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From the Core Investment Macro Research team

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Macro outlook – The clouds around the inflation peak



Gilles Moec

AXA Group Chief Economist

and Head of AXA IM Core Investments Research

Key points

- 2022 ushered in a new monetary policy era. A
 policy-induced recession looks like the price to pay
 to get inflation back under control after a peak in
 late 2022.
- Higher interest rates will gradually impair the capacity of fiscal policy to remain accommodative.
 In the US, "policy paralysis" is on the cards after the mid-terms, while in Europe fiscal policy will still deliver more stimulus in the first half of 2023 to deal with the external inflation shock, but we think this will be the "last gasp" of fiscal activism.
- Supportive fiscal and monetary policy have dissimulated the underlying slowdown in potential growth for two decades. A new growth model is needed, but elusive.

The immediate cost of future disinflation

The inflation shock has defined 2022. Not primarily because as usual, by eroding purchasing power and corporate margins it has hampered consumption and investment – private spending has been remarkably resilient actually in the developed world given the circumstances – but because it has marked the end of an era for monetary policy.

Having missed the signs that what was initially widely seen as a transitory price reset after the post-pandemic reopening was turning into persistent inflation, the key central banks engaged in swift tightening without equivalent since the 1990s. The catch-up took the Federal Reserve (Fed) from what was still a very accommodative stance to properly restrictive territory in about half a year. Combined with Quantitative Tightening, this has produced the steepest tightening in broad financial conditions since the Great Financial Crisis of 2008-2009.

In principle, not all central banks should have followed the Fed. The US had a clear case of overheating to address, after the excessive fiscal stimulus of the late Trump and early Biden administrations, with an extremely tight labour market plagued by a lower participation rate. The Euro area had been more prudent with its fiscal stance during the pandemic and participation is rising there, now exceeding the US level in the 15- to 64-year-old bracket. Yet, the European Central Bank (ECB) has sometimes mirrored the Fed approach — for instance

when delivering 75bp hikes. True, the Euro area will likely only hit the upper end of the "neutral range" (1 to 2%) for its policy rate in December 2022, but the starting point was lower than in the US, and we expect the neutral threshold to be exceeded in Q1 2023 (at 2.5%). Combined with a tightening in banks' lending standards, the ECB stance has in our view already taken broad financial conditions into restrictive territory. The ECB's approach, while inflation in the Euro area remains driven by supply-side developments (in particular gas prices) which can hardly be affected by monetary policy, is explicitly focusing on anchoring inflation expectations, but we suspect a significant share of their new-found hawkishness is fuelled by the depreciation of the euro.

Indeed, the world economy – once again in a configuration eerily resemblant to episodes from the 1990s – is adjusting to a stronger dollar fuelled by the Fed's policy. The ECB is actually one of the least affected central banks. Its counterparts in emerging markets have much more to do and we have seen cumulative hikes in excess of 1,000 basis points in some countries (Brazil, Hungary). We are not overly concerned by systemic risks in the emerging world – their intrinsic financial position is much better than in the 1990s, a key difference with that period – but the extreme tightness of monetary policy will seriously dampen domestic demand, especially when fiscal policy will have to adjust to the rise in sovereign refinancing costs (Brazil again). Those who have chosen not to defend their currency and bucked the trend by cutting rates are facing painful hyper-inflation, such as Turkey.

China is the one big exception to this rule. Even if the exchange rate has been softening as a result, Beijing has been able to loosen monetary policy against a backdrop of muted inflation. Yet, the Chinese authorities continue to be reluctant to make full use of their still wide policy space for fear of rekindling financial stability risks, while the shift away from the "zero Covid" policy is tentative at best, which is likely to trigger more pandemic-related disruptions in 2023. China's contribution to world growth will remain subdued in our view.

We are thus in a configuration we have not seen for decades: a policy-engineered slowdown in the world economy. The intensity and duration of this tightening phase depends of course on the speed of disinflation at the epicentre of the problem: the US economy. In the autumn of 2022, some tentative signs were finally appearing that the labour market is softening, which would herald the deceleration in wages into 2023 which the Fed wants to see. The "inflation peak" has probably been hit, which should allow a less rapid pace of rate hikes, but the distance from target, and the risks of further slippage are so high that the "terminal rate" has not been reached (we think it will hit 5%). This means that, given transmission lags, the monetary stance throughout 2023 is



likely to remain more restrictive than in the second half of 2022. This is predicated on our belief that the Fed won't want to cut rates as quickly as the market is currently pricing (second half of 2023) since they will want to be satisfied that they have properly broken the back of inflation. The price to pay for this will be a recession in the first three quarters of 2023 in the US which will trigger the usual adverse ripple effects over the entirety of the world economy next year.

Memories of past mistakes often inform policy-makers action. Just like the premature monetary tightening of the 1930s was the mistake Ben Bernanke wanted to avoid at all costs in his management of the aftermath of the Great Financial Crisis of 2008/2009, this time it's the 1974 error which is probably haunting Jay Powell. Indeed, contrary to popular belief, the Fed initially responded to the first oil shock of 1973 by rapidly hiking rates. Its fateful decision came at the end of 1974 when, worried by the significant rise in unemployment, the Fed reversed course although inflation was still in double-digit territory. This laid the ground for rampant inflation throughout the second half of the 1970s, ultimately forcing the Fed into a massive tightening in 1980.

In a way, what lies ahead of us is the mirror image of monetary policy "over-activism" of the last two decades. Central banks had come to the conclusion that it was only by driving the economy "red hot" — well above potential — that they would manage to bring inflation back to target from their stubborn, near zero new trend. Today, the conclusion they have reached is that it's only by driving demand below an already low supply pace that they will be able to bring inflation back to 2%. No pain, no gain.

Fiscal activism's last gasp

While the monetary tightening is synchronized across the Atlantic, the fiscal stance has started to diverge. In the US, the Inflation Reduction Act — which in reality is a Green Transition Act — will probably be the last big program of Biden's mandate as the Republican's midterm gain of the House majority will probably usher in at least two years of policy paralysis. But this is probably "what the doctor orders" at the moment in the US: there is little point in fiscal policy attempting to offset the Fed stance given the need to address the economy's domestically-focused overheating. The situation is very different in the Euro area where governments have engaged in a new series of fiscal stimulus to mitigate the impact of elevated energy prices on households' income and corporate margins in the context of the Ukraine war.

There is still probably some degree of complementarity between fiscal and monetary policy in Europe. Households receiving temporary income support from governments may reduce pressure on more persistent wages, thus limiting the risks of the region settling on a wage/price loop which would force the ECB into even more tightening. A conflict is however likely to emerge towards the second half of 2023 as significant government issuance would clash with the ECB's likely decision to gradually reduce the reinvestment of the bonds it purchased during Quantitative Easing. Even if the European fiscal surveillance system were to allow for another prolongation of the exemption from the deficit reduction rules, we expect the budget bills for 2024, which will start to be discussed in the summer of 2023, will mark the end of fiscal profligacy.

Looking for a growth model

Over the last two decades, monetary and fiscal support has often dissimulated the underlying lack of dynamism of the developed economies, faced with slowdown in productivity adding to the demographic woes. In some countries, and that's certainly the case in the US, the decline in labour market participation is another source of weakness for potential GDP growth. Now that policy support is past its peak, those structural flaws will take centre stage.

The recent experience in the UK is interesting from this point of view. While the content of the plan was deeply flawed – upfront, unfunded tax cuts combined with vague promises about structural reforms – at least Liz Truss' administration tried to address the deterioration in potential growth in the UK. The U-turn on the fiscal stance by the Sunak administration is of course welcome from a financial stability point of view, but what is missing is a plan to re-start the economy.

On the list of macro challenges, we need to add the likely "greenflation" looming – the necessary fight against climate change is forcing the adoption of cleaner, but usually more expensive technologies, while we expect more regions beyond the EU to adopt forms of carbon pricing. "De-globalization" is also a risk, especially for countries which have made the choice of extroverted growth – such as Germany. The US is probably in a more comfortable position than Europe. Its demographic position, although deteriorating, is less problematic, and the country can at least count on cheap, domestically produced energy. The European Union at the time of the pandemic had managed to give substance to its long-term growth strategy by breaking the taboo of debt mutualisation to fund the "Next Generation" programs. We find it concerning that the member states have not found the same capacity to respond to the fallout of the Ukraine war with another concerted investment effort.

While we are confident that by the middle of 2023 the world economy will start improving again, we would warn against any excessive enthusiasm. Beyond the cyclical recovery, many structural questions will remain unanswered.



Investment Outlook - Positive but tempered return expectations



Chris Iggo
Chair of the AXA IM Investment Institute
and CIO of AXA IM Core

Key points

- Peak interest rates support fixed income
- Capital gains hard to come by
- Bonds provide improved income returns
- Equities at risk from recession
- Earnings forecasts are likely to be cut further
- Some scope for sector rotation
- Much depends on energy prices.

Contrasting returns

There were few places to hide in 2022. Inflation, monetary policy tightening and geopolitical risks marked a stark contrast to the drivers of returns in 2020 and 2021; the backdrop ultimately forced a revaluation of fixed income and equity assets. From low to high inflation, and from low to high interest rates, returns suffered as markets adjusted to the new paradigm.

However, as 2022 came to a close, markets found a more stable footing. Fourth quarter (Q4) returns were significantly better than what had gone before, even if the outlook was clouded – as it still is. Inflation is high and is only just showing signs of moderating. Central banks are not likely to stop raising rates until well into the new year. More importantly, we expect recession on both sides of the Atlantic.

The modest recovery in asset prices towards the end of 2022 should not, in our view, be seen as a step towards revisiting the valuation peaks of recent years. Equity price-earnings ratios are likely to remain below their highs and bond yields are not going back to close to zero. The kind of capital returns that investors enjoyed in the quantitative easing era are unlikely to be repeated any time soon. The current environment requires more thoughtful investment strategies than just chasing earnings growth and higher yield, irrespective of valuations or credit risk.

The inflation advantage

In a recession, cash flow from corporate assets to investors becomes challenged. Earnings growth slows as costs rise and revenues come under pressure. In credit markets, scarcer cash flows mean understanding how borrowers manage their debt liabilities is key. It seems in the early part of 2023, with macroeconomic uncertainty still running relatively high, investors are likely to retain a level of defensiveness. Volatility and ongoing periods of losses should not be ruled out.

Improved trade-off

Fixed income investors, however, stand to benefit most from the peak in inflation and policy rates. For bond markets, the trade-off between return and risk has improved. Yields are higher – compared to the situation in recent years – and this provides more 'carry' for bond holders and better income opportunities for new fixed income investments. At the same time, with higher yields, fixed income has the potential to play a more significant role in multi-asset portfolios. In 2022, very unusually, both bond and equity returns were very negative. Thankfully, central banks don't raise rates by 300-500 basis points every year. As such, we don't expect a repeat in 2023. If equities struggle with the growth environment, bonds can provide a hedge and an alternative to those investors putting a premium on income.

Supporting duration

Higher rates dominated 2022 and their impact on valuations has been clear. When and if growth slows, central banks will stop raising rates, as long as inflation is easing back. This is already priced in to yield curves with markets anticipating peak rates in the US in Q2 and in the Eurozone in Q3. For now, it is an environment that supports exposure to the shorter maturity part of bond markets. Such strategies currently provide the highest yields seen for years. Extending duration along the curve also locks in better yield and provides optionality to recognise capital gains once markets start to anticipate central banks easing. Our base case is that this is unlikely until late 2023 or 2024, but markets tend to look forward to these events

Income vs. total returns

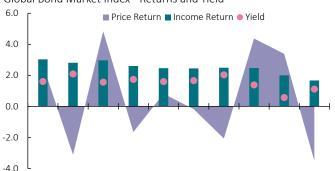
The new regime for fixed income markets and related strategies is a more balanced one. In recent years, returns were dominated by capital gains as central banks pushed down yields. Income should now be a more significant contributor to total returns (Exhibit 1). This has portfolio construction implications with bonds now more suited to income-focused strategies as well as allowing institutional investors more flexibility in meeting liabilities without taking unnecessary credit or liquidity risks to achieve yield targets.

This focus on income, with more modest capital gain potential, supports corporate bond markets. However, borrowers will be



challenged and this could impact on the level of credit spreads. Rates have done a lot of the work in pushing up corporate borrowing costs. Spreads have also widened but remain below the highs seen in previous periods of stress. This means that for similar credit ratings, today's yields are significantly higher than in recent years. This provides attractive return potential as corporates have generally managed balance sheets well, terming out debt, containing leverage levels and ensuring healthy interest coverage. Over the medium term, today's spreads will allow investors to benefit from capital gains when corporate fundamentals do improve.

