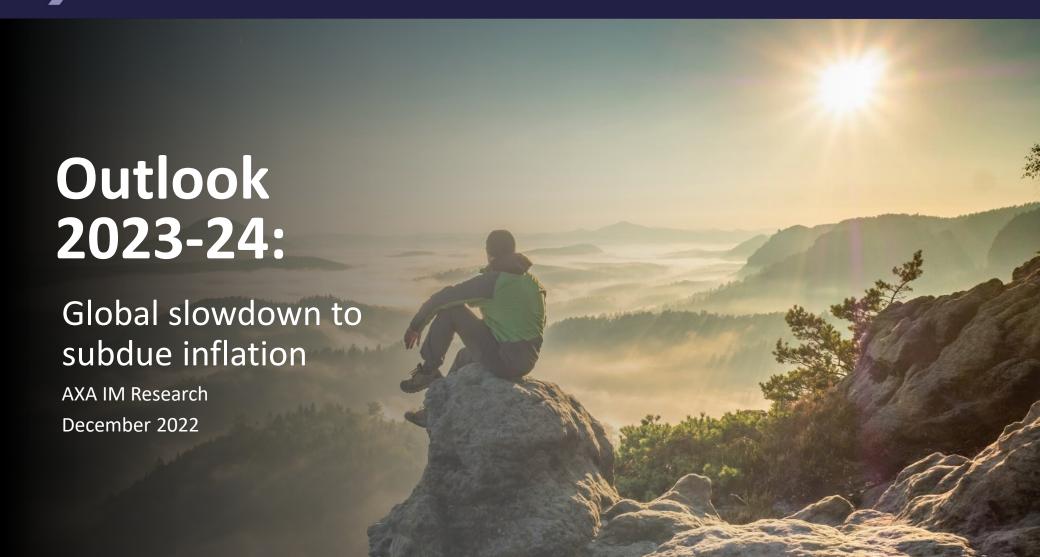


Investment Institute Macroeconomics



Summary: Outlook 2023-24

Themes of the outlook

- Energy, inflation and geopolitics will remain complex bedfellows across 2023 and 2024. We hope that geopolitical developments will not worsen, with no escalation in the Ukraine war and a stabilisation in US-China relations. However, the deterioration in 2022 will continue to impact energy and broader markets as US tech restrictions on China bite this year even as a post-pandemic realignment of global supply chains continues.
- Inflation pressures look set to ease as economic growth slows and in many cases reverses next year. Monetary policy looks set to tighten further in 2023, but we forecast most central banks deferring cuts until 2024. The effects of balance sheet policy looks likely to be examined more closely next year.
- Rising debt burdens and interest costs look to strain government finances in 2023, both EM and DM as governments try to marry cost-of-living cushions with medium-term sustainability. Elections in Turkey may be a focus next year. Elections in the European Parliament, UK and US will be focus.

Macroeconomic outlook: Global slowdown to subdue inflation

- We forecast global growth to slow to just 2.3% its weakest since the pandemic and before that 2009. This looks set to include recessions across Europe, as the energy crunch bites. And a mild recession forecast for 2023 in the US. Meanwhile a Chinese rebound is expected to be bumpy as the economy continues to struggle with COVID. Many EM's will also struggle as financial conditions remain tight and amidst fading external demand.
- Inflation is expected to fall from multi-decade highs in most regions. However, we caution that a sharp drop in goods and energy inflation may not be matched by more domestic driven factors, including services and housing. This may slow the path of correction in headline inflation in some regions.
- Central bank have raised rates sharply across 2022 for developed markets (DM) and for two years in many emerging markets (EM). First-in-first-out does not always work, but Brazil, Chile and Peru could ease policy in H2 2023 in EMs and the BoE could also cut before end-2023 in DMs. But mostly, a slower decline in inflation looks likely to defer monetary policy easing until 2024.

Investment Strategy: "The year of the bond" a film noir for optimists

- FX: A Fed pivot is certainly getting closer and will mark an inflection in US dollar trajectory, though not a collapse. The yen should be the main beneficiary. The euro and sterling are facing new structural challenges that may not disappear any time soon. High beta currencies should also manage to rebound.
- Rates: Interest rate markets have been subject to significant stress in 2022 as investors were exposed to a period of transition between two distinct regimes. 2023 starts with a certainty that income will play a role in investors' allocation given short-term risk-free yields of 4.5% vs 0.15% at end 2020.
- Credit: A yield of 5.2% in Global IG is consistent with a return of 6% pa over a 5-year period compared to an average of 4% pa over the history of the Global IG index. Spreads have been resilient reflecting healthy balance sheets. In excess spread terms Europe credit screens cheaper than US credit.
- Equities: Consensus EPS growth expectations seem too optimistic given next year's economic outlook in developed markets, thus raising risks of further downside. Equity markets tend to rebound at the trough of a recession and the rebound can be decent but likely milder than post GFC norms.



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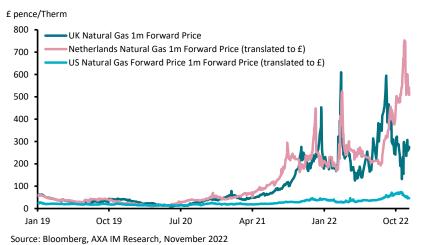
Energy

A European centric energy shock

- With Russia cutting gas supplies to Europe, Europe will bear the brunt of the energy shock. Natural gas prices have surged in Europe this year, but look set to remain elevated though 2023 and beyond, reflecting availability and impacting inflation.
- Thanks to significant reductions in consumption, and helped by a mild start to the Northern hemisphere winter, European countries look likely to get through this winter without having to restrict consumption further. However, shortages will threaten Winter 2023 and consumption will be restrained across the Eurozone through next summer to rebuild storage levels ahead of next winter.
- Europe is not the only region facing energy issues. Increased demand has raised the price of international LNG. This has caused many Asian countries to switch to coal-fired generation. This could be exacerbated next year if China's economy quickens.
- The US has benefitted, producing and exporting more LNG. This is likely to be a long-term support for investment and exports.
- Oil prices have dropped as recession concerns mount. Risks remain over the imposition of an oil embargo and price cap on Russia.

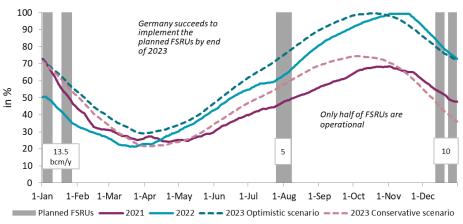
Natural gas prices have soared in Europe

Natural Gas Prices UK, US and Netherlands



Getting through next winter means securing more LNG





Sources: AXA IM Macro Research, as of October 2022

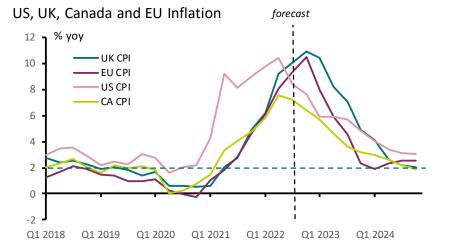


Inflation

Inflation the stand-out feature of 2022

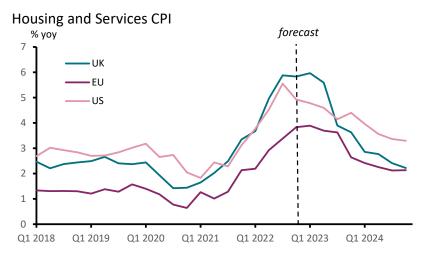
- Inflation was the stand-out feature of 2022, with the Russia-Ukraine war adding further supply shocks, but tight domestic conditions in some regions compounding the outlook.
- European countries are likely to see a peak in inflation over the coming months, related to energy increases. Elsewhere, including in the US, inflation appears to have peaked in most regions.
- We expect inflation to fall sharply across 2023 and 2024, but from current high levels not to return to central bank target rates until 2024. This is slower than market consensus expectations.
- We expect energy and goods inflation to fall quickly in 2023. However, tight labour markets are likely to see a slower retracement in services and housing related inflation particularly in the US where we expect a modest labour market loosening.

