Goldman Sachs | Asset Management

December 15, 2023

FIXED INCOME MUSINGS

POLICY PICTURE

The Fed

What happened? The Fed maintained the federal funds rate at 5.25-5.5% and expects faster rate cuts compared to its September projection given recent disinflation progress.

Our outlook. We believe the Fed will deliver five rate 0.25% rate cuts in 2024 to reach 4-4.25% by year-end, starting in June, though risks are skewed towards an earlier rate cut. We think there will be more easing compared to the Fed (its median staff projection only point to three rate cuts in 2024) should disinflation continue in the coming months.

The ECB

What happened? The ECB kept policy rates on hold at 4% and announced that PEPP reinvestments are set to reduce in the second half of 2024 and conclude by year-end. President Lagarde noted rate cuts have not been discussed yet despite lower staff projections for inflation.

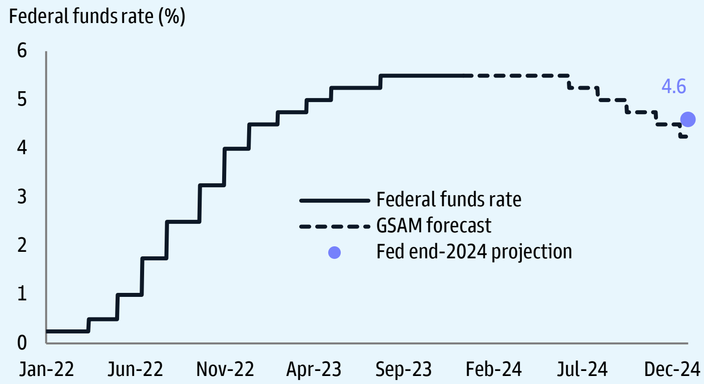
Our outlook. We think the ECB will begin rate cuts in June considering downward momentum in both activity and inflation. We believe subsequent 25bps cuts will be delivered in September and December. That said, further easing may occur should disinflation gain pace or the economy falls into a recession.

The BoE

What happened? The BoE kept the Bank Rate unchanged at 5.25% but struck a slightly hawkish tone with three members opting for a 25bps hike. The MPC reiterated its data-dependent approach, and that monetary policy will need to remain restrictive for an extended period.

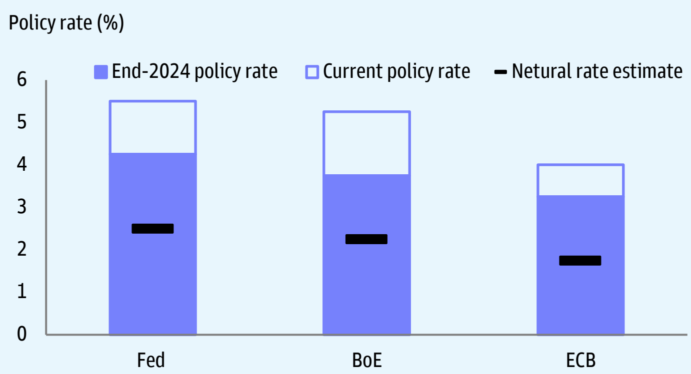
Our outlook. We think the BoE will initiate rate cuts from May given sluggish growth and abating underlying inflation pressures. We expect further easing throughout 2024 to reach a Bank Rate of 3.75% by year-end.

Counting down to cuts



Source: Goldman Sachs Asset Management, Fed, Macrobond. As of December 14, 2023.

From rate hikes to rate cuts



Source: Goldman Sachs Asset Management, Macrobond, As of December 2023. End-2024 policy rate is based on Goldman Sachs Asset Management projections. Neutral rate estimates reflect central bank projections.

