FIXED INCOME MUSINGS

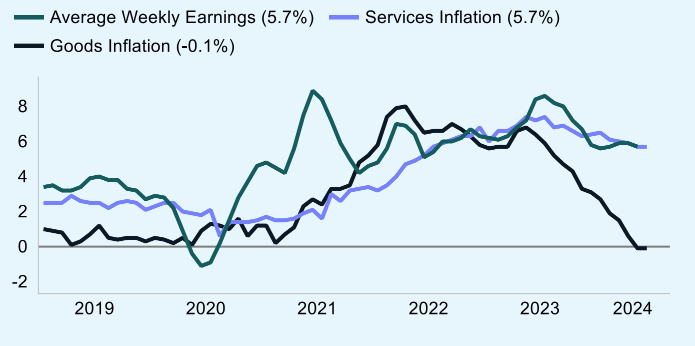
MACRO AT A GLANCE

UK data send mixed messages...Both annual headline inflation and core inflation remained steady at 2.0% and 3.5%, respectively, in June. Notably, services inflation rose by 5.7% which was partly attributed to one-off factors, including home insurance and social protection costs, and temporary factors, such as increased demand for hotels from Taylor Swift's Eras tour. Despite these pressures, signs of a cooling labor market, evidenced by the recent 0.8% uptick in the unemployment rate from a cycle low to 4.4%, and moderating wage growth, may reassure the BoE regarding the outlook for disinflation.

...but an August BoE cut still seems likely. We continue to foresee the BoE leaning towards a rate cut in August, while remaining vigilant to potential sustained services inflation, influenced by 'Swiftonomics'—the economic effects of concerts on spending in areas like retail and hospitality.

'Swiftonomics' appears to be pushing up services prices

Annual UK CPI inflation and wage growth (%) (figures in brackets denote latest value)



Source: Goldman Sachs Asset Management, Macrobond. As of June 2024. Average weekly earnings is as of May 2024.

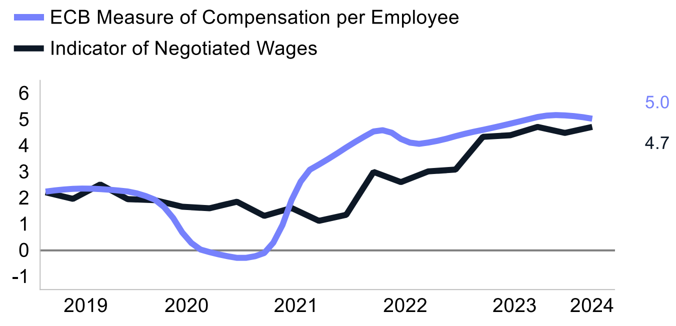
POLICY PICTURE

ECB door is open for a second cut... As expected, the ECB maintained the deposit facility rate at 3.75% and its data-dependent stance. However, we believe the press conference tone was somewhat dovish, with growth risks acknowledged and recent inflationary pressures, including wage growth, being downplayed. President Lagarde expressed that wage growth by 2025 is expected to align with the 2% inflation target, indicating a stabilization once wages 'catch up' to the new inflation landscape.

...although services inflation may delay the timeline. We predict a second rate cut in September, contingent on data aligning with ECB projections. However, persistent services inflation, fueled by robust tourism and Taylor Swift's tour, could postpone easing measures. Nonetheless, we anticipate these inflationary effects will be considered temporary, leading central banks to 'shake it off'.

ECB expects wage growth to ease in 2025

Measures of annual Euro area wage growth (%)



Source: Goldman Sachs Asset Management, Macrobond. As of March 2024.