Inflation outlook set to turn



Source: BLS, ONS, CANSIM, ECB, AXA IM Research, November 2022

Housing and services inflation to slow headline fall



Source: BLS, ONS, AXA IM Research, November 2022



Geopolitical tensions

Ukraine – no end in sight

- The Russia-Ukraine war compounded the inflation shock for this year. This conflict remains a global risk with few signs of the war ending soon. Rather there are even risks of escalation either accidentally, or through Russian use of chemical or nuclear weapons.

Tensions with China

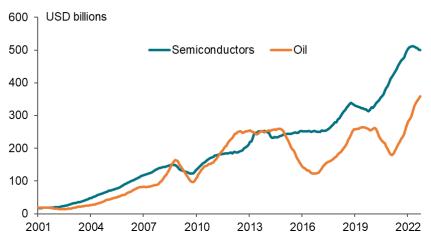
- Broader geopolitical tensions persist between the US and China. China increased military activity around Taiwan following House speaker Pelosi's visit.
- The US has increased restrictions on semiconductor exports to China. While some uncertainty persists as to how severely this will be implemented, this is a risk to China's potential growth outlook and to global trade.
- Amidst, post-pandemic realignment of global supply chains, questions over on-shoring, near-shoring or friend-shoring raise risks as to the scale of deglobalisation that could take place over the coming years.

Russia's invasion compounded inflation surge



China's imports of semiconductors exceeds oil

China imports of semiconductors and oil



Source: CEIC, AXA IM Research, November 2022



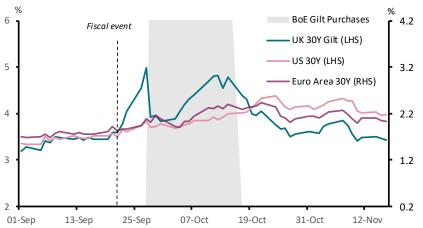
Political developments

Upcoming elections

- Turkey (June 2023) a potentially regime changing election as current President Erdogan lags in the latest polls. We see the risks of a financial crisis emerging around the time of this election.
- European Parliament (Spring 2024) after a tumultuous couple of winters and recession, an important test, particularly for how European authorities have handled issues of mutualised debt.
- UK (2024, most likely May) polls currently suggest a change of government. However, both the Conservative and Labour (opposition) parties have move to the political centre-ground meaning economic consequences may not be materially different.
- US (November 2024) Republicans took the House from Democrats in recent midterms, but Democrats did better than expected. Former President Trump is the only candidate to announce for the Presidency this far ahead. We are not convinced that either candidate will be known until mid-2024.

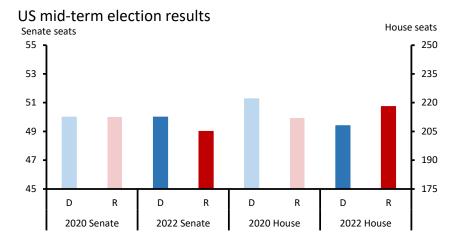
UK political turmoil had visible impact on gilt yields

30Y government bond yields since 1 September



Source: Bloomberg, AXA IM Research, November 2022

US midterms show Republican gains less than expected



Source: Reuters, AXA IM Research, November 2022



Fiscal sustainability issues

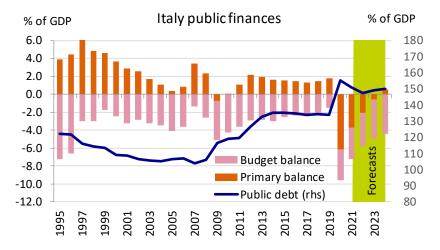
Developed Markets: Italy a likely first candidate for market stress, though not the only one

- Monetary dominance (interest rate and APP QT) to put additional pressure on euro area member states fragile public finances.
- Italy is among the most vulnerable and its public debt to GDP projected to fall <150% is no panacea. Italy's new government was elected on a manifesto of significant fiscal easing (2-4% of GDP) and is a key concern despite prudent first steps. Any permanent increase in public spending, NGEU reform implementation and medium-term nominal growth, will be closely watched.
- The UK enacted major cuts to restore fiscal rectitude. Progress against forecasts and underlying growth to be monitored.

Emerging Markets: Frontier Markets are facing debt sustainability issues, Turkey could follow

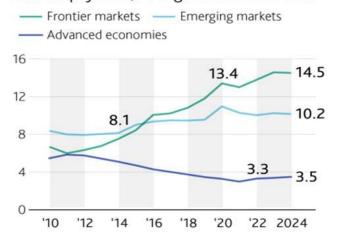
- The external backdrop has remained a headwind for EM countries overall, but lower-income countries have been significantly impacted due to their heavier reliance on external debt which, along the increase in the debt service, makes them vulnerable to sovereign debt and BoP crisis. The likes of Sri Lanka, Ghana, El Salvador, Kenya, Nigeria, Egypt have been experiencing tensions.

Italy: Challenging fiscal outlook



Source: EC, AXA IM Research

Government debt affordability reducing in Frontier Markets Interest payment, % of government revenue



Source: Moody's, AXA IM Research, November 2022



Uncertain labour market dynamics

Varied labour market responses

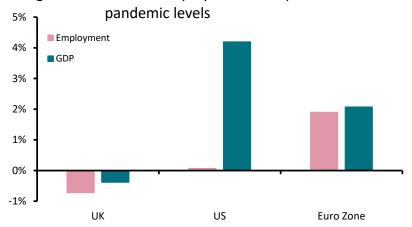
- Labour market reactions have been different in key developed economies, despite similarities in output and inflation.
- US employment has risen only a little from pre-COVID levels, despite a surge in GDP. Eurozone and UK employment has risen a little less than GDP. This suggests a material, relative improvement in US productivity over the past few years.

Structural changes in labour markets

- It is still unclear to what extent changes in the labour market since the pandemic will prove permanent. However, we now have a more pessimistic baseline outlook for US labour market supply – reflecting the weak participation recovery to date. Inactivity – dominated by rising long-term sickness, reflecting long-COVID and delays in treatment for other long-term issues - also accounts for a sharp drop in UK participation. Eurozone participation has overcome initial pandemic declines and resumed multi-decade upward trends in participation for most working age groups, levels now exceeding the US from 25-64.

Varied labour market responses since the pandemic

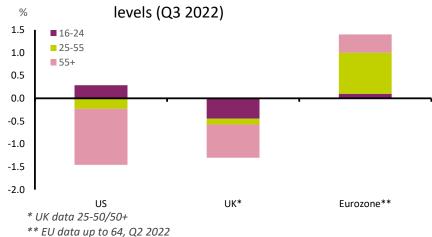
Change in real GDP and employment since pre-



Source: ONS, BLS, Eurostat, AXA IM Research, November 2022

Labour market participation

Change in participation rates from pre-covid



Source: BLS, ONS, OECD, AXA IM Research, November 2022



Monetary policy

Policy rates, close to peak – further from fall?

