FIXED INCOME MUSINGS

MACRO AT A GLANCE

Digesting an increasingly benign inflation trajectory. Data releases over November support the view that central banks may have tamed inflation without inducing a recession. Annual US core PCE inflation eased from 3.7% to 3.5% in October, reaffirming the disinflation trend reflected in <u>core CPI inflation data</u> released earlier in the month. Meanwhile, flash data for November showed annual headline inflation in the Euro area slowing further, in large part due to a -11.5% decline in energy prices. Encouragingly, core inflation slowed for the fourth month in a row, reflecting easing core goods price pressures.

Surveys point to divergent growth momentum. The US manufacturing sector remains weak with the ISM manufacturing index in contracting territory for the thirteenth consecutive month. However, third quarter GDP growth expanded by the fastest pace in two years. By contrast, Euro area PMI data imply subdued activity, with growth stalling in response to tighter financial conditions.

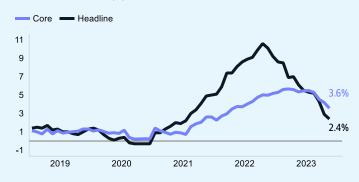
TRACKING TREASURIES

Stronger, lower, steeper. Stronger conviction that the next move for the Fed will likely be a rate cut saw the US 10-year Treasury yield exit November 60bps lower, having started the month way up at 4.9%. Meanwhile, the US Treasury bond yield curve between 2- and 10-year maturities steepened by 19bps.

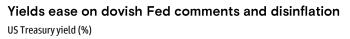
Countdown to cuts. Disinflation progress and <u>dovish</u> <u>comments</u> from Fed Governor Waller, who has historically leaned hawkish, saw investors pull forward the expected timeline for central bank policy rate cuts. Market-implied pricing points to the first move lower arriving in March 2024 for both the US and Europe.

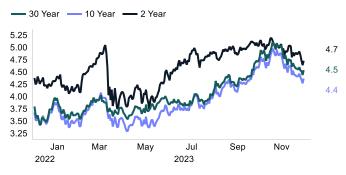
Euro area inflation eases further

Annual Euro area inflation (%)



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





Source: Goldman Sachs Asset Management, Macrobond. As of November 30, 2023.

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POLICY PICTURE

Germany's fiscal fiasco

Context. Fiscal discipline in Germany is enforced via a "debt brake" which limits the cyclically adjusted structural deficit to 0.35% of GDP. In emergencies, this rule can be suspended, including via the use of off-budget special purpose funds, subject to a certain number of provisions. In recent years, the German government has invoked the emergency rule and created several of these funds to finance pandemic relief, climate-related, and defence spending.

What's happened? Germany's constitutional court ruled that unused pandemic relief funds cannot be allocated to the government's Climate and Transformation Fund (KTF) which is used to drive the green transition of the German economy. The German government had initially tried to use these off-balance sheet funds believing that the debt brake would not apply. Instead, the debt brake rule applies on a consolidated basis (including off-balance sheet funds) and is applied annually when funds are disbursed. In addition, to justify exemptions of the debt brake, the final use of funds must align with the original intent of the emergency.

Potential implications. The government had planned to spend €58 billion of KTF funds on climate-related investments and subsidies in 2024. But with revenues of the Fund amounting to €28 billion and unused pandemic relief funds no longer on their way, the KTF faces a €29 billion funding gap next year. Less finance than anticipated suggests some climate-related projects may be delayed unless funds are redirected from other planned expenditures. The ruling may also limit the future use of other off-balance sheet funds to circumvent the debt brake. In the near term, the ruling could have implications for further fiscal consolidation across the Euro area, and impact Germany's negotiating stance in the ongoing debate around reforming the European Union's fiscal rules.

German KTF in numbers

212bn

Planned expenditures of the KTF over 2024-2027

0.5%

KTF funding shortfall for 2024 as a percent of German GDP

Source: Goldman Sachs Global Investment Research - European Daily: Germany — Implications of the Constitutional Court Ruling (November 19, 2023).