Exhibit 1: Income to dominate bond returns Global Bond Market Index - Returns and Yield



2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Source: Bloomberg LLP - ICE BofA Bond Indices and AXA IM Research, 17 November 2022

High time for high yield?

Core credit investment strategies can achieve higher yields with less credit risk. Subsequently investors need not chase returns in more economically-sensitive sectors when more defensive credit sectors offer attractive yields. However, we also see a role for high yield credit. Yields have been at levels in 2022 that historically have been associated with subsequent positive returns. High yield markets are of better credit quality in general than in the past and have seen similar improvements in credit metrics as the investment grade market. Of course, defaults will rise a little but we have little concern about a large wave of refinancing-related defaults. Given the close relationship between the excess returns of high yield bonds (relative to government bonds) and equity returns, we see high yield as a relatively lower risk option on an eventual recovery in equity returns.

Chasing income

Higher yields can be achieved with less duration and credit risk than in recent years. That is useful in this kind of economic environment. A significant improvement in risk-adjusted performance for more challenged parts of the fixed income market, like emerging market debt, may have to wait until the overall outlook and risk sentiment is significantly improved. An end to the Ukraine war and a recovery in the Chinese property

market would be welcome developments for emerging market debt.

The Q4 equity market rally was chiefly driven by expectations of peak inflation and rates but it needs to be judged against a deteriorating earnings outlook and in an environment where interest rates are going to be higher than they have been for years. These will remain headwinds for stocks for some time. Even after the significant de-rating already seen, stock markets are still vulnerable to the expected earnings recession.

A balanced outlook

There is the potential for some sector and style rotation going forward. Energy stocks have outperformed on the back of high oil and gas prices. Historically, however, energy sector earnings are more cyclical and with lower long-term growth potential than the more dynamic new economy sectors which have been most impacted by the market de-rating.

The long-term outlook for traditional energy companies is challenged by the momentum of the energy transition. Sure, prices may remain high but this is not guaranteed if growth undercuts energy demand or if there are new developments on the supply side (an end to the war in Ukraine; a return of Iran to global oil markets). At the same time, a new corporate investment cycle will eventually benefit technology and automation while government policies are more focused on energy efficiency and healthcare.

It is not unheard of to have consecutive years of negative equity returns. However, I believe the outlook is more balanced; earnings are under pressure but valuations more attractive. Outside of the US, markets have seen significant declines in price-earnings multiples. European markets, for example, would be well placed to rally should there be positive developments in Ukraine. Asia will benefit from a post-'Zero-COVID' recovery in China. Long term, however, the US valuation premium is not likely to be challenged given the dominance of US technology, a greater level of energy security and more positive demographics. In the near term though, some highly-priced parts of the US market remain vulnerable.

Global tightening forced a revaluation across asset classes. Cash flow expectations have been challenged and investors should be less confident about capital growth strategies as we enter 2023. Bond returns should improve relative to volatility and parts of the equity market are becoming cheap. As 2023 unfolds, there should be more clarity on the macro outlook. This should support positive, albeit prudent, portfolio return expectations.



Summary – Recessions likely amidst global realignment



David Page
Head of Macro Research
Macro Research – Core Investments

Key points

- We expect inflation to fall back towards target over the coming two years as global growth slows, with recessions forecast in both Europe and the US
- The Ukraine war and wider geopolitical tensions are causing a realignment of energy and wider supply chains tracking broad geopolitical contours
- Inflation looks set to fall but pressures on government finances have created social strains
- Structural changes from an ageing workforce and post-pandemic effects add to the uncertainties

Previous shocks continue to pose threats

Our outlook and expectation for 2023 and 2024 is to finally see inflation retreat towards central bank targets against a backdrop of soft global growth, with recessions in Europe and the US, alongside a lacklustre recovery in China, before a slow recovery emerges in 2024. We recall that two of our last three Outlooks were rewritten within months of the new year. The first after COVID-19, which had not even been identified as we went to print; the second after Russia's invasion of Ukraine, which added further impetus to inflation from disrupted energy and food markets (Exhibit 2). Chastened by both experiences, we cautiously consider the risks around this year's Outlook.

The pandemic led to the wildest swings in GDP on record. The most obvious present threat from COVID-19 is in China. China's initial success in containing the virus has been followed by slow preparation towards living with it. It recently announced measures to tackle this by accelerating vaccination rates and increasing medical capacities. But it is doing so against a renewed outbreak, which still threatens interim restrictions. The trade-off between loosening restrictions and increased vulnerability will persist and likely weigh on Chinese activity across 2023. However, COVID-19 remains a global risk as the threat of immunity evading mutations still exists — this is difficult to quantify risk, but we assume it is easing.

The war in Ukraine continues but recent Ukrainian successes in the East and South highlight the unpredictable nature of the conflict which some had thought Russia would quickly win. As Russia conscripts hundreds of thousands to the region, an end does not appear in sight. Moreover, there are risks that it could

even escalate, either accidently or with Russia threatening the use of nuclear or chemical weapons.

Geopolitical risks are not restricted to Europe. Tensions between the US and China have worsened in recent years. Recent talks between Presidents Joe Biden and Xi Jinping offer hopes of arresting a further deterioration. Taiwan remains a key source of tension. The US has also imposed significant restrictions on the export of high-end technology to Chinese companies perceived as colluding with the military. In practice, this casts the net widely and with the US pushing for third-party enforcement, this could materially restrict Chinese access to semiconductor technology. This risks impacting China's potential growth and it could also have a broader impact on global trade. Yet combined with a post-pandemic realignment of global supply chains, including a mix of on-shoring, near-shoring or friend-shoring, there is a marked uncertainty over the scale and impact of any deglobalisation.

Exhibit 2: Russia invasion boosted inflation Oil and wheat price



A global realignment of energy supply is already underway, along the lines of broad geopolitical contours. Europe faces the end of cheap and plentiful natural gas supply, a constraint likely to drive it into sharp recession this winter. Without the swift installation of additional liquefied natural gas (LNG) import capacity, this will also impact next winter. LNG terminals are also being pushed to their limits, with US and European facilities run at materially higher load factors than before, with associated risks e.g., the explosion at the US Freeport terminal. Europe is also about to impose a ban on Russian oil, with the US to implement a price cap. Both risk uncertain reactions.

The outlook for energy markets also depends on the weather. A mild start to the Northern Hemisphere winter should help Europe. This is consistent with a *La Niña* weather system over the South-Eastern Pacific, which is entering its third year and often sees milder European winters. This will, however, also drive torrid weather conditions elsewhere. Moreover, climate



change is driving trend temperatures higher but also increasing weather extremes. This will affect energy but will also have a profound impact on food production.

Inflation, government pressures and elections

Inflation has been the most obvious consequence of additional supply shocks. We expect inflation to ease from the start of 2023. Disinflation will vary from country to country, reflecting different economic conditions and local norms in terms of expectations and pass-through. Meanwhile, persistently high levels of inflation are having material societal impacts. In developed economies inflation is draining government finances, requiring public belt tightening, which can lead to social unrest. For emerging markets (EM), food and energy inflation have a more direct impact on overall price levels and historic periods of EM social turbulence have occurred during times of high inflation.

Governments face increasing strain over the coming years. EMs are impacted by tight global financial conditions, particularly an elevated dollar. Some 'frontier' economies have already fallen into financial crisis, with several appealing to the IMF. This will likely continue in 2023. Larger EM economies face the same risk, but we but do not see a systemic EM crisis evolving. Risks are not confined to EMs. The UK saw its fiscal sustainability questioned in 2022 and requires severe austerity over several years to restore fiscal rectitude. Many European states have a worse starting point and markets will monitor developments closely as the European Commission negotiates medium-term debt strategies with these countries.

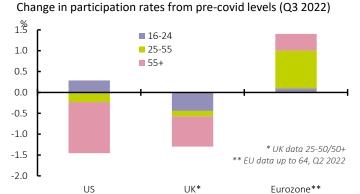
The electoral timetable does not suggest significant political change over the coming years. We think Turkish elections in June 2023 could present further financial stability challenges. In developed markets, after Northern Ireland Assembly Elections expected in 2023, the UK faces a General Election in 2024. Current polls suggest a change of government, but with both parties having recently moved towards the political centre, this election promises to be the least economically damaging in over a decade. US Presidential Elections will be held in November 2024. Midterm elections further damaged former President Donald Trump's standing, but he has still announced that he will stand for re-election. President Biden's better midterm performance would help his cause, but it is not obvious that he will seek a second term. Uncertainty thus surrounds both parties' nominees for the 2024 elections.

Forecasting uncertain amidst structural change

Most importantly, these developments take place amid ongoing structural changes, including shifting demographics – ageing in key economies – and post-pandemic reorganisation (Exhibit 3). We predict unemployment will rise across Europe

and the US in 2023 but not as sharply as previous downturns. In part this reflects the particular tightness in the labour market and an expectation that falling vacancies, rather than job losses may do more to loosen the market. In part it reflects the withdrawal of labour supply as a result of both the pandemic and ageing. The combination has been a long-term headwind to potential growth which we expect to persist into 2023.

Exhibit 3: Labour supply reacts differently across regions



Source: BLS, ONS, OECD and AXA IM Research, 23 November 2022

We expect recessions in Europe's economies, driven by the energy shock. We also forecast a mild recession in the US – more a consequence of tighter financial conditions in response to excess inflation pressures. We expect China's growth outlook to remain relatively subdued, forecasting another contraction in Q1 GDP as COVID-19 restrictions make an impact again. We forecast global growth of 2.3% in 2023, compared to IMF forecasts of 2.7%, and only expect 2.8% in 2024.

Central banks quickly tightened policy as inflation rose in 2022, but this poses risks for 2023. Forward-acting monetary policy tools employed using backward-looking data are a recipe for over-shooting. Some central banks appear to be shifting to a more forward-looking approach, led by the Bank of England (BoE), but with a noteworthy shift from the Federal Reserve. The onset of recession in many economies should soon mark the peak in interest rates although persistently resilient labour markets are an upside risk. Across Europe, we forecast peaks at lower rates than markets expect.

We are also cautious that inflation may take longer to moderate than markets consider, likely deferring future easing in the monetary stance to 2024 for most. In EM, Latin American countries quicker to tighten could begin easing later in 2023, including Brazil, Peru and Chile. In developed markets, the BoE may be among the first to ease, perhaps joined by the Bank of Canada if the housing market reverses more sharply than we expect. Rate policy may also be affected by balance sheet policy, all but relegated to background noise by many central banks, but we think it is likely to have more visible impact across the course of 2023.



US – Mild recession to see inflation fall



David Page
Head of Macro Research
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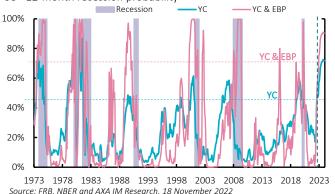
Key points

- The US economy appears to be heading for recession
 we expect it to contract in the first half of 2023.
- Any recession looks set to be mild, though our GDP outlook of -0.2% and 0.9% for 2023 and 2024 is lower than consensus.
- The fall in output should loosen the labour market and alleviate inflation pressures. We forecast inflation to fall sharply albeit a little slower than consensus.
- Interest rates appear close to a peak we estimate
 5% and are likely to remain at that level until 2024.

Recession or not?

The question facing the US is whether or not the economy will tip into recession. Our view since the summer has been that it will, and we now expect a recession starting in early 2023. Pinpointing dates is difficult, as recessions typically reflect the concerted reactions of consumer spending, hiring, investment and inventory – often influenced by external events. Recession in Europe, prompted by the energy shock as a result of the Ukraine crisis, will be a headwind to domestic activity – though we believe domestic dynamics will drive the US contraction.

Exhibit 4: Recession over next 12 months seen as likely US - 12-month recession probability



Our recession probability model suggests recession over the coming 12 months (Exhibit 4). As usual, this has preceded declines in survey evidence, for now simply suggesting deceleration. Two factors add to our conviction: First, inventory has risen sharply since the pandemic. The nature of GDP accounting – measuring the change in change of inventory –

means that if inventory grows at a slower pace, as it is now doing, it weighs on activity. Recessions are typically driven by reversals in inventory. Second, downward revisions to the saving rate in the latest GDP release add to our view. These suggest households drew more heavily on savings to finance spending in 2022. This illustrates the strain on real incomes and suggests household buffers against future pressure are smaller.