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CREDIT CHECK-IN: NAVIGATING THE US ELECTION

Credit markets appear to be in "wait and see" mode on the potential policy changes from the US election outcome and the corresponding impact, which is likely to vary across sectors. While we stress the outcome and policy implications are subject to change as the election progresses, we identify three areas that we think could impact US investment grade (IG) credit markets:

1. M&A Trends:

- There may be an uptick in M&A activity due to reduced antitrust enforcement under a Republican sweep[3]. For context, the current leadership at the Federal Trade Commission (FTC) and Department of Justice, appointed by President Biden, launched 50 antitrust challenges in 2022, a record number, which we think has dampened M&A activity including those transactions that would have been funded with debt.
- We think corporate bond spreads may widen if there is an uptick in debt-funded M&A activity which can negatively affect credit metrics. That said, the endorsement of the FTC's stance on limiting consolidation from the Republican vice-presidential pick may continue to dampen M&A activity.

2. Tariffs and Industry Impact:

- Trump has floated several tariff policies including targeting specific products from certain countries, a 10% across-the-board tariff, and a 60% tariff on imports from China.
- We analyzed the sensitivity of companies in the US IG credit market to potential trade tensions with China by assessing earnings and cash flow exposure as well as supply chain exposure to China. Our analysis suggests overall exposure is manageable given the diverse global exposure of companies in the US IG credit universe.

Figures in focus

12% Proportion of total bond issuance for M&A in 2021-2024, down from 17% in 2016-2019[1]

60% Proposed tariff on imports from China under a Trump presidency[2]

Source: [1] J.P. Morgan. As of June 2024. [2] Goldman Sachs Global Investment Research – Global Economics Analyst: The Impact of Trade Policy Uncertainty on Growth in the US and Europe (June 25, 2024).

- That said, tariffs and retaliatory tariffs may present challenges for industries dependent on Chinese imports, such as medical products, semiconductors, and apparel, as well as sectors more reliant on Chinese demand like aircraft and luxury goods.

3. Corporate Taxation:

- Corporate taxes may rise in a unified Democratic government, with President Biden proposing a 28% statutory rate, an increase from 21% currently.
- We think industries with a high proportion of earnings from the US, such as railroads and telecom companies, may be most impacted from a rise in corporate tax rates. Higher corporate taxes may also put pressure on corporate bond spreads given an anticipated lower level of earnings and cash flow.

 [3] In political terms, a 'sweep' refers to the scenario where a single political party wins majority seats in both the Senate and the House of Representatives, in addition to securing the Presidency. This means that the party has significant control over the legislative and executive branches of government, allowing for potentially easier passage of laws and policies aligned with their agenda.

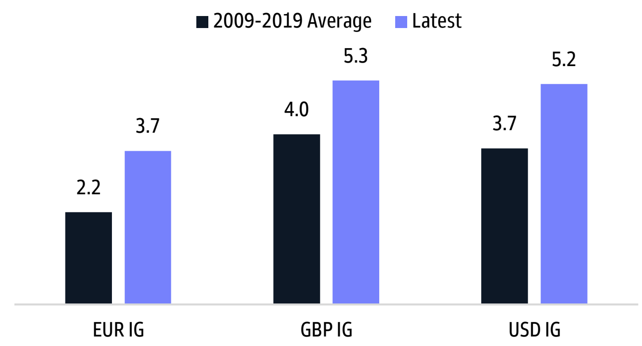
NAVIGATING FIXED INCOME

In our Q3 Fixed Income Outlook, 'Sound Fundamentals, Narrow Margins,' we observe economic and corporate fundamentals remain resilient. However, we approach our fixed income exposure with caution due to narrow spreads and heightened political uncertainty which create a small margin for error. Below we highlight three key themes against this backdrop and their investment implications.

1. **Riding the Easing Cycle.** Disinflation appears to be back on track following a setback earlier this year, especially across major economies. In response, central banks have begun easing or are poised to cut rates in the coming months, creating a favorable backdrop for fixed income assets including core fixed income assets. We also think short-duration bonds offer timely investment potential with the prospect of securing appealing yields before broad-based central bank rate cuts.
2. **Navigating New Realities.** The private sector's financial health is reflected in low delinquency, downgrade, and default rates, providing a solid base for debt servicing capacity. This bodes well for income potential and return prospects for corporate bonds and securitized assets like collateralized loan obligations (CLOs) and commercial mortgage-backed securities (CMBS). In addition, the growth of the green bond market, characterized by increased diversity and depth, creates opportunities for investors to 'green' a part of their fixed income holdings or establish a dedicated green bond allocation.
3. **Steering Through Political Uncertainty.** Global political dynamics do not indicate immediate fiscal tightening, aligning with our expectations for steeper sovereign yield curves. Political uncertainty underscores the need for diversification, active security selection, and strategies to bolster portfolio resilience, including leveraging the US dollar's perceived safe-haven status and using currency options that benefit from increased currency volatility.

