

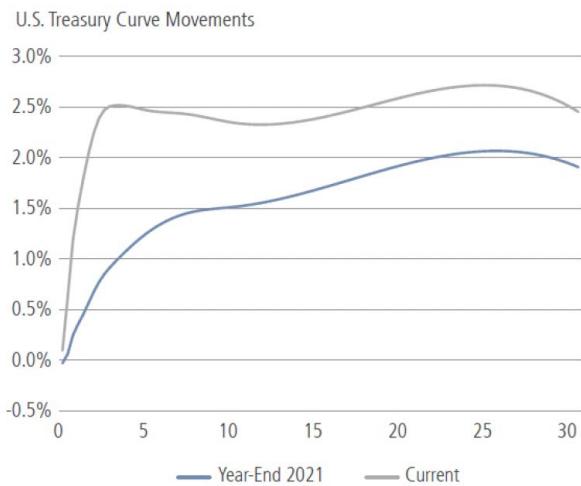
2022 FIXED INCOME MARKET UPDATE AND OUTLOOK

Fixed income had the most difficult quarter in more than forty years due to rising interest rates triggered by higher inflation. Because of elevated inflation and uncertainty around its pathway, we are cautious with the following view:

- **Cash:** Overweight due to the uncertainty of recession and the path of inflation. Yields for cash have been increasing.
- **Investment Grade Fixed Income:** *Neutral to slightly overweight* due to yields having risen significantly the past few weeks. Investment grade fixed income is finally offering income. The curve now reflects monetary policy, but the risk is that if inflation further increases, yields should rise more than what is currently embedded.
- **Other Fixed Income:** *Overall Underweight* due to recession and inflation risks
 - Underweight high yield corporate bonds, but given rising rates, overweight on senior loans
 - Maintaining high-yield munis and emerging market bonds at neutral

Due to the uncertainty of the economic path, it is prudent to have a portfolio that is diversified by functions. It is also important to use the full range of investments in a portfolio, including real assets and private investments.

For investors, the first quarter of 2022 was one of the most difficult ones in more than four decades. The Barclay's Aggregate Bond Index suffered its worst single quarter since 1980 because yields rose significantly this year. Yields reflect the pickup in inflation, with March headline CPI rising to 8.4%, a 40-year high that crossed 8% for the first time since 1982. Markets have expected that the Federal Reserve will significantly tighten monetary policy to tamp down inflation. The economy has been gripped by a double inflation shock of COVID and Ukraine.



Source: Bloomberg. As of March 31, 2022

The Barclay's Aggregate Bond Index had its worst single quarter since 1980. The rise in interest rates during the first quarter led to significant declines across the bond market:

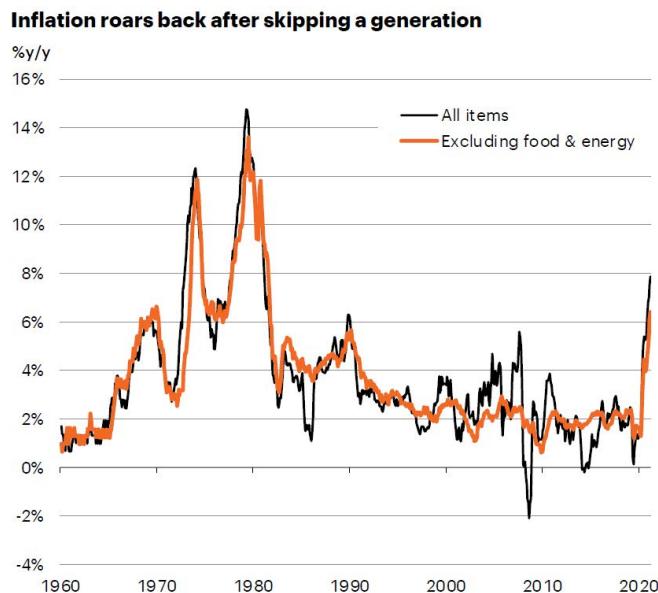
U.S. Fixed Income	1 Month	3 Months	YTD
US Aggregate	-2.78%	-5.93%	-5.93%
US TIPS	-1.86%	-3.02%	-3.02%
US Treasury	-3.11%	-5.58%	-5.58%
US Agencies	-2.37%	-4.24%	-4.24%
US Municipals	-3.24%	-6.23%	-6.23%
US Securitized	-2.61%	-5.00%	-5.00%
US Corporates	-2.52%	-7.69%	-7.69%
US High Yield	-1.15%	-4.84%	-4.84%
US Leverages Loans	.05%	-0.10%	-0.10%

Source: BNY Mellon Portfolio Strategy Group using data from Bloomberg as of March 31, 2022.

