

MARKET PULSE

MACRO VIEWS

INFLATION: US inflation has been more persistent and broad-based than anticipated, with inflationary pressures extending beyond durable goods to core services, wages, and energy. Shelter inflation has run at the highest level since 1990 over the past four months. While we expect price pressure to moderate in 2023, we forecast US core PCE to end 2022 at 3.7%, a substantially higher run rate than in the past decade.

MONETARY POLICY: Central banks globally have pulled forward policy normalization as inflation concerns accelerate. We now expect seven Federal Reserve rate hikes in 2022 on the back of an already tight labor market and rising risks of a wage-price spiral. The European Central Bank has also turned more aggressive, though the probability of exiting negative rates later this year remains low.

GEOPOLITICS: Military conflict between Russia and Ukraine has risen, amplifying market volatility and a flight to safety. While we believe equity risks will remain short-lived, the situation remains in flux with potential longer-term direct impacts on growth, trade, energy prices, and inflation.

GROWTH: While monetary and fiscal support have become negative impulses in the US, we believe the composition of real rates and reopening momentum remains supportive. We forecast US growth of 3.3% in 2022, still well above trend. We also expect global growth of 3.8% for the year, a resilient number on the back of continued growth catch-up and a consumption boost from global excess savings.

MARKET VIEWS

EQUITIES: Elevated inflation and accelerated Fed tightening have lowered our S&P 500 YE 2022 price target from 5100 to 4900. Notably, we did not change our earnings forecasts, still expecting 8% EPS growth in 2022. We expect sales growth to be the key driver of returns, with modest margin expansion and limited room for valuation to move higher.

RATES: We forecast further yield curve flattening with expectations for the 2-Year and 10-Year US Treasury yields to end 2022 at 1.90% and 2.25%, respectively. We believe concerns around a yield curve inversion may be overstated, as 1) the hurdle for inversion is lower in a low-rate regime, 2) there is excess demand for long-dated bonds, and 3) spillover from global markets weighs on yields, all make it less predictive.

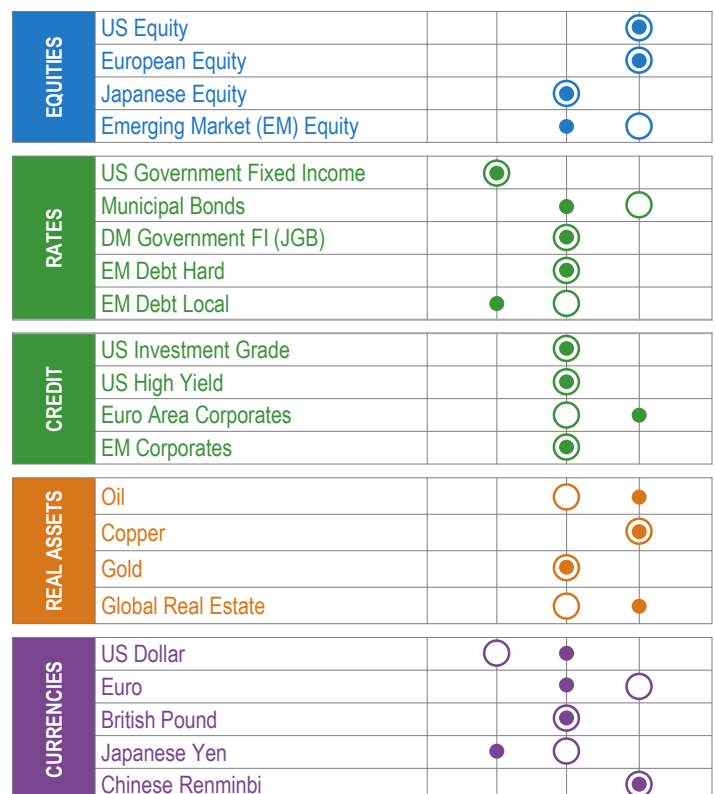
MUNIS: Market re-pricing has led to more attractive muni-Treasury ratios. We expect tax season to drive some outflows, especially after years of robust equity market gains. That said, muni fundamentals are likely to remain strong on the back of revenue growth and past federal support.