For now, unemployment remains a subdued 3.7%, indicating the economy is not yet in recession. The Sahm rule – that observes that a 0.5 percentage point rise in unemployment over 12 months is a good indicator of recession – has not been met, though we forecast this for next year. We also see recession as consistent with the tightening in financial conditions, which has been sharper than the Federal Reserve (Fed) usually delivers in tightening phases – indeed, the sharpest since the 2001 and 2008 recessions.

A mild recession but growth below consensus

We forecast a mild recession, with a combination of weaker consumer spending, business investment and inventory adjustment resulting in GDP falling in Q1 to Q3 2023. Thereafter, we anticipate a return to growth but the expected sluggish fiscal and monetary policy responses are likely to drive only a modest pick-up, reflecting the end of the inventory adjustment, a recovery in real disposable income and firmer business investment.

The investment outlook will likely be critical. Corporate profit growth is likely to decelerate and fall outright throughout 2023 as energy, unit labour and finance costs rise and firms reduce profit margins. This is likely to lead to a fall in investment. However, energy investment should rise gradually – part of a global realignment of energy supply – which will help raise business investment by end-2023 and into 2024. Residential investment will also be important. This interest rate-sensitive category has reversed quickly from pandemic highs and is expected to still fall across 2023, though not as quickly.

We forecast GDP to fall from 1.9% in 2022 to -0.2% in 2023, including a mild recession, before rising to 0.9% for 2024. This is below the current consensus outlook of 1.8%, 0.4% and 1.4%.

We consider a number of upside risks. Energy could boost growth further, exceeding our cautious energy investment outlook, or contributing more through liquified natural gas exports. The labour market could continue to surprise in its resilience. We expect a small rise in unemployment to 4.5% by end-2023 but back to 4.2% by end-2024; more loosening may occur from falling vacancies than actual job losses. We assume a somewhat slower fall in inflation but if this occurs more in



line with consensus, the boost to disposable income may be greater. The boost from pandemic savings may also be larger.

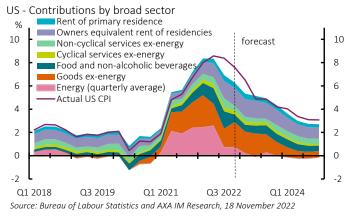
But there are also downside risks. We anticipate a relatively mild inventory correction compared to previous recessions, assuming recent supply chain issues create a higher demand for inventory, but a downturn may still force firms to scale back. Delayed policy stimulus could weigh more on the outlook, alongside the risk of a further tightening in financial conditions. We still envisage a modest rise in labour force participation, despite Congressional Budget Office projections to the contrary – overall, we consider the risks to be evenly balanced.

Inflation to fall but slower than markets forecast

Inflation has been the biggest surprise this year. We forecast an average 8.2% for 2022 – double the rate we forecast a year ago. The Russian invasion of Ukraine accounted for much of that. However, unexpected labour market resilience has led to ongoing pressure in shelter and services inflation. With our outlook for a modest labour market correction, we forecast a slower fall in these components in the coming quarters.

We expect a sharp drop in inflation in 2023 and 2024, to average 5.1% in 2023 (4.2% in Q4 2023) and 3.4% in 2024 (3% by year-end) (Exhibit 5). However, consensus expectations are for inflation to average 4.2% next year and 2.4% in 2024.

Exhibit 5: Inflation to fall, but more slowly than consensus



Fed close to peak but far from cut

With higher inflation and a resilient labour market the Fed tightened aggressively this year. The Fed Funds Rate (FFR) stands at 3.75-4.00% at the time of writing, and as we had expected for some time, Fed Chair Jerome Powell has suggested it could moderate the pace of hikes from as soon as December. We also expect the Fed to tighten more slowly – by 25bps – in February and March next year. We forecast 4.75-5.00% as the peak but contend that labour market developments, rather than inflation, are likely to be critical. If

the labour market remains tight, the Fed could tighten further, while a loosening could see a lower peak.

Our expectation of a slower fall in inflation makes us cautious of how soon the Fed will reverse policy. With core inflation expected well above target and a controlled labour market loosening, we expect the Fed to keep rates on hold at 5% throughout next year, against market expectations for a cut. We expect the Fed to begin cutting rates in 2024 and forecast an end of year rate of 3.75% (markets predict 3.50%). This would fall short of the 5% cuts seen during previous recessions (other than the pandemic). However, a mild recession, where unemployment looks set to remain relatively low and inflation still high, should warrant a more cautious easing in policy.

Caution also applies to the impact of the balance sheet. The Fed is conducting quantitative tightening (QT) at a far faster pace than before, but Powell suggested a minor impact — perhaps equivalent to a 25bp FFR hike per year. While highly uncertain, we think the QT impact has been exacerbated by the parallel large build-up of reverse repo holdings on the Fed's balance sheet. The combination has squeezed excess reserves far faster than could have been anticipated. This may unwind next year. If it doesn't, we expect the Fed to halt QT around mid-year, earlier than expected. If it does, a fast unwind could boost excess reserves and ease financial conditions further. Either could impact the outlook for rates.

Political outlook: From midterm to long term

As we write, the final midterm election results are still unknown. As expected, Republicans look likely to regain a majority in the House but by a small margin. As we suggested the Senate was tougher and Democrats have held the majority even before the last race in Georgia is decided on 6 December.

A divided government will mean policy gridlock, with no major bills likely to pass over the next two years. This could have an additional impact on a recession because, unlike Europe, the US relies on discretionary fiscal relief, rather than automatic fiscal stabilisers, to mitigate a slowdown. A divided government risks a slower and smaller stimulus. Tensions may also arise around spending bills and the extension of the debt ceiling.

The bigger impact may be on the 2024 Presidential Election. Donald Trump has announced he will stand for re-election but Trump-backed candidates did not fare well in the midterms, weakening his standing. President Joe Biden did better than his approval ratings suggested. As inflation falls with unemployment forecast around 4% by end-2024, the economy may work in his favour. But it is not obvious to us that the President will stand for a second term, which could mean two new candidates for 2024.



Eurozone - Difficult roads ahead



François Cabau, Senior Economist (Euro Area) Macro Research – Core Investments



Hugo Le Damany, Economist (Euro Area) Macro Research – Core Investments

Key points

- We expect Eurozone GDP to contract by 1% between Q4 2022 and Q1 2023, followed by a weak recovery
- Limited labour market ramifications imply persistent (core) inflationary pressures
- We forecast ECB deposit facility rate (DFR) to peak at 2.5% next March and an initial gradual partial APP unwind from next April
- Markets have yet to fully grasp public debt sustainability issues

Growth's swan song

Eurozone GDP grew by 0.2% quarter-on-quarter in Q3 2022, remaining resilient despite increasingly alarming forward-looking surveys. We think this resilience is mainly due to three factors: ongoing positive impetus from COVID-19 reopening, resulting in a swifter-than-expected convergence to more normal savings behaviour and strength of gross disposable income underpinned by a strong labour market.

Amid a highly uncertain macro environment, we think a grim outlook lies ahead. Constrained energy supply and faltering demand are likely to push the Eurozone into a marked recession this winter while a changing economic structure and tight monetary policy will lead to a sub-par recovery. Monetary policy dominance will generate increasing worries about public debt sustainability, while the future of European Union (EU) fiscal rules and the Next GenerationEU (NGEU) package are likely to bring additional political and policy challenges.

An inevitable recession

We have revised up our GDP forecasts slightly, though continue to project the Eurozone economy will contract led by energy (gas) supply constraints (and/or elevated prices) and weakening demand from a historic terms-of-trade shock. However, higher levels of gas storage during a warmer autumn mean severe output disruptions are less likely. We now expect Eurozone

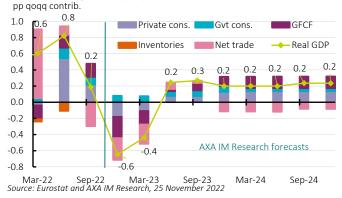
GDP to contract by 1% (from -1.4% previously) between Q4 and Q1 2023 where both domestic demand and net trade are likely to contribute in tandem (Exhibit 6).

Although Germany is making good progress shifting its energy mix away from Russia, the latest data confirms our initial assessment that it is likely to be the most affected of the large Eurozone countries¹. But indirect (trade) effects imply other countries are unlikely to escape contraction.

A weak recovery

We think the recovery will feature three key characteristics. First, the seasonal nature of the supply disruption implies that when capacity comes back online, it will swiftly translate into a bounce in economic activity — whether to fulfil demand or for stock building purposes. This is likely sooner rather than later in Germany, thanks to the implementation of energy price caps from March and an expected China pick-up, as shown by a positive net trade contribution to growth (Exhibit 6).

Exhibit 6: A grim growth outlook
Eurozone GDP growth by expenditure



Second, the seasonal nature of the shock coupled with supportive fiscal policy should avoid a full economic cycle adjustment. In other words, we expect only a limited 0.7 percentage point (ppt) unemployment rate rise to 7.2% in late 2023 enabling demand to recover modestly, especially when inflation softens while wage growth accelerates. Our models suggest that negotiated pay growth (excluding bonuses) will reach around 4.5% year-on-year from Q2 2023 and surpass inflation which will recede to 2.5% in Q4 23, mainly owing to negative base effects from energy (more below). Furthermore, the NGEU should is likely to support investment despite tight monetary policy, which will keep the recovery pace below potential.

 $^{^1}$ Page, D., Le Damany, H., Cabau, F., Topa-Serry I. and Adegbembo, M., "The economic impact of a Russian gas cut-off", AXA IM Macro Research, 30 Sept 2022



Third, mending the supply side of the economy – changing the energy mix (especially for Germany) and securing supply chains – is a process that will likely take years. While uncertainty runs high, we think the quantum and/or price adjustment will result in a permanent supply shock. The European Commission has estimated Eurozone real potential growth between 1.1% and 1.2% since 2015 on average, consistent with a 0.3% quarterly growth rate. Reflecting the persistent constraints the economy will face, we have pencilled in 0.22% quarter-on-quarter on a sequential basis through 2024. We do not expect the Q3 2022 GDP level to be recouped until Q2 2024.

No swift end in sight for ECB's hawkish bias

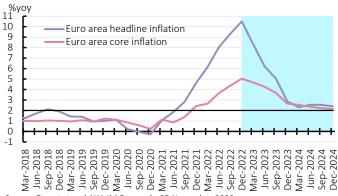
We continue to project headline and core inflation to peak in Q4 2022 at 10.8% and 5% (annual) respectively. The former is poised to recede swiftly owing to negative energy base effects, fiscal measures and an increased inability to pass through input costs as demand falters this winter. We project headline inflation to drop by around 2ppt year-on-year each quarter, ending 2023 at 2.5%, consistent with a 5.6% annual average next year (8.6% this year). In 2024, an unwind of fiscal measures and likely persistent issues with supply will push energy prices moderately higher, to a 2.4% headline average.

We project a more moderate core inflation retracement of c. 0.6ppt on average for each quarter of next year, mainly coming from non-energy industrial goods, while services are likely to prove much more 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, only 0.1ppt lower than this year, and stabilising above the ECB medium term inflation target at 2.3% in 2024 (Exhibit 7).

The ECB raised its DFR by 200 basis points (bps) in just three meetings this year, to 1.5%. We, and the market, expect an additional 50bp rate hike in December. With inflation expected to fall and policy moving towards restrictive territory, frontloading is likely behind us, but it does not mean an end to hawkishness altogether. We think the ECB is likely to shift to 25bp increases in February and in March to reach 2.5%, which would be some way below the peak rate the market is pricing of 2.9% in mid-2023 – yet still in restrictive territory.

The ECB's policy focus is likely to switch to Asset Purchase Programme (APP) unwind next year. Prior to high level guidelines to be communicated at the December meeting, we think the ECB is unlikely to make a concrete decision on a path before its March 2023 meeting at the earliest. We expect gradual, partial reinvestment, before picking up the pace towards year-end, mindful of already high sovereign funding rates, high public indebtedness and record expected net issuance next year. Although peripheral bond spreads have behaved well so far, we caution against complacency.

Exhibit 7: Challenging landing at ECB's inflation target Eurozone inflation outlook



Source: Eurostat and AXA IM Research, 25 November 2022

Crunch times for Eurozone ahead

The past decade of falling interest rates has allowed the Italian debt management office to lower the implicit interest rate on public debt to 2.4% in 2021, maintaining debt maturity to seven years while Italian public debt jumped to 151% of GDP in 2021. Thus, there are some strong firewalls against public debt trajectory rising uncontrollably within the next couple of years, including the fiscally conservative first steps of the new government. A continuously decreasing share of non-resident bond holders (under 30%) has likely also helped limit market pressure so far.

