FIXED INCOME MUSINGS

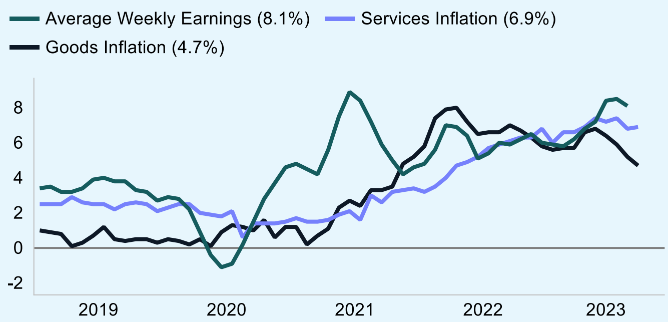
MACRO AT A GLANCE

UK Snapshot:

- **Steady disinflation progress.** Annual headline and core inflation was slightly above consensus expectations in September but below the BoE's projections. A sequential rise in energy prices kept headline inflation unchanged at 6.7%, but this is down from a peak of 11% last year and will likely be lower in October as the energy price cap is lowered. Services inflation remains sticky at high levels, but core goods prices have eased considerably.
- **Elevated but slowing wage pressures.** Wage growth decelerated in August, and we believe further easing is likely given labour market loosening which should help to alleviate core services price pressures.
- **Tracking Table Mountain.** Recent data reinforce our expectation for the Bank Rate to hold steady for an extended period, a trajectory that BoE's chief economist, Huw Pill, has likened to Table Mountain.

Goods and wage inflation continue to ease in the UK

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



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

POLICY PICTURE

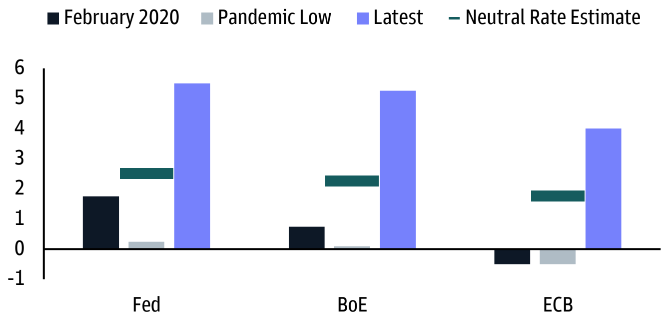
Careful but constructive. Chair Powell emphasized "ongoing progress" towards price stability and maximum employment but stressed that the Fed is "proceeding carefully" given uncertainties and past tightening. Like his peers, he also noted that higher long-term bond yields may alleviate the need for further tightening "at the margin".

What we're watching in the US:

- **The impact of higher oil prices** on inflation expectations.
- **Labour market rebalancing** which is key to alleviating core services inflation.
- **Growth headwinds** from resumed student loan repayments, reduced auto activity, and the potential for a government shutdown.

We believe policy rates have likely peaked

Central bank policy rates (%)



Source: Goldman Sachs Asset Management, Macrobond. As of September 27, 2023.

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CHINA CHECK-IN

A brightening picture… Recent economic activity in China has been better than feared, suggesting policy easing is working and raising hopes that the government's "around 5%" growth target may be achieved this year.

…but headwinds remain. We continue to anticipate a cautious and incremental approach to policy support, resulting in an "L-shaped" trajectory for the property sector and a somewhat orderly deleveraging process. Structurally, we think a rotation from investment to domestic consumption alongside demographic headwinds will result in a lower potential growth trajectory. Big picture, despite an improvement in the near-term situation, investors must remain alert to challenges posed by ongoing property sector stress, demographic shifts and geopolitical tensions.

Economic data in China provides some optimism

4.9%	Annual GDP growth in Q3, which exceeded expectations for a 4.5% rise
5.5%	Annual growth in retail sales in September, up from 4.6% in August

Source: Goldman Sachs Global Investment Research - China: Q3 GDP and September retail sales data beat expectations - First take (October 18, 2023).

NAVIGATING FIXED INCOME

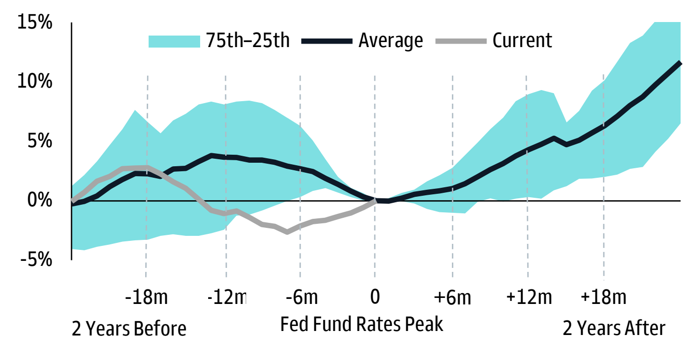
US Treasury yields climb higher. Last week's pullback in US Treasury bond yields amid geopolitical volatility proved short-lived, with solid US retail sales and industrial production data reigniting the rise this week, reinforcing expectations for a higher-for-longer rate regime.

