

FIXED INCOME MUSINGS

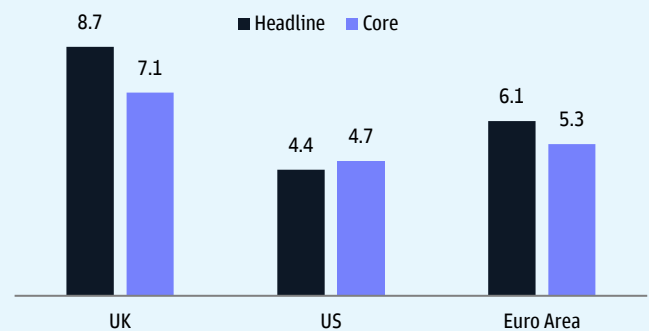
MACRO AT A GLANCE

UK inflation remains stubbornly high. Price pressures remained broad-based in May as annual headline and core inflation rose 8.7% and 7.1%, respectively. Services inflation climbed to 7.3% year-over-year (YoY). Core goods and food prices continue to diverge from moderating trends observed in other advanced economies like the US and Euro area (see Chart), complicating the path towards the BoE's 2% inflation target.

US housing market stabilization. Several recent datapoints suggest the US housing market is proving more resilient than expected despite mortgage rates exceeding 6%. New housing starts surged by almost 22% on the month in May and the National Association of Home Builders (NAHB) index points to improved sentiment in the sector. Strength likely reflects low supply and still-healthy consumer balance sheets. On the one hand, the resilience alleviates recessionary concerns. On the other hand, it presents hawkish implications for Fed policy.

UK inflation remains elevated compared to its peers

Annual CPI inflation (%)



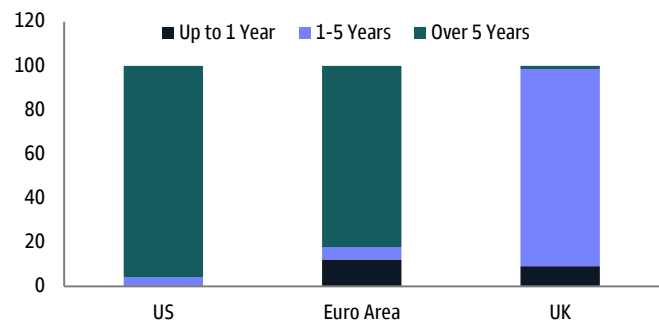
Source: Goldman Sachs Asset Management, Macrobond. As of May 2023. Denotes the US core PCE, the Fed's preferred measure of inflation.

POLICY PICTURE

BoE delivers a hawkish surprise. Despite limited expectations for a 0.5% increase to 5%, the Bank delivered a hawkish surprise in response to 'persistence in the inflation process'. The BoE stated the outsized rate hike was specific to this week's 'particular meeting'. We expect inflation pressures to moderate in the coming months as downside growth risks from higher mortgage costs (see Chart) and past tightening become more apparent. Nonetheless, we have raised our terminal rate projection from 5.25% to 5.5%, and we are mindful of upside risks to this outlook considering elevated inflation, a tight labor market and sticky growth.

UK faces higher mortgage refinancing risks

Estimates of mortgages by length of fixation (%)



Source: Goldman Sachs Global Investment Research - European Daily: UK—The Housing Channel of Policy Tightening (February 21, 2023). Euro Area estimates are derived using a purchasing power parity weighted composite of Germany, France, Italy and Spain.

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CREDIT CHECK-IN

The impact of higher policy rates on corporate credit downgrade and default activity is top of mind. We expect the outlook in Europe to remain benign, similar to our [view on the US](#), and we will discuss the outlook for Emerging Market credit next week.

