policy (Build Back Better)

January 2022

### SUMMARY

- Developed market central banks eased financial conditions to deal with the pandemic, leading to a convergence of accommodative monetary policies across the globe.
- As the global economy recovers unevenly in different regions, however, there is now a divergence in how various central banks are beginning to remove accommodation.
- The U.S. Federal Reserve (Fed) was early, aggressive, and coordinated on both the fiscal and monetary policy fronts, but perhaps slow to remove accommodation, from our viewpoint.
  - The Fed is intent on making up for this error; hopefully it does not over-correct.
- The Bank of England (BOE) was surprisingly hawkish, raising rates in a surprise move in December in consideration of high inflation and inflation expectations.
  - Alongside the Fed, the BOE is the only major developed market central bank becoming more restrictive.
- The European Central Bank (ECB) has been more middle-of-the-road, forecasting continued easy monetary policy and no rate hikes. This is significant; it has often been wary of an inflation overshoot.
  - The ECB allowing for temporarily high inflation would be a welcome change.
- The Bank of Japan (BOJ), however, is still mired in a disinflationary quagmire, has made little change to its policy stance, and is unlikely to be a catalyst for any significant rates moves elsewhere in the world.
- It may be difficult for 10-year U.S. rates to go significantly higher—say, substantially above 3%—without tightening actions by other major central banks.
- In terms of U.S. fiscal policy, the Build Back Better Act bill was passed by the House of Representatives last year, but stalled in the Senate. We expect congressional Democrats will introduce a revised version of the bill early this year, but view the chances of eventual passage as uncertain.
- With moderately supportive technicals and very strong fundamentals, we believe munis will continue to provide value for tax-sensitive investors, regardless of whether or not the Build Back Better Act bill eventually passes. However, given already rich valuations and tight credit spreads, munis are unlikely to outperform as strongly in 2022 as they did in 2021.

AUTHORED BY

**CIO Fixed Income Strategy Team**

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**Please see back page for important disclosure information.**

## FIXED INCOME ASSET CLASS WEIGHTINGS\*

Asset Class	Underweight	Neutral	Overweight
Fixed Income	•	•	•
U.S. Investment Grade Taxable	•	•	•
International	•	•	•
Global High Yield Taxable	•	•	•
U.S. Investment Grade Tax Exempt	•	•	•
U.S. High Yield Tax Exempt	•	•	•

\* These Chief Investment Office (CIO) views relate to a fully-diversified, multi-asset class portfolio and use the asset class breakdown of the CIO "High Tax / Balanced" portfolio.

Source: Global Wealth & Investment Management Investment Strategy Committee Meeting as of January 11, 2022.

## FIXED INCOME AT A GLANCE

Rates Markets	31-Dec	30-Nov	Change
Fed Funds rate	0.13%	0.13%	+0 bps
3-month Treasury Bills	0.04%	0.05%	-1 bps
U.S. 2-year Note	0.73%	0.57%	+17 bps
U.S. 5-year Note	1.26%	1.16%	+10 bps
U.S. 10-year Note	1.51%	1.45%	+7 bps
U.S. 30-year Note	1.90%	1.79%	+11 bps
FF / 10s Curve	+139 bps	+132 bps	+7 bps
2s / 10s Curve	+78 bps	+88 bps	-10 bps
German 10-year	-0.18%	-0.35%	+17 bps
UK 10-year	0.97%	0.81%	+16 bps
Japanese 10-year	0.07%	0.05%	+1 bps

Credit Markets	31-Dec	30-Nov	Change
U.S. Investment Grade (Spread)	+92 bps	+99 bps	-7 bps
U.S. High Yield (Spread)	+283 bps	+337 bps	-54 bps
U.S. High Yield (Yield)	4.21%	4.80%	-59 bps
Emerging Markets (U.S.\$, Spread)	+297 bps	+333 bps	-36 bps
10-year AAA Municipal	1.05%	1.07%	-2 bps
10-year Muni / Treasury Ratio	69.5%	73.7%	-4.2%