Elevated yields across core fixed income assets

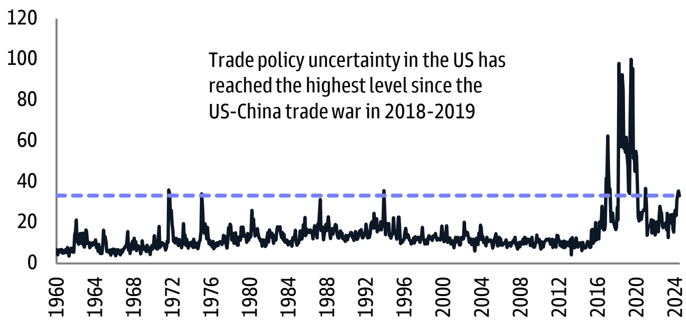
Core fixed income yields (%)



Source: Goldman Sachs Asset Management, Macrobond. As of July 17, 2024.

Trade policy uncertainty reaches pre-trade war peak

US trade policy uncertainty index (100 = 2019 peak)



Source: Source: Haver Analytics, Goldman Sachs Global Investment Research - Global Economics Analyst The Impact of Trade Policy Uncertainty on Growth in the US and Europe, June 25, 2024. * Caldara D., Iacoviello M., Molligo P., Prestipino A., and Raffo A. (2020). Dashed line corresponds to latest value as of June 30, 2024.

Listen to Goldman Sachs The Markets for a discussion with Gurpreet Garewal, Goldman Sachs Asset Management, Fixed Income Macro Strategist, for a recap of the ECB meeting, the outlook for markets and what to watch in the week ahead.

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SUSTAINABILITY SPOTLIGHT

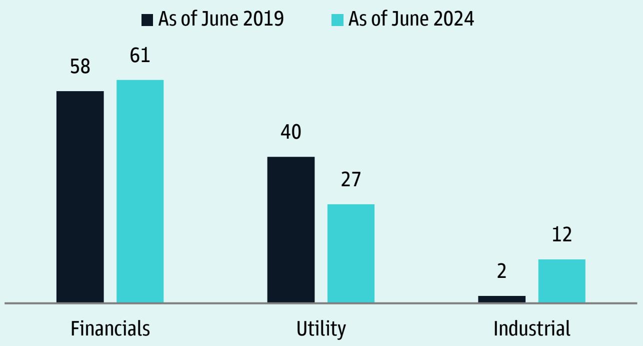
Collaborating with Clients on the Climate Transition

Alexa Gordon, a client portfolio manager in our fixed income team, recently shared valuable insights at Transition-IQ's Sustainable Fixed Income & Finance Forum, focusing on innovative strategies to support the climate transition. Key highlights from her discussion include:

- Strategic Engagement: We actively engage with bond issuers on key issues such as climate transition, inclusive growth, and corporate governance as detailed in the Goldman Sachs Asset Management Stewardship Report. In 2023, we enhanced our engagement tracking and reporting tools, which now offer more detailed insights and improved monitoring of outcomes and progress.
- Customized Solutions: We recognize the distinct sustainability goals of each client. Our focus is on crafting customized solutions that cater to diverse needs and requirements.
- Recognizing Nuances: It's essential to acknowledge that sustainable solutions can differ based on the region, sector, and asset class, particularly concerning data availability and the investable universe. For instance, smaller high-yield or emerging market companies may face challenges to report on certain data due to limited resources. Our role as active investors includes addressing these data gaps through proactive engagement.
- A Collaborative Approach: The ever-changing market landscape highlights the necessity for active management and specialized expertise. Our goal is to work alongside our clients, helping them navigate these shifts, manage risks and identify growing opportunities such as in the green bond market which continues to expand. This includes those that align with sustainability goals such as inclusive growth and climate transition for long-term investment performance.