European Investment Grade

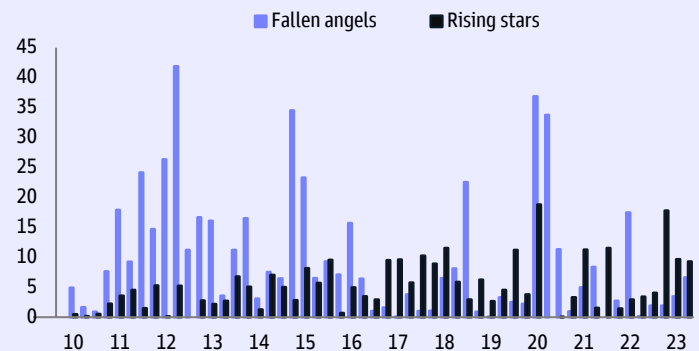
Should current expectations for growth hold, we expect downgrade activity in the European investment grade (IG) market to remain benign. Balance sheets continue to be healthy in aggregate. For example, net leverage has been on a downtrend since peaking in 2020 reflecting conservative corporate capital management and a recovery in earnings. Meanwhile, interest coverage ratios remain high, though they have moderated from recent peaks. As a result, ratings migration trends have been net positive for five consecutive quarters, with the volume of rising star debt (upgrades from high yield) outpacing fallen angels (downgrades into high yield) as shown in the Chart. That said, we are mindful that European companies face headwinds from tighter policy and slowing growth alongside unfavourable technical dynamics due to higher than anticipated new supply and the ECB's quantitative tightening program. Overall, like the US, the complex operating environment underscores the importance of active security selection.

European High Yield

Although European companies are still more reliant on bank lending than capital markets relative to their US counterparts, the EUR high yield (HY) market has grown a remarkable 300% since 2010 to just over €500 billion¹. For comparison, the USD HY market is \$1.5 trillion. The expansion reflects downgrades from IG after the European debt crisis and a pullback in bank lending. Fundamentally, issuers on both sides of the Atlantic face similar headwinds from higher funding costs and weaker earnings growth. But so far, the fixed rate structure of their liabilities and excess liquidity accumulated in 2020 and 2021 has led to a smooth transition to a higher rate environment. Median leverage, proxied by the ratio of net debt to EBITDA, closed 2022 at the low end of its post-financial crisis range. The same applies for net profit margins, which are at the high

Upgrades outpacing downgrades in European credit

Notional volume of debt (€ billion)



Source: Goldman Sachs Global Investment Research - Global Credit Trader - Leveraged loan defaults: No rest for the weary (June 15, 2023).

end of the historical range. Interest coverage ratios also ended 2022 at record-high levels. Like the US, we believe European HY bond issuers remain in a position of fundamental strength relative to history, which likely explains the benign default environment in recent quarters. Absent a recession, which is not our base case, we expect defaults to gradually drift higher but stay below their long-run average. Our next 18-month default rate projection—informed by bottom-up analysis of credit metrics—is a modest 2.8%. This represents a subtle rise from the 1.2% year-to-date default rate as of the end of April.

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CENTRAL BANK SNAPSHOT

	Interest Rate Policy	Balance Sheet Policy	Outlook	Our outlook relative to market-implied pricing
Fed	<p>Federal funds rate: 5.0-5.25%</p> <p>Prior changes: May, March, February 2023 (+25bps) December 2022 (+50bps) June, July, September and November 2022 (+75bps) May 2022 (+50bps) March 2022 (+25bps)</p>	<p>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.</p>	<p>We expect another hike in July should inflation and the labor market remain firm.</p> <p>Expected terminal rate: 5.25-5.5%</p>	Neutral
ECB	<p>Deposit facility rate: 3.5%</p> <p>Prior changes: May, June 2023 (+25bps) March, February 2023 and December 2022 (+50bps) September and October 2022 (+75bps) July 2022 (+50bps), the first hike since 2011</p>	<p>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.</p>	<p>We expect a final 25bps hike in July, however, we recognise risks are skewed towards further tightening should inflation remain firm.</p> <p>Expected terminal rate: 3.75%</p>	Neutral
BoE	<p>Bank Rate: 5.0%</p> <p>Prior changes: 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)</p>	<p>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.</p>	<p>We expect recent data momentum to keep the BoE on a hiking path and expect a terminal rate of 5.5%.</p> <p>Expected terminal rate: 5.5%</p>	Dovish
BoJ	<p>Policy deposit rate: -0.10%</p> <p>Prior changes: January 2016, when the Bank introduced its negative interest rate policy (NIRP) 10-year JGB yield target: ~0%, with tolerance band of +/-50bps (yield curve control policy)</p>	<p>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.</p>	<p>Absent a turn in the global economic cycle, we expect YCC to be tweaked further or abandoned. We also see potential for a rate rise this year.</p>	Hawkish