Index Returns	1-month	12-months	Year-to-Date
U.S. Treasury	-0.5%	-2.3%	-2.3%
U.S. MBS	-0.1%	-1.0%	-1.0%
U.S. ABS	-0.2%	-0.3%	-0.3%
U.S. CMBS	-0.1%	-0.3%	-0.3%
U.S. Corporate	-0.1%	-1.0%	-1.0%
U.S. High Yield	1.9%	5.3%	5.3%
U.S. Leveraged Loans	0.6%	5.2%	5.2%
U.S. Municipals	0.2%	1.5%	1.5%
U.S. Municipal High Yield	0.3%	7.8%	7.8%

Bps refers to basis points. Source: Bloomberg. Data as of December 31, 2021 and subject to change. **Past performance is no guarantee of future results. Please refer to the end of the document for asset class proxies and index definitions.**

## FIXED INCOME U.S. RATES FORECAST

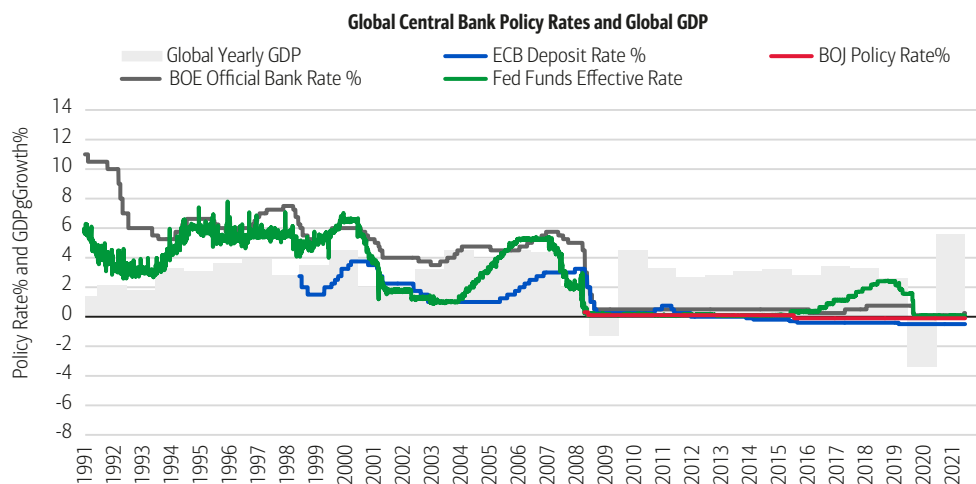
(% end of period)	Spot*	2Q22	4Q22
Fed Funds Range	0.08	0.25–0.50	1.00–1.25
2-Year T-Note	0.90	1.00	1.35
5-Year T-Note	1.48	1.50	1.75
10-Year T-Note	1.71	1.75	2.00
30-Year T-Bond	2.05	2.15	2.15

Source: BofA Global Research U.S. Rates Research; January 14, 2022; spot price as of that date. Note: Federal funds rate forecasts are model expectations; other values are for market rates. The forecasts in the table above are the baseline view from BofA Global Research team. The Global Wealth & Investment Management (GWIM) Investment Strategy Committee (ISC) may make adjustments to this view over the course of the year and can express upside/downside to these forecasts.

**There can be no assurance that the forecasts will be achieved. Economic or financial forecasts are inherently limited and should not be relied on as indicators of future investment outcomes.**

Developed market central banks have eased financial conditions to deal with the economic effects of the pandemic, leading to a convergence of accommodative monetary policies—lower rates and increased asset purchases—across the globe. This is fairly typical during a global economic recession (Exhibit 1). As the global economy recovers unevenly in different regions, however, there is now a divergence in how various central banks are beginning to remove accommodation. Similar to the U.S., where high inflation and large policy pivots may lead to a higher chance of an error, differing central bank responses increase the chance of a policy error at some point in a developed market economy in the coming years.