COMMODITIES: Historic levels of backwardation, reflecting draws on supply at the same time of record demand, mean that the current GSCI roll yield is estimated at 10%. In energy markets, limited rig counts, capex investment, and supply discipline suggest continued oil deficits.

FX: The Fed's hawkish tilt and strong US economic data provide near-term support for the US dollar, though we still see structural constraints longer-term. As rates in Europe may move into positive territory, we expect flows to recover, informing our favorable long-term euro view.

ASSET CLASS VIEWS¹

Shorter-Term ● Longer-Term ○ Less Attractive More Attractive



ASSET CLASS FORECASTS²

	Current	3m	12m	% Δ to 12m
S&P 500 (\$)	4329	4500	4900	13.2
STOXX Europe (€)	422	470	490	16.2
MSCI Asia-Pacific Ex-Japan (\$)	584	640	700	19.9
TOPIX (¥)	1845	2050	2200	19.2
10-Year Treasury	1.7	2.1	2.3	56 bp
10-Year Bund	(0.1)	0.3	0.6	67 bp
10-Year JGB	0.2	0.3	0.3	13 bp
Euro (€/\$)	1.09	1.16	1.20	10.0
Pound (£/\$)	1.32	1.36	1.41	6.9
Yen (\$/¥)	115	117	115	0.3
Brent Crude Oil (\$/bbl)	118.1	105.0	105.0	-11.1
London Gold (\$/troy oz)	1961	1950	2150	9.6

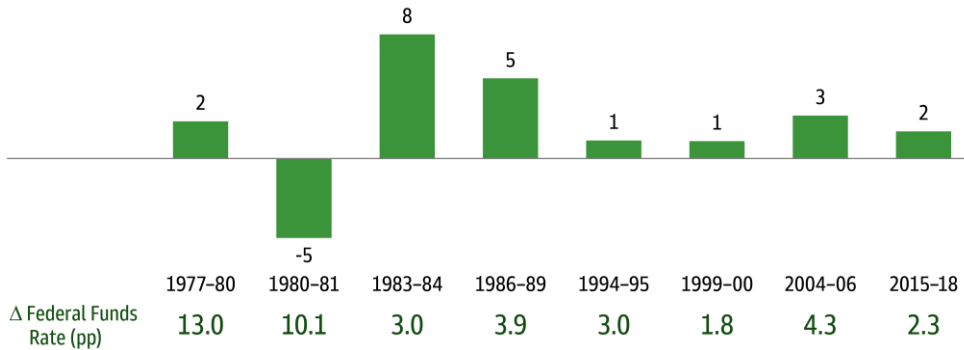
Source: Goldman Sachs Global Investment Research and Goldman Sachs Asset Management as of February 2022. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. Goldman Sachs does not provide accounting, tax or legal advice. Diversification does not protect an investor from market risk and does not ensure a profit. Please see additional disclosures at the end of this presentation. Past performance does not guarantee future results, which may vary.

Good, Better, Best

Yields are set to trend higher as the Federal Reserve eyes elevated inflation against full-employment and above-trend output. While rate sensitivity remains a consideration for fixed income, we believe its risk-mitigating qualities are becoming appealing again. Historical periods of policy tightening for bonds have meant reemergence of income, hedging potential, and mostly positive returns. As bonds start to behave more like themselves, investors may benefit from revisiting their fixed income allocation.

