MUSINGS

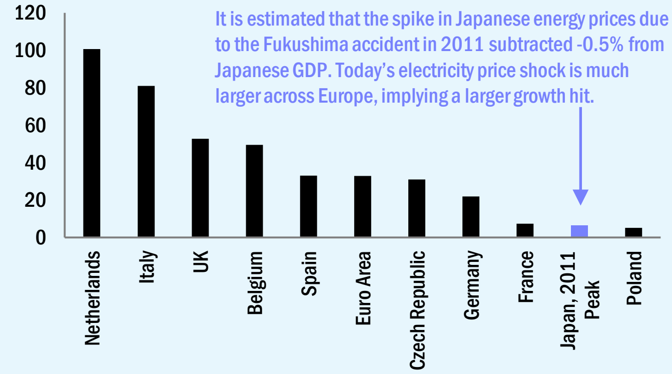
MACRO AT A GLANCE

Strength in UK inflation, retail sales and the labour market strengthens the case for monetary tightening despite record low consumer confidence (based on the GfK measure). At 3.8%, the unemployment rate remained close to a 50-year low in June, while annual headline inflation reached a 40-year high of 10.1% in July. Inflation is set to remain elevated, exceeding 13% on BoE projections, given strong wage growth and high energy prices. Constrained labour supply combined with the potential for additional fiscal support poses further upside risks to inflation.

In Europe, energy price pressures continue to worsen. Natural gas—which powers 28% of European electricity usage—reached a record high price of €241 per megawatt-hour in the futures market[1]. Electricity inflation is five times higher in Europe than the 7% peak in Japan following the 2011 energy price spike due to the Fukushima accident, implying a much larger hit to European growth (see Chart).

Surging electricity prices set to weigh on demand

Most recent year-over-year (%) electricity CPI inflation



Source: Goldman Sachs Asset Management, Macrobond, Goldman Sachs Global Investment Research - Global Economics Comment: Europe's Energy Crisis: Lessons from Fukushima and the US Shale Boom (August 17, 2022).

POLICY PICTURE

Central banks remain on the hiking path, with the RBNZ and Norges Bank delivering 50bps rate hikes. In minutes from the July FOMC meeting policymakers acknowledged that it may be appropriate "at some point to slow the pace of policy rate increases" owing to the lag in monetary policy transmission. Meanwhile, ECB Executive Board member, Isabel Schnabel, indicated the central bank may press ahead with rate hikes against a backdrop of slowing growth given elevated inflation pressures. In light of recent economic data, we have revised our BoE outlook. We expect a 50bps rate hike in September and November followed by a reversion to 25bps increments. We had previously expected only one further 50bps rate rise in September.

"What we're seeing is a supply-side shock that is slowing growth and at the same time raising price pressures. The growth slowdown is then probably not sufficient to dampen inflation even if it reduces the price pressures due to slowing demand."

Isabel Schnabel, Member of the Executive Board of the ECB ([August 16, 2022])

Past performance does not guarantee future results, which may vary. 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. [1]Source: Energy monitor live EU electricity generation map as of 7am August 19, 2022. Electricity represents 22% of the EU's final energy consumption. Abbreviations: Federal Open Market Committee (FOMC).

NAVIGATING FIXED INCOME

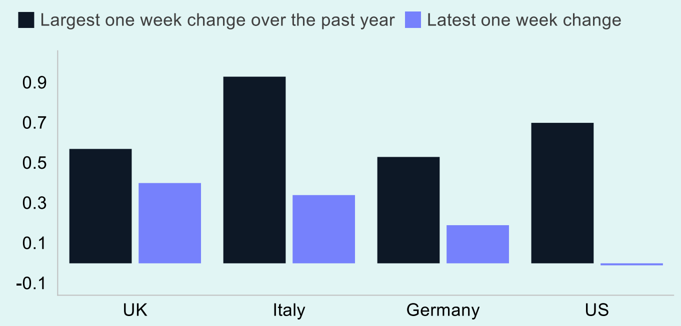
Interest rates: Firm UK inflation data generated a sharp selloff in the policy-sensitive 2-year bond which spilled over into other core bond markets (see Chart). We used weakness in UK rates as an opening to reduce underweight exposure held versus Swedish rates. Big picture, we retain a bias to be overweight rates from economies where market-implied pricing for terminal rates is above neutral policy rate estimates as this suggests these economies will be first-movers when global policy shifts to an easing mode. Economies in this category include Australia, Canada, Sweden and New Zealand, where high household leverage results in greater sensitivity to policy tightening. For now, still-high inflation precludes us from implementing larger overweight rate exposures in these markets.