**Exhibit 1: Developed market central banks generally act in unison in a crisis (Global Financial Crisis, coronavirus)**

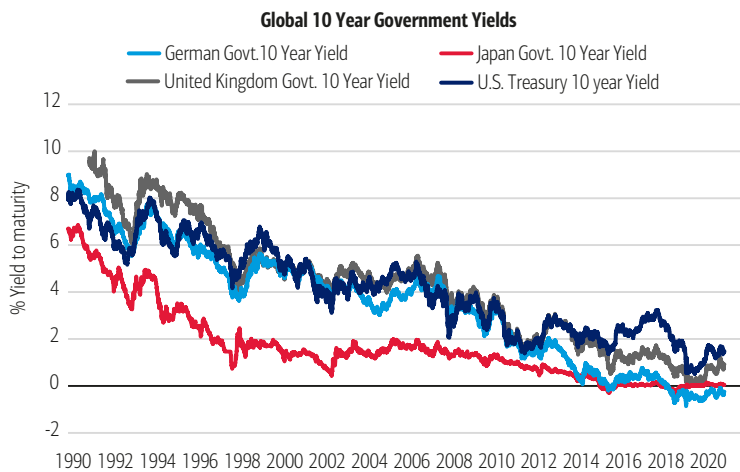


Source: GDP from World Bank group as of 12/31/2020; European Central Bank as of 12/28/2021; Bank of Japan as of 12/28/2021; Bank of England as of 12/28/2021; Federal Reserve Bank of New York as of 12/28/2021. GDP = Gross Domestic Product. ECB = European Central Bank. BOE = Bank of Europe. BOJ = Bank of Japan.

The similar harmonized response during the 2008/2009 financial crisis also helped global growth at that time, underscoring the power of central bank coordination. In contrast, a unilateral approach by any single central bank “swimming against the tide” can be significantly less effective and short-lived. As examples, the European Central Bank (ECB) rate hikes in 2011, when the European economy was not ready, or the Fed’s too-tight monetary policy in 2018, which actually led to a global slowdown and the initial Fed Chair Powell Pivot 1.0. Both episodes were unilateral and relatively quickly reversed.

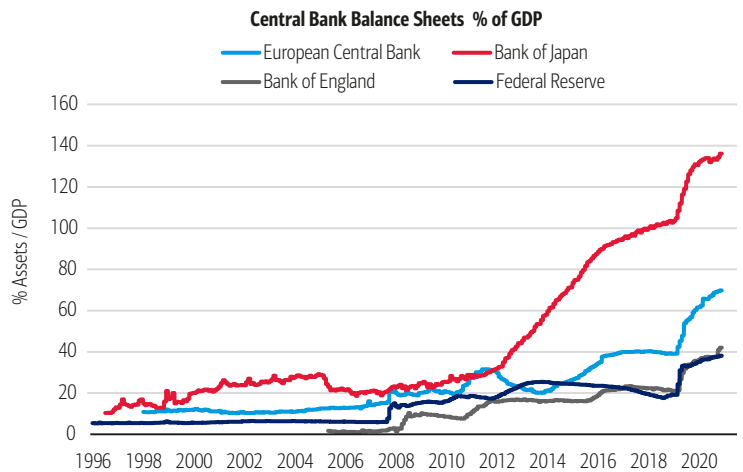
The economic aftermath of the financial crisis, though, was quite different, and required more prolonged and consistent help. (A banking crisis inhibits credit creation, creating long-lasting economic shortfalls: “secular stagnation,” a prolonged period of subtrend economic growth and inflation.) Low policy rates, slower economic growth and disinflation—alongside demographic pressures—have led to global developed market rates being at extremely low levels, with the U.S. actually being high in relative terms (Exhibit 2). Global rates at such low levels—at or close to the “zero lower bound (ZLB)” —means that central banks have had to use newer monetary policy tools. In particular, they have made significant asset purchases that have increased their balance sheet holdings dramatically (Exhibit 3).

**Exhibit 2: Lingering financial crisis economic effects and low policy rates have caused historically low global long-term rates...**



Source: Bloomberg as of 12/28/2021.

**Exhibit 3: ...and developed market central banks have turned to using their bank balance instead**



Source: Bloomberg as of 10/28/2021.

As global developed market central banks become less accommodative overall—raising short-term rates, ceasing asset purchases, potentially winding down balance sheet holdings—this should help allow a gradual rise in U.S. Treasury rates. With current U.S. nominal growth and inflation exceptionally strong, it appears as if the major factor stalling a quicker rise in rates is the fact that longer-term U.S. rates are still an outlier on the high side versus other developed markets. Any rise in global rates may hasten a further rise in U.S. rates, and any balance sheet unwind—as a relatively unknown tool—may have outsized effects. What happens in Frankfurt doesn't necessarily stay in Frankfurt.