- Central banks raised rates aggressively in 2022 in the face of rampant inflation.
- We see most major central banks enacting additional rate hikes over the coming months, but peaking before Spring 2023.
- We are more cautious in expectations for easier policy, despite expectations for recessions across Europe and the US. We forecast the BoE to cut rates in 2023 (along with Brazil, Chile and Peru), but the Fed, ECB and BoC to defer cuts until 2024.
- The PBoC and BoJ remain out of kilter with global trends. PBoC to ease further, with BoJ adjusting easy policy only in 2024.

Balance sheet

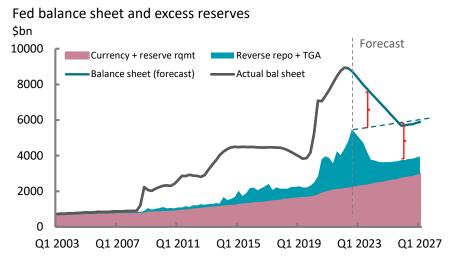
- Considered a background operation for much of this year, balance sheet issues look likely to demand more attention in 2023. The Fed may have to consider prematurely curtailing QT unless reverse repo holdings ease. ECB QT will be fraught with risk around peripheral spreads.

Central Bank interest rate forecasts

Central Banks' policy rates BoE Fed BoC BoJ forecast

Source: ECB, BoE, BoC, BoJ, Fed, AXA IM Research, November 2022

Fed's balance sheet



Source: FRB, AXA IM Research, November 2022



Macro outlook



Mild recession outlook for 2023

US

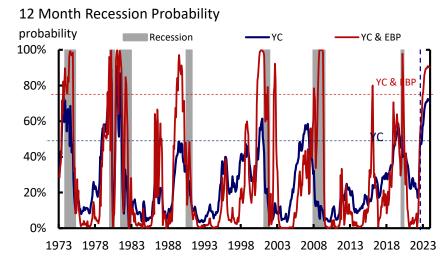
Recession likely for 2023

Recessions are difficult to call and depend on a confluence of events. Our recession probability model suggests a contraction will be likely over the next 12-months and we estimate this in H1 2023, with high levels of inventory and downward revisions to the saving rate adding to our conviction. A downturn would also be consistent with the rise in unemployment that we expect across 2023 and the recent tightening in financial conditions.

Mild recession, below consensus growth

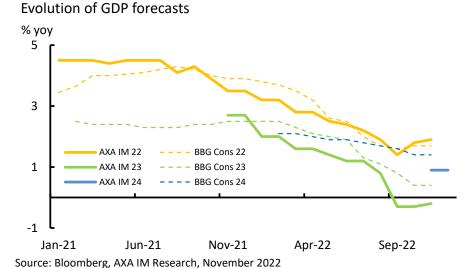
Weak real income and rising energy, finance and unit labour costs are likely to weigh on consumer and investment spending next year. Inventory slowing should also weigh on activity. From growth of 1.9% in 2022, we forecast GDP to fall by 0.2% in 2023 before a modest 0.9% rebound in 2024, in part soft given slow policy responses. This is softer than the consensus 0.4% and 1.4% outlook. Risks are two-sided, including stronger boosts from energy and a larger inventory correction. We see them as balanced overall.

Recession over the next 12-months seems likely



Source: FRB, NBER, AXA IM Research, November 2022

Mild recession, below consensus growth



Inflation to keep Fed from easing until 2024

US

Inflation falling, but more persistent shelter and services inflation

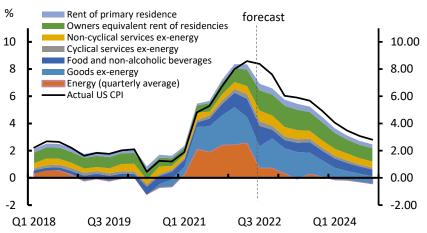
- Inflation has fallen from a peak of 9.1% in June and we forecast an average 8.2% for 2022 as a whole, falling to 5.1% across 2023 and 3.4% in 2024. This is above consensus expectations which forecast 4.2% and 2.5%. We expect goods price inflation to fall sharply as supply chain issues ease. But we expect the ongoing resilience of the labour market to see more persistence in shelter and services inflation, slowing the fall in overall inflation somewhat.

Federal Reserve wants to be sure to get the job done

- Fed Chair Powel signalled that the pace of Fed hikes may slow as soon as December. We forecast a 50bps increase in December and 25bps hikes in February and March taking rates to a peak of 4.75-5.00%, now in line with adjusted market expectations. But with a mild recession and an expected slower fall in inflation, we expect the Fed to delay reversing policy until 2024, when we forecast cuts back to 3.75% by year-end. Balance sheet developments may also complicate the rate outlook.

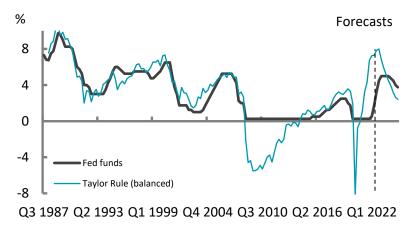
Inflation set to fall, but divergence across sectors

Contributions by broad sector



Source: BLS, AXA IM Research, November 2022

Fed to hike further in 2023, to cut only in 2024 Monetary policy and "rules"



Source: FRB, AXA IM Research, November 2022



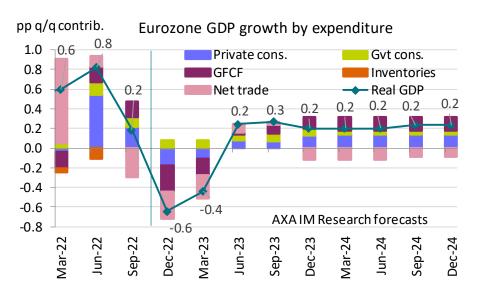
Growth swan song

Euro area

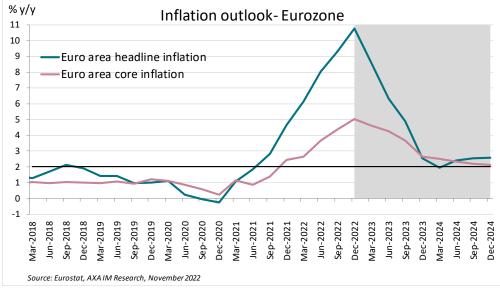
An inevitable recession followed by weak recovery

- We project a grim outlook where three key themes will dominate: a) Combined constrained energy supply and demand faltering to push euro area into a marked recession (at least) this coming winter, b) changing economic structure and tight monetary policy to pave the way for a subpar recovery, c) monetary dominance to generate increasing worries with regards to public debt sustainability. We do not expect the Q3 22 GDP level to be recouped until Q2 2024.
- We continue to project euro area headline and core inflation to peak in Q4 this year at 10.8% and 5.0% respectively. We project a much more moderate core inflation, forecasting c. 0.6pp y/y on average every quarter of next year, mainly coming from non-energy industrial goods, while services inflation is likely to prove much sticky owing to the staggered nature of wage negotiations, and the expected resilience of the labour market. All in, we project euro area core inflation to average 3.8% next year, edging down from 3.9% this year, stabilising above the ECB medium term inflation target at 2.3% in 2024.

Timid recovery after marked GDP contraction



Core inflation to slowly grind lower from Q4 22 peak



Source: Eurostat, AXA IM Research, November 2022



ECB to remain in its hawkish corner

Euro area

Governments focus on own domestic political economy concerns

- Planned, significant, untargeted, permanent demand supporting measures (incl. caps on gas/electricity prices and fuel tax rebates) plus optimistic growth forecasts imply risks of fiscal slippage, especially if energy crisis measures are extended.

