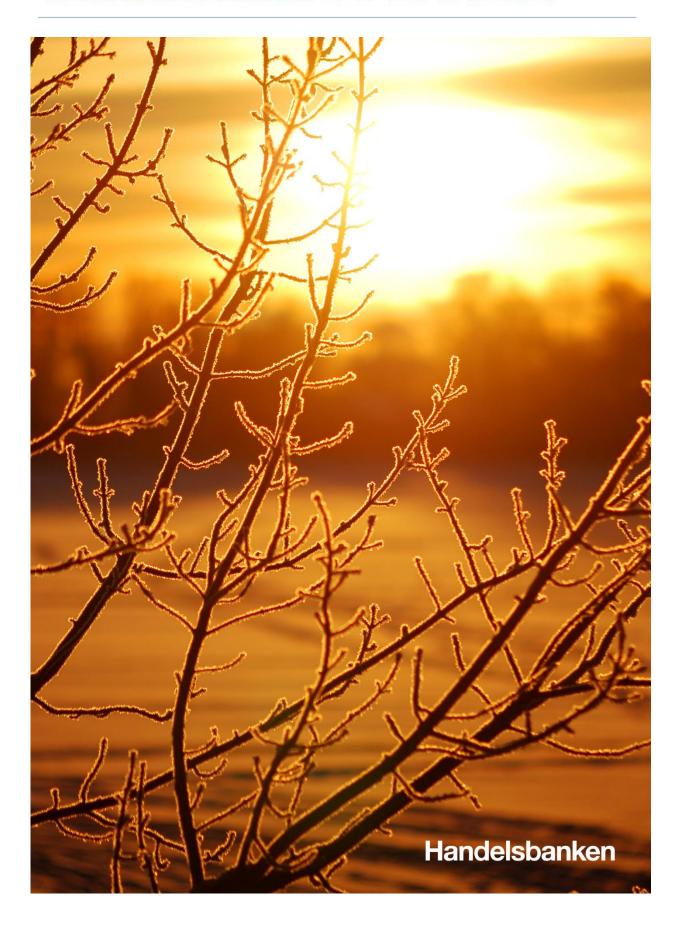
Macro Research January 24, 2024

Global Macro Forecast



Ready, steady, slow!

- The huge economic imbalances created by the crises of recent years are normalising.
- > Inflation is falling back surprisingly quickly, but risks to a soft-landing scenario persist.
- The swift turnaround to looser monetary policy will steady GDP, but lagging effects from past tightening will lead to lacklustre growth and higher unemployment.
- > The way is paved for rate cuts to start from May.









Our view	Short term Medium term
GROWTH	→
UNEMPLOYMENT	7 7
INFLATION	\rightarrow
POLICY RATES	и и
LONG-TERM INTEREST RATES	\rightarrow \rightarrow
EUR/USD	\supset
Note: The arrows illustrate our stylised overall direction compared with previous period. Short term refers to 1 year, medium term to 2–3 years. Source: Handelsbanken	

Table of contents

Global backdrop: The great normalisation	4
Theme article monetary policy: Ready, steady, slow!	10
Eurozone: Prepare for a soft landing but stay buckled up	16
Sweden: A dovish light at the end of the tunnel?	18
United Kingdom: Stumbling along	20
Norway: Probably no interest rate cuts anytime soon	22
Finland: Subdued outlook for 2024	24
Key figures	26
Disclaimers	29

Global backdrop

The great normalisation

Achieving a soft economic landing seems less challenging now as inflation is falling back surprisingly quickly. The huge economic imbalances created by the crises of recent years are normalising, with high demand dampened by tight monetary policy and recovering supply. Crucially, inflation expectations have remained anchored, rendering central banks' jobs easier and paving the way for rate cuts to start from May. The swift turnaround to looser policy will steady GDP, although lagging effects from past policy tightening means that growth will remain lacklustre in 2024, leading to somewhat higher unemployment. In 2025–26, however, GDP will recover, and labour markets should stabilise. Risks to this soft-landing scenario persist, however – progress toward inflation targets could suffer a setback, causing high policy rates to linger, thus hurting the economy; or a recession could suddenly start, driving sharp rate cuts.

Finally some luck, or simply economics?

In recent years, our world has suffered a pandemic, war and terror, and a cost-of-living crisis — all of which also drove historically large imbalances in the global economy. Thankfully, it now seems increasingly likely that the ongoing normalisation will come about through a soft landing, rather than these challenges being insurmountable. Double-digit inflation is firmly in the rear-view mirror and the overheated global economy has cooled substantially without wreaking havoc on the labour market.