However, we think there is likely increased market stress ahead. First, there is a clear risk of public deficits overshooting next year owing to optimistic government growth forecasts and the possible need to extend energy measures. Second, the Italian government has yet to implement any of its electoral pledges (worth 2%-4% of GDP). Third, our baseline forecasts are consistent with a primary surplus worth 2.1% of GDP to stabilise the public debt-to-GDP ratio in 2024 – a high bar. Fourth, although gradual, the ECB's unwind of the APP would reduce its high share of holdings (26%). Finally, there are significant challenges to reaching an agreement on future fiscal rules after the EC issued initial guidelines, which could be detrimental to fiscal credibility.

After general elections in Greece, Finland and Spain next year, the European Parliament will be up for renewal in spring 2024. By then, we will have more experience of enhanced mutualised debt in Europe with NGEU in the last third of its expected life. Alongside heightened market pressure from challenging public debt trajectories, EU institutions will likely face a renewed crunch time amid ever-polarised voters.



UK - Navigating troubled waters



Modupe Adegbembo
Junior Economist (G7)
Macro Research – Core Investments

Key points

- We expect the UK economy to enter recession this year and forecast GDP growth to average 4.3% in 2022, -0.7% in 2023 and 0.8% in 2024
- Inflation should begin to gradually retrace in 2023, falling towards the BoE's 2% target in 2024
- Interest rates are likely to peak at 4.25% in Q1 2023, but we expect to see the BoE begin to cut from Q4 and across 2024 to end the year at 3%
- Political developments remain important, in particular the Northern Ireland Protocol negotiations remain a risk.

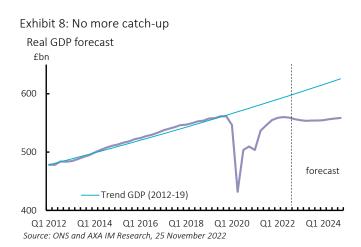
Recession to give way to sluggish recovery

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, and declines in business and residential investment. We expect this to last around four quarters with a peak-to-trough decline of 1%. Following this, we expect inflation to retrace and alleviate real incomes pressures and for consumption to slowly recover. The slowdown is apparent in levels terms (Exhibit 8) with GDP remaining around its prepandemic level. 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 seen unemployment remain low and kept the labour market tight. We see unemployment rising steadily over 2023 and 2024 to peak at 5% towards the end of 2024. We see unemployment averaging 3.6% in 2022, 4.5% in 2023 and 4.9% in 2024.

Energy effects to fade slowly as fiscal stance tightens

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 Consumer Price Index inflation to average 9.1% in 2022, 7.6% in 2023 and 2.8% in 2024 (consensus 9%, 6.3% and 2.5%).



The Government outlined plans for a sharp fiscal consolidation over the next six years, announcing measures totalling a net £62bn in tightening, despite the impact of energy price caps and recession. This reduces the deficit by £55bn through cuts in spending and increases in taxes. However, energy caps and other cost-of-living top-ups sees the fiscal stance loosen this year, compared to a planned tightening in March. It will now tighten less sharply next year, and the bulk of the tightening now takes place in 2024-2025 and beyond.

BoE first in, first out

The Bank of England (BoE) has increased interest rates by 300 basis points (bps) but the end appears in view. We expect it will increase rates by 50bps in December and February, and 25bps 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 see the BoE consider loosening policy. We anticipate 25bp cuts in each quarter starting in Q4 2023 bringing rates to 3% by Q4 2024. The precise timing is likely to depend on the scale of labour market adjustment.

Counting down to 2024's General Election

Negotiations between the European Union and UK on the Northern Ireland (NI) Protocol have resumed as the Government tries to avoid another election in NI. We think second NI Assembly elections by April are likely as the Government seems unlikely to resolve the deadlock. Local elections will also be held in May 2023 but a General Election should be held in 2024. Opinion polls currently suggest a Labour win. However, in contrast to recent elections, both main parties have been forced back to the political centre ground and economic orthodoxy, meaning the next election should be the least economically damaging for a decade.



Canada – Slower activity but avoiding recession



David Page
Head of Macro Research
Macro Research – Core Investments

Key points

- Canada's GDP growth looks set to slow to a below-consensus 0.3% in 2023 and 1.1% in 2024 (from 3.3%). We expect the economy to avoid recession, but see stagnation from end 2022 to mid-2023
- Inflation should fall to average 4.3% next year and 2.4% in 2024 (from 6.8% this year)
- The Bank of Canada appears close to a peak which we forecast at 4.25% in January, a little sooner than markets. We expect policy to be kept on hold through 2023 before rate cuts to 3.25% by end-2024.

Marked slowdown, but recession should be avoided

Canada looks to be on track to post solid growth in 2022 - we estimate 3.3%. Yet the bulk of this reflected a re-opening from lockdown restrictions in early 2022 and growth has been more subdued since. We expect it to get tougher still. Our forecasts suggest Canada should avoid recession, instead forecasting stagnation from end-2022 to mid-2023 (Exhibit 9), with growth gradually rising later in 2023 and into 2024. Our 2023 and 2024 forecasts are for 0.3% and 1.1%, below consensus forecasts of 0.6% and 1.7% respectively.

Exhibit 9: Canada faces stagnation rather than recession Canada - GDP Growth and outlook



The slowdown is likely to be driven by three main factors: exports, destocking and tighter financial conditions. Export growth is likely to weaken as the global economy is forecast to slow to just 2.2%, with key export markets (the US and Europe) expected to be in recession or suffering subdued growth (China). Some of this should be mitigated by Canada's resource

exports but we see a fall in 2023. Inventory has also risen sharply, particularly in Q2, and threatens a marked reversal.

Tighter financial conditions will also impact. Consumer spending, dampened by weak real incomes, will come under further pressure as mortgage costs rise. The impact on residential investment should also be marked with home sales falling sharply across 2022 and house prices facing a sharp correction next year. We also expect investment to fall as corporate profits slow. In total, we see growth around flat from Q4 2022 to Q2 2023 with housing a downside risk.

Inflation to fall

Inflation fell to 6.9% in October, from an 8.1% peak in June. We expect a more material easing over the next two years, due to a fall in energy price inflation and a supply chain recovery easing goods price inflation. The speed of the fall will also reflect the house price adjustment - expected to be material next year. We forecast inflation averaging 4.3% in 2023 (from an expected 6.8% in 2022) and 2.4% in 2024. This is a slightly slower drop than market forecasts of 3.5% and 2.1%.

Labour market developments will have a key bearing on inflation. The labour market is still tight, with unemployment at 5.2% in October. Employment declined successively until September but surged by 108k in October. We expect employment to fall over the coming months with a rise in unemployment to 6.7% by end-2023 and above 7% in 2024. This is consistent with some recovery in productivity growth. Absent this, high unit labour costs may keep inflation firmer.

BoC sooner to peak, sooner to cut?

The Bank of Canada (BoC) slowed its tightening, hiking by 50bps at its latest meeting. The labour market outlook, more than the inflation outlook, is critical. If employment falls as we expect, the BoC is likely to hike by 0.25% in December and 0.25% in January, taking the overnight lending rate to 4.25%. We expect this to be the peak, a little below market expectations, but further labour market resilience could require a higher rate.

Weak growth, a rising output gap and falling inflation would all be consistent with the BoC having to cut beyond this point. Given efforts to curb inflation, we expect the BoC will keep policy tighter for longer to ensure a return to target in 2024. As such, we expect the BoC to remain on hold through 2023, cutting in 2024 by 0.25% per quarter to 3.25% by year-end. A sharper contraction in the housing market might see the BoC ease rates sooner.



Japan – Recovery appears set to continue



Modupe Adegbembo
Junior Economist (G7)
Macro Research – Core Investments

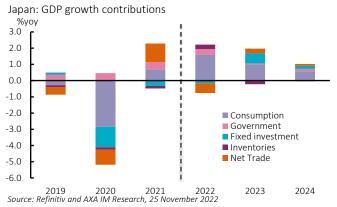
Key points

- Japan's economy looks set to remain robust we forecast GDP growth of 1.6%, 1.7% and 1.3% in 2022, 2023 and 2024 respectively
- Wage pressures are rising and evidence of firms passing on cost increases are growing
- We expect the BoJ to remain on hold in 2023, but positive shifts in pricing norms could see yield curve control adjusted in 2024
- The next BoJ Governor expected in April 2023 could signal a shift in approach.

Recovery set to continue

The recovery of the Japanese economy looks set to continue. Growth should be supported by the delayed reopening of the economy from COVID-19 and a recovery in tourism, with the borders of the country now fully open to overseas visitors. The positive growth momentum will be tempered by slowing external demand – we expect recession in Europe and the US and below-trend growth in China in 2023. In 2024 we expect Japan to continue catching up to its pre-pandemic trend (Exhibit 10). We forecast GDP growth of 1.6%, 1.7% and 1.3% in 2022, 2023 and 2024 respectively (consensus 1.5%, 1.3% and 1.1%).

Exhibit 10: Growth continues to recover



Inflation spike to fade, but price pressures growing

Inflation is set to remain above the Bank of Japan's (BoJ) target in the near term with a weak yen adding to inflationary pressures. Core Consumer Price Index (CPI) inflation (which excludes only fresh food) is on the rise and likely to peak this quarter. 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 companies becoming more willing to pass on price increases to their customers provides some upside risks. We expect CPI inflation to average 2.4% in 2022, 2.1% in 2023 and 1.3% in 2024 (consensus 2.3%, 1.6% and 1.0%). That said, the outlook is for inflation to fall back below the BoJ's target, with having just risen above target due to extreme external pressure, and far short of elevated inflation across the globe.

Wage dynamics in Japan appear to be improving but do not yet suggest a significant shift in Japan's pricing norms and spring wage negotiations will be key. Rengo, Japan's largest Trade Union confederation, confirmed it will request a total pay increase of 5% but final results tend to come in below Rengo's target – in 2022 Rengo aimed for total pay increase of 4% and achieved 2.2%.

BoJ: The last dove standing

The BoJ continues to emphasise wage growth as a necessary condition to changing its ultra-accommodative policy stance. This has remained the philosophy under Haruhiko Kuroda's governorship, but things may change following the appointment of a new Governor in April 2023. Deputy Governor Masayoshi Amamiya and ex-Deputy Governor Hiroshi Nakaso are seen as frontrunners. Nakaso is widely seen as more in favour of reducing monetary stimulus and his appointment would raise the risk of a change in policy from Q3 2023 after the spring wage negotiations. We currently still do not expect the 2% inflation target to be achieved in a sustainable manner during our forecast horizon, but we expect the post-Kuroda BoJ to adjust the ultra-accommodative yield curve control (YCC) policy after taking into account recent inflation, shifts in expectations and a gradual rise in wages.

In terms of timing, we believe a decision to change BoJ policy is unlikely before the spring 2023 wage negotiations. But weaker global economic conditions could see the BoJ proceed cautiously and only tweak policy early in the following year when external conditions improve. In addition, we expect the BoJ to wait for clearer evidence that underlying inflationary pressures are growing and to see if core inflation remains above previous levels once the energy shock dissipates. We expect the BoJ to shift the YCC target of around 0% plus or minus 25 basis points (bps) on 10-year Japanese government bond yields to +/-40bps and to make this move in early 2024. Yet this is a finely balanced call and we see risks skewed to the BoJ remaining on hold throughout 2024.



China – A bumpy path to reopening



Aidan Yao Senior Economist (China) Macro Research – Core Investments

Key points

- China's economic outlook continues to hinge on the path of the pandemic and Beijing's response
- We expect the authorities to pave the way for a reopening, but that path will be bumpy and uncertain
- Falling exports partially offset by a less bad property market – call for continued policy accommodation

COVID-19 response fails to keep up with virus

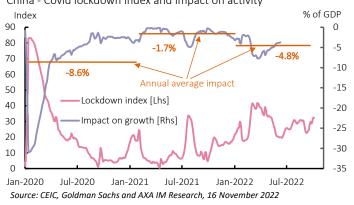
Three years into the COVID-19 pandemic, while most countries have exited emergency responses, China remains wedded to a rigid containment strategy. 2022 was a particularly difficult year for the Chinese economy, with the impact of rolling lockdowns exacerbated by a collapsing housing market and stiffening external headwinds – manifested in rising food and energy prices, escalating geopolitical tensions, and tightening global financial conditions. Beijing has tried to mitigate these shocks by easing counter-cyclical policies and finetuning its COVID-19 response after the Shanghai debacle. But those moves have failed to prevent a steep decline of economic growth. With annual GDP gains expected to more than halve to about 3% from 8.1% in 2021, Beijing is set to miss its growth target for the second time in three years.