From ECB rates frontloading to QT

- Our baseline expects the ECB's DFR at 2.5% next March, still lower than market peak rate pricing of 2.9%.
- APP QT looks likely for Q2 2023, most likely announced in March. We expect it to be strong in words, but slow in action, due to increasingly difficult public debt sustainability dynamics in a year of historical net high issuance (net of QE).

What to watch:

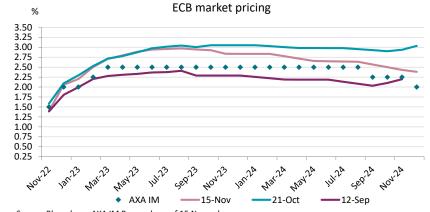
- Source of inflation shock: Mainly supply led but increasingly also from demand. Crucial for a pivot from ECB.
- Core inflation pressures: wage agreements, services inflation.
- Pace and extent of labour market softening.

Risk of fiscal slippage in 2023

		Germany	France	Italy	Spain
Government's	2022	-3.5	-5.0	-5.6	-5.0
public balance forecasts, % of	2023	-2.0	-5.0	-4.5	-3.9
GDP	2024	-2.0	-4.5	-3.7	n/a
Government's	2022	2.2* (1.7)	2.7 (2.4)	3.7 (3.6)	4.4 (4.5)
2023 GDP forecast (AXA IM),	2023	2.5* (-0.6)	1.0 (0.0)	0.6 (0.0)	2.1 (0.3)
%	2024	0.8* (0.8)	1.6 (0.8)	1.9 (0.6)	n/a (1.3)

^{*} Although German 2023 Draft Budgetary Plan is dated from October, GDP forecasts are taken from Spring projection. Since then, economy ministry latest 2023 GDP forecast is - 0.4%. Source: 2023 Draft budgetary plans, AXAIM Research

We continue to find ECB market pricing terminal rate too aggressive



Source: Bloomberg, AXA IM Research, as of 15 November



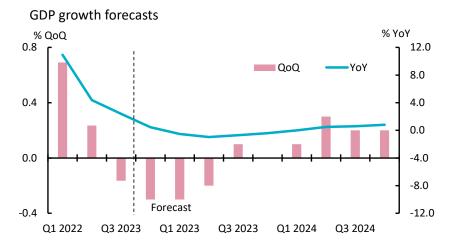
Recession to pave way to sluggish recovery

UK

Recession set to see output decline by 1% peak to trough

- The UK economy has been flashing red for months and the recent decline in Q3 GDP, exacerbated by an additional Bank Holiday, likely marks the beginning of a recession driven by falling consumption, declines in business and residential investment. We expect the downturn to last around four quarters with a peak to trough decline of 1%. Following this, we expect inflation to retrace and alleviate real income pressures and for consumption to recover slowly. We forecast growth of 4.3% in 2022, -0.7% in 2023 and 0.8% in 2024 (consensus 4.2%, -0.5% and 0.8%).
- Labour demand now appears to have turned, lagging declines in economic activity. But a reduction in labour supply has kept the labour market tight and seen unemployment remain low. We see unemployment rising steadily over 2023 and 2024 to peak at 5% towards the end of 2024.
- Political developments remain important, in particular NI protocol negotiations remain a risk and we expect fresh elections for the NI assembly in early 2023, local elections in May 2023 and a 2024 General Election.

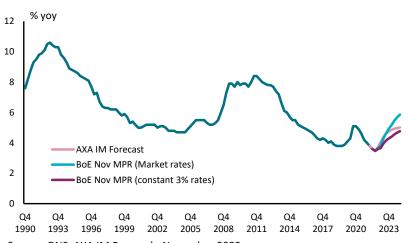
Four quarter recession followed by sluggish upturn



Source: ONS, AXA IM Research, November 2022

Unemployment on a rising path to 2024

Unemployment Forecasts



Source: ONS, AXA IM Research, November 2022



BoE first in first out

UK

Inflation to fall slowly back towards target by 2024

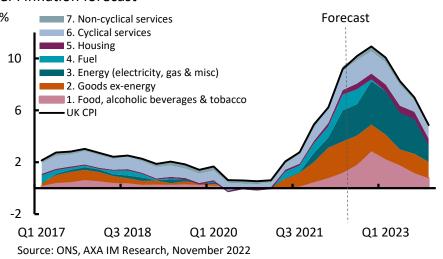
Inflation has risen sharply and now stands at 11.1%. We expect a slow decline in the headline rate, with upside contributions from food inflation likely to keep the headline above double digits into 2023. The Government's decision to extend the energy price cap beyond March next year will help reduce inflation over 2023 as a whole. We forecast CPI inflation to average 9.1% in 2022, 7.6% in 2023 and 2.8% in 2024 (consensus 9.0%, 6.3% and 2.5%).

BoE likely to lead the pack with rate cuts as negative output gap grows

The end of the MPC's hiking cycle is nearing. We see the Bank of England (BoE) increasing rates by 50bp in December and February, and 25bp in March to 4.25%. The outlook thereafter, with a growing negative output gap and inflation expected to fall below target towards the end of the forecast horizon, should then see the Bank consider loosening policy. We anticipate a 25bp cuts in each quarter starting in Q4 23 bringing Bank rate to 3.00% by Q4 24. The precise timing is likely to depend on the scale of labour market adjustment.

Prices set to gradually decline

CPI inflation forecast



Bank rate to peak at 4.25%, but BoE to cut from Q4 2023

Source: Bank of England, Bloomberg, AXA IM Research, November 2022



A bumpy path to reopening

China

A step-by-step exit from ZCP

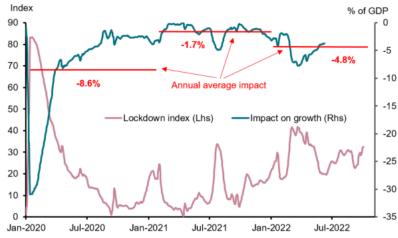
- China's economic outlook for 2023/24 hinges critically on the evolution of the pandemic and Beijing's response. We think the worsening cost and benefit trade-off of relying on the Zero-COVID Policy (ZCP) to tackle Omicron and declining political uncertainty will force Beijing to adjust its current approach, paving the way for a gradual economic reopening in 2023. We see this proceeding in three phases –medical preparation first, before liberalizing the domestic economy, with border reopening last. Beijing's 20-pronged plan suggests that adjustments have already begun. But another outbreak threatens any smooth implementation.