Given that many international factors can influence economic growth and inflation in a domestic economy, diverse policies from different central banks multiply the chance for a monetary policy error somewhere across the globe in 2022. A review of their different approaches is important, therefore, as we have seen that in the past, policy errors can ripple throughout global economies.

**Exhibit 4: Economic and monetary policy summary**

Country	Most Recent YOY% CPI	2022 CPI (yoy%) Survey Forecast†	2022 Real GDP (yoy%) Survey Forecast†	Central Bank Policy Rate	Current Policy Rate	End of 2022 Policy Rate Forecast†
United States	6.80%	3.90%	4.40%	Fed Funds Rate (upper bound)	0.25%	1.00%
United Kingdom *	5.10%	4.00%	4.80%	Bank of England Rate*	0.25%	0.75%
European Union	4.90%	2.50%	4.20%	ECB Deposit Facility Rate	-0.50%	-0.50%
Japan	0.60%	0.07%	2.90%	BOJ Policy Balance rate	-0.10%	-0.10%

**Current Policy Stance**

- Tightening
- Stable

\* Raised rate in December as the first major central bank to remove coronavirus stimulus.  
 † Source: Bloomberg Survey Forecast as of 12/28/2021. CPI = Consumer Price Index.

**FEDERAL RESERVE**

We have discussed the Fed at length. Our primary concern has been that the Fed is behind the curve, as headline inflation is now 7%. It seems to have realized this, however, and seems intent on catching up now—correctly in our opinion. Several months ago, the Fed was messaging no rates hikes in 2022, a quantitative easing (QE) wind-down mid-

year, and no discussion of balance sheet roll-off. Now it is discussing four rate hikes in 2022, QE wind-down by March at the latest, and balance sheet roll-off this year—major changes in a short amount of time.

Our secondary concern, however, was that this general economic environment was fertile ground for a monetary policy error to occur. These dramatic policy pivots only increase the risk of an error in either direction. While not our base case and certainly not a foregone conclusion in the U.S., we feel that the current conditions—high inflation, low rates, tapering QE, aggressively changing tack from dovish to more hawkish policy, personnel changes at the Fed—do significantly heighten the risk of a monetary policy mistake. For now, yield curves have stopped flattening and highlight that the Fed is changing tack appropriately, but we will continue to carefully watch market signals for any changes.

## BANK OF ENGLAND

In an unexpected move in December, the BOE Monetary Policy Committee (MPC) surprised markets with an increase in its official bank rate of 15 bps to 0.25%. (As expected, the MPC did not change its policy of maintaining its stock of U.K. government and corporate bonds at £875 billion.) Similar to the Fed, the MPC sets monetary policy to achieve a 2% inflation target but, unlike the Fed, does not have a maximum employment focus. Although inflation has been a persistent concern in the U.K., most market participants and strategists expected the MPC to stay the course and not hike rates in December due to concerns regarding the omicron variant. However, the MPC minutes<sup>1</sup> highlighted as reasons to raise rates sooner the significant move higher in inflation expectations—U.K. 10-year breakevens are now over 4%, very elevated—continuing inflationary pressures of “greater persistence” throughout the economy, and a labor market that was “tight and has continued to tighten.” This is very notable—among the first developed market central banks to tighten the BOE follows only Norway and New Zealand, and the rate hike was a shock to markets, which almost unanimously expected no hike.

While having to balance between dealing with inflation before it became too entrenched and a worsening pandemic outlook, the MPC noted that the “experience since March 2020 suggests that successive waves of COVID-19 appear to have had less impact on gross domestic product (GDP).” Unemployment has hit 4.2%, right on top of prepandemic levels of 3.8%. The MPC believes that with a continuing rise in rates over 2022, Consumer Price Index (CPI) increases would dissipate “as supply disruption eased, global demand rebalanced from goods to services, and energy prices stopped rising,” while labor cost increases would slow down as well. The MPC believes that correct policy will cause inflation to “fall back materially” in the second half of 2022. While this move did lead to some volatility in markets, the benefit of moving now—an early “spoonful of medicine,” as it were—may make it easier for the BOE to maintain the credibility to deal with inflation in 2022, from our perspective.