Cross sector asset allocation: Since the July Fed meeting, risk assets have rebounded somewhat as concerns around policy overtightening and growth weakness have diminished (see Chart). We observe two notable relative value relationships. First, at a sector level, high yield spreads have compressed towards investment grade spreads, reflecting the cyclical nature of the former. Second, within sectors, lower quality bonds have underperformed higher quality bonds. For example, with the high yield market, CCC-rated bonds have underperformed BB-rated peers. This suggests there is still an element of growth worries. We remain modestly overweight credit given carry potential, however, we used recent strength as an opportunity to dial down exposure.

Emerging market debt: External debt spreads have tightened amid the broader relief rally, further aided by modest inflows and muted new issuance. Nonetheless, we remain cautious as we think pockets of risk premium are justified by poor fundamentals and idiosyncratic issues.

UK led rate selloff extended to other major markets

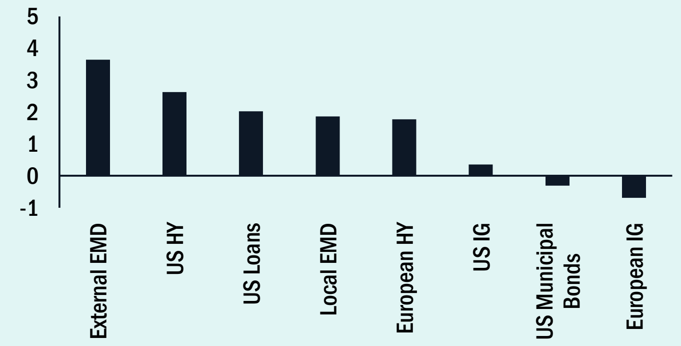
2-year government bond yields (%)



Source: Goldman Sachs Asset Management, Macrobond. As of August 19, 2022.

Partial rebound in risk assets since July Fed meeting

Fixed income spread sector total returns (%) since July 27, 2022



Source: Goldman Sachs Asset Management, Macrobond. As of August 19, 2022.
Abbreviations: Emerging market debt (EMD), High-yield (HY), Investment grade (IG).

CREDIT CHECK-IN: LEARNINGS FROM EARNINGS

During a weekly investment forum, our investment grade credit team shared key learnings from second quarter US corporate earnings releases. Overall, balance sheet positions remain healthy but companies are weighing the possibility of recession and seeking to achieve stability in profit margins.

A decent quarter for credit metrics

Overall, second quarter earnings releases were constructive for investment grade credit metrics. Consumer spending—aided by a tight labour market and excess savings—proved resilient and many companies are benefiting from pricing power. Earnings before interest, tax, depreciation and amortization (EBITDA) and debt-to-enterprise values remain higher than pre-pandemic levels. However, net leverage ratios are starting to weaken and we saw operating cash flow fall over the quarter for the first time in a while, reflecting higher inventories and delays in consumer payments of bills in some instances.

Companies remain relatively disciplined in their spending on capital expenditures (capex) but we see an increase in dividend payments and share buybacks. That said, there is sector variation. For example, Utilities are pressing ahead with capex related to the energy transition and we've seen an uptick in buybacks and dividend outlays in the Technology sector, where these equity-friendly activities are trending higher than in 2019.

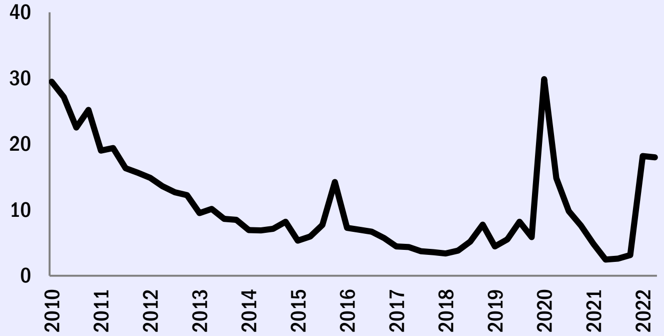
Companies are preparing for recession

Looking ahead, high inflation and rising rates are expected to be growing headwinds to consumer spending, particularly for low-income consumers where there is already evidence of both a moderation in discretionary spending and a preference for products from lower price-point brands. By contrast, higher-income household spending continues to reflect pent-up demand for in-person experiences.

Given tightening financial conditions, companies are preparing for the possibility of a recession by taking steps to preserve stable profit margins either by exercising pricing power (in response to rising input costs) or through cost control measures (such as reduced spending on advertising and a slowdown or pause in hiring).