Past performance does not guarantee future results, which may vary. 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. Please see additional disclosures at the end of this presentation. Abbreviations: Pandemic Emergency Purchase Program (PEPP)

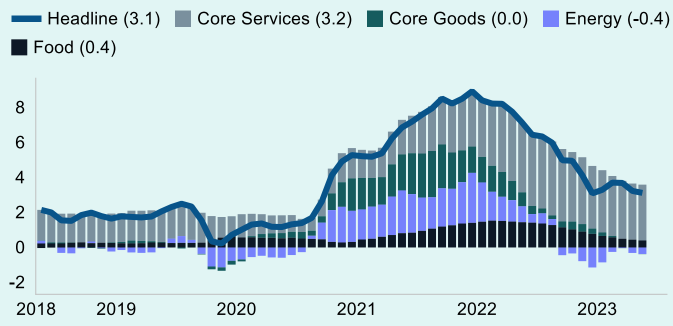
MACRO AT A GLANCE

UK – stagnation concerns. Elevated policy rates have encouraged disinflation but have also led to slowing economic activity. Monthly GDP growth contracted by 0.3% in October, with a decline across all major sectors (services, manufacturing and construction). Recent data, including a sharp slowdown in sequential wage growth, support the BoE's decision to leave policy rates on hold, but a sharper economic slowdown could accelerate the timeline for rate cuts.

US – further disinflation ahead. While annual headline inflation was unchanged in November, our Underlying Inflation Pressures indicator suggests the US has unwound about two-thirds of its inflation overshoot. We believe continued disinflation is in the pipeline for 2024 given indicators point to a further normalization of goods prices (particularly cars) and a deceleration in rents. A loosening labor market will also lower wage growth and in turn ease core services inflation.

US inflation – within striking distance of target

Contributions to annual US CPI inflation (%) (figures in brackets denote latest value)



Source: Goldman Sachs Asset Management, Macrobond. As of November 2023.

SUSTAINABILITY SPOTLIGHT

COP28 recap. The United Nations Climate Change Conference (COP28) saw notable progress in advancing the climate transition. The conference began with a historic loss and damage fund aimed at helping vulnerable countries navigate the impacts of climate change with contributions totaling $792 million so far. COP28 concluded with a significant breakthrough in which participants united to transition away from fossil fuels.

Investment implications. The urgency to decarbonize has increased investors' focus on incorporating net zero considerations into portfolios. As we have outlined, the global bond market will be critical for financing the climate transition, especially green bonds. By financing environmentally beneficial assets, green bonds may yield lower credit risks over time. They may also protect against climate change-related portfolio risks from policy shifts like carbon taxation.

Highlights of the final COP28 agreement

- **Phasing out inefficient fossil fuel subsidies** that do not address energy poverty or just transition
- **Accelerating efforts to phase out unabated coal** and limit new and unabated coal power generation
- **Tripling renewable energy capacity** and **doubling energy efficiency improvements by 2030**
- **Accelerating efforts to utilize zero- and low-carbon fuels** by 2050 and reduce emissions from road transport
- **Accelerating non-carbon emissions reduction,** in particular methane by 2030

Source: Goldman Sachs Global Investment Research – GS Sustain: Key COP28 takeaways for Sustainable Investing and MENA capex (December 13, 2023).

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NAVIGATING FIXED INCOME

Words speak louder than action. Faster rate cut projections and Fed Chair Powell entertaining the idea of policy easing led to a rally in rates and bolstered risk assets this week. Following the Fed meeting, financial conditions eased further, and the 10-year US Treasury yield fell below 4% for the first time since August.

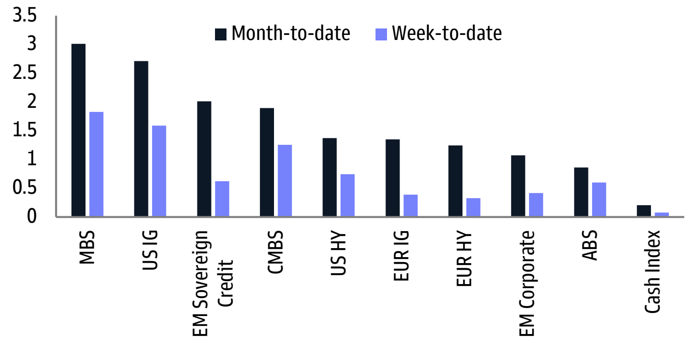
2024 – a year of balancing acts. With the inflation surge in the rear-view, central banks are now balancing the challenge of inflation persisting slightly above target with the risk of weaker growth—a dynamic not experienced in recent years. Against this backdrop, we continue to prefer high-quality assets, including investment grade (IG) credit and agency mortgage-backed securities. We are constructive on IG credit given robust balance sheets suggest credit rating downgrades and defaults will align with, rather than exceed historical trends, pointing to stable overall spreads. We also believe these exposures should be balanced with duration for the following reasons:

- Improved valuations in government bonds after price adjustments in 2022 and 2023.
- Bonds may act as a hedge against recession risks. The sharp rally in bonds amidst the US regional banking crisis in March demonstrated their value as a hedge against growth and financial risks.
- A transition from inflation and policy shocks to growth shocks should foster a return to negative correlations between bonds and risk assets, thereby enhancing the portfolio value of bonds.