Property becomes less of a drag

The property market remains a wild card. The ongoing turmoil has rattled the economy, with incremental policy easing so far failing to form a bottom for the market. The good news is that the policy wind has shifted further with Beijing now taking more substantial steps to alleviate developer' funding stress. The bad news is that there are no easy fixes to the structural imbalances in the sector. We expect more policy support to stabilise the housing market, reducing its growth drag in 2023 compared to this year

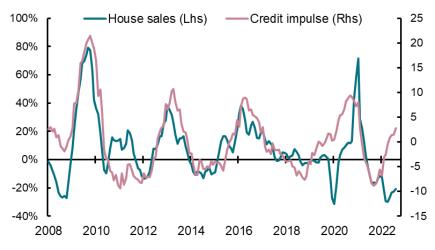
Phasing out ZCP will create growth tailwind

COVID lockdown index and impact on activity



Source: CEIC, Goldman Sachs, AXA IM Research, Nov 22

More policy support to stabilise the housing market Credit impulse and house sales



Source: Bloomberg, CEIC, AXA IM Research, Nov 22



Policy accommodation needed to nurture recovery

China

Export engine sputters amidst weakening global demand

- Export activity has faltered lately and is expected to contract in 2023 as developed economies fall into recession. In addition, rising geopolitical tensions between China and the US – particularly in the area of advanced technology – could further impact an already soured trade relationship. The loss of export growth contribution could add to the urgency for Beijing to ease COVID-19 controls to revive domestic demand

Growth recovers to 5%, with risks balanced to the downside

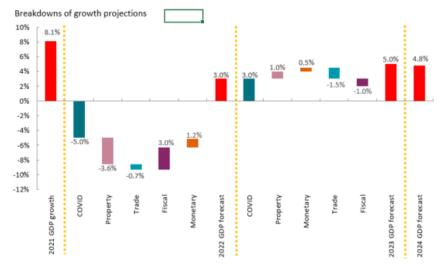
- A multitude of economic headwinds call for continued policy accommodation. While the scale of policy easing may not change much in either direction, the efficacy could improve if easing COVID-19 controls and stabilization of the property market help unclog policy transmission channels. We expect annual growth to accelerate to 5% in 2023 from 3%, before moderating to 4.8% in 2024 as the economy reverts to trend. Risk-wise, we consider the chance of Beijing mismanaging of the transition out of the ZCP as greater than a smooth path to reopening. In an adverse scenario, 2023 growth could fall to 3.5% or lower even with the help of a low base

Export momentum to falter as global demand weakens

China's total exports growth (3mma) and US ISM %, yoy Index **Exports** US ISM (Rhs) 50 40 62 30 60 20 58 10 52 -10 48 -20 46 2014 2015 2019 2020 2021

Source: CEIC, AXA IM Research, Nov 22

Recovery reflects reopening and stabilizing property market



Source: CEIC, AXA IM Research, Nov 22



Recovery remains on track

Japan

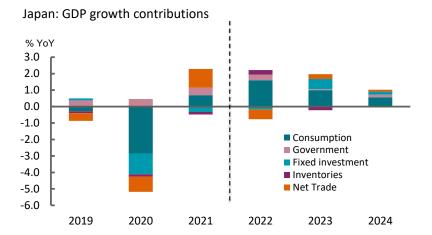
Recovery set to continue

- The recovery of the Japanese economy looks set to continue. Growth will be supported by the delayed reopening of the economy from COVID-19 and a strong recovery in tourism, with the borders of the country now fully open to tourism. The positive growth momentum will be tempered by slowing external demand, as we expect recession in Europe and the US and below trend growth in China in 2023. In 2024, we expect a catch-up to Japan's pre-pandemic trend to continue. We forecast GDP growth of 1.6%, 1.7% and 1.3% in 2022, 2023 and 2024

Inflation to set to decline from H2 2022,

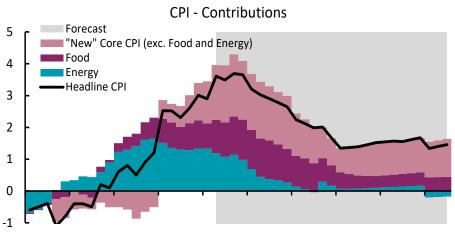
- Inflation is set to remain above the BoJ's target in the near term with a weak yen adding to inflationary pressures. Government intervention is set to cap the increase in inflation in 2023 through additional subsidies on energy. Following this, we expect to see inflation fall in 2024, though evidence that companies are becoming more willing to pass on price increases to their customers could see inflation remain buoyant. We expect CPI inflation to average 2.5% in 2022, 2.1% in 2023 and 1.3% in 2024

Delayed recovery in consumption and capex to support recovery



Source: Refinitiv, AXA IM Research, November 2022

Inflation close to peak and set to fall gradually over 2023 and 2024



Jan-21 Jun-21 Nov-21 Apr-22 Sep-22 Feb-23 Jul-23 Dec-23 May-24 Oct-24

Source: Refinitiv, AXA IM Research, November 2022



A shift in Japan's price norms?

Japan

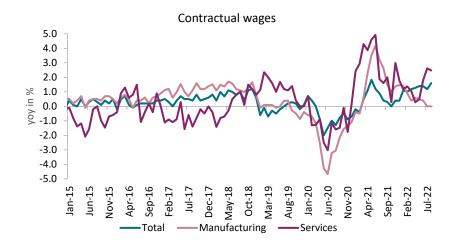
Evidence price pressures are broadening grows

- Wage dynamics in Japan are improving – but do not yet suggest a significant shift in Japan's pricing norms. Shunto Spring wage negotiations will be key in this regard. Rengo, Japan's largest Trade Union confederation confirmed they will request a total pay increase of 5%. Negotiations tend to come in below Rengo's targets, in 2022 they requested total pay increase of 4% and pay increased by 2.2%.

New Governor to usher in shift of policy

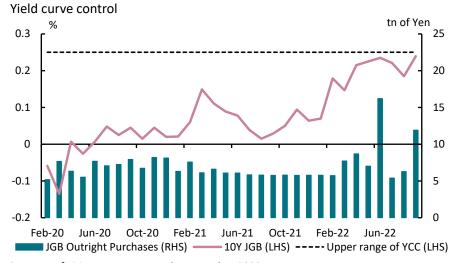
- Current BoJ Governor Kuroda is step to step down in April. BoJ Deputy Governor (DG) Masayoshi Amamiya and ex BoJ DG Hiroshi Nakaso are frontrunners to replace Kuroda. We think the leadership change alongside the confidence that price pressures are broadening, and a robust wage growth will see the BoJ adjust its policy of YCC. At present, the BoJ targets the yield of 10Y JGBs at 0% with a tolerance of +/-25bp – we think they could widen this to +/-40bp in 2024.

Total cash earnings rise



Source: Refinity, AXA IM Research, November 2022

YCC continues to come under pressure



Source: Refinitiv, AXA IM Research, November 2022



Weak activity to loosen labour market

Canada

Weaker economy, on balance avoids recession

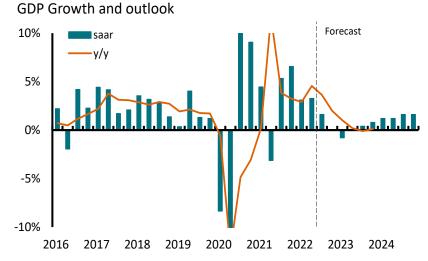
- Activity has been subdued from around mid-year. We expect further consumer pressure combined with slowing business investment and an inventory slowdown to slow activity to a standstill by end-year until mid-2023. We then expect falling inflation and firming global exports to gradually lift growth into 2024. This envisages avoiding recession, but it may be close. We forecast GDP growth of 3.3% for 2022, 0.3% for 2023 and 1.1% for 2024. This is below the consensus for 0.6% and 1.7% for 2023 and 2024.

Labour market loosening – a productivity rebound?

- Slowing activity should be consistent with slower employment growth. We see October's surge in jobs as anomalous and expect falling employment over the coming months. This should see unemployment rise from around lows of 5.2% in October to 6.7% by end-2023 and a little over 7% by end-2024. Beyond weaker demand, this allows for some recovery in the exceptionally weak productivity growth of recent years. Without this, unit labour costs may be a persistent pressure on inflation.