While some might attribute these positive developments to chance or pure luck, we see economic drivers that help explain this great normalisation, which has been surprisingly smooth and is forecast to continue mostly in the same vein.

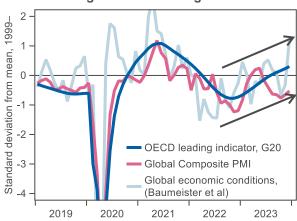
The supply side of the economy has continued to recover after the huge negative shocks from the pandemic and Russia's invasion of Ukraine. The energy supply has improved markedly, the labour supply is normalising, productivity is showing signs of picking up, supply chain disruptions have largely abated, and, to some extent, the world is overcoming geopolitical hurdles.

Demand, which was previously elevated, has been easing – without tail risks materialising – and is now better balanced with supply. Key to this was expeditious monetary policy tightening in 2022–23, although the gradual nature of the slowdown has been largely attributable to the resilience of households, which had their coffers full of savings, and the majority of businesses exhibiting balance sheet strength.

Inflation expectations have remained remarkably low on a medium- to longer-term basis – even during bouts of sky-rocketing short-term expectations and as central banks initially fell behind the curve in their inflation-fighting efforts. Well-anchored inflation expectations have been instrumental in curbing excessive price and wage setting, preventing a transition away from a low- to a high-inflation regime.

However, a soft landing cannot be taken for granted yet. So while it is now our baseline scenario, risks persist, as outlined below.

Global leading indicators rising from low levels



Sources: Macrobond, OECD, S&P Global, C. Baumeister et al (2022) and Handelsbanken

Short-term outlook promising

After slow volume growth in a 2023 marked by destocking, weak order inflows and backlog clearing, global industrial production may have turned a corner. Since our September Global Macro Forecast, PMI manufacturing shows new orders have passed a trough and have almost stopped decreasing. In fact, several leading growth indicators show a similar tendency, and overall we now revise our short-term outlook for global GDP upwards.

Consumer sentiment is also driving the turnaround in growth, in particular with the forward-looking subcomponents of household surveys trending up, albeit from depressed levels. Importantly, as we have forecast, households' downbeat real incomes are now beginning to pick up. This is a clear positive

for growth, since a lower flow of income is a more binding constraint on consumer spending now that the excess savings built up during the pandemic have been more or less exhausted in order to bridge the gap over the past few years.

Household incomes are picking up – a key positive for the growth outlook

Labour markets remain mostly buoyant, and overall the short-term unemployment outlook has been revised downwards. The key exception is in the Nordic countries, where labour markets are exhibiting weaker signs than anticipated (see tables appendix).

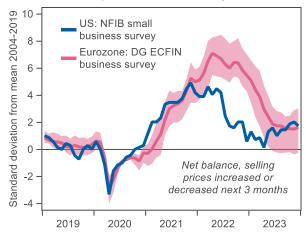
Inflation has not quite fallen back to target yet, even though recent outcomes have been lower than forecast. Despite this positive news, services prices inflation remains high, although that in itself is not a problem. More broadly, however, there are signs that the easing of inflation will slow or even suffer a setback in the short term. Companies' pricing plans on both sides of the Atlantic overwhelmingly indicate further increases in the first quarter, albeit with a less extreme frequency. Furthermore, underpinning these still-elevated inflation signals are several factors featured in the Gordian disinflation knot that we described in our September report²:

- Wage growth is high, and labour markets remain tight – as anticipated
- Productivity growth is better than foreseen in the US – but overall mostly lacklustre
- Profit growth shows signs of slowing, even declining in the US – mixed progress

All told, we cut our short-term outlook for inflation, while still forecasting a path above, rather than below, 2 percent. We expect that the path toward central banks' targets will be bumpy.

¹ See our macro comment <u>"Do not expect service price inflation to normalise and do not worry too much about it"</u>, December 2023.

Price increase plans still unusually dominant



Sources: Macrobond, DG ECFIN, NFIB and Handelsbanken

Subdued but upbeat medium-term outlook

The supply side of the economy has continued to show improvement in terms of increased supply and waning matching problems in the labour market, abating supply chain disruptions, and even a tentative pickup in trend productivity growth. This means that the global economy is clawing back some of the potential GDP lost in the wake of the pandemic crisis and deteriorating geopolitics, not least from Russia's full-scale invasion of Ukraine. All else equal, these supply side improvements imply room for inflation to decline while GDP growth continues; potential that is already starting to be realised in outturns and the short-term outlook, and which, we judge, will also bolster the medium-term outlook somewhat.