Growing diversity, growing opportunities

Bloomberg MSCI Euro Green Bond Index Sector Weights (%)



Source: Bloomberg.

2023 Engagements with Bond Issuers

	Fixed Income	Multiple Teams*
	352	274
Thematic Engagements	24	94
Proxy Related Engagements	-	43
Providing Feedback	25	123
Investment Research and Monitoring Engagements	303	14

Source: Goldman Sachs Asset Management Stewardship Report 2023. *Denotes engagement from teams within both the Fixed Income and Fundamental Equity teams.

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% Last change: July 2023 (+25bps) Hiking cycle duration: 17 months Rate at the start of latest hiking cycle: 0.25%	The Fed has been reducing its balance sheet passively since June 2022. The FOMC decided to decrease the pace of this reduction starting in June 2024, with the monthly runoff scaling down from $60 billion to $25 billion.	We think the Fed may initiate a rate cut in September considering recent disinflation progress and cooling of the labor market, followed by a further rate cut in December. Anticipated rate at end-2024: 4.75-5% Neutral rate estimate: 2.25-3.75%	In line
ECB	Deposit facility rate: 3.75% Last change: June 2024 (-25bps) Hiking cycle duration: 15 months Rate at the start of the latest hiking cycle: -0.5%	The ECB started reducing its balance sheet in March 2023 and ceased reinvestments from its APP in July 2023. The reinvestment of proceeds from maturing securities under the PEPP will gradually decrease starting July 2024 and conclude in December 2024.	We think the ECB will adopt a gradual, quarterly pace of easing. Anticipated rate at end-2024: 3.25% Neutral rate estimate: 2.0-3.0%	Slightly dovish
BoE	Bank Rate: 5.25% Last change: August 2023 (+25bps) Hiking cycle duration: 21 months Rate at the start of the latest hiking cycle: 0.1%	The BoE has actively been reducing its balance sheet since November 2022. While we expect the passive reduction to continue in conjunction with rate cuts, active bond sales may be paused.	We think the easing cycle will begin in August, but we are mindful persistent inflation may delay the start to the easing cycle. Anticipated rate at end-2024: 4.75% Neutral rate estimate: 2.75-3.25%	Dovish
BoJ	Policy deposit rate: 0.10% Last change: March 2024 (+20bps) Duration of negative rates: 98 months Rate at start of the latest hiking cycle: -0.10%	We think the BoJ will reduce its purchases of Japanese Government Bonds cautiously to prevent market instability.	We anticipate further, albeit modest, hikes in interest rates as Japan's real rates remain low and financial conditions are relatively easy relative to the backdrop of inflation. Anticipated rate at end-2024: 0.5% Neutral rate estimate: 0.75-2.0%	Slightly hawkish

Source: Goldman Sachs Asset Management. As of July 19, 2024. Abbreviations: Quantitative Easing (QE), Quantitative Tightening (QT), Yield Curve Control (YCC), Negative Interest Rate Policy (NIRP) Pandemic Emergency Purchase Program (PEPP), Asset Purchase Program (APP), Targeted Longer-Term Refinancing Operations (TLTROs), Japanese Government Bond (JGB). The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document. The **neutral rate estimates** come with a degree of uncertainty. They are derived from a combination of fundamental, market, and model-based assessments. The ranges for the Fed, BoE and BoJ reflect the diversity of these estimates. For the ECB, the range represents the spectrum of policymakers' estimates, which has been adjusted based on our discretionary perspective. Estimated neutral rates by central banks are as follows: BoE 2-3%, BoJ 1-2.5%, Fed 2.4-3.8%, ECB 1.5-3%.