A GOOD PORTFOLIO KEEPS ITS CORE

Bloomberg Barclays US Aggregate Bond Index Total Return During Fed Tightening Cycle (%)

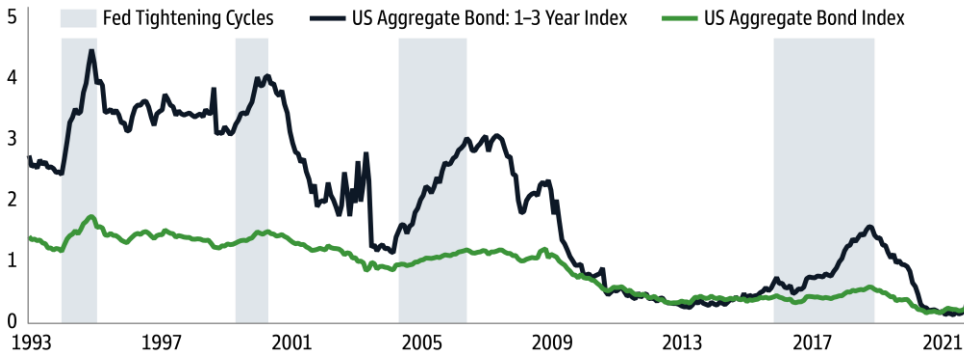


A good portfolio is built to weather all storms, even Fed tightening ones. While higher rates are expected to challenge bond prices, the yield pick-up may also improve its hedging quality. Core fixed income has delivered positive returns and lower drawdowns relative to US equities across hiking cycles, on average. With a steeper policy path ahead, an emphasis on stable income over capital appreciation may be welcomed.

Source: Bloomberg and Goldman Sachs Asset Management

A BETTER PORTFOLIO KNOWS WHEN LESS IS MORE

Yield per Unit of Duration (%)



While core bonds are integral to sound portfolio design, we believe a better portfolio in this environment may tilt toward the short-end of the curve. Rising rates translate to better bargains for short-duration bonds; higher Fed funds rate directly passes through to yields while minimal duration keeps price sensitivity low. As such, yields have historically improved by 200 bps during hiking cycles, surpassing what is observed in the broader US Agg.

Source: Bloomberg and Goldman Sachs Asset Management

THE BEST PORTFOLIO IS WILLING TO EXPLORE

Tax-Equivalent Yield to Worst (%)



Still, we believe investors with risk appetite can further improve their returns by exploring high quality credit. The municipal complex reflects one asset class where investors may realize higher yields without having to compromise a lower correlation to risk assets. With above-potential US growth, improving state revenues, and still healthy reserves, we believe looking beyond corporate credit may prove additive to a portfolio's fixed income allocation.

Source: Bloomberg and Goldman Sachs Asset Management

Top Section Notes: As of January 31, 2022. Chart shows the total index return during the nine Federal Reserve hiking cycles since 1970, including Feb-72 to Jul-74, Jan-77 to Apr-80, Jul-80 to Jun-81, Feb-83 to Aug-84, Dec-86 to Mar-89, Jan-94 to Feb-95, May-99 to May-00, May-04 to Jun-06, and Nov-15 to Dec-18. Middle Section Notes: As of January 31, 2022. Bottom Section Notes: As of January 31, 2022. Please see additional disclosures at the end of this presentation. **Past performance does not guarantee future results, which may vary.**

Important Information

1. Asset Class Views for equities, credits, sovereigns, real assets, and currencies are informed by Goldman Sachs Asset Management, Goldman Sachs Global Investment Research, and Goldman Sachs Investment Strategy Group views. The views expressed herein are as of February 2022 and subject to change in the future. "Shorter-term" view refers to less than 1 year. "Longer-term" view refers to 1-5 years. Individual portfolio management teams for Goldman Sachs Asset Management may have views and opinions and/or make investment decisions that, in certain instances, may not always be consistent with the views and opinions expressed herein.
2. Price targets of major asset classes are provided by Goldman Sachs Global Investment Research. Source: "Global energy spike as Euro area enters bear market territory" – 03/07/2022.

Page 1 Definitions:

Basis points (bps) refers to a unit represented by one hundredth of one percent.

Bbl refers to per barrel.

BoE refers to Bank of England.

Brent crude oil is a common international benchmark for oil prices.

Core PCE refers to the core personal consumption expenditure price index, excluding food and energy.

ECB refers to the European Central Bank.

EM refers to emerging markets.

EPS refers to earnings per share.

Fed refers to the Federal Reserve.