## EUROPEAN CENTRAL BANK

The ECB faced similar difficult choices at its latest meeting, as it looked to adjust monetary policy accommodation away from pandemic-era policies while at the same time not wanting to seem oblivious to omicron or further variants. Similar to the U.K. and U.S., Europe is facing higher inflation (4.9%, as of November 2021) and an unemployment rate just above its prepandemic low. The ECB also has a formalized 2% inflation target.

The ECB made no changes to rates, as expected—the ECB Main Refinance Rate remains at 0%. It also agreed to reduce its QE program—the Pandemic Emergency Purchase Program (PEPP)—on schedule and as expected. PEPP will end in March, similar to when the Fed’s QE program will be ending as well. The ECB did, however, keep its regular QE

<sup>1</sup> “Bank Rate increased to 0.25%,” Bank of England, December 2021.

program—the Asset Purchase Program (APP) – on pace through the end of 2022. The APP will be adjusted higher in the short term, however, to moderate the reduction on PEPP, but allows for an overall reduction in QE throughout 2022.

The ECB actually expects higher inflation to persist somewhat in 2022, forecasting an average rate of 3.2% in 2022 before a decline closer to its 2% target in 2023.<sup>2</sup> Given that in years past developed central banks in general—and the ECB in particular—were too hawkish in dealing with inflation preemptively, allowing a moderate overshoot at this juncture seems very pragmatic. Highlighting to the markets very early that it will tolerate this overshoot seems wise, in our opinion, especially to counter its historical bias for lower inflation. This decision to continue APP through 2022, in conjunction with simultaneously acknowledging a higher short-term inflation outlook, should help convince the market not to expect any rate hikes in 2022.

## BANK OF JAPAN

As opposed to all the other central banks, which have been very busy, the Bank of Japan (BOJ) has been relatively quiet. The Japanese economy is in a very different place from other leading global economies. Japan's nationwide CPI is only 0.6% year-over-year (YoY) and the country is not currently seeing any of the significant inflationary issues facing the U.S., U.K. or Europe, so it does not have the same challenges with monetary policy. This is despite the fact that Japanese unemployment is currently only 2.8%.

The BOJ therefore recently maintained its stance on all policy fronts, including rates, forward guidance and its QE programs. It maintained its yield curve control policy—setting a target for 10-year Japanese Government Bonds (JGB) at about 0%, a policy that has been in place since 2016—and at the same time left its short-term policy rate in negative territory at -0.1%. As scheduled, the BOJ will stop its stepped-up, post-pandemic commercial paper and corporate bond purchases in March 2022, and return to its prepandemic QE levels. (Similar to the ECB, the BOJ's pandemic-era QE program was in addition to a standard QE program.) There are no rate hikes expected for 2022.

## SUMMARY

In summary, the U.S. was early, aggressive, and coordinated from both a fiscal and monetary policy stance, but perhaps slow to remove accommodation, from our point of view. It seems intent on making up for this error; hopefully, it does not over-correct. Other global developed market central banks are taking different tacks. The BOE was surprisingly hawkish, raising rates in a surprise move in December, in consideration of high inflation and inflation expectations, joining the Fed as the only major developed market central banks becoming more restrictive. The ECB has been more middle-of-the-road, highlighting the forecast of continued easy monetary policy and no rate hikes. This is significant, as it has often been wary of an inflation overshoot. Allowing for temporarily high inflation would be a welcome change for the ECB, in our view, and very helpful for nominal GDP growth in the EU. The BOJ, however, is still mired in a disinflationary quagmire, has made few changes to its policy stance, and is unlikely to be a catalyst for any significant rates moves elsewhere in the world.

This post-pandemic inflationary world presents significant challenges for global central banks. Large balance sheets, extremely low policy rates and deeply negative real rates are not something we have seen in generations. The key for any central bank is to maintain optionality and be responsive to a changing economic environment. Barring a policy error, we believe inflation will begin to decline and global rates will harmonize at higher levels—but only in the coming years, as long as some policy rates remain at zero or below.