The dark side of higher rates. While higher interest rates mean higher income and total return potential, they can also create vulnerabilities. These include heightened risks among emerging market sovereigns burdened by dollar-denominated debt and external balances, concerning fiscal trajectories, limited funding sources for smaller companies and challenges for lower income households given diminished savings. Downside risks to economic growth and earnings further reinforces the case for adding duration in portfolios.

Early Santa rally

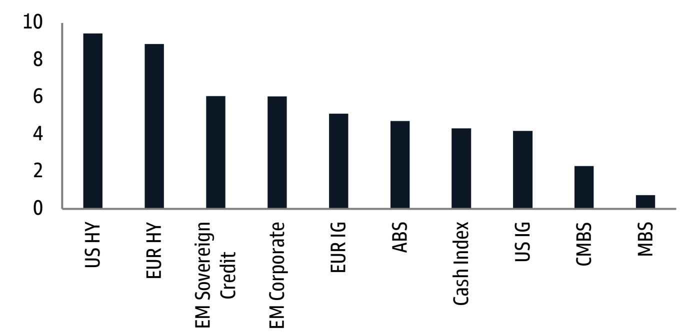
Total return (%)



Source: Goldman Sachs Asset Management, Macrobond. As of December 14, 2023.

Positive returns across fixed income in 2023

Total return year-to-date (%)



Source: Goldman Sachs Asset Management, Macrobond. As of December 14, 2023.

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CENTRAL BANK SNAPSHOT

	Interest Rate Policy	Balance Sheet Policy	Outlook	Our outlook relative to market-implied pricing
Fed	Federal funds rate: 5.25-5.5% Prior changes: July, May, March, February 2023 (+25bps) December 2022 (+50bps) June, July, September and November 2022 (+75bps) May 2022 (+50bps) March 2022 (+25bps)	The Fed has engaged in balance sheet runoff since June 2022.	We believe the Fed will deliver 25bps rate cuts in June, July, September, November and December. However, further disinflation and dovish Fed commentary could point to earlier cuts. Expected rate at end-2024: 4.0-4.25% Fed's neutral rate estimate: 2.5%	Neutral
ECB	Deposit facility rate: 4% Prior changes: September, July, June, May 2023 (+25bps) March, February 2023 and December 2022 (+50bps) September and October 2022 (+75bps) July 2022 (+50bps), the first hike since 2011	The ECB began winding down its balance sheet in March 2023 and ended APP reinvestments in July 2023. PEPP reinvestments will be wound down from July 2024 and end in December.	We believe rate cuts of 25bps will be delivered in June, September, and December. Risks of earlier or larger cuts may occur if disinflation is faster than expected or if a recession occurs. Expected rate at end-2024: 3.25% ECB's neutral rate estimate: 1.75%	Hawkish
BoE	Bank Rate: 5.25% Prior changes: August 2023 (+25bps) June 2023 (+50bps) May, March 2023 (+25bps) February 2023 and December 2022 (+50bps) November 2022 (+75bps) August and September 2022 (+50bps) February, March, May, June 2022 (+25bps) December 2021 (+15bps)	The BoE began QT in November 2022. Passive balance sheet runoff may continue alongside normalisation rate cuts, but we believe the final portion of active sales will likely be cancelled.	We think rate cuts of 25bps will begin in May and continue at each subsequent meeting in 2024 to reach 3.75% by year-end. Expected rate at end-2024: 3.75% BoE's neutral rate estimate: 2.25%	Dovish
BoJ	Policy deposit rate: -0.10% Prior changes: Suspension of fixed-rate purchase operations. 1% upper bound of 10-year JGB yield is a 'reference' and removal of -/+50bps tolerance band. Fixed-rate purchase operations: Increased from 0.5% to 1% 10-year JGB yield target: ~0%, with tolerance band of -/+50bps (yield curve control policy) January 2016, when the Bank introduced its negative interest rate policy (NIRP)	The BoJ has increased JGB purchases significantly in 2023 to defend YCC. We think a 'reference rate' for YCC may be retained in 2024, resulting in modest JGB purchases to facilitate an orderly departure from NIRP.	We believe there will be an exit from negative rates in January 2024 followed by 25bps rate hikes at in April, July and October 2024. That said, the BoJ is unlikely to deliver rate hikes should a global hard-landing occur. Expected rate at end-2024: 0.75% BoJ's neutral rate estimate: 0%	Hawkish