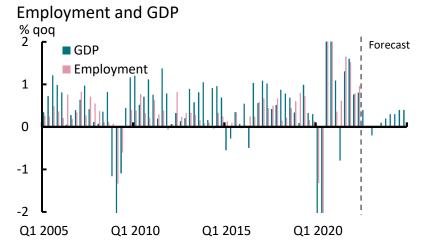
Growth to avoid recession, but slow pick-up in 2024

Source: CANSIM, AXA IM Research, November 2022



Source: CANSIM, AXA IM Research, November 2022

Employment growth to reverse





Inflation fall should see BoC ease policy in 2024

Canada

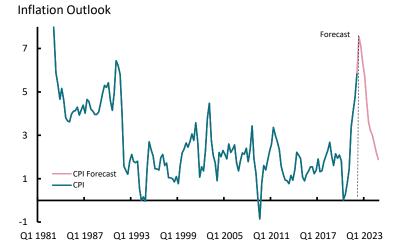
Inflation set to fall back to target in 2024

- Inflation has dropped from a peak of 8.1% to 6.9% in October. We forecast this will fall back more quickly in 2023 and estimate an average of 4.3% in 2023 and 2.4% in 2024. This is a little slower decline than consensus forecasts of 3.5% and 2.1% suggest. The decline in house price inflation will be key to the short-term outlook. The broader loosening in the labour market should see inflation back to target by end-2024.

BoC close to peak, but on hold into 2024

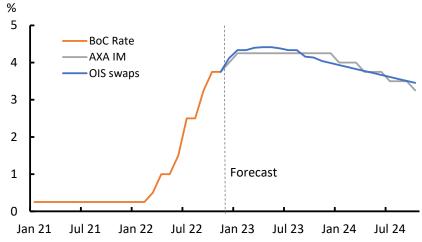
The Bank of Canada moderated the pace of its rate increases in October, in line with our outlook. Assuming employment falls again in November, we expect a further step down to 25bps in December and a final 25bps in January – an expected peak of 4.25% and a little below current market expectations. However, we expect the BoC to hold rates at 4.25% until the start of 2024, when we forecast a quarter-per-quarter easing to 3.25% by end-2024. A sharper housing correction could result in an earlier cut.

Inflation expected to ease sharply next year



Source: CANSIM, AXA IM Research, November 2022

BoC close to peak, housing market key to an easing in 2023 Bank of Canada overnight rate and outlook



Source: CANISM, Bloomberg, AXA IM Research, November 22



Darkest before the dawn

Emerging Markets

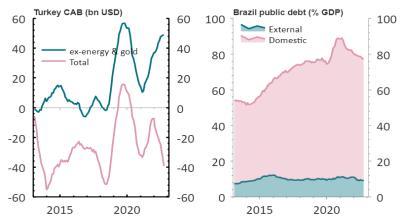
Headwinds into H1 2023, recovery in H2 2023 and towards potential in 2024.

- Inflation will be weighing on household purchasing power while tighter credit conditions will hurt fixed investment through EM at various degrees in H1 2023. Frontier markets, more dependant on external funding, will continue to struggle in H1 2023.
- Among big EM (ex-China), we will be watchful of the fiscal orientation of the new Lula administration in Brazil, as well as the capacity to finance external needs in Turkey ahead of June 2023 elections.

Central Europe in recession in 2023... 2024 recovery will depend on EU funds arrival (or not)

- Upon weaker domestic and external demand, and an energy supply crisis that will be pushing Europe in recession in Q4 2022/Q1 2023. We estimate 1-2ppt cumulative GDP contraction for the Central European countries during those 2 quarters.
- The strength of the recovery into 2024 will depend on the timely arrival and disbursement of European funds.

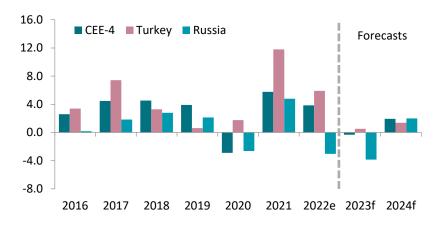
EM: never short of idiosyncratic issues Dealing with idiosynchratic issues



Source: Refinitiv Datastream and AXA IM Research Sep 22

Energy supply shortfalls and recession in EM Europe

EM Europe: real GDP growth (%)



Source: Refinitiv Datastream & AXA IM Research, November 22



Soft landing for LatAm and Asia amid heightened external uncertainties

Emerging Markets

LatAm: Growth to slow on unfavorable external conditions and tight policy mix

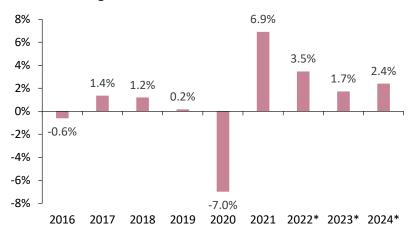
Despite a good 2022 performance, growth will moderate in Latin America in 2023 as a result of unfavourable external environment. Weaker global demand will impact exports and remittances, important growth engines for the region. Domestically, a tight policy mix will weaken private consumption while policy uncertainty will likely sour investor sentiment. We expect the region's growth to slow to 1.7% in 2023 and bounce back to trend growth in 2024, reaching 2.4%.

EM Asia: Despite a growth slowdown, domestic demand will remain as the key growth anchor

- In 2023, export momentum will likely weaken on declining developed market demand which will only be partially offset by the modest demand recovery from China. Korea, Taiwan and Singapore will be most vulnerable given export-dependence. The domestic-oriented economies and commodity exporters may be less affected due to still resilient services sector and sticky commodity prices. We forecast regional growth to soften to 4.5% and normalise to 4.8% in 2024.

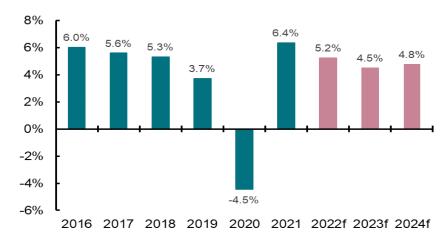
Latam growth to slow in 2023 and bounce back to trend in 2024

Latin America growth forecast



Source: Refinitiv Datastream & AXA IM Research, November 22

Weaker ex-China, Asia economic growth outlook for next year Asia excluding China growth forecast



Source: CEIC, AXA IM Research, November 22





Multi-Asset Investment views

Our key messages and convictions



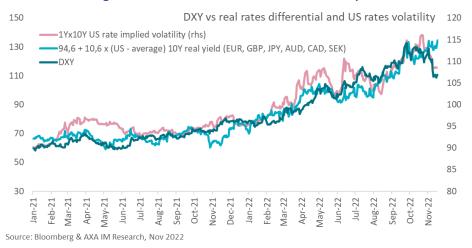
Source: AXA IM as at 23/11/2022



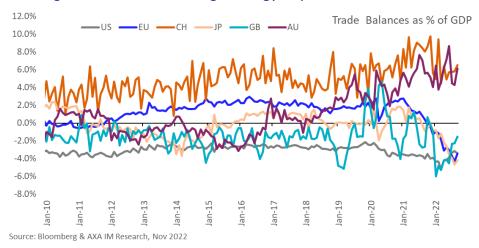
Currencies: US dollar a fading star

- A Fed pivot appears to be nearing and will mark an inflection point in US dollar trajectory, though not a collapse. Expectations of other
 central banks will also adjust accordingly, reflecting global inflationary pressures. But at the same time, better risk sentiment and lower
 uncertainty on rates will pose a challenge to the US dollar. The yen should be the main beneficiary.
- The euro and sterling are facing new structural challenges that may not disappear any time soon, as the geopolitical consequences of the Ukraine war have created durable pressure on energy costs, pushing the EU and UK to reposition their energy dependencies. With such structural weaknesses, the euro and sterling should only marginally benefit from the dollar cooling in 2023.
- If a hard-landing is avoided along the way, high beta currencies should also manage to rebound. Australia, Canada and Norway exports are also benefitting from higher energy prices, with Australia reaching a current account surplus. But those countries also have much higher leveraged households, and the risk of a hard landing from rising mortgage rates is greater, in particular in Sweden.
- The renminbi should also lag, given China's difficult exit from COVID-19 and softer global demand.