Companies are increasingly concerned about recession

Proportion of US companies mentioning "Recession" in quarterly earnings calls



Source: Goldman Sachs Global Investment Research, Haver Analytics. Based on companies in the Russell 3000 Index which includes ~2/3 of companies that are in the Bloomberg Barclays US investment grade index. As of August 2, 2022.

Industry Snapshot

Banks: The rising rate environment is supportive of net interest margins and credit metrics remain strong. Banks increased provisions for potential loan losses over the quarter citing both an increase in loan growth as well as concerns around the economic outlook.

Energy: Companies that have benefited from higher prices are returning capital to shareholders rather than investing to expand production. Big picture, we think this preserves the challenge of structural undersupply in energy markets which may lead to energy cost inflation.

Housing: The average 30-year fixed rate mortgage rate has increased by 2.4% over the past year to 5.2% , the largest yearly increase since the 1980s given the front-loaded Fed hiking cycle[1]. The resultant reduction in housing affordability has started to weigh on new home sales which creates knock-on headwinds for consumer durables such as new furniture and other items that are associated with new home purchases.

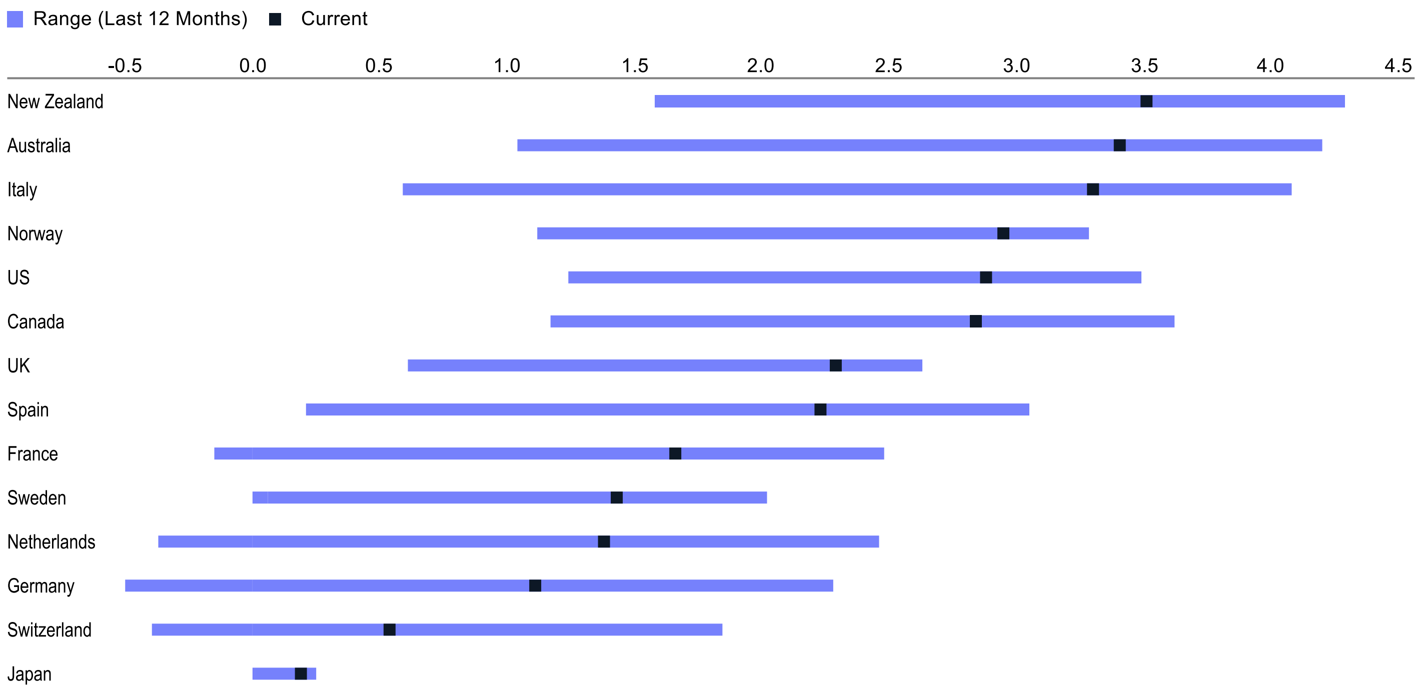
 [1] Source: Macrobond, Freddie Mac as of August 11, 2022.