It will be difficult for 10-year U.S. rates to go significantly higher—say, substantially above 3%—without tightening actions by other major global central banks. While it is

<sup>2</sup> Macroeconomic projections, European Central Bank, December 2021.

likely that the ECB eventually joins the Fed and BOE in a more coordinated effort, this may not occur until 2023 at the earliest. Therefore, we expect a gradual grind higher in U.S. rates but not a spike, as long as European rate rises remain relatively modest. This underpins our suggestion to be short – but not too short – duration, while prudently taking yield from high-quality spread product in a diversified and prudent manner.

## MUNICIPALS

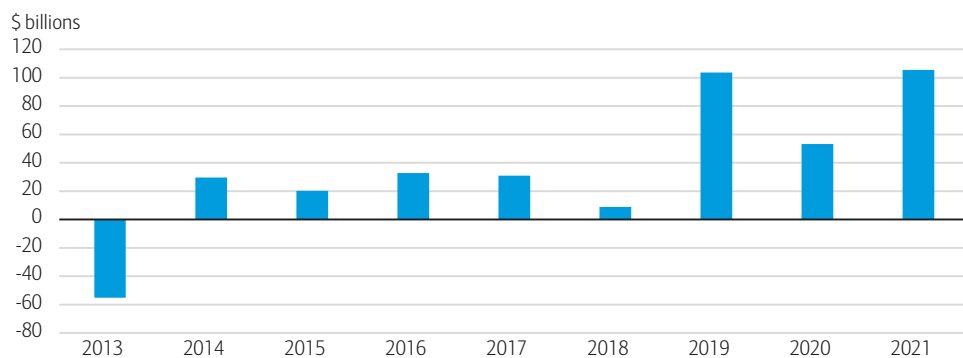
### Build Back (a Little) Better?

The Build Back Better Act bill was passed by the House of Representatives last November but stalled in the U.S. Senate in December. We expect congressional Democrats will introduce a revised version of the bill early this year but view the chances of eventual passage as uncertain. Below, we review the history of the bill and how it has evolved, focusing on potential ramifications for the municipal bond market. We note that with most of the large tax rate increases and muni-specific issuance provisions already stripped from the bill, its passage would have only a modestly positive effect on the technical environment for munis.

### Initial Proposal

The Build Back Better Act bill, as it was initially written when introduced last fall, would have been a boon to the municipal bond industry, with proposed increases in the top individual tax rate from 37% to 39.6%, a 3% surtax on individual income over \$5 million, an increase in the corporate tax rate from 21% to 26.5%, and provisions to reauthorize tax-exempt advance refundings and a new version of taxable Build America Bonds. The net effect would likely have been a powerful increase in demand for tax-exempt munis and a more robust primary municipal market. We believe the expectations of higher tax rates sparked record flows into municipal bond mutual funds and exchange traded funds (ETFs) (Exhibit 5) and drove tax-exempt munis to outperform most taxable indices over the course of 2021 (Exhibit 6).

### Exhibit 5: Flows into Municipal Bond Mutual Funds and ETFs



Source: Investment Company Institute, as of January 5, 2022.

### Exhibit 6: Fixed Income Total Returns

Bloomberg Indices	2021
Municipal Index	1.52%
U.S. Aggregate Bond Index	-1.54%
U.S. Treasury Index	-2.32%
U.S. Corporate Bond Index	-1.04%

Source: Bloomberg, as of January 5, 2022. **Past performance is no guarantee of future results. Performance results are extremely short term and do not provide an adequate basis for evaluating performance potential over varying market conditions or economic cycles. Securities indexes assume reinvestment of all distributions and interest payments. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index. Indexes are all based in U.S. dollars. Please refer to appendix for asset class proxies, disclosures and index definitions.**

## The Compromise

However, the size of the original bill—at \$3.5 trillion—was considered too high to win support from some moderate Democrats, and so the bill was reduced to about \$2 trillion. In the scaled-down version that passed the House of Representatives on November 19, tax-exempt advance refundings and Build America Bonds were removed, as were individual and corporate tax rate increases, except for new 5% and 3% surtaxes on individual earnings of over \$10 million and \$25 million per year, respectively. A new 15% alternative minimum corporate tax was added, but this would have included income from tax-exempt munis in the earnings base, and the cap on state and local tax (SALT) deductions was raised from \$10,000 to \$80,000. Overall, we believe passage of the smaller Build Back Better Act would have only a modestly positive effect on the technical environment for munis. The increased demand from individuals with income over \$10 million would affect a very narrow slice of the taxpayer base, and that would be partly offset by the increase in the SALT deduction cap and the alternative minimum tax on corporations.