The outlook for the economy will continue to hinge on the evolution of the pandemic and Beijing's response. Continuing with draconian controls against repeated COVID-19 flare-ups will likely prolong the economic stress, creating permanent scarring in the economy and society. The housing market remains a wild card, as it struggles to find a bottom against depleting homebuyers' confidence and acute financial stress among property developers. Exports – once a strong engine of growth – have also started to sputter and will likely lose further steam as developed economies fall into recession. These challenges will complicate Beijing's counter-cyclical policies and make next year's outlook more uncertain than usual. Below, we explain in detail these four drivers of the economy and the risks to our assessment.

Changing tack to reprioritise the economy

Starting with the pandemic, developments over the past year have likely brought two revelations to Beijing. First, the virus is unlikely to disappear any time soon, and could continue to mutate turning the pandemic to endemic, which may already be the case outside China. Second, and related, the medical response has to adapt for a long fight against a constantly changing enemy. The brutal lockdown in Shanghai, which brought China's largest city to a standstill, was a painful lesson that achieving zero infections against a highly transmissible virus will inflict tremendous economic and social costs (Exhibit 11). Calls for an exit from the Zero COVID Policy (ZCP) have since grown as China becomes isolated from the rest of the world.

Exhibit 11: Economy at the mercy of the pandemic China - Covid lockdown index and impact on activity



Beijing's reluctance to change is likely a result of three considerations. Medically, China is not ready to exit the ZCP with a low immunity rate among its vast population and limited medical resources, which could prove insufficient to deal with increased severe cases upon reopening. Economically, the ZCP had been seen as a success not long ago for contributing to China's growth outperformance and gains of export market share before this year. Finally, altering a policy, extolled as an emblem of China's superior governing system ahead of a oncein-a-decade leadership reshuffle, was seen as unwise politically.

These arguments, however, have been weakened by recent events. The economic calculation has clearly shifted, reflected by the higher costs of tackling Omicron compared to the Alpha or Delta variants. Meanwhile, the conclusion of the 20th Party Congress has helped remove a major political uncertainty and refocus the party's attention on its core objective of delivering growth and prosperity. The remaining hurdle is weak medical defences. Hence, moves to build such a defence should be seen as preparation for an exit from the ZCP.

Our baseline view for 2023 rests crucially on the assumption that the ZCP will be adjusted for an eventual reopening of the economy. We see this proceeding in three phases. Phase one focuses on getting the public medically and mentally ready for a change. This involves raising the vaccination rate (particularly for the elderly), introducing antiviral drugs, constructing more



field hospitals, and reshaping public consensus to ease people's fears of the virus. These changes are already underway and the latest announcement from Beijing of 20 measures to fine-tune the COVID-19 strategy suggests more is to come. Phase two puts the emphasis on reopening the domestic economy by easing social and mobility restrictions, reducing mass testing, and abandoning the frequent use of 'static management'. A broad liberalisation within China is assumed to be reached by the middle of next year. The final step is to open the border with the rest of the world through successive reductions of quarantine restrictions for visitors.

It is important to reiterate our long-held view that no official announcement on ending the ZCP will be given until, perhaps, full liberalisation is achieved. But under the ZCP banner, we see the emphasis shifting from achieving zero infections at all costs to 'dynamically adjusting' the strategy to reprioritise economic normalisation. Investors therefore need to pay more attention to what Beijing does than what it says.

There is however considerable uncertainty around this baseline view. It is entirely possible that the fear of exposing China's vast unvaccinated population to a virulent virus continues to hold Beijing back from reopening. And even if the ZCP is adjusted, the path could be bumpier than hoped. Too slow a change will do little to save the economy, while too fast an exit could lead to surging infections and hospitalisations that overwhelm the public health system. The ensuing social backlash could set back the reopening and economic recovery. We have built a cautious forecast – including a negative quarter of growth followed by only a partial recovery – to account for potential hiccups in this transition, but the actual path ahead could be bumpier still.

Property and exports switch sides

Besides the pandemic, the ongoing property market turmoil has also rattled the economy and financial markets. Fears of contagion to the household sector and banking system following the mortgage boycott instance – prompted the authorities to ease property policies. But this was barely enough to slow the deterioration of conditions. The good news is that the policy wind has shifted further with Beijing now taking more substantial steps to ease developers' funding stress. The bad news is that there are no easy fixes to the structural imbalances, with an overhang of housing supply in lower-tier cities and excess leverage at many private-sector developers. After abruptly pricking the bubble, Beijing now must manage its fallout. We expect further policy support to stabilise the market next year, helped by easing COVID-19 controls. But there will unlikely be a vigorous rebound of activities until structural challenges are tackled.

The external sector is set to become less supportive of the economy next year. After acting as a solid engine of growth

since 2020, export activity has faltered lately and is expected to contract as developed economies slide into recession. In addition, rising geopolitical tensions between China and the US – notably in the area of advanced technology – could further impact an already soured trade relationship. The loss of this export growth contribution could add to the urgency for Beijing to ease COVID-19 controls to revive domestic demand.

Better transmission improves policy efficacy

The multitude of economic headwinds call for continued accommodation from China's counter-cyclical policies. Compared to this year, policy efficacy may improve in 2023 if easing COVID-19 controls and stabilising property market can help to unclog policy transmission channels. On the monetary side, the room for aggressive easing is limited by concerns about currency depreciation and capital outflows, while tightening is unlikely given the uncertain path of the economy. Incremental policy exit is possible later in the year only if economic reopening proceeds smoothly. Fiscal policy will likely stay supportive too, but Beijing may struggle to repeat some ad-hoc, frontloaded, stimulus implemented this year given the already stretched fiscal balance sheets of local governments. With reduced potential for conventional stimulus, there are few options left to bolster growth other than freeing the economy from the grip of the pandemic.

Exhibit 12: Dissecting our growth forecast for 2023-2024

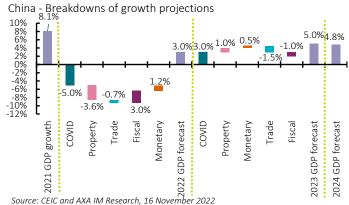


Exhibit 12 shows how our above-consensus 5% growth forecast for 2023 is derived. This is followed by a slight moderation to 4.8% in 2024 as the economy reverts to trend. The biggest swing factor in our forecast is the ZCP, which offers a two-sided risk. However, we consider the chances of inaction, or delayed action, from the authorities as greater than proactive action. In an adverse scenario of China continuing its current pandemic response for another year, we think the economy would suffer from deeper economic scarring and further reduced space for counter-cyclical policy. Annual growth could fall to 3.5% or lower in that scenario even with the help of a low base.



Emerging Markets – Darkest before dawn



Irina Topa-Serry,
Senior Economist (Emerging Markets),
Macro Research – Core Investments

Key points

- Domestic and external headwinds will trigger a marked slowdown in emerging markets, with Chile and Central European countries in recession.
 Recovery should start in the second half of 2023
- External liquidity conditions for frontier markets have materially worsened. High inflation raises the odds of food insecurity and social unrest
- Turkey is walking a tightrope, hoping to avoid a currency crisis before the next elections.

Growth headwinds in EM abound

Economic activity in emerging markets (EM) again proved more resilient than expected through most of 2022, prompting upward adjustments to GDP growth forecasts for the full year. But as we head into 2023, economic activity will be affected by the sharp tightening of financial conditions, while external demand will weaken as advanced economies are expected to slow. China is the brightest part of the EM story, but its COVID-19 re-opening path is fraught and likely to prove less of a driver for EM commodity demand than during past economic recoveries, as it is now more services-oriented.

Policy mixes will be increasingly less supportive, with central banks likely inclined to keep rates higher for longer, similar to expectations from major developed market central banks, while price indexation mechanisms may be an obstacle to disinflation. Brazilian and Hungarian central banks are likely to be the first to pivot by end-2023. Fiscal policy space has been reduced by the exceptional COVID-19 efforts. Additional measures taken to limit the inflation effect on household balance sheets will gradually be removed across 2023-24. All in all, we expect EM (excluding China) GDP growth to decelerate sharply on a sequential basis in Q4 2022 and Q1 2023, and then slowly improve into the second half of 2023 and more so in 2024 as external and domestic conditions normalise.

Rising vulnerabilities for low-income countries

The external backdrop has remained a headwind for EM countries overall, but lower-income countries, usually referred to as frontier markets, have been significantly impacted by tighter global financial conditions, reduced liquidity and a much

higher reliance on external financing. In recent months, Sri Lanka suspended its foreign debt payments, Ghana is expected to restructure its debt to qualify for assistance from the International Monetary Fund, El Salvador experienced high solvency risks, Egypt is striving to cover its balance of payment gap and currency devaluations are looming in Kenya and Nigeria. More broadly, many frontier market governments are forced to rely heavily on external debt which, along with an increase in debt service costs, makes them vulnerable to currency moves which could ignite sovereign crises. Rising inflation, falling currencies and higher food import bills mean the odds of balance of payment crises are rising as the level of foreign exchange reserves become inadequate. Social unrest — linked to food insecurity — is a clear risk, that new multilateral emergency financing lines are trying to avoid.

Central and Eastern Europe in recession

High inflation is weighing on household purchasing power while tighter credit conditions will hurt fixed investment in Central and Eastern Europe, at a time when a winter energy supply crisis will be pushing Europe into recession. The timely disbursement of European funds will be critical to the growth profile. Poland and Hungary are yet to achieve the milestones imposed by the EU Commission — which could delay Poland receiving the funds until 2024 while Hungary could potentially lose 70% of the resources. However, despite the region's forecast recession, central banks need to maintain a tight policy stance in order to anchor inflation expectations and limit currency depreciation given widening current account deficits. With fiscal tightening in sight post-2022 elections, high policy rates and severe recession ahead, Hungary is the only central bank in the region that we expect to ease policy in 2023.

Turkey likely to pivot, willingly or not

At odds with global synchronous monetary policy tightening — and all the more worrying given its high inflation, rising external financing needs and declining currency reserves — Turkey has been cutting policy rates. The currency has been supported by the central bank's 'liraization strategy' which restricts capital mobility and forces banks to buy government bonds. Without a much lower energy bill or much weaker currency helping to curb the non-oil deficit, the overall current account deficit is likely to widen beyond 5% of GDP. Two-thirds of capital account financing relies on unidentified 'net errors and omissions' but is needed to avoid an outright currency crisis before mid-2023 elections. At that point, we believe the central bank will pivot to monetary orthodoxy, with policy rates likely raised to around 15%-20%, which should trigger a contraction in growth but also a gradual reabsorption of imbalances.



Emerging Asia – A soft landing despite growing external headwinds



Shirley Shen, Economist (Emerging Asia) Macro Research – Core Investments

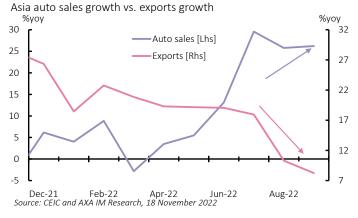
Key points

- Growth expected to soften on weakening exports and heightened external headwinds
- Most central banks to pause tightening from March next year due to falling inflation and weaker growth
- Escalation of geopolitical tensions remains a risk, exacerbating already vulnerable external positions

A weakening growth outlook

Slowdown in developed market (DM) economies and China, coupled with tightening global monetary conditions, have created headwinds for the economic recovery in Asia in 2022. Meanwhile, domestic consumption and services recovered strongly throughout the year following the easing of COVID-19related restrictions and border reopening (Exhibit 13). Export momentum is set to weaken further in 2023 as reduced DM demand is expected to be only partially offset by a modest recovery from China. This will pressure the export-dependent economies of the region, including South Korea, Taiwan and Singapore. However, commodity exporters such as Indonesia and Malaysia should still benefit from elevated energy and raw material prices. In contrast, domestic-oriented economies may prove more resilient, thanks to a further recovery in consumption and services activity. Overall, we forecast economic growth for Asia ex. China to moderate to 4.5% from 5.2% this year before edging up to 4.8% in 2024.

Exhibit 13: Growth anchor has shifted away from exports



We expect domestic activity to drive the region's growth in 2023. Recent data has pointed to a strong growth rebound in private consumption, which we think will continue, albeit more gradually. Unemployment rates have fallen from the peak and border reopening has brought tourists back to the region. Despite the continued absence of Chinese visitors, exports of services should provide a growing tailwind for economies that rely on tourism.