OUR LATEST THINKING

Fixed Income Musings

Week	In Focus
July 12, 2024	• US disinflation still on track • UK economy rebounds • Recent Fed chatter • Factors impacting US Treasury yields
July 5, 2024	• European inflation slowing • US economy cools • H2 in review
June 28, 2024	• US core PCE declines further • Central bank divergence intact • Consumer check-in
June 21, 2024	• UK inflation back to target • BoE on track for August cut • Firm fundamentals for US IG • Navigating EM local bonds
June 14, 2024	• Fed meeting recap • US inflation back on track • UK labor market mixed signals • French political uncertainty

Sound Fundamentals, Narrow Margins

Fixed Income Outlook 3Q 2024
July 18, 2024

Navigating Through the Noise

Fixed Income Outlook 2Q 2024
April 16, 2024

Stronger for Longer: Investing in India's Economic Ascent

April 10, 2024

SOVEREIGN BOND YIELDS (%)

	Latest (%)	Year-to-date Change (bps)	1-Year Change (bps)	Last 10-year Percentile
US 2 Year	4.5	23	-28	89
US 10 Year	4.2	32	39	93
US 2-10 Slope	-0.3	9	67	18
US Treasury 10-Year Inflation-Protected	1.9	17	33	93
Germany 2 Year	2.7	36	-44	89
Germany 10 Year	2.4	37	-5	90
Japanese 10 Year	1.0	42	57	99
UK 10 Year	4.1	47	-34	90
Chinese 10 Year	2.3	-29	-36	1

Source: Macrobond, Goldman Sachs Asset Management. As of 19 July 2024.

EXCHANGE RATES

	Latest	Year-to-date Change (%)	1-year Change (%)
Euro (€ per $)	0.92	1.2	2.9
British Pound (£ per $)	0.77	-1.8	0.8
Japanese Yen (¥ per $)	156.79	11.2	12.7
Chinese Yuan Renminbi (CNY per $)	7.26	2.6	1.2

Source: Macrobond, Goldman Sachs Asset Management. As of 19 July 2024.

FIXED INCOME SECTOR YIELDS (%)

	Latest (%)	Last 10 year average (%)	Year-to-date change (bps)	Last 10 year Percentile
US Investment Grade	5.3	3.6	13.1	85
European Investment Grade	3.6	1.5	8.2	82
UK Investment Grade	5.3	3.2	18.6	83
US High Yield	7.6	6.6	-5.0	71
European High Yield	6.2	4.3	-5.0	79
EM External	8.2	6.2	39.1	85
EM Corporate	6.4	5.4	-27.4	76
US Agency MBS	5.0	2.9	28.4	92
US ABS	5.5	2.8	-10.3	83
US Munis	3.6	2.4	23.9	89
US CMBS	4.7	2.7	14.9	89

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 19 July 2024.

FIXED INCOME SECTOR SPREADS (BASIS POINTS)

	Latest (bps)	Last 10 year average (bps)	Year-to-date change (bps)	Last 10 Year Percentile
US Investment Grade	93	130	-11	7
European Investment Grade	109	122	-26	38
UK Investment Grade	109	150	-25	6
US High Yield	309	441	-25	2
European High Yield	341	404	-54	25
EM External	392	379	9	66
EM Corporate	243	338	-45	1
US Agency MBS	44	36	-4	65
US ABS	96	95	-26	65
US CMBS	44	53	-7	19

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 19 July 2024.

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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.

Collateralized loan obligations ("CLOs") involve many of the risks associated with debt securities, including interest rate risk, credit risk, default risk, and liquidity risk. The risks of an investment in a CLO also depend largely on the quality and type of the collateral and the class or "tranche" of the CLO. There is the possibility that the strategy may invest in CLOs that are subordinate to other classes. CLOs also can be difficult to value and may be highly leveraged (which could make them highly volatile). The use of CLOs may result in losses.

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.

International securities may be more volatile and less liquid and are subject to the risks of adverse economic or political developments. International securities are subject to greater risk of loss 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.

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

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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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