What's driving the US dollar, real rates or volatility?



Fading trade balances of large energy importers





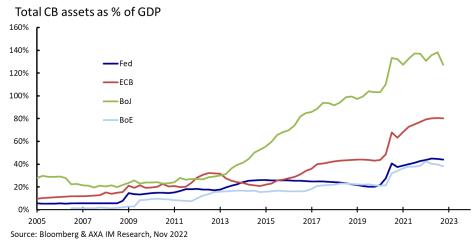
Rates: Shadows and Lights

- Interest rate markets have been subject to significant stress in 2022 as investors were exposed to a period of transition between two
 distinct regimes. From a backdrop of low interest rates, low volatility, almost absent inflation and unprecedented support from monetary
 policy central banks have switched to an aggressive policy stance in order to tackle the high-inflationary backdrop.
- Looking ahead, central banks' balance sheet transition is a key risk for bond investors. Central banks' dominant role in their respective sovereign markets is likely to fade in time, albeit gradually, thus putting pressure on the existing investor base. As net supply flips from negative to positive, the key questions is who is going to buy, by how much, and at what price?
- 2023 starts with a certainty that income will play a role in investors' allocation. Negative yielding debt has collapsed to a mere 3% of the global aggregate index, from almost 27% at the end of 2020. In other words, constructing investment portfolios with short-term risk-free yields around 4.5% is a totally different proposition compared to starting with only 0.15%, as was the case at the end of 2020.

A challenging year for rates



Looking for a new demand/supply balance

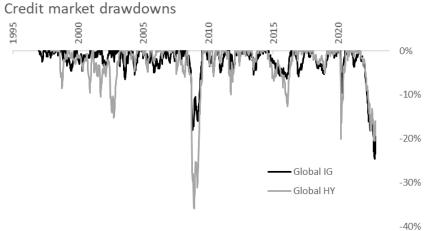




Credit: a film noir for optimists

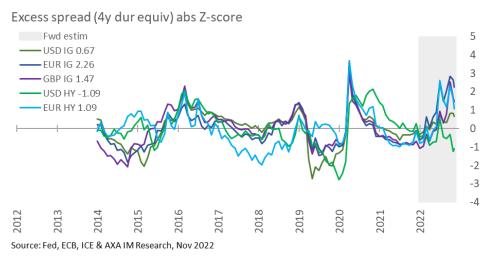
- Credit markets, especially investment-grade, have seen eye-watering drawdowns in 2022. Typically what tends to follow is a decent rebound in returns. Historically, a yield of 5.2% in Global IG is consistent with a return of 6% pa over the subsequent 5-year period compared to an average of 4% pa over the history of the Global IG index.
- Spreads have been resilient despite an extraordinary rise in interest rates, an inflation shock, and rising recession risks reflecting healthy balance sheets. The quarterly average spread in Global IG is currently 160bps, half the level that is historically associated with zero growth in global GDP. The one exception is EUR IG, whose quarterly average spread of 205bps implies a negative GDP of -0.4% at the start of 2023.
- Default expectations have risen, putting high yield valuations under pressure. In excess spread terms (namely nominal spreads minus credit losses, where credit losses are due to defaults in HY and fallen angels in IG) European credit screens cheaper than US credit.

Return drawdowns in 2022 have been hefty; record low for IG



Source: ICE & AXA IM Research, Nov 2022

Excess spread in IG & HY flags the relative value in EUR over US credit

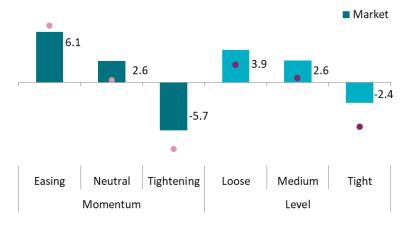


Equities: Rebound prospects amid headwinds

- The impact of high inflation and monetary tightening on economic growth has been harmful for stocks in 2022 and things are unlikely to get better quickly in 2023. Consensus EPS growth expectations seem too optimistic given next year's outlook in developed markets (c.0%). Thus, the market correction may not yet be complete; the onset of further macro deterioration could trigger a deeper stock market trough.
- Consensus is for policy rates reaching terminal levels in H1 2023 and the risks are for policy being eased more slowly thenafter. Quantitative tightening should bring an additional layer to liquidity tightening; negative for equities. In our baseline scenario, inflation does not fall back to target in 2023, constraining central bankers from reversing their hawkish stance; adding weight to our 'further downside' narrative.
- Post GFC, the lower interest rate environment has resulted in a structurally higher ERP (+2.4% vs pre GFC). At the current 4%, ERP has little upside potential as interest rates are expected to remain elevated; so forward performance of equities is likely to be below the post-GFC period. Equity markets tend to rebound at the trough of a recession and the rebound can be decent, but likely milder than post-GFC norms.

Do not overlook the level of policy restriction

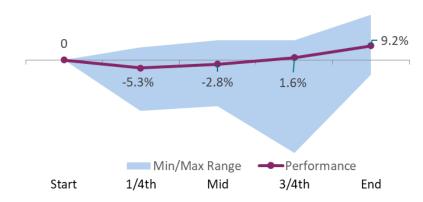
Global Equity - Quarterly returns and financial conditions



Source: MSCI, Chicago Federal Reserve and AXA IM, November 2022

Stock markets tend to rebound ahead of the recession trough

Average S&P 500 path in recession since 1900

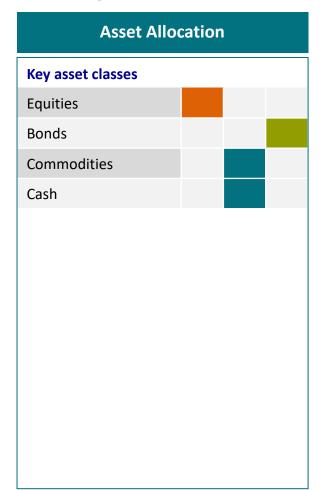


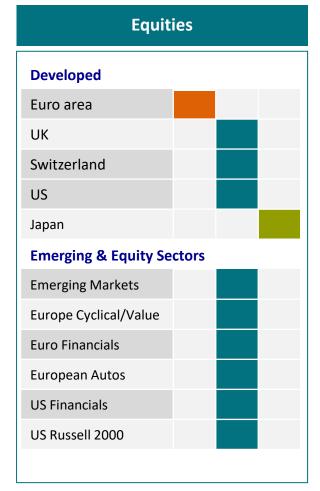
Source: Robert Shiller and AXA IM Research, November 2022