Goods exports have softened this year, but by less than feared, thanks to strong demand for lower-end chips and commodity exports from a few resource-producing nations. However, export growth will come under further pressure as developed economies enter recession. In addition, external positions have deteriorated for some, with a widening of current account deficits in India, Philippines and Thailand. Currencies have also depreciated sharply against the dollar, prompting central banks to intervene to defend their exchange rates, which ends up eroding currency reserve buffers. These external vulnerabilities, if prolonged, could affect the operation of domestic policies, complicating the growth and inflation outlook.

Monetary tightening approaching an end

Price pressures have risen significantly across the region since the onset of the Russia-Ukraine conflict. In many instances, inflation has risen to multi-decade highs. Recent outturns, however, show that price pressure has started to ease and will likely fall further in 2023 on slowing economic growth, easing supply chain bottlenecks and monetary tightening. However, risks still remain. Core inflation could stay sticky in countries like India, the Philippines and Indonesia, with upside risks to food prices from adverse weather events. Moreover, currency depreciation could add imported inflation to some economies.

From a policy standpoint, a gradual easing of inflation and slowing economic growth should limit the extent of further monetary policy tightening. In our base-case scenario, most Asian central banks are expected to press pause from March 2023, barring a major surprise from the Federal Reserve (Fed). Meanwhile, fiscal consolidation is expected to proceed cautiously, as authorities exit from the generous policy support provided during the pandemic. Such gradualism is warranted as economies slow and growth risks bias to the downside.

Thailand and India face general and state elections respectively in 2023. In general, we expect policy continuity with the governments continuing to pursue economic re-opening to recoup the losses from the pandemic. However, a further escalation of geopolitical tensions globally could lead to higher commodity prices and risk aversion, posing a risk to Asia's already fraying external position.



Latin America - Rude awakening



Luis Lopez-Vivas, Economist (Latin America), Macro Research – Core Investments

Key points

- Growth is expected to slow next year amid an unfavourable external environment before picking up again in 2024
- Central banks could start easing monetary policy towards the second half of next year
- Policy uncertainty will dampen investor sentiment.

Clouds on the horizon

Despite significant monetary and fiscal tightening, most major Latin American countries saw better-than-expected economic growth this year. Diverse factors such as high commodity prices, strong US import growth and a vigorous recovery in the service sectors should allow the region to outpace global growth in 2022 (3.5% vs. 3.2%). However, Latin America is in for a rude awakening as a more unfavourable external environment is likely to cause the region's growth to slow below trend next year. Latin America's two main trading partners, the US and China, should both see weak growth next year, which will have a negative impact on commodity prices and remittances, important growth engines for the region. Similarly, tighter global financial conditions will further weaken capital flows into Latin America and increase financing costs for sovereigns and corporates. Domestically, monetary and fiscal stances will remain tight. In addition, private consumption should lose momentum, impacted by high inflation, and policy uncertainty should keep a lid on investment. In this context, growth in the region is poised to decelerate to 1.7% in 2023 and bounce back to trend growth in 2024, reaching 2.4%.

Cautious monetary policy ahead

Thanks to an early and aggressive hiking cycle, inflation has peaked in most countries in the region and is starting to decline. However, we expect inflation to remain above target for most of next year due to the lagged effects of monetary tightening and second-round effects as higher energy and food prices are passed through into core prices. Considering the persistence in inflation and the Fed's ongoing tightening cycle, central banks will have to be extremely careful in any loosening of monetary policy. We expect Chile and Brazil to be the first countries to cut policy rates by the start of the second half of next year. Brazil was the first to start hiking in March 2021 and

inflation there is firmly on its way towards target. In Chile, there is a high probability that the economy will fall into recession, which would prompt the central bank to ease policy. Mexico and Colombia will likely be the laggards in this regard and will have to wait until Q4 2023 to start cutting rates. Inflation is still running hot in Colombia, reflecting its booming economy, while Mexico will have to wait until the Fed adopts a more dovish stance before cutting, to avoid capital outflows.

Policy uncertainty to hurt investment

While the election season is finally over, we still expect policy uncertainty to remain elevated across the region. Both Colombia and Brazil recently elected left-wing presidents with plans to address issues such as climate change and social inequality. However, they have yet to provide blueprints to make these plans viable for their countries, which is weighing on investor sentiment. In Colombia, President Gustavo Petro has promised to put an end to the vital oil industry, but has proposed no alternative to replace the revenues the sector generates. In Brazil, President-Elect Luiz Inácio Lula da Silva plans to tackle inequality by removing the fiscal rule and boosting government spending at time when the debt ratio is already close to 90% of GDP. Meanwhile in Chile the debate on constitutional reform will continue after citizens rejected a new draft in September. This creates a degree of uncertainty over how and when the new constitution process will conclude and what it will mean for key policies towards the mining industry and the overall fiscal policy of Chile. Finally in Peru, the embattled President Pedro Castillo has already survived two impeachment attempts but it is unclear if his administration will manage to hold on to power next year.

Risks to the outlook

Looking ahead, the balance of risks to our outlook is tilted to the downside. A deeper recession in the US or slower growth in China, reflecting COVID-19 lockdowns, would significantly weaken commodity prices and lower remittances. Moreover, a more hawkish Fed could severely push up bond yields and worsen the already-fragile fiscal situation in Latin America. On the domestic front, entrenched inflation would dent private consumption and delay the central banks' ability to ease monetary policy. Similarly, high inflation amid an economic slowdown could spark social unrest in the region. In terms of upside risks, Latin America could benefit from 'near-shoring' efforts, particularly if the war continues and tensions with China remain high. In addition, there is the possibility of higher-than-expected productivity growth as a result of increased digitalisation during the pandemic.



Currencies – US dollar a fading star



Romain Cabasson, Head of Solution Portfolio Management, Multi-Assets – Core Investments

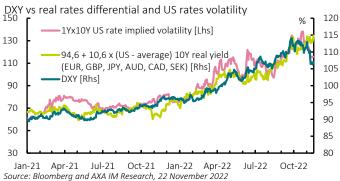
Key points

- 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
- If a hard landing is avoided along the way, high beta currencies should also manage to rebound
- The euro and sterling are facing new structural challenges that may not disappear any time soon
- The renminbi should also lag, given China's difficult exit from COVID-19 and softer global demand.

All eyes on the Fed

The US dollar has dominated 2022. Rising inflation pressures following post COVID-19 re-openings, supply bottlenecks and the Ukraine war's consequences have forced all major central banks to tighten monetary policy. But the US economy has been in a much better cyclical position and the Federal Reserve (Fed) has tightened by more, facing sharper domestic inflation pressures and less damage from external energy costs. The simultaneous withdrawal of easy global monetary policy fuelled concerns on global growth and valuations, triggering safehaven flows. Those two factors have supported the dollar and left little room for differentiation between other currencies.

Exhibit 14: What's driving the US dollar, real rates or volatility?



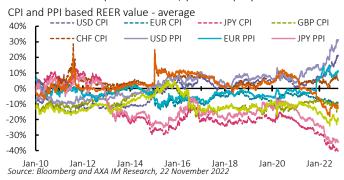
All eyes are now anxiously looking for any signs of softening in inflation pressures in the US that could lead to a pivot in the Fed's stance. Although difficult to call, that moment is probably getting closer. But this is unlikely to translate to a collapse of US real rates. Expectations of other central 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 (Exhibit 14).

The yen's moment to shine

October's US Consumer Price Index (CPI) inflation report gave a taste of what to expect. Risk sentiment rebounded, and highbeta currencies benefited. The Japanese yen outperformed — not only was it largely undervalued to start with, but expectations of the Bank of Japan (BoJ) are suppressed, so the real rate differential could only move in its favour (Exhibit 15).

Exhibit 15: Euro expensive vs PPI, yen cheap by all measures

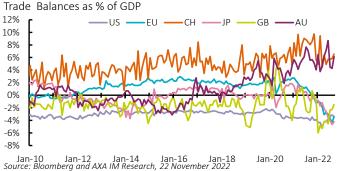


Nonetheless, for the very short term, market reaction looks slightly excessive. More data is needed to confirm an inflation softening and we expect the Fed to push back in between. But beyond any short-term dollar rebound we expect the yen to strengthen in 2023. BoJ Governor Haruhiko Kuroda is leaving office in April, leaving some room for hawkish market speculation. Domestically, a demand boost from reopening should emerge and additional fiscal support is being deployed.

Trapped in the energy prices gravity field

The geopolitical consequences of the Ukraine war have created durable pressure on energy costs, pushing the EU and UK to reposition their energy dependencies (Exhibit 16).

Exhibit 16: Fading trade balances of large energy importers





The EU manufacturing sector's competitiveness is particularly challenged, as seen in the sharper rise of Producer Price Index (PPI) inflation that has brough the euro into overvalued territory, while the trade surplus has faded as higher energy import costs and lower exports weigh. UK twin deficits proved problematic in September in a tighter liquidity environment, constraining the UK government into fiscal austerity in a recession. With such structural weaknesses, the euro and sterling should only marginally benefit from the dollar cooling in 2023. The Swiss franc should hold up better, given Switzerland's lower energy dependency.

Black hole scenario

High-beta currencies should benefit from the better risk sentiment that a Fed pivot would trigger. 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 comparison, the EU and US have most mortgages fixed until maturity. Australia and Sweden are particularly exposed with high debt levels and a very high proportion of variable rates. Australian demand seems to be solid so far, absorbing the shock. But Swedish households do not appear in good shape and house prices are already adjusting sharply (Exhibit 17). As such, the krona should lag other high-beta currencies.

Exhibit 17: Rising mortgages: Higher pain for Swedish households



Zero-COVID-19 policy through the vacuum hatch

The divergence between the Fed and the People's Bank of China (PBOC) weakened the yuan in 2022. This should hold as real estate deleveraging is ongoing and prevents financial inflows from returning. China is now looking at exiting its 'zerocovid' strategy but reopening without proper vaccination or immunity is challenging. Also, the trade balance will come under more pressure from global demand softening and from higher imports upon domestic reopening. And although it depreciated against the dollar, the yuan is still strong against the currencies in the China Foreign Exchange Trade System basket and the PBoC might tolerate some weakness.

Cross assets – The year of the bond



Greg Venizelos,
Macro & Credit Strategist,
Macro Research – Core Investments

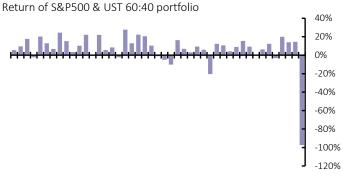
Key points

- Investors can get higher yields for less risk as interest rates are at their highest in 15 years. This should lead to a positive outcome for fixed income in 2023
- The proverbial 60:40 portfolio has had its secondworst year in 45 years. Previously, major negative years have been followed by a string of positive years.

A twice-in-a-generation portfolio outcome

Monetary policy can often be more art than science. While the accepted wisdom is higher rates undermine growth and help bring inflation down, the precise mechanisms and timings are still not self-evident. In the US, the Fed will have raised rates more in a year than at almost any time since the early 1980s. That should prove enough to tame inflation and lead to a positive outcome for fixed income in 2023 given yields are at their highest in 15 years. Investors can get higher yields for less risk than was the case in recent years and returns in bond markets are very unlikely to be negative for a third consecutive year. Despite all the concerns about market liquidity, central bank balance sheet reduction and risks of defaults and downgrades, 2023 should the year of the bond.

Exhibit 18: The proverbial 60:40 portfolio has had its second-worst year in 45 years



1978 1982 1986 1990 1994 1998 2002 2006 2010 2014 2018 2022 Source: Bloomberg, ICE and AXA IM Research, 22 November 2022

The proverbial 60:40 portfolio of 60% equities-40% bonds has had its second-worst year in 45 years (Exhibit 18). Historically, major 'down' years like 2008 or 2002 have been followed by a string of 'up' years, implying a positive outcome in 2023 unless equities drop by high double digits.



Rates - Shadows and Lights



Alessandro Tentori.

AXA IM Southern Europe CIO and Rates Strategist, Macro Research – Core Investments

Key points

- Fixed income markets have been in a state of transition between two distinct environments
- This transition from low to high inflation has been a stressful period for investors
- To tackle the high-inflationary backdrop, central bankers have switched to an aggressive policy stance
- Looking ahead, central banks' balance sheet transition is a major source of risk for bond investors
- Positively, investors will be constructing portfolios with a short-term risk-free rate around 4.5%.