Navigating a higher rate regime:

- **Macro:** Borrowing costs have surged following the Fed's rapid hiking cycle. While larger companies may be able to absorb higher borrowing costs, the interest burden for small US businesses may rise from 5.8% of revenues in 2021 to 7% in 2024[1]. In Europe, Italian bond yields may widen relative to German bunds amid fiscal sustainability concerns.
- **Markets:** Though a headwind to growth and cyclical assets, higher yields—particularly on high quality bonds—are an attractive opportunity for investors. We believe US households will be a notable source of demand for bonds in the coming years, especially given their low starting direct allocation, as bond valuations appear more attractive relative to equities.

Bond inflows generally rise around the end of hiking cycles

Global bonds flows around hiking cycles as a percent of AUM (%)



Source: ICE, Haver Analytics, Goldman Sachs Global Investment Research 'TARA' gets more persuasive - strong fixed income inflows with potential for further rotation (September 11, 2023). Reflects hiking cycles since 1985.

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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 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 we'll see slightly more easing in 2024 than the median FOMC projection, though we see high uncertainty around the timing for easing, the pace and the neutral rate. 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 pause in policy actions before a pivot towards easing at some point in the second half of 2024. 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: 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. Considering this, we expect YCC to be further weakened or abandoned altogether. We also expect 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 September 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	5.1	4.1	4.6
US 10 Year	5.0	3.5	4.2
US 2-10 Slope	-0.2	-0.6	-0.4
US Treasury 10-Year Inflation-Protected	2.5	1.3	1.7
Germany 2 Year	3.3	2.9	2.1
Germany 10 Year	2.9	2.4	2.4
Japanese 10 Year	0.8	0.5	0.2
UK 10 Year	4.7	3.8	3.9
Chinese 10 Year	2.7	2.8	2.7

Source: Macrobond, Goldman Sachs Asset Management. As of 20 October 2023.

EXCHANGE RATES

	Latest	6 months ago	12 months ago
Euro (€ per $)	0.95	0.91	1.02
British Pound (£ per $)	0.82	0.80	0.88
Japanese Yen (¥ per $)	149.93	134.05	149.58
Chinese Yuan Renminbi (CNY per $)	7.32	6.87	7.22

Source: Macrobond, Goldman Sachs Asset Management. As of 20 October 2023.

FIXED INCOME SECTOR YIELDS (%)

	Latest	Last 10 year average	Last 10 year Percentile
US Investment Grade	6.4	3.4	100.0
European Investment Grade	4.3	1.4	100.0
UK Investment Grade	6.5	3.1	98.8
US High Yield	9.5	6.4	98.7
European High Yield	8.0	4.1	99.1
EM External	9.6	6.1	99.2
EM Corporate	8.2	5.3	99.2
US Agency MBS	6.2	2.7	100.0
US ABS	6.4	2.5	99.9
US Munis	4.6	2.3	100.0
US CMBS	5.7	2.5	100.0

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 20 October 2023.

FIXED INCOME SECTOR SPREADS (BASIS POINTS)

	Latest	12 months ago	Last 10 Year Percentile
US Investment Grade	131	170	56.1
European Investment Grade	160	221	88.0
UK Investment Grade	166	240	73.6
US High Yield	437	497	59.6
European High Yield	481	602	82.0
EM External	448	566	83.8
EM Corporate	326	392	48.9
US Agency MBS	94	62	99.2
US ABS	123	149	82.6
US CMBS	62	68	78.4

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 20 October 2023.

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ADDITIONAL FIXED INCOME INSIGHTS

Musings

October 13, 2023

October 6, 2023

September 29, 2023

September 22, 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

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 Perspectives: Seeking Balance

- Commercial Real Estate: Into the Headwinds

Asset Management Perspectives: Finding Footholds for Growth

- Bear (Market) Necessities: The Case for Core Fixed Income
- All About Alpha: Portfolio Construction in a New Reality
- China's Next Chapter: Reopening, Recovery and Beyond
- Green Bonds: Connecting Fixed Income Capital to the Global Climate Transition

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.

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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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