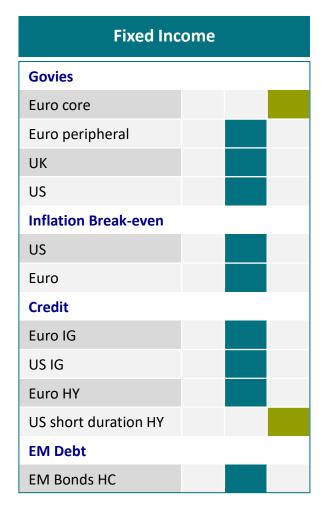


Asset allocation stance

Positioning across and within asset classes







 Legend
 Negative
 Neutral
 Positive
 Change
 ▲ Upgrade
 ▼ Downgrade

Source: AXA IM as at 23/11/2022



Forecasts & Calendar



Macro forecast summary

Forecasts - update

Bool CDB growth (%)	20	2022*		2023*		2024*	
Real GDP growth (%)	AXA IM	Consensus	AXA IM	Consensus	AXA IM	Consensus	
World	3.2		2.3		2.8		
Advanced economies	2.5		0.1		1.0		
US	1.9	1.7	-0.2	0.2	0.9		
Euro area	3.2	3.0	-0.3	0.0	0.9		
Germany	1.7	1.4	-0.6	-0.9	0.8		
France	2.4	2.5	0.0	0.3	0.8		
Italy	3.6	3.3	0.0	-0.1	0.6		
Spain	4.5	4.4	0.3	1.2	1.3		
Japan	1.6	1.5	1.7	1.5	1.3		
UK	4.3	4.1	-0.7	-0.3	0.8		
Switzerland	2.3	2.2	0.6	0.7	1.3		
Canada	3.2	3.2	0.3	0.6	1.1		
Emerging economies	3.6		3.5		3.8		
Asia	4.1		4.8		4.5		
China	3.0	3.2	5.0	4.8	4.8		
South Korea	2.3	2.6	1.5	1.6	2.0		
Rest of EM Asia	5.5		4.9		4.4		
LatAm	3.5		1.7		2.4		
Brazil	2.7	2.6	1.0	0.9	2.0		
Mexico	2.2	2.1	1.0	1.2	2.0		
EM Europe	0.5		-0.9		2.1		
Russia	-3.0		-3.8		2.0		
Poland	4.4	4.1	0.1	1.1	2.4		
Turkey	5.9	5.1	0.5	2.2	1.4		
Other EMs	4.5		3.6		3.6		

Source: Datastream, IMF and AXA IM Macro Research – As of 30 November 2022



Expectations on inflation and central banks

Forecasts - update

Inflation Forecasts

CDI Inflation (%)	20	2022*		2023*		2024*	
CPI Inflation (%)	AXA IM	Consensus	AXA IM	Consensus	AXA IM	Consensus	
dvanced economies	7.5		5.0		2.7		
US	8.2	8.0	5.1	3.9	3.4		
Euro area	8.6	8.3	5.6	5.8	2.4		
China	2.1	2.2	2.3	2.3	2.5		
Japan	2.4	2.2	2.1	1.6	1.3		
UK	9.1	8.9	7.6	6.4	2.8		
Switzerland	2.8	3.0	2.0	2.3	1.3		
Canada	6.8	6.8	4.3	3.5	2.4		

Source: Datastream, IMF and AXA IM Macro Research – As of 30 November 2022

Central banks' policy: meeting dates and expected changes

Central bank policy							
	Meeting dates and e	xpected changes (Ra	ates in bp / QE in bn)				
		Current	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23
	Dates		1-2 Nov	31-1 Jan/Feb	2-3 May	25-26 Jul	31-1 Oct/Nov
United States - Fed	Dates	3.25	13-14 Dec	21-22 Mar	13-14 Jun	19-20 Sep	12-13 Dec
	Rates		+1.25 (4.25-4.50)	+0.5 (4.75-5.00)	unch (5.00)	unch (5.00)	unch (5.00)
	Dates		15 Dec	2 Feb	4 May	27 Jul	26 Oct
Euro area - ECB	Dates	1.50	13 Dec	16 Mar	15 Jun	14 Sep	14 Dec
	Rates		+0.5 (2.00)	0.5 (2.50)	unch (2.50)	unch (2.50)	unch (2.50)
	Dates		19-20 Dec	17-18 Jan	27-28 Apr	27-28 Jul	30-31 Oct
Japan - BoJ	Dates	-0.10	19-20 Dec	9-10 Mar	15-16 Jun	21-22 Sep	18-19 Dec
	Rates		unch (-0.10)	unch (-0.10)	unch (-0.10)	unch (-0.10)	unch (-0.10)
	Dates		3 Nov	2 Feb	11 May	3 Aug	2 Nov
UK - BoE	Dates	2.25	15 Dec	23 Mar	22 Jun	21 Sep	14 Dec
	Rates	•	+1.25 (3.50)	+0.75 (4.25)	unch (4.25)	unch (4.25)	-0.25 (4.00)

Source: AXA IM Macro Research - As of 30 November 2022



Calendar of 2023 events

2022	Dates	Events	Comments
	Dec	China Central Economic Work Conference	
	06-Dec	US: Run-off Senate election in Georgia	Dem's hold Senate maj
	13-14 Dec	FOMC Meeting	+50bps (4.25-4.50%)
	15-Dec	ECB Meeting	+50bps (DFR = 2%); comments on Q
	15-Dec	BoE Meeting	+50bp (3.50%)
	15-16 Dec	EU Summit	
	16-Dec	US: Continuing Resolution to avoid government shutdown ends	Extension likely
	19-20 Dec	BoJ Meeting	Unchanged (-0.1%)
2023	Dates	Events	Comments
lanuary.	Q1 2023	China Second Plenary Session of the 20th CPC Congress	
January	17-18 Jan	BoJ Meeting	
	01-Feb	FOMC Meeting	+0.25% (4.50%-4.75%)
- abruani	02-Feb	BoE Meeting	+50bps (4.00%)
ebruary	02-Feb	ECB Meeting	+25bps (DFR= 2.25%)
	25-Feb	Nigeria general election	, ,
	March	National People's Congress	
	16-Mar	ECB Meeting	+25bps (DFR=2.5%)
March	21-22 Mar	FOMC Meeting	+0.25% (4.75%-5.00%)
	23-Mar	BoE Meeting	+25bps (4.25%)
	23-24 Mar	EU Summit	
	02-Apr	Finland elections (National Parliament)	
April	08-Apr	BoJ Governor Kuroda's term ends	
'	13-Apr	Northern Ireland Assembly elections	latest date if executive not formed
	04-May	ECB Meeting	Unchanged (2.5%)
	04-May	UK local elections	B (' ' '
	07-May	Thailand general elections	
May	11-May	BoE Meeting	Unchanged (4.25%)
	14-May	Germany (Federal state elections)	8 1 1
	28-May	Spain Regional elections	
	13-14 June	FOMC Meeting	
	15-Jun	ECB Meeting	Unchanged (2.5%)
June	18-Jun	Turkey presidential and parliamentary elections	0 1
	29-30 June	EU Summit	
July	July	Greece elections (National Parliament)	
ptember	Autumn 23	Poland presidential elections	
•	29-Oct	Argentina general elections	
ecember		Spain (National Parliament)	
2024	Dates	Events	Comments
January	Jan	US Primaries begin	
April	10-Apr	South Korean legislative election	
	01-May	India general elections	
May	11-May	US Presidential elections	
June	02-Jun	Mexico general elections	
July	2024	UK general elections	

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27 October 2022

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26 October 2022

October Monthly OpEd – How far is too far?

26 October 2022

The economic impact of a Russian gas cut-off

30 September 2022

September Global Macro Monthly – Temperature keeps on rising for central banks

28 September 2022

<u>September Monthly OpEd – Dollar reigns supreme</u>

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