Every transition creates stress

Fixed income, and especially interest rate markets, have been subject to significant stress during 2022 (Exhibit 19). Investors have been exposed to a period of transition between two distinct environments. Previously investors had been enjoying a backdrop of low interest rates, low volatility, almost absent inflation and unprecedented support from monetary policy. But now they are contending with the complete opposite – inflation levels not seen for decades, aggressive interest rate hikes by central banks and large swings in volatility. As in any transition, the level of stress and uncertainty has been extensive, often affecting market liquidity and sometimes even market functioning. But just how long will this transition continue?

Exhibit 19: A challenging year for rates



Are inflation expectations too optimistic?

Market participants and central bankers have underestimated inflation risks for a few quarters. Extra-large rate hikes and high

market volatility are a testament to this assumption. Only recently has the perception of inflation changed, as our collective understanding about the origins of this episode has improved. Nonetheless, market-based inflation expectations have been formulated to reflect the 'credible disinflation' hypothesis. They still are. Most likely, this is a direct result of central bankers' dedication to preventing inflation expectations from becoming unanchored. The speed at which market-based US inflation expectations converge to 2% (Exhibit 20) goes beyond what can be reasonably predicted on the basis of oil price futures. The picture is a bit different in Europe and in the UK. In particular, it's the quality of inflation that is different: Eurozone inflation seems to be less sensitive to monetary policy than US inflation, thus providing the Federal Reserve with an edge over the European Central Bank (ECB). Hence, European inflation is at risk of drifting even higher as producer price pressures pass through the inflation pipeline.

Exhibit 20: All good on the inflation front, says the market Market-based inflation expectations



Source: Bloomberg and AXA IM Research, 22 November 2022

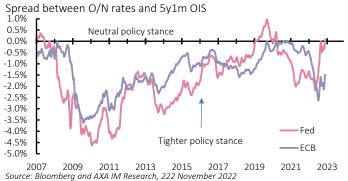
Assessing rate expectations: Where is neutral?

Assessing monetary policy's stance is by no means an easy task, especially coming out of a prolonged period of ultralow/negative interest rates and quantitative easing (QE). Several models of the equilibrium real interest rates have been proposed in the past, each with their own shortcomings. In addition, analysts are left with the choice of an average inflation rate, which may not necessarily reflect a central bank's target. For example, the annual variation of euro Harmonised Index of Consumer Prices (HICP) has averaged only 1.3% between 2009 and 2020. A naïve market-based approach is certainly not devoid of criticism but it offers a readily observable monetary policy stance nonetheless. In Exhibit 21, we show the difference between the overnight interest rate and one-month interest rate 5 years forward, which we chose as a representation of the 'neutral' nominal rate over the business cycle. The QE/negative rates period does not beg further discussion, while the more recent past tells us a story of two central banks: The Fed initiated its tightening cycle a few months ahead of the ECB and has already driven monetary



policy in excess of a neutral interest rate level. Of course, this does not mean that the Fed will stop here, but rather the 'hike at any cost to prevent falling too far behind' mentality might now be replaced by a more traditional, data- and forecast-based approach. On the other hand, the ECB looks to be still short of reaching a neutral stance and might have to keep the pressure on inflation breakevens – the difference between yields on a nominal bond and an inflation-linked bond – irrespective of the business cycle, if inflation were to stay at unpleasantly elevated levels.

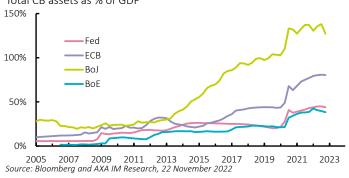
Exhibit 21: Monetary policy stance



Central banks' balance sheets and the term premium

All else equal, the next 12 to 24 months are likely to challenge the demand/supply balance established during the QE period. Central banks' almost dominant role in their respective sovereign markets (Exhibit 22) is likely to fade in time, albeit gradually, thus putting pressure on the existing investor base. However, as net supply flips from very negative to very positive, the key questions will be – who is going to buy? How much are they going to buy? And at what price?

Exhibit 22: Looking for a new demand/supply balance Total CB assets as % of GDP

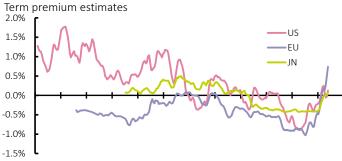


Liquidity issues and brief episodes of dysfunction have already been observed in some market segments, while collateral scarcity has affected the relative pricing between European government bonds and swaps, i.e. agreements between two counterparties to exchange assets or cashflows. As the ECB steps back and releases quality bonds back to the market,

collateral availability will improve almost mechanically. Liquidity conditions in global government bond markets might need more time to improve, though, also because we do not anticipate a change in bank regulation anytime soon.

The dynamics of central banks' balance sheets probably explains part of the 'term premium puzzle', i.e. the apparent insensitivity of Treasuries' term premium to either higher interest rates or higher volatility. Theoretically, investors should require a higher compensation for their duration risk in an environment of higher and faster moving rates/yields. While this seems to be the case for European government bonds, our calculations show that's not yet the case for the US Treasury market (Exhibit 23). One explanation could be linked to the Fed's duration extraction in a homogeneous bond market, which is rather different from ECB's duration extraction in a heterogeneous bond market.

Exhibit 23: The term premium puzzle



2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 Source: Bloomberg and AXA IM Research, 23 November 2022

Looking into 2023

If anything, 2023 should starts with a certainty – income will play a role in investors' allocation. The market value of negative yielding debt has collapsed to a mere 3% of the global aggregate index, coming 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.

Unfortunately, 2023 also carries several unknowns, from inflation to the business cycle, from central banks' reaction function to the speed of balance sheet reduction. Luckily, these are 'known' unknowns, in the sense that we already have them on the radar screen, albeit perhaps still unable to properly quantify them. Leaving 'unknown' unknowns aside, an asymmetric policy mix might be yet another source of risk for bond markets. We've witnessed the challenges of an expansionary fiscal and a restrictive monetary policy not only in the UK this year, but also on the US market towards the end of President Jimmy Carter's administration.



Credit – A film noir for optimists



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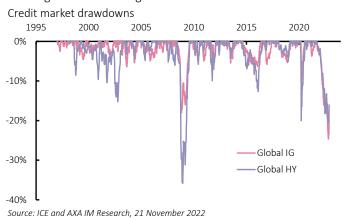
Key points

- Credit markets, especially investment-grade, have seen eye-watering drawdowns in 2022. Typically, what tends to follow is a decent rebound in returns.
- Spreads have been resilient despite an extraordinary rise in interest rates, an inflation shock, and rising recession risks – reflecting healthy balance sheets.
- Default expectations have risen, putting high yield valuations under pressure. In excess spread terms, European credit screens cheaper than US credit.

Deep drawdowns bring attractive entry points

The inexorable rise in interest rates which has accompanied, if not caused, the fall in risk assets in 2022 has made for some eye-watering losses in credit returns. This has been very pronounced in investment grade (IG) due to its higher duration sensitivity compared to high yield (HY). Global IG was down by around 25% in late October (Exhibit 24), a drawdown nearly 1.5 times worse than that during the global financial crisis. In contrast, high yield's drop has been half that seen in that crisis.

Exhibit 24: Return drawdowns in 2022 have been hefty; record-breaking for investment grade

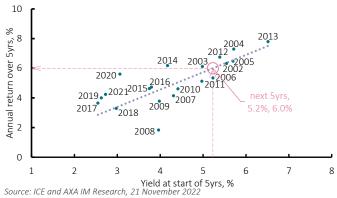


Historically, steep drawdowns have tended to be followed by a significant rebound over the subsequent 12 months – though past performance does not guarantee future results. In Global IG, for example, the spread has widened by 60% to mid November 2022, from 100 basis points (bps) to 161bps. The yield, however, has nearly trebled from 1.85% to 5.2% over the same period.

Historically, a yield of 5.2% in Global IG is consistent with a return of 6% per annum (pa) over the subsequent five-year period (Exhibit 25). This compares to an average of 4% pa over the history of the Global IG index.

Exhibit 25: At current levels of credit yields returns have been historically very attractive

Global IG return pa over 5-year period to year x

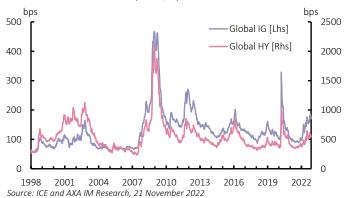


Global spreads not pricing recession

Credit spreads have inevitably widened in 2022 but have remained resilient in comparison to the extraordinary rise in interest rates, the inflation shock and the rising risks of recession. It's a tug of war between resilient corporate balance sheet fundamentals (contained spreads) and significant macro and policy headwinds (elevated refinancing costs, tight bank lending). The quarterly average spread in Global IG is currently 160bps, half the level that is historically associated with zero growth in global GDP (Exhibit 26). This implies year-on-year GDP growth of 3% over the next quarter. The one exception is euro IG, whose quarterly average spread of 205bps implies a negative GDP of -0.4% at the start of 2023, consistent with the stronger macro headwinds facing Europe.

Exhibit 26: Global spreads have widened but not to levels that suggest significant recession risks

Global credit benchmark spread, bp

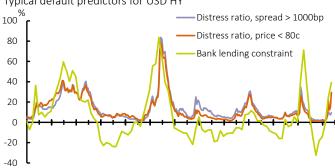




Default outlook weaker but manageable

Default expectations for HY have evolved through 2022, from quite benign at the beginning, to somewhat worse than the historical average currently. Most of the deterioration came through the summer, as yields and cross-asset risk premia rose notably. Key default predictors have deteriorated, such as bank lending standards (green line, Exhibit 27). The same is true for predictors that comprise interest rate risk – the refinancing gap, the difference between average yield and average coupon of an index and price-based bond distress ratios (orange line, Exhibit 27). By contrast, spread-based bond distress ratios have remained reasonably well contained (blue line, Exhibit 27).

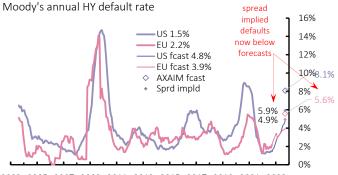
Exhibit 27: Default predictors have deteriorated, particularly those with interest rate risk like the price-based distress ratio Typical default predictors for USD HY



1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 Source: US Fed, ICE and AXA IM Research, 21 November 2022

The deterioration of default predictors has pushed model-forecast default rates higher, to levels that are above spread-implied defaults at current spread levels. This has made default valuations no longer cheap, across most HY credit cohorts. This is the case for the Moody's HY cohorts for US and Europe (Exhibit 28) as well as the ICE benchmark for US dollar HY. The one exception is the ICE euro HY benchmark that still looks cheap, in our view, by around 100bps.

Exhibit 28: Default forecasts have risen, making valuations no longer cheap, across most high yield credit cohorts

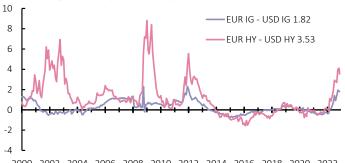


2003 2005 2007 2009 2011 2013 2015 2017 2019 2021 2023 Source: Moody's, ICE, Fed, ECB and AXA IM Research, 21 nov 2022

Relative value favours European credit

The severe energy shock in Europe on the back of Russia's invasion of Ukraine has brought about recession risks which have been promptly reflected in the relative pricing of European credit premia compared to other geographies. Once we normalise yields for duration mismatch (the US benchmark is much longer than the European one) and deduct currency hedging costs, euro credit shows a significant yield pickup over dollar credit (Exhibit 29) — near its historic highs in IG, at just under 2%, and at its highest level since the Eurozone debt crisis in HY, at circa 3.5%.

Exhibit 29: Adjusted for duration and currency hedging costs, euro credit offers historically high yield pickup over dollar credit Yield, FX adjusted & 4y duration equivalent



2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 Source: Bloomberg, ICE and AXA IM Research, 21 November 2022

To establish relative value in terms of credit risk in isolation (spreads rather than yields) and across markets, we can compare excess spreads, namely nominal spreads minus credit losses. Credit losses are due to defaults in HY and 'fallen angels' — companies downgraded from IG to HY. Default predictors inform us about default expectations over the next 12 months, while the direction in Purchasing Managers' Indices indicate fallen angel expectations. Normalising excess spreads as a deviation from their historic mean gives the relative value 'pecking order' (Exhibit 30). US dollar HY appears rich while euro IG look cheapest, followed by sterling IG, euro HY and dollar IG.