Demand in the economy will continue to grow slowly throughout 2024, due to lagging effects from past monetary policy tightening, as well as ongoing restrictiveness in both fiscal and monetary policy.

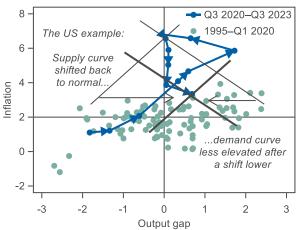
The cyclical normalisation in 2025–26 involves a rise in household consumption. It is driven by improved household purchasing power, when real incomes continue to grow as inflation is contained while nominal wages gradually catch up with the higher price level caused by the recent inflation surge. Fixed investments will eventually pick up as interest rates fall and economic sentiment strengthens. Notably, currently depressed housing construction should bottom out and rise over our forecast period.

On a global level, we forecast GDP growth of 2.8 percent in 2024, followed by 3.1 percent per year in 2025 and 2026, respectively (see graph appendix). For advanced economies, this means the positive output gap closing from above or even

² See theme article "<u>Brave new nominal world</u>", p.p. 9f, Global Macro Forecast, September 2023.

turning slightly negative through slow 2024 GDP growth before growth normalisation can be forecast for 2025–26.

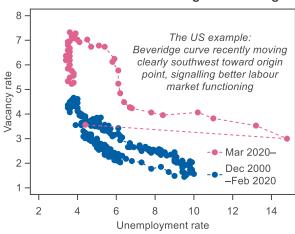
Supply recovered, demand cooled last year



Sources: Macrobond, BEA and Handelsbanken

We believe that labour demand will cool further in 2024 due to slowing GDP growth. As with previous cycles, this deterioration is expected to come with a lag, although we forecast merely a small rise in unemployment. This is because the current gradual drop in job vacancies is less about declining demand for labour and more about a normalisation of the poor labour market matching in recent years, as it returns to pre-pandemic conditions. A case in point is the US where, judging by the Beveridge curve, we expect a moderate rise in unemployment in H2 2024 and H1 2025. In the latter stages of our forecast period, we deem that unemployment will stabilise around equilibrium levels, which sit slightly higher than the largely low levels currently seen in most of the economies that we cover.

Poor labour market functioning normalising



Sources: Macrobond, BLS and Handelsbanken

Box: Major countries overviews

Eurozone - see separate article

China

- The short-term outlook depends largely on policy for which the signals are mixed.
- Growth in trend down toward 4 percent in 2026, but achieved the government's growth target of 5 percent last year.
- Post-pandemic recovery dampened by ongoing housing correction and subdued external demand – exports fell in 2023.
- More policy support needed for recovery. And structural reforms required to foster self-sustaining growth, as population, investments and competitiveness decline.
- Risks to the outlook: falling property prices, debt burden, particularly among local governments and real estate companies, and disinflation, even deflationary pressures, which could worsen the debt burden outlook.

US

- A soft landing is now the main scenario, as recession looks set to be avoided.
- Election year likely mired in social and political instability, which could interact with fiscal and economic fragilities and even hurt markets and the real economy.
- Unemployment to rise moderately from H2 2024, as surplus labour demand fades.
- Cost-push shocks have waned, with growth in both productivity and labour supply supporting GDP and dampening inflation.
- Inflation is, however, still expected to linger somewhat above the 2 percent target, with wage growth elevated.
- Easing inflation risks to lead to earlier and deeper cuts than previously forecast.
- GDP growth to improve in 2025 and head back up to trend in 2026.
- Risks to the outlook: contractionary effect of 2024 tightening of fiscal policy, profit recession to intensify, commercial real estate sector losses causing new banking troubles.

Monetary policy: Ready, steady, slow!

We believe central banks are on the verge of achieving a soft landing for the economy. Bringing inflation back to its target will continue to be the main focus of central banks, given the backdrop of our baseline forecast for a gradual and, all in all, merely moderate dampening of the economy. Growing evidence of disinflation implies that policy rate cuts will come earlier than we assumed in our September report, albeit not at a noticeably quicker pace nor reaching significantly different end points, but rather converging towards a neutral interest rate in the medium term.

Firstly, we do not assume that continued progress on inflation towards the target will be a straight line, but rather a process interrupted by the occasional setback. However, the downward trend in inflation, paired with the better demand-supply balance in the economy, implies that severe upside risks to inflation have subsided and should be more evenly weighed against other risks.³

Secondly, declining inflation – assuming that short-term inflation expectations decline in lock-step and longer-term expectations stay anchored – supports a lowering of the nominal policy rate. Otherwise, the real rate will climb and the policy stance would in practice be tightened, posing a risk to the soft landing.