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CENTRAL BANK SNAPSHOT

	Interest Rate Policy	Balance Sheet Policy	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 monthly pace of net asset purchases was reduced from November 2021 and ended in March 2022. Since June 2022, the Fed has engaged in balance sheet runoff.	We believe the Fed will leave policy unchanged into 2024. However, rising oil prices could renew upside inflation risks while a sharp economic slowdown could accelerate the timeline for rate cuts. Expected terminal rate: 5.25-5.5%	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's balance sheet unwind began on March 1, 2023. The decline will amount to EUR 15bn per month on average until the end of the second quarter of 2023 and its subsequent pace will be determined over time. The anti- fragmentation tool, the Transmission Protection Instrument (TPI), unveiled in July 2022 will be used to ensure monetary policy is transmitted smoothly across all euro area countries.	We believe a rate cut will occur sometime in 2024. A sharp economic slowdown or larger-than-expected deterioration in the labor market could prompt earlier policy easing. Expected terminal rate: 4.0%.	Neutral
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)	In September/October 2022, the BoE temporarily purchased long-dated UK gilts and postponed active gilt sales; in November 2022 the BoE commenced active sales and an unwind of the temporary purchases. The pace of quantitative tightening was increased in September 2023.	Our base case expectation is that the BoE will now leave rates on hold for an extended period, with the next move being a cut sometime in 2024. Expected terminal rate: 5.25%	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)	Following the December 2022 meeting, the BoJ has stepped up their defence of the new +0.5% YCC upper band by significantly increasing regular and ad- hoc Japanese Government Bond purchases along the yield curve. Targets for ETF, corporate bond and other risk asset purchases remain in place but in practice there have been limited recent buying.	We are gaining conviction that strength in domestic inflation will lead to YCC being further weakened or abandoned. We also believe negative rates to be removed in the coming quarters, potentially followed by a number of rate hikes into positive territory.	Hawkish

Source: Goldman Sachs Asset Management. As of November 2, 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.

Our outlook relative to

SOVEREIGN BOND YIELDS (%)

	Latest	6 months ago	12 months ago
US 2 Year	4.6	4.5	4.4
US 10 Year	4.3	3.7	3.7
US 2-10 Slope	-0.4	-0.8	-0.7
US Treasury 10-Year Inflation-Protected	2.1	1.5	1.3
Germany 2 Year	2.8	2.8	2.1
Germany 10 Year	2.4	2.4	1.9
Japanese 10 Year	0.7	0.4	0.3
UK 10 Year	4.2	4.3	3.2
Chinese 10 Year	2.7	2.7	2.9

Source: Macrobond, Goldman Sachs Asset Management. As of 30 November 2023.

EXCHANGE RATES

	Latest	6 months ago	12 months ago
Euro (€ per \$)	0.91	0.93	0.97
British Pound (£ per \$)	0.79	0.81	0.84
Japanese Yen (¥ per \$)	147.41	139.79	139.50
Chinese Yuan Renminbi (CNY per \$)	7.08	7.08	7.09

Source: Macrobond, Goldman Sachs Asset Management. As of 30 November 2023.

FIXED INCOME SECTOR YIELDS (%)

	Latest	Last 10 year average	Last 10 year Percentile
US Investment Grade	5.6	3.4	95.2
European Investment Grade	4.3	1.4	90.7
UK Investment Grade	5.8	3.1	93.4
US High Yield	8.4	6.4	84.3
European High Yield	7.0	4.2	87.8
EM External	8.5	6.1	91.5
EM Corporate	7.3	5.3	94.5
US Agency MBS	5.2	2.8	97.7
US ABS	6.0	2.5	94.8
US Munis	3.8	2.3	94.6
US CMBS	5.0	2.5	96.4

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 30 November 2023.

FIXED INCOME SECTOR SPREADS (BASIS POINTS)

	Latest	12 months ago	Last 10 Year Percentile
US Investment Grade	111	142	21.3
European Investment Grade	146	178	78.6
UK Investment Grade	144	202	41.9
US High Yield	380	463	32.9
European High Yield	432	503	65.7
EM External	411	466	74.2
EM Corporate	309	358	30.0
US Agency MBS	64	40	89.0
US ABS	128	170	83.9
US CMBS	58	67	66.8

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 30 November 2023.

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ADDITIONAL FIXED INCOME INSIGHTS

Musings

November 17, 2023

November 10, 2023

November 3, 2023

<u>October 27, 2023</u>

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

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

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

Risk Consideration

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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.

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MUSINGS

Index Benchmarks

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

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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