Exhibit 30: Excess spread across investment grade and high yield flags the relative value in European over US credit Excess spread (4y dur equiv) abs Z-score



2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Source: Fed, ECB, ICE and AXA IM Research, 21 November 2022



Equity – Rebound prospects amid headwinds



Emmanuel Makonga Investment Strategist, Macro Research – Core Investments

Key points

- Runaway inflation amplified by exogenous factors together with a dimming economic outlook have been challenging for equity markets.
- The tightening of monetary conditions should continue to affect equity markets both in level and direction terms.
- While equities tend to anticipate macroeconomic recovery in recessions, the potential for rebound may be weaker in the lagged-stimulus environment we expect in 2023.

Unexpected events rushed the process

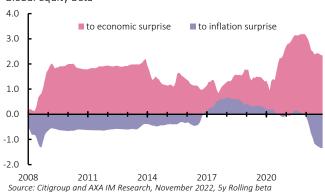
There is no doubt 2022 was a one-of-a-kind year — it marked the end of three consecutive years of positive returns for stock markets. At the time of writing, we are witnessing the worst year-to-date performance (-13.8%) since the 2008 global financial crisis. This downturn can be explained by several issues but two have captured our attention. First, the start of the monetary tightening cycle, which fed the negative trend on the growth outlook. Second, the Russia-Ukraine war which had two major repercussions — one on sentiment, where the uncertainty brought by the war led investors to turn from risky assets to safe havens, the other on inflation as Russia and Ukraine are two major global suppliers of commodities. This high inflation regime coupled with the cost of monetary tightening on economic growth has been harmful for stocks.

The only sector that has performed positively this year was energy (+47.4%). Volatility in commodities helped inflate the earnings of the industry's companies, which have been consistently revised upwards this year (+99.8%), keeping the sector at attractive valuations throughout 2022. This outperformance fuelled the rotation towards Value (-3.1%) from Growth (-23.6%). The latter suffered from the rise in interest rates due to its long duration bias. Finally, the Defensives strategy (+3.2%) proved resilient, supported by sustained revenues of healthcare and consumer staples.

Inflation has clearly been the major market mover this year (Exhibit 31). The (negative) beta versus inflation surprises has risen consistently through the year and now stands at its historically lowest level. This shows how equities have reacted

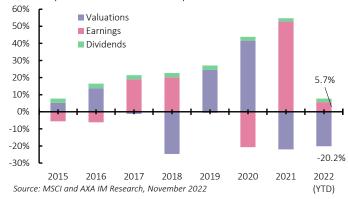
more to inflation news than in the past, with large swings in the market following inflation data releases this year.

Exhibit 31: Inflation in the driver's seat Global equity beta



The uncertainty around inflation prompted more hawkish policy from central bankers, which led to a sell-off in bond markets. As a result, discount rates increased and led to a mechanical decline in the value of equities. Thus, the de-rating (-19.5%) has been the main reason for this year's market correction, while earnings have held up rather well at +5.7% (Exhibit 32). However, we do not expect this earnings' resistance to continue next year. The consensus earnings-pershare growth expectations seem too optimistic given our outlook for next year's economic growth in developed markets is at circa 0%, with recessions across Europe and the US. Therefore, we believe the market correction is not yet complete, and the onset of further macroeconomic decline could be the trigger for a deeper stock market decline.

Exhibit 32: Resilient earnings helps to mitigate the fall Global equities: total return decomposition



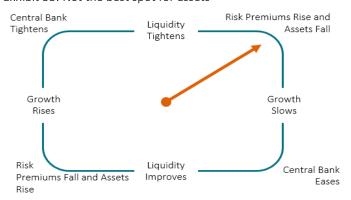
Limited support in the financial condition outlook

In a classic liquidity cycle, fund allocations move from cash to assets and vice versa. We are currently in a phase where asset



prices are falling, and risk premia are rising (Exhibit 33). Yet we have doubts on the way we will reach the next stage, namely central bank easing. If the consensus is on rates reaching terminal levels by the first half of 2023, we think the risk is policy being eased more slowly. Moreover, more attention should be paid to central bank balance sheet management. Indeed, the liquidity provided by the plethora of unconventional tools used by central banks post the 2008 crisis is being reversed in increasing jurisdictions. Thus, quantitative tightening will bring an additional layer to the already de facto negative liquidity tightening for equities, thereby adding weight to our 'further downside' narrative.

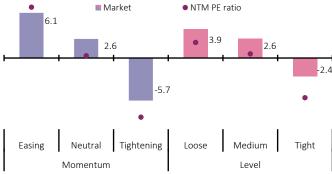
Exhibit 33: Not the best spot for assets



Source: Bridgewater and AXA IM Research, November 2022

The pace of tightening in monetary conditions has had a significant impact on sentiment, while the level of monetary conditions is also important. In our baseline scenario where inflation does not fall back to its target in 2023, we find it difficult to imagine central bankers reversing their hawkish stance. Under tight monetary conditions, next 12-month price-to-earnings ratios tend to correct by -5.3% over three months on average (Exhibit 34).

Exhibit 34: Do not overlook the level of policy restriction Global Equity - Quarterly returns and financial conditions

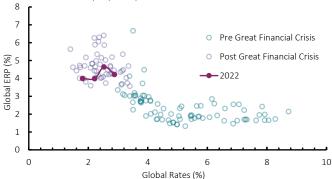


Source: MSCI, Chicago Federal Reserve and AXA IM, November 2022

Things may soon improve, but by less than usual

With the idea that monetary conditions will remain 'tighter for longer', the behaviour of the equity risk premium (ERP) should be considered. Post the 2008 crisis, the lower interest rate environment has resulted in a structurally higher ERP (+2.4% vs. pre-2008) and it currently hovers around 4% (Exhibit 35). These levels imply two things looking forward. The ERP has little upside potential as interest rates are expected to remain high, so if one looks for a more appealing entry level, prospects for getting there are slim. Finally, the forward performance of equities is most likely to be below the post-2008 period.

Exhibit 35: Post financial crisis bonanza coming to an end Global rates and equity risk premium

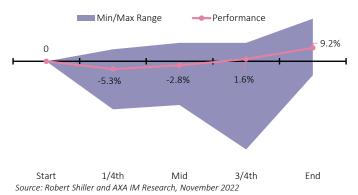


Source: Absolute Strategy Research and AXA IM Research, November 2022

Equity markets have tended to rebound at the bottom of a recession, often aided by early signals of an upcoming improvement in liquidity (Exhibit 36). When this is priced in, the rebound could be decent but milder than after the 2008 crisis. Thus, given our macro scenario, a barbell positioning between Defensives and Quality in the first half of 2023 and Cyclicals and Growth for the expected rebound in the second half appears sensible.

Exhibit 36: Stock markets tend to rebound ahead of the recession trough

Average S&P 500 path in recession since 1900





Forecast summary

Bool CDB growth (9/)	2022*		2023*		2024*	
Real GDP growth (%)	AXA IM	Consensus	AXA IM	Consensus	AXA IM	Consensus
Vorld	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	3.6	2.5	0.0	0.3	0.6	
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	
merging 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 23 November 2022

CDI Inflation (9/)	20	2022*		2023*		2024*	
CPI Inflation (%)	AXA IM	Consensus	AXA IM	Consensus	AXA IM	Consensus	
Advanced 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 23 November 2022

		Current	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23
		Current	1-2 Nov	31-1 Jan/Feb	2-3 May	25-26 Jul	31-1 Oct/N
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
	Datas		1F.D	2 Feb	4 May	27 Jul	26 Oct
Euro area - ECB	Dates	1.50	15 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
	D .		-0.10 19-20 Dec	17-18 Jan	27-28 Apr	27-28 Jul	30-31 Oc
Japan - BoJ	Dates	-0.10		9-10 Mar	15-16 Jun	21-22 Sep	18-19 De
•	Rates		unch (-0.10)	unch (-0.10)	unch (-0.10)	unch (-0.10)	unch (-0.1
	BoE Dates		3 Nov	2 Feb	11 May	3 Aug	2 Nov
UK - BoE		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 23 November 2022



Calendar of events

2022	Dates	Events	Comments
	Dec	China Central Economic Work Conference	
	6 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 QT
	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	
	1 Feb	FOMC Meeting	+0.25% (4.50%-4.75%)
February	2 Feb	BoE Meeting	+50bps (4.00%)
rebluary	2 Feb	ECB Meeting	+25bps (DFR= 2.25%)
	25 Feb	Nigeria general elections	
	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	
	2 April	Finland election (National Parliament)	
April	8 April	BoJ Governor Kuroda's term ends	
	13 April	Northern Ireland Assembly elections	latest date if executive not formed
	4 May	ECB Meeting	Unchanged (2.5%)
	4 May	UK local elections	
May	7 May	Thailand general elections	
iviay	11 May	BoE Meeting	Unchanged (4.25%)
	14 May	Germany (Federal state elections)	
	28 May	Spain Regional elections	
	13-14 June	FOMC Meeting	
June	15 June	ECB Meeting	Unchanged (2.5%)
Jane	18 June	Turkey presidential and parliamentary elections	
	29-30 June	EU Summit	
July	July	Greece elections (National Parliament)	
September	Autumn 23	Poland presidential elections	
October	29 Oct	Argentina general elections	
December	·	Spain (National Parliament)	
2024	Dates	Events	Comments
January	Jan	US Primaries begin	
April	10 April	South Korean legislative elections	
May	1 May	India general elections	
	11 May	US Presidential elections	
June	2 June	Mexico general elections	
July		UK general elections	



Abbreviation glossary

	0 /		
1Q23	first quarter of 2023	IMF	International Monetary Fund
1H23	first half of 2023	ISM	Institute of Supply Management
[Lhs]	left hand scale (graph)	JGB	Japanese Government Bonds
[Rhs]	right hand scale (graph)	JPY/¥	Yen
a.r.	annualised rate	LatAm	Latin America
APP	Asset Purchase Programme	LBO	Leveraged buy-out
AUD	Australian dollar	LTRO	Long Term Refinancing Operation
BAML	Bank of America Merrill Lynch	MBS	Mortgage-backed security
BEA	US Bureau of Economic Analysis	mom	month on month
BIS	Bank for International Settlements	MPC	Monetary Policy Committee
bn	billion	MRO	Main Refinancing Operation
BLS	Bureau of Labor Statistics	n.s/a	non-seasonally adjusted
BoC	Bank of Canada	NBER	National Bureau of Economic Research
BoE	Bank of England	NPL	non-performing loans
BofA	Bank of America	NFIB	National Federation of Independent Business
ВоЈ	Bank of Japan	NOK	Norwegian krone
bp(s)	basis point(s)	OECD	Organisation for Economic Cooperation and
CAD	Canadian dollar	Develop	
	1 Canadian Socio-Economic Information Management System	OMT	Outright Monetary Transactions
CEE	Central and Eastern Europe	ONS	Office for National Statistics
	A Central and Eastern Europe/Middle East/Africa	P/B	price-to-book ratio
CHF	Swiss franc	P/E	price/earnings
CPI	Consumer price index	PBoC	People Bank of China
DFR	Deposit facility rate	PCE	personal consumption expenses
DM	Developed market	PEG	price/earnings to growth
EBA	European Banking Authority	PEPP	pandemic emergency purchase programme
EC	European Commission	PMI	Purchasing Manager Index
ECB	European Central Bank	рр	percentage point
EM(s)	Emerging market(s)	PPI	Producer price index
EMU	European Monetary Union	PPP	purchasing power parity
EPS	Earnings per share	QE	Quantitative easing
ERP	Equity risk premium	QE3	Third quantitative easing
ESM	European Stability Mechanism	QQE	Quantitative and qualitative easing
ETF	Exchange-Traded fund		quarter on quarter
EU	European Union	qoq REER	Real Effective Exchange Rate
EUR/€	Euro	RMB	renminbi chinois (yuan)
Fed	US Federal Reserve	RRR	Required rate of return
FFR	Fed fund rate	s/a	seasonally adjusted
FOMC		S/ a SEK	Swedish krona
	Federal Open Market Committee		
FTA	Free Trade Agreement	SMEs	Small and medium size enterprises
FRB	Federal Reserve Bank Fiscal Year	SMP	Securities Markets Programme
FY		SWF	Sovereign Wealth fund
GBP/£	Pound Sterling	TFP	total factor productivity
GDP	Gross Domestic Product	TLTRO	Targeted Longer Term Refinancing Operation trillion
GFC	Global Financial Crisis	tn	
HKD	Hong Kong dollar	UN (¢	United Nations
HY	High Yield	USD/\$	US dollar
ICE	InterContinental Exchange	VAT	value-added tax
IG	Investment Grade	yoy	year on year
IIF	Institute of International Finance	ytd	year to date
INSEE	French National Institute of Statistics and Economic	WTO	World Trade Organisation
	Studies		



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