Source: Goldman Sachs Asset Management. As of December 15, 2023. 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. Please see additional disclosures at the end of this presentation.

SOVEREIGN BOND YIELDS (%)

	Latest	6 months ago	12 months ago
US 2 Year	4.5	4.7	4.2
US 10 Year	4.0	3.8	3.5
US 2-10 Slope	-0.4	-0.9	-0.7
US Treasury 10-Year Inflation-Protected	1.9	1.6	1.3
Germany 2 Year	2.7	3.0	2.1
Germany 10 Year	2.2	2.4	1.9
Japanese 10 Year	0.7	0.4	0.3
UK 10 Year	3.9	4.4	3.3
Chinese 10 Year	2.6	2.6	2.9

Source: Macrobond, Goldman Sachs Asset Management. As of 14 December 2023.

EXCHANGE RATES

	Latest	6 months ago	12 months ago
Euro (€ per $)	0.93	0.92	0.94
British Pound (£ per $)	0.80	0.79	0.81
Japanese Yen (¥ per $)	145.17	139.42	134.86
Chinese Yuan Renminbi (CNY per $)	7.17	7.15	6.95

Source: Macrobond, Goldman Sachs Asset Management. As of 14 December 2023.

FIXED INCOME SECTOR YIELDS (%)

	Latest	Last 10 year average	Last 10 year Percentile
US Investment Grade	5.3	3.5	90.6
European Investment Grade	4.3	1.4	88.7
UK Investment Grade	5.5	3.1	90.6
US High Yield	8.2	6.5	82.1
European High Yield	6.7	4.2	85.8
EM External	8.2	6.1	86.3
EM Corporate	7.0	5.3	90.4
US Agency MBS	4.8	2.8	95.1
US ABS	5.8	2.5	91.9
US Munis	3.6	2.3	91.6
US CMBS	4.7	2.6	93.2

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 14 December 2023.

FIXED INCOME SECTOR SPREADS (BASIS POINTS)

	Latest	12 months ago	Last 10 Year Percentile
US Investment Grade	108	136	17.9
European Investment Grade	142	169	76.2
UK Investment Grade	140	195	35.6
US High Yield	379	434	32.3
European High Yield	417	504	61.9
EM External	408	452	73.1
EM Corporate	309	333	30.4
US Agency MBS	50	45	78.4
US ABS	126	154	82.9
US CMBS	52	62	44.4

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 14 December 2023.

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ADDITIONAL FIXED INCOME INSIGHTS

Musings

December 8, 2023

December 1, 2023

November 17, 2023

November 10, 2023

Navigating Fixed Income

Navigating Disinflation: The Case for EM Local Bonds

Navigating EM External Debt: Earning Carry, Finding Alpha

Navigating Investment Grade Credit with Goldman Sachs Asset Management

Navigating Opportunities in Investment Grade Credit

Navigating External EM Debt

Navigating The EM Corporate Bond Market

Navigating Short Duration Opportunities

Bear (Market) Necessities: The Case for Core Fixed Income

Fixed Income Outlook

Q4 2023 Outlook: Turning Cautious

Q3 2023 Outlook: Resilience and Risk

Q2 2023 Outlook: Quality Control

Q1 2023 Outlook: Bring on Bonds

Asset Management Insights

Asset Management Outlook 2024: Embracing New Realities

Asset Management Perspectives: Coming into Focus

- Introduction
- Forces of Change: Investing in a World of Cyclical and Structural Drivers
- Triple A to Triple Threat: US Debt Sustainability, Serviceability, and Geopolitical Risks
- Taking The High Road: Investing In A Higher-for-Longer Rate World
- Japan's Economic Revival and the Road Ahead