CENTRAL BANK SNAPSHOT

	Interest Rate Policy	Balance Sheet Policy	Outlook	Our outlook relative to market-implied pricing
Fed	Federal funds rate: 2.25-2.5% Last changed: July 2022 (+75bps) June 2022 (+75bps) Prior changes: May 2022 (+50bps) March 2022 (+25bps)	Started reducing the monthly pace of its net asset purchases in November 2021 and ended net additional purchases of Treasuries and agency MBS in early March. Balance sheet runoff begins in June; an eventual monthly cap will be set at $95bn—split $60bn-$35bn between US Treasury and mortgage-backed securities (MBS)—and the caps will initially be set at half of those levels for the first three months of runoff ($30bn UST-$17.5bn MBS). Balance sheet size: 37% of GDP	We expect a 50bps rate hike in September followed by a reversion to 25bps rate hikes.	Slightly hawkish
ECB	Deposit facility rate: 0.0% Last changed: July 2022 (+50bps), the first hike since 2011	The ECB will end net APP purchases from July 1, 2022. Reinvestments under the PEPP will continue until at least the end of 2024. On July 21, the ECB announced a new anti-fragmentation tool, the Transmission Protection Instrument (TPI), used to ensure monetary policy is transmitted smoothly across all euro area countries. Balance sheet size: 65% of GDP	We expect a 50bps hike in September and two further 25bps rate hikes at the October and December meetings.	Slightly dovish
BoE	Bank Rate: 1.75% Last changed: August 2022 (+50bps) June 2022 (+25bps) Prior changes: May 2022 (+25bps) March 2022 (+25bps) February 2022 (+25bps) December 2021 (+15bps)	BoE members voted in February 2022 to begin reducing the stock of UK government bond purchases by ceasing to reinvest maturing assets, as well as to begin to reduce the stock of sterling non-financial investment grade corporate bond purchases by ceasing to reinvest maturing assets and by a program of corporate bond sales. The BoE announced it will start UK gilt sales in September at a pace of £10 billion per quarter. Balance sheet size: 30% of GDP	We think the BoE will deliver another 50bps hike at both the September and November meeting before slowing down to 25bps at the December meeting.	Slightly dovish
BoJ	Policy deposit rate: -0.10% Last changed: January 2016, when the Bank introduced its negative interest rate policy (NIRP) 10-year JGB yield target: ~0%, with tolerance band of -/+25bp (yield curve control policy)	The Bank voted in January 2021 to purchase ETFs and Japanese REITs as necessary with upper limits of ~¥12tn and ~¥180bn, respectively, on annual paces of increase in their outstanding amounts, as well as to purchase commercial paper and corporate bonds with an upper limit on the outstanding amount of ~¥20tn in total until the end of March. Balance sheet size: 135% of GDP	We expect unchanged policies through 2022 but see scope for a rate hike in 2023.	Slightly dovish

Source: Goldman Sachs Asset Management. As of August 4, 2022. 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.

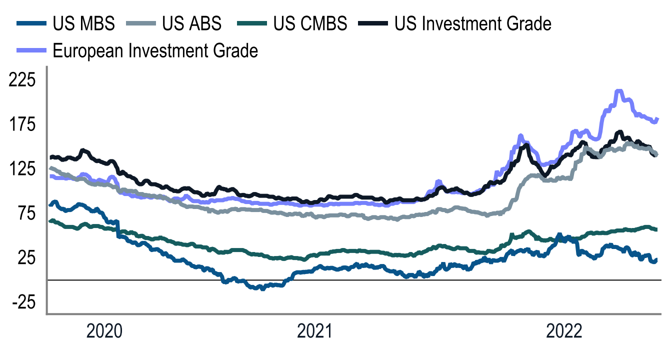
10-YEAR SOVEREIGN BOND YIELDS (%)



Source: Macrobond, Goldman Sachs Asset Management. As of August 19, 2022.

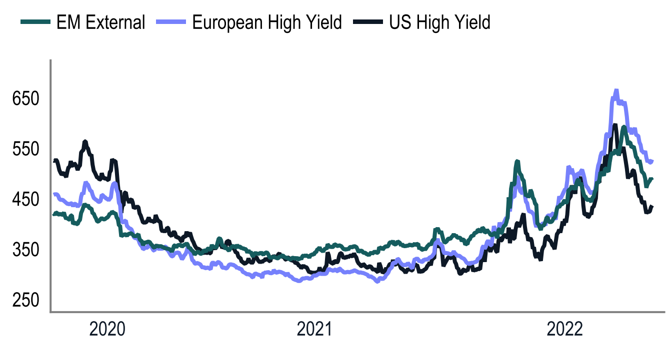
FIXED INCOME SECTOR SPREADS

Investment Grade and Securitized Spreads (bps)



Source: Macrobond. ICE BoAML indices. As of August 18, 2022.

High Yield and Emerging Market Spreads (bps)



Source: Macrobond. ICE BoAML, J.P. Morgan indices. As of August 18, 2022.

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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

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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).

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