The speed of the market's repricing upwards of the path of interest rate hikes has been striking. The Fed is embarking on an aggressive rate hiking cycle with the goal of getting inflation down. At this point, markets are priced for another 250 bps of rate hikes this year, including 50 bps rate hikes at the next four FOMC meetings (May, June, July, August). As a result, the market is pricing a year end Fed funds rate of 2.80%.

MARKET OUTLOOK

The key to the fixed income outlook is the path of inflation and the trajectory of interest rates. We recommend underweight investment grade fixed income due to the rising interest rate risk triggered by rising inflation. Inflation has risen significantly this year, as seen in the chart below.



Source: Bureau of Labor Statistics, FS Investments, as of March 11, 2022

Inflation is the key driver of the path of the economy. Currently, the economy has been struck by double inflationary shocks simultaneously. The first is COVID related, and the second is triggered by the war in Ukraine. **The crux of the problem is that the causes of inflation are supply driven, while the Fed only has tools to address demand.**

First, the Covid-related shock has not dissipated because Covid has not gone away. Higher inflation was triggered by aggregate demand stimulated by enormous fiscal policy, including three rounds of checks to households. As checks were spent on goods, the supply chain, also disrupted by the Covid-19 pandemic, was overwhelmed by demand, and prices rose. Due to stimulus check money having been spent, the front-loading of goods consumption, resumption of spending on services, restocking of inventories, and continued reentry back to the workforce, Covid-related inflation should slowly ease through the year. However, with China still embroiled in Covid-related shutdowns, supply chains are still being disrupted. An important aspect is the labor force that did not return to work as expected as Covid cases receded. The resulting tight labor market has put upward pressure on wages, which is inflationary.

The second inflationary shock was triggered by geopolitical events in eastern Europe. Russia is a large exporter of energy, metals and food, so the Western boycott curtailed supply and raised prices of energy and food. Replacing Russia's very large supply will take considerable time, so the inflation effects will also likely take a long time.

The Federal Reserve's response to higher inflation has been to raise interest rates. The first was a 25-basis-point hike in March. It is expected to raise rates by 250 basis points by the end of 2022, including 50 basis points at the May and June FOMC meetings. We believe that the Fed will have an aggressive hiking cycle until inflation rolls over. The effect of higher rates is causing a slow-down in capital goods orders and mortgage applications. Due to tighter policy, the market is expecting economic growth to fall:

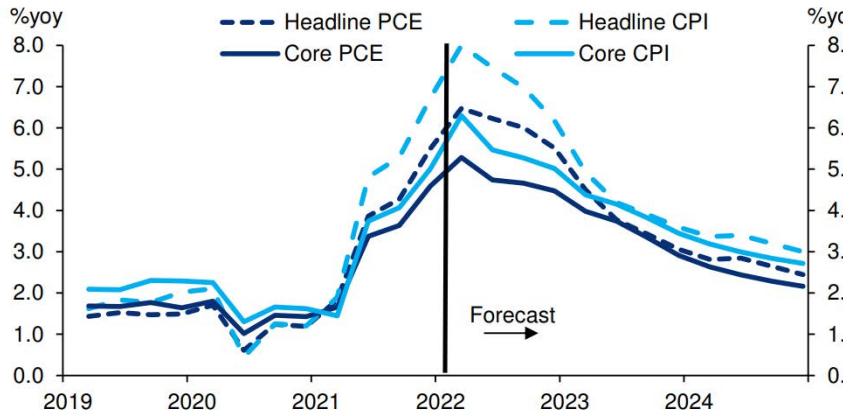


Source: Bank of America, Barclays, Citi, Credit Suisse, Deutsche Bank, Goldman Sachs, J.P. Morgan, Morgan Stanley, Nomura. As of March 2022

