FIXED INCOME MUSINGS

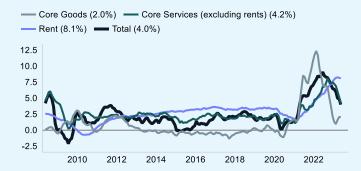
MACRO AT A GLANCE

Ongoing evidence of US disinflation. Annual headline and core inflation fell in May to 4.0% and 5.3%, respectively. That said, the monthly pace of core inflation remains sticky primarily due to used car prices. However, the Manheim Index—a measure of the outlook for used car prices—points to a moderation ahead. Importantly, the slowdown in shelter inflation was also sustained. Indeed, the Cleveland Fed trimmed mean CPI inflation measure—which omits volatile categories—has fallen from an annualized monthly peak of 9.5% in October 2021 to 2.8% in May.

The UK labour market remains tight. The unemployment rate declined 10bps to 3.8% in April, and although labour force participation improved in April, it remains below its pre-pandemic level. Annual wage growth continues to run around double the 3-3.5% level that is considered to be compatible with 2% inflation, cementing the case for the BoE to hike rates next week.

US inflation eased further in May

Annual US CPI Inflation (%) (figures in brackets denote latest value)



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

LIQUIDITY SPOTLIGHT

The US is estimated to issue ~\$600 billion - \$1.4 trillion of US Treasury bills (T-bills)¹ in the coming months as it replenishes its Treasury General Account (TGA). The sharp increase in supply will likely push T-bill rates higher, however, we believe the supply will be well-absorbed by money market funds who are participating in the Federal Reserve's Reverse Repo Program (RRP). We expect liquidity provided by the RRP and the Fed's Standard Repo Facility to curtail the risk of a funding market stress scenario in the repurchase agreement market as seen in 2019. That said, higher T-bill rates may result in higher yields in other short-dated instruments that are benchmarked against it, including investment grade corporate bonds and agency mortgage-backed securities.

Rebuilding the Treasury's cash balance

TGA balance (billions)



Source: Goldman Sachs Asset Management, Bloomberg. As of June 12, 2023.

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POLICY PICTURE

Fed – a hawkish pause. The Fed opted to pause policy actions for the first time in over a year. However, with the economy remaining resilient, fading downside risks from banking sector stress, resolution of debt ceiling uncertainties and still-elevated core inflation, the Fed hinted that "additional policy firming" may be warranted. The hawkish outlook was reflected in the median projection for the Fed funds rate at the end of the year which rose from 5.1% in March to 5.6%. We expect the Fed to deliver a final 25bps hike in July unless there is substantial progress in labour market rebalancing or easing inflation pressures.

ECB – still more ground to cover. The ECB delivered a 25bps rate hike given firm momentum in the labour market and expectations of inflation remaining "too high for too long". In particular, core inflation is expected to remain elevated for longer according to new ECB staff projections (see Chart). President Lagarde stated that another rate hike in July was "very likely" as rates need to be brought to sufficiently restrictive levels. That said, tighter policy appears to be translating into tighter financing conditions and underlying inflationary pressures have begun to ease. As a result, we expect the ECB will deliver a final hike in July to reach a terminal rate of 3.75%, however, we recognise that risks are skewed towards further tightening should inflation remain firm.

BoJ – wait and see. Despite the BoJ maintaining status quo across all monetary policy parameters this month, we continue to expect gradual normalisation at some point this year that entails further widening of the 10-year yield curve control band and an exit from negative interest rates as inflation continues to rise.

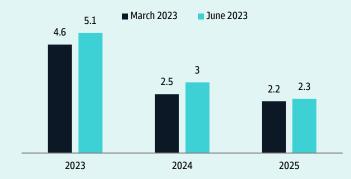
Central banks adopt a slower pace to higher peak rate

		Latest hike (basis point)	Expected hike at next meeting (basis point)	Current policy rate (%)	Expected terminal rate (%)
	Fed	-	25	5.0-5.25	5.25-5.5
	ЕСВ	25	25	3.5	3.75
Ī	ВоЕ	25	25	4.5	5.0

Source: Goldman Sachs Asset Management. As of June 15, 2023. Based on forecasts from our economists.

ECB projects higher core inflation for longer

ECB projections for annual Euro area core inflation (%)



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

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 the US to remain benign and will discuss the outlook for European and Emerging Market credit markets in the coming weeks.

US Investment Grade

We expect downgrade activity—including fallen angels into the high yield market—to remain muted for several reasons. First, based on first quarter earnings reports, balance sheets remain healthy in aggregate, with interest coverage ratios and leverage experiencing limited deterioration. Second, downgrades have largely been confined to REITs which amount to a modest 2-3% of the US investment grade (IG) index. Lastly, banking sector stress appears to have calmed. Overall, we think the longer maturity profile of IG bonds coupled with greater financial flexibility and operational agility among IG issuers means the market is well positioned to adjust to higher funding costs without facing a significant near-term rise in negative rating actions.