## No Deal, Yet

However, even the scaled-down version of the Build Back Better Act bill proved to be too expensive for a Democratic senator, and so the bill has stalled. We expect congressional Democrats will introduce a revised version of the bill early this year, but its chances of eventual passage are uncertain. The objecting senator has stated concerns that the increased spending provided in the bill would not be fully paid for, particularly if short-term spending provisions in the bill were extended. Therefore, if the bill is revived, we expect certain spending items to be reduced or eliminated; reportedly, Democrats are negotiating over spending for the Child Tax Credit, Universal pre-K education, climate change remediation, and expansion of the Affordable Care Act. Further tax rate increases to pay for the increased spending cannot be ruled out, although we believe they are unlikely, given potential opposition from other moderate Democrats. As a reminder, if no new tax bill is enacted, tax changes from the Tax Cuts and Jobs Act of 2017, including the reduction in the top individual tax rate from 39.6% to 37% and the \$10,000 cap on SALT deductions, are scheduled to sunset after 2025.

## Muni Outlook Is Still Favorable

With additional tax rate increases apparently off the table, we continue to believe that if the Build Back Better Act bill eventually passes, it will have only a modestly positive effect on the municipal market's technical environment. Conversely, even if the bill fails, we believe the technical environment for munis will remain supportive, given still-robust retail demand for tax-exempt securities and limited supply. Also, we note that the fundamental environment for munis remains quite strong for these reasons:

- Tax revenues are increasing (state and local government tax revenues for the 12 months ending September 2021 totaled \$1.84 trillion, up 16.1% from the 12 months ending September 2020, according to the U.S. Census Bureau),
- Federal fiscal stimulus has been very generous (the Coronavirus Aid, Relief and Economic Security Act, the American Rescue Plan Act of 2021, and the Infrastructure Investment and Jobs Act provided over \$1 trillion for municipal issuers), and
- Pension funding levels have improved due to the run-up in equity prices (average funding levels for the 100 largest U.S. public pension funds rose to an estimated 85% as of June 30, 2021, up from only 71% the prior year, according to Milliman).

With moderately supportive technicals and very strong fundamentals, we believe munis will continue to provide value for tax-sensitive investors, regardless of whether or not the Build Back Better Act bill eventually passes. However, given already rich valuations and tight credit spreads, munis are unlikely to outperform as strongly in 2022 as they did in 2021.



# Asset Class Proxies

See below for index definitions.

Asset Class	Index
U.S. Investment Grade	Bloomberg U.S. Corporate Bond Index
Emerging Markets	Bloomberg EM USD Aggregate Total Return Index
U.S. Treasury	Bloomberg U.S. Treasury Index
U.S. Mortgage-Backed Securities (MBS)	Bloomberg U.S. Mortgage Backed Securities Index
U.S. Asset-Backed Securities (ABS)	Bloomberg Capital Asset-Backed Index
U.S. Commercial Mortgage-Backed Securities (CMBS)	Bloomberg U.S. CMBS Index
U.S. Corporate	Bloomberg U.S. Corporate Bond Index
U.S. High Yield	Bloomberg High Yield Corporate Bond Index
U.S. Leveraged Loans	S&P/LSTA Leveraged Loan Index
U.S. Municipals	Bloomberg Municipal Index
U.S. Municipal High Yield	Bloomberg High Yield Municipal Index

## Index Definitions

**Securities indexes assume reinvestment of all distributions and interest payments. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index.**

**Indexes are all based in dollars.**

**Bloomberg Investment Grade Corporate Bond Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes U.S. dollar-denominated securities publicly issued by U.S. and non-U.S. industrial, utility and financial issuers. The U.S. Corporate Index is a component of the U.S. Credit and U.S. Aggregate Indices.