Source: Goldman Sachs Asset Management. As of June 22, 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	4.7	4.3	3.2
US 10 Year	3.8	3.6	3.3
US 2-10 Slope	-0.9	-0.7	0.1
US Treasury 10-Year Inflation-Protected	1.6	1.4	0.7
Germany 2 Year	3.1	2.4	1.1
Germany 10 Year	2.5	2.2	1.7
Japanese 10 Year	0.4	0.3	0.2
UK 10 Year	4.4	3.5	2.5
Chinese 10 Year	2.7	2.9	2.8

Source: Macrobond, Goldman Sachs Asset Management. As of 22 June 2023.

EXCHANGE RATES (BASIS POINTS)

	Latest	6 months ago	12 months ago
Euro (€ per \$)	0.91	0.94	0.94
British Pound (£ per \$)	0.79	0.83	0.81
Japanese Yen (¥ per \$)	142.06	132.25	135.84
Chinese Yuan Renminbi (CNY per \$)	7.18	6.98	6.70

Source: Macrobond, Goldman Sachs Asset Management. As of 22 June 2023.

FIXED INCOME SECTOR YIELDS (%)

	Latest	Last 10 year average	Last 10 year Percentile
US Investment Grade	5.5	3.3	97.0
European Investment Grade	4.3	1.3	99.3
UK Investment Grade	6.5	3.0	99.3
US High Yield	8.6	6.3	92.6
European High Yield	7.4	4.1	95.4
EM External	8.4	6.0	92.0
EM Corporate	7.1	5.2	96.1
US Agency MBS	4.7	2.7	97.7
US ABS	6.0	2.3	99.1
US Munis	3.6	2.3	95.9
US CMBS	4.6	2.4	97.5

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 22 June 2023.

FIXED INCOME SECTOR SPREADS (BASIS POINTS)

	Latest	12 months ago	Last 10 Year Percentile
US Investment Grade	135	149	58.2
European Investment Grade	157	189	87.2
UK Investment Grade	168	189	72.2
US High Yield	415	517	48.9
European High Yield	428	535	64.5
EM External	445	502	75.2
EM Corporate	315	344	83.4
US Agency MBS	54	37	36.5
US ABS	138	146	84.7
US CMBS	54	52	88.0

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. As of 22 June 2023.

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ADDITIONAL FIXED INCOME INSIGHTS

Musings

[June 16, 2023](#)

[June 9, 2023](#)

[June 2, 2023](#)

[May 26, 2023](#)

Navigating Fixed Income

[Navigating Opportunities in Investment Grade Credit](#)

[Navigating External EM Debt](#)

[Navigating The EM Corporate Bond Market](#)

[Navigating Short Duration Opportunities](#)

[Staying Overweight MBS Through Macro Volatility](#)

[Navigating Fixed Income in 2023](#)

Fixed Income Outlook

[Q2 2023 Outlook: Quality Control](#)

[Q1 2023 Outlook: Bring on Bonds](#)

Asset Management Insights

[Asset Management Perspectives: Finding Footholds for Growth](#)

Fixed Income Highlights:

- [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](#)

[Asset Management Perspectives: Inflection Points](#)

Fixed Income Highlights:

- [Europe: Recovering into a New Regime](#)

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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.

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.

You could lose money by investing in money market funds. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

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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