GDP refers to gross domestic product.

QoQ refers to quarter over quarter.

WTI refers to West Texas Instrument crude oil.

YE refers to year-end.

Page 2 Definitions:

Top chart shows the annualized return of the Bloomberg Barclays US Aggregate Bond Index (US Agg) during past eight Federal Reserve policy hiking cycles. "Federal funds rate" refers to the target interest rate set by the Federal Open Market Committee (FOMC).

Middle chart shows the yield per unit of duration for the Bloomberg Barclays US Aggregate Bond Index and the Bloomberg Barclays US Aggregate Bond: 1-3 Year Index. "Yields" refers to the yield to worst. "Duration" refers to the sensitivity of bond prices to a change in interest rates.

Bottom chart shows the tax-equivalent yield to worst for five indices as of January 31, 2022: Bloomberg Barclays US Aggregate Bond Index, Bloomberg Barclays Municipal Bond Index, Bloomberg Barclays Municipal High Yield Bond Index, Bloomberg Barclays US Corporate Investment Grade Bond Index, and Bloomberg Barclays US Corporate High Yield Bond Index.

Glossary

The Bloomberg Barclays Municipal Bond Index covers the USD-

denominated long-term tax-exempted bond market, including state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.

The Bloomberg Barclays Municipal High Yield Bond Index is a market value-weighted index designed to measure the performance of US dollar-denominated high-yield municipal bonds issued by US states, the District of Columbia, US territories, and local governments or agencies.

The Bloomberg Barclays US Aggregate Bond Index represents an unmanaged diversified portfolio of fixed income securities, including US Treasuries, investment grade corporate bonds, and mortgage backed and asset-backed securities.

The Bloomberg Barclays US Aggregate Bond: 1-3 Year Index represents an unmanaged diversified portfolio of fixed income securities, including US Treasuries, investment grade corporate bonds, and mortgage backed and asset-backed securities, with maturities ranging from one to three years.

The Dow Jones Equal Weight US Issued Corporate Bond Index is designed to track the total returns of 100 large and liquid investment-grade bonds issued by companies in the US corporate bond market.

The MSCI AC Asia Pacific ex Japan Index captures large and mid cap representation across 4 of 5 Developed Markets countries and 8 Emerging Markets countries in the Asia Pacific region.

The S&P 500 Index is the Standard & Poor's 500 Composite Stock Prices Index of 500 stocks, an unmanaged index of common stock prices. The index figures do not reflect any deduction for fees, expenses or taxes. It is not possible to invest directly in an unmanaged index.

The STOXX Europe 600 Index is derived from the STOXX Europe Total Market Index (TMI) and is a subset of the STOXX Global 1800 Index.

The Tokyo Price Index (TOPIX) is a metric for stock prices on the Tokyo Stock Exchange (TSE). A capitalization-weighted index, TOPIX lists all firms that have been determined to be part of the "first section" of the TSE.

The 10-Year US Treasury Bond is a US Treasury debt obligation that has a maturity of 10 years.

Indices are unmanaged. The figures for the index reflect the reinvestment of all income or dividends, but do not reflect the deduction of any fees or expenses which would reduce returns. Investors cannot invest directly in indices.

Risk Considerations

Equity securities are more volatile than bonds and subject to greater risks. Foreign and emerging markets investments may be more volatile and less liquid than investments in U.S. securities and are subject to the risks of currency fluctuations and adverse economic or political developments. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity. The currency market affords investors a substantial degree of leverage. This leverage presents the potential for substantial profits but also entails a high degree of risk including the risk that losses may be similarly substantial. Currency fluctuations will also affect the value of an investment.

Investments in fixed income securities are subject to the risks associated with debt securities generally, including credit, liquidity, interest rate, call and extension risk.

A 10-Year Treasury is a debt obligation backed by the United States government and its interest payments are exempt from state and local taxes. However, interest payments are not exempt from federal taxes.

The above are not an exhaustive list of potential risks. There may be additional risks that should be considered before any investment decision.

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