**Bloomberg EM USD Aggregate Total Return Index.** The Bloomberg Emerging Markets Hard Currency Aggregate Index is a flagship hard currency Emerging Markets debt benchmark that includes USD-denominated debt from sovereign, quasi-sovereign, and corporate EM issuers.

**Bloomberg U.S. Treasury Index** tracks the market for Treasuries issued by the U.S. government. It represents the U.S. Treasury component of the U.S. Government index. An investment cannot be made directly in a market index.

**Bloomberg U.S. Mortgage Backed Securities (MBS) Index** is the U.S. MBS component of the U.S. Aggregate index. The MBS Index covers the mortgage-backed pass-through securities of Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

**Bloomberg Capital Asset-Backed Index** is composed of debt securities backed by credit card, auto and home equity loans that are rated investment grade or higher by Moody's Investors Service, Standard & Poor's Ratings Service or Fitch Investor's Service.

**Bloomberg U.S. CMBS Index** is the Bloomberg Non-Agency Investment Grade CMBS: BBB Total Return Index Unhedged.

**Bloomberg High Yield Corporate Bond Index** measures U.S. dollar denominated, non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt.

**S&P/LSTA Leveraged Loan Index** is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market based upon market weightings, spreads and interest payments.

**Bloomberg Municipal Index** is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.

**Bloomberg High Yield Municipal Index** is a benchmark that covers the high yield portion of the USD-denominated long-term tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.

**Bloomberg Aggregate Bond Index** is a broad-based fixed-income index used by bond traders, mutual funds, and ETFs as a benchmark to measure their relative performance.

**Bloomberg U.S. Aggregate Bond Index** is a broad base, market capitalization-weighted bond market index representing intermediate term investment grade bonds traded in the United States.

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# Glossary

**Duration**—Duration typically measures the sensitivity of the value of a bond or fixed income portfolio to changes in interest rates. In general, the higher the duration, the more a bond's price will drop as interest rates rise and thus the greater the interest rate risk.

**Spread product**—the term for bonds that are not Treasury securities. Agency securities, asset-backed securities, corporate bonds, high-yield bonds and mortgage-backed securities are various types of spread product.

## Important Disclosures

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Asset allocation, diversification and rebalancing do not ensure a profit or protect against loss in declining markets.

Investing in fixed-income securities may involve certain risks, including the credit quality of individual issuers, possible prepayments, market or economic developments and yields and share price fluctuations due to changes in interest rates. When interest rates go up, bond prices typically drop, and vice versa. Income from investing in municipal bonds is generally exempt from Federal and state taxes for residents of the issuing state. While the interest income is tax-exempt, any capital gains distributed are taxable to the investor. Income for some investors may be subject to the Federal Alternative Minimum Tax (AMT).

Tax-exempt investing offers current tax-exempt income, but it also involves special risks. Single-state municipal bonds pose additional risks due to limited geographical diversification.

Interest income from certain tax-exempt bonds may be subject to certain state and local taxes and, if applicable, the alternative minimum tax. Any capital gains distributed are taxable to the investor.

Investments in high-yield bonds (sometimes referred to as "junk bonds") offer the potential for high current income and attractive total return, but involve certain risks. Changes in economic conditions or other circumstances may adversely affect a junk bond issuer's ability to make principal and interest payments.

For investments in ABS and MBS, generally, when interest rates decline, prepayments accelerate beyond the initial pricing assumptions, which could cause the average life and expected maturity of the securities to shorten. Conversely, when interest rates rise, prepayments slow down beyond the initial pricing assumptions, and could cause the average life and expected maturity of the securities to extend, and the market value to decline.

Most senior/leveraged loans are made to corporations with below investment-grade credit ratings and are subject to significant credit, valuation and liquidity risk. The value of the collateral securing a loan may not be sufficient to cover the amount owed, may be found invalid or may be used to pay other outstanding obligations of the borrower under applicable law. There is also the risk that the collateral may be difficult to liquidate, or that a majority of the collateral may be illiquid.

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