US High Yield

Many high yield (HY) issuers termed out their bond maturities during easy financial conditions prior to the start of the Fed's tightening cycle and will be able to wait years before having to refinance debt at higher rates—by which point rates may have declined. Between April 2020 and November 2021, more than \$800 billion of bonds were issued (for context the notional outstanding for the entire market at the beginning of that period was roughly \$1.5 trillion). In addition, strong fundamental positions mean many HY borrowers are well positioned to weather rising debt servicing costs, hence our benign outlook for default activity.

US Leveraged Loans

Loan issuers face a more challenging transition to a higher rate environment than issuers with bonds that have fixed rates over longer maturities. The headwinds are greatest for "loan-only" capital structures, the share of which has increased from less than 50% in 2011 to over 70% today¹. Five issuers have defaulted so far this month, lifting the

Few high yield bonds maturing before 2025

Dollar notion amount of HY bonds maturing each year in the USD HY market (billions)



Source: Bloomberg, Goldman Sachs Global Investment Research Global Markets Daily: Higher Rates: A Stronger Fundamental Headwind for Leveraged Loans than for HY Bonds (14 June 2023).

year-to-date count to 23 and notional value to \$25 billion. This is more than the total volume for 2021 and 2022 combined. Give this backdrop and the potential for further Fed tightening and slowing growth, concerns about the default outlook are understandable. While we do not discount these headwinds, our outlook that is informed by bottom-up analysis of factors like liquidity positions, nearterm maturity requirements and medium-term fundamentals suggests a benign 5.6% of the loans that we have exposure to may experience default or an exchange for new terms through to the end of 2024. Additional sources of reassurance include interest rate hedges, elongated maturities and covenants that suggest nearterm amendments or loan extensions will stay in check. Further, we think technology (hardware and software) and healthcare will account for around 40% of defaults; we are underweight both sectors. We are also underweight CCCrated issuers; we expect 75% of defaults to be driven by issuers rated CCC or below. If we extrapolate our analysis to the broader loan market beyond our exposures, we foresee a 7% cumulative default and exchange rate through to the end of 2024 for the entire benchmark².

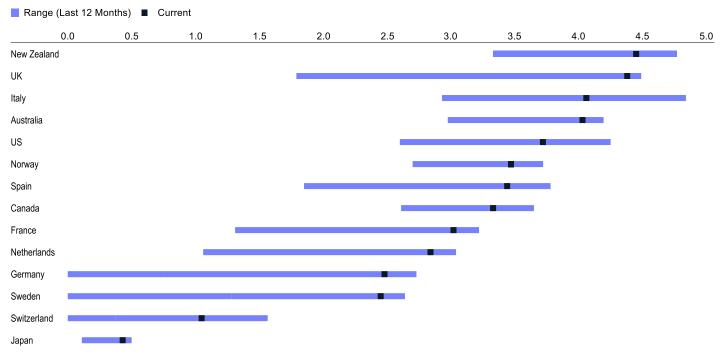
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CENTRAL BANK SNAPSHOT

	Interest Rate Policy	Balance Sheet Policy	Outlook	Our outlook relative to market-implied pricing
Fed	Federal funds rate: 5.0-5.25% Prior changes: 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 expect another hike in July should inflation and the labor market remain firm. Expected terminal rate: 5.25-5.5%	Neutral
ECB	Deposit facility rate: 3.5% 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	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 continue to expect a terminal rate of 3.75%. Expected terminal rate: 3.75%.	Neutral
BoE	Bank Rate: 4.5% Prior changes: 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.	We expect recent data momentum to keep the BoE on a hiking path and expect two further 25bps hikes. Expected terminal rate: 5.0%	Dovish
ВоЈ	Policy deposit rate: -0.10% 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)	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.	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.	Hawkish

Source: Goldman Sachs Asset Management. As of June 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.

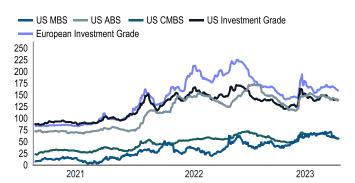
10-YEAR SOVEREIGN BOND YIELDS (%)



Source: Goldman Sachs Asset Management, Macrobond. As of June 16, 2023.

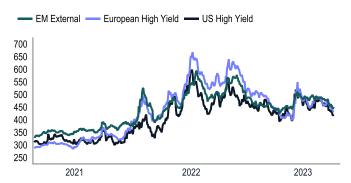
FIXED INCOME SECTOR SPREADS

Investment Grade and Securitized Spreads (bps)



Source:: Macrobond. ICE BoAML indices. As of June 15, 2023.

High Yield and Emerging Market Spreads (bps)



Source: Macrobond. ICE BoAML indices. As of As of June 15, 2023.

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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).

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Jurisdiction compliance code: 285876-TMPL-07/2022-1641660.

Content Compliance Code: 323697-0TU-1819924.