In our opinion, there are a few economic scenarios that could play out: A soft landing, a hard landing, and stagflation:

SOFT LANDING

Currently, the market expects inflation to have peaked in March and fall grudgingly throughout the year. We expect balance sheet runoff to be announced at the July FOMC meeting and commence in August. These policies should reflect the Fed's credibility in fighting inflation without throwing the economy into a tailspin as the commodity shock is digested. The tightening will help contain inflation. The outlook for inflation per Deutsche Bank is illustrated below.



Source: BEA, BLS, Haver Analytics, Deutsche Bank

It appears that much of the hawkish Fed policy is already embedded in the yield curve. Also, the real policy rate is extremely negative and thus simulative, and the real yield curve is upward sloping—not indicating a recession. If the Fed can “thread the needle,” it could lead to a soft landing. In our opinion, this is a positive outcome for fixed income.

- **Treasury and muni bonds:** Treasury and muni bonds will now have more yield, but the real yield will still be challenging.
- **Credit:** Investment grade, high yield and loans have seen higher yields. These sectors will be able to provide income to a fixed income portfolio. Currently, the credit quality of corporates is improving. As a result, credit has an attractive return vs. risk profile. Loans, which are floating rate, is an effective way to ride interest rates higher.
- **Emerging market debt:** With attractive yields, emerging market debt can provide absolute return in a more stable global environment.

Currently, we do not see signs of a near-term recession, but the probabilities are rising.

HARD LANDING

A hard landing could occur if the Fed excessively tightens monetary policy by raising rates too high. The worry is that to control inflation, the Fed will utilize demand destruction by putting the economy into recession. Moreover, high inflation that does not subside over the balance of the year could cause them to be more aggressive in tightening monetary policy, thus sacrificing economic growth in future years and potentially upsetting markets. Fed fund futures are already pricing in interest rate cuts in late 2023. This suggests that bond managers don't think the econ-

omy can tolerate the hiking cycle the Fed has in mind. In our opinion, a hard landing is a mixed outcome for fixed income, with core doing well but riskier segments doing worse:

- **Treasury and muni bonds:** Treasury and muni bonds can provide a ballast due to flight to quality after the rate hiking ceases.
- **Credit:** Spreads rising due to weakening fundamentals tend to hurt credit investments, with the higher-yielding segments more negatively impacted.
- **Emerging market debt:** A recession in the US could negatively impact emerging markets on the whole.

STAGFLATION

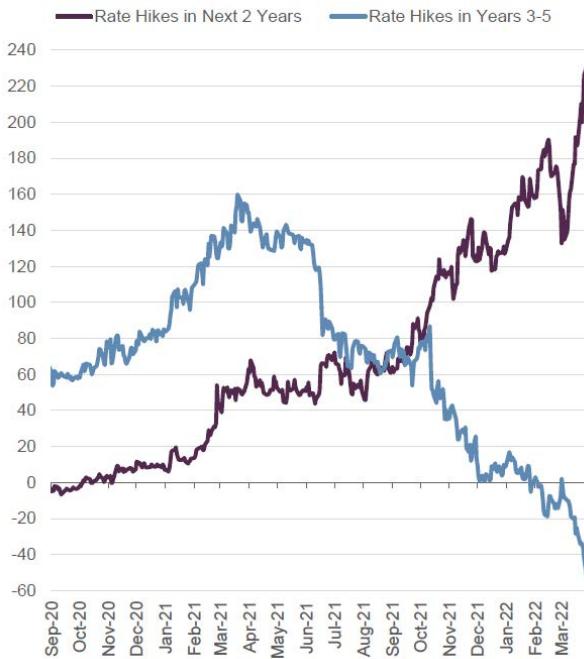
There is a risk that the economy will be both too hot in terms of inflation and too cold in terms of growth. In this scenario, the US economy would confront a negative shock for growth and spurs further inflation. This could occur if inflation becomes much broader and, therefore, more difficult to contain. This could result in a wage-price spiral and the yield curve moving higher than what is currently priced as the Fed becomes more aggressive. The economy would likely slow as higher rates dampen demand.