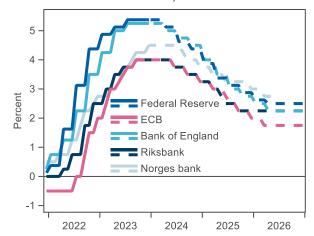
Thirdly, if the economy stays on course for a soft landing, neither a system-critical crisis nor a surge in unemployment will materialise, necessitating powerful policy action to support the economy and the financial system.

Given these conditions, in particular, we expect central banks to adopt a careful and resilient monetary policy strategy for 2024. Central banks will start to cut rates early – before inflation has stabilised at target but is credibly on track towards it – proceeding gradually to allow time to properly digest inflation outcomes and evaluate economic developments between making policy rate changes. With a firm hand, the strategy should halt expectations of looser future policy translating into overly loose current financial conditions, which would risk stoking inflation once again.

We forecast that the Fed will be the first major central bank to cut rates, in May, followed by the ECB in June. We analyse the outlook and conditions for rate cuts more thoroughly in our theme article *Ready*, *steady*, *slow!*

³ For more on the non-linear Phillips curve, see <u>inflation article</u>, p. 19–20, in Swedish forecast report, January 2023.

Cautious rate cuts at first, then normalisation



Sources: Macrobond, resp. central bank and Handelsbanken

	Federal Reserve	ECB	Bank of England	Riksbank	Norges Bank
First cut?	May	June	June	June	Aug
Total cuts	300bp	225bp	300bp	175bp	200bp
Long-run neutral rate (nominal)	~2.5%	1.5– 2.0%	~2.5%	2.0– 2.5%	1.75– 2.25%
QT outlook: Taper or speed up? End of QT?	Taper from Q3; QT stopped in H1 2025	Speed up in H2 and 2025, no end in sight	Pace unchanged, no end in sight	Speed up in Feb; active QT stops by end 2025	

Source: Handelsbanken

Quantitative tightening (QT) – the reduction of central banks' balance sheets through active or passive decreases of asset holdings – is forecast to continue beyond the start of policy rate cuts. Our reading is that there is a growing consensus that balance sheet policies have only a limited monetary policy effect in everyday central banking. In other words, what is, on paper, a tightening using this tool will not significantly counteract the intended effect of the coming policy rate cuts. The overarching objective of QT is now instead to normalise (i.e. shrink from current levels) balance sheets in order to regain the capacity to use quantitative easing in the event of a future financial crisis. However, country-

specific conditions and policy frameworks will, in our view, lead to some QT variation (see table).

Market pricing wrong but fair?

Market pricing of the short- to medium-term trajectories of policy rates is too low compared to our baseline forecast. This suggests that recent falls in bond yields and swap rates have gone too far, and a rebound or at least hesitancy should be expected during H1 2024 if the economy evolves as anticipated and we are right about central banks' actions (see graph appendix).

In our view, this is further complicated by the fact that at the same time as markets are underestimating rates in the short term, pricing of the medium- to longer-term policy rates is *over-estimating* the (nominal) neutral policy rate. All told, this implies that longer bonds and swaps are not trading far off fair levels. Nonetheless, as market participants start converging towards our outlook for policy rates, i.e. short risk-free interest rates, some renewed volatility in market interest rates should be expected.

Markets pricing in too many policy rate cuts too soon, but are upbeat on the neutral rate

On top of the outlook for the risk-free rate, our longrate forecasts are affected by the rising term premium - the interest rate risk compensation investors demand to hold longer duration bonds rather than shorter. A normalisation from negative to mostly positive term premiums has materialised faster than we had forecast in September. We observe higher term premiums today than six months ago, even disregarding the autumn spell when US fiscal sustainability worries temporarily fuelled premiums. Looking ahead, we assume that today's term premiums will more or less prevail, merely exhibiting some further widening. There is, however, significant uncertainty around this, as a policy rate cutting cycle unfolds at the same time as QT continues and can affect the short-term supply of bonds in markets.

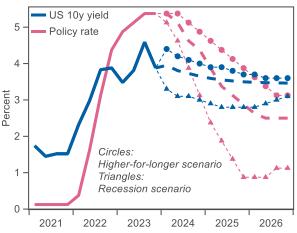
Risks scenarios alter long rates outlook

There are multiple risks to our baseline forecast, generating very different conclusions for the market interest rate forecasts. Two risk scenarios stand out:

1) Central banks make smaller cuts to policy rates than indicated in our baseline scenario, and delay the first cut, owing to a