Risk Consideration

Investments in fixed income securities are subject to the risks associated with debt securities generally, including credit, liquidity, interest rate, prepayment and extension risk. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. The value of securities with variable and floating interest rates are generally less sensitive to interest rate changes than securities with fixed interest rates. Variable and floating rate securities may decline in value if interest rates do not move as expected. Conversely, variable and floating rate securities will not generally rise in value if market interest rates decline. Credit risk is the risk that an issuer will default on payments of interest and principal. Credit risk is higher when investing in high yield bonds, also known as junk bonds. Prepayment risk is the risk that the issuer of a security may pay off principal more quickly than originally anticipated. Extension risk is the risk that the issuer of a security may pay off principal more slowly than originally anticipated. All fixed income investments may be worth less than their original cost upon redemption or maturity.

The risk of foreign currency exchange rate fluctuations may cause the value of securities denominated in such foreign currency to decline in value. Currency exchange rates may fluctuate significantly over short periods of time. These risks may be more pronounced for investments in securities of issuers located in, or otherwise economically tied to, emerging countries. If applicable, investment techniques used to attempt to reduce the risk of currency movements (hedging), may not be effective. Hedging also involves additional risks associated with derivatives.

Emerging markets investments may be less liquid and are subject to greater risk than developed market investments as a result of, but not limited to, the following: inadequate regulations, volatile securities markets, adverse exchange rates, and social, political, military, regulatory, economic or environmental developments, or natural disasters.

When interest rates increase, fixed income securities will generally decline in value. Fluctuations in interest rates may also affect the yield and liquidity of fixed income securities.

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High-yield, lower-rated securities involve greater price volatility and present greater credit risks than higher-rated fixed income securities.

Mortgage-related and other asset-backed securities are subject to credit/default, interest rate and certain additional risks, including extension risk (i.e., in periods of rising interest rates, issuers may pay principal later than expected) and prepayment risk (i.e., in periods of declining interest rates, issuers may pay principal more quickly than expected, causing the strategy to reinvest proceeds at lower prevailing interest rates).

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The indices referenced herein have been selected because they are well known, easily recognized by investors, and reflect those indices that the Investment Manager believes, in part based on industry practice, provide a suitable benchmark against which to evaluate the investment or broader market described herein. The exclusion of "failed" or closed hedge funds may mean that each index overstates the performance of hedge funds generally.

Sector Spread Indexes

US Investment Grade Corporates: ICE BofAML US Corporate Index

US High Yield Corporates: ICE BofAML US Corporate High Yield Index

European Investment Grade Corporates: ICE BofAML Euro Corporate Index

European High Yield Corporates: ICE BofAML Euro High Yield Index

ABS: ICE BofAML US Fixed Rate Asset-Backed Securities Index

MBS: ICE BofAML US Agency Mortgage-Backed Securities Index

CMBS: ICE BofAML US Fixed Rate Commercial Mortgage-Backed Securities Index

EM External Debt: J.P. Morgan, EMBI Global Diversified Face Constrained Index

Past performance does not guarantee future results, which may vary. The value of investments and the income derived from investments will fluctuate and can go down as well as up. A loss of principal may occur.

Abbreviations: US Federal Reserve (Fed), European Central Bank (ECB), Bank of England (BoE), Bank of Japan (BoJ), Swiss National Bank (SNB), Central Bank of Sweden (Riksbank), Reserve Bank of New Zealand (RBNZ), Central Bank of Norway (Norges Bank) Bank of Canada (BoC), Reserve Bank of Australia (RBA), Quantitative Easing (QE), Quantitative Tightening (QT), Pandemic Emergency Purchase Program (PEPP), Consumer price index (CPI), producer price index (PPI), developed markets (DM), emerging markets (EM), Japanese Government Bond (JGB). Mortgage-backed securities (MBS), Asset-backed securities (ABS).

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