The Fed's tools cannot address supply chain disruptions, labor shortages and food and energy supplies. It can only affect the quantity and price of money to restrain aggregate demand. As such, the supply-driven nature of inflation means fighting such inflation aggressively with monetary policy will dent growth while doing little to address the underlying cause.

The higher and longer inflation lasts, the more aggressive the Fed might become. If inflation proves stickier or higher than the market expects, the Fed may be forced to tighten more aggressively and risk assets may falter. In our opinion, stagflation is an extremely negative outcome for the entire fixed income arena.

Overall, for all of the economic scenarios, the big unknown today remains the medium-term path for interest rates due to inflation. However, inflation will likely be higher in the future than seen in the previous forty years. What makes this investing environment tricky is that while the market expects the Fed to raise interest rates, it also expects the Fed to cut rates as well:

The Market Is Pricing in Rate Hikes in the Next 2 Years, But
Rate Cuts Over the Subsequent 3 Years (bp)...



Source: Guggenheim Investments, Bloomberg. Data as of 03/29/2022.

THE ROLE OF FIXED INCOME

In order to effectively invest in fixed income, it is important to understand its four primary functions in a portfolio: Liquidity, diversification, stability and income.

Liquidity: Fixed income can provide liquidity to portfolios. Due to the depth of the market, securities can be sold without much price disruption. According to the Securities Industry and Financial Markets Association (SIFMA) the US bond market is over \$50 trillion (net of holding by the Federal Reserve, Social Security and other government agencies) in 2021:

Bond Market Segment	Outstanding (\$tn)
Money Market	1,014.20
US Treasury Securities	22,584.00
Federal Agencies	1,433.30
Municipal Securities	4,049.70
Mortgage Backed Securities	12,201.60
Asset Backed Securities	1,585.30
Corporate Securities	10,022.40
Total	52,890.50

Source: Securities Industry and Financial Markets Association (SIFMA)

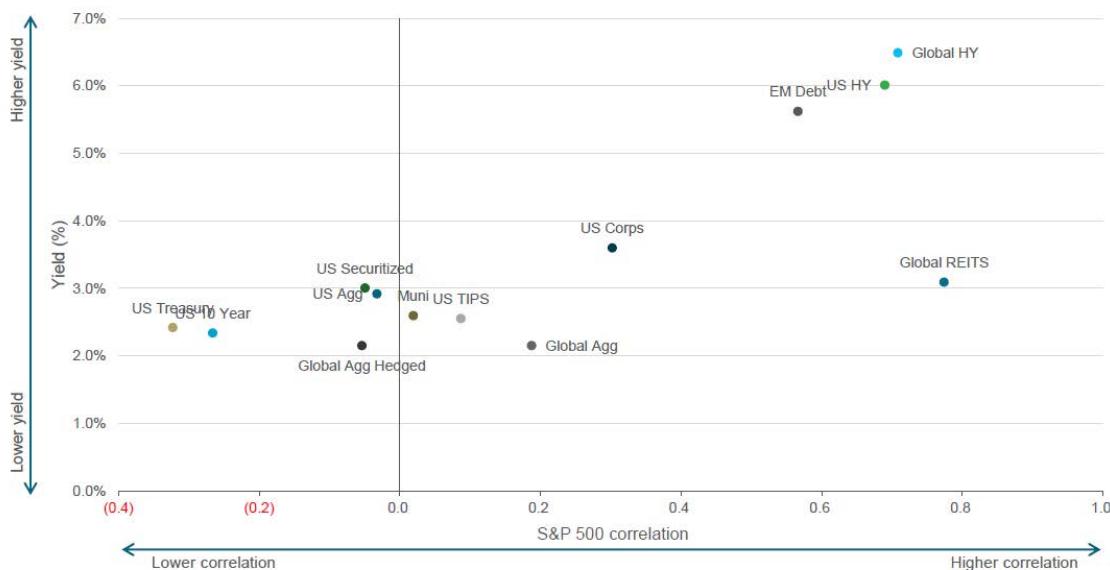
Income: Historically, reinvested income is compounded, which is an important driver to help a portfolio grow. For distributed amounts, it provides the funding to pay for needs. For several years, fixed income provided an inadequate level of income due to low yields. The silver lining of the increase in rates is that going forward, more income can be generated, as shown:

Sector	Yield at 3/31/2022	Yield at 12/31/2021
U.S. Aggregate	2.92%	1.75%
U.S. 10Y Treasury	2.32%	1.52%
Municipals	2.60%	1.11%
Investment Grade Corporates	3.60%	2.33%
High Yield Corporates	6.01%	4.21%
Municipals	2.60%	1.11%
MBS	2.99%	1.98%
ABS	3.45%	1.96%
Leveraged Loans	5.41%	4.60%

Source: JPMorgan Asset Management 3/31/2022

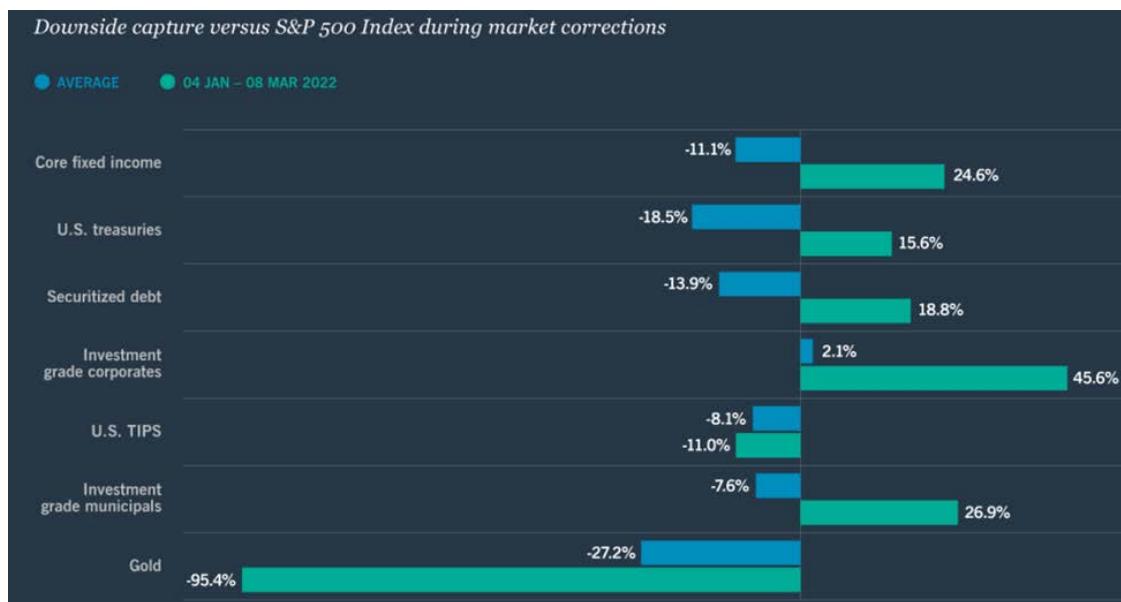
Diversification: Fixed income offers diversification in a portfolio because of its correlation with equities. Due to inflation, the correlation between stocks and bonds has risen, but overall, fixed income offers diversification, thereby improving a portfolio's return vs. risk. Government sectors have a higher benefit than corporate credit due to having lower correlations to equity. Credit risk is affected by the same earnings cycle that affects stocks.

Income vs. diversification tradeoff as of 03/31/2022.



Source: BNY Mellon Portfolio Strategy Group using data from Bloomberg as of March 31, 2022.

Stability: Historically, bonds have provided an effective ballast against equity market risk. Due to flight to quality, government bonds have gained as the equity market experiences a drawdown. However, due to lower market yields, the ability of bonds to protect a portfolio has been diminished. Moreover, bonds are susceptible to rising rates, which also negatively affects stocks. As a result, this year, bonds have not delivered the traditional role of protection. However, after rates peak, bonds should again provide portfolio protection. This will be necessary in the event of an economic hard landing. The following chart shows the difference in protection between this quarter and the past 25 years:



Source: Bloomberg, L.P., December 31 1997 to March 31 2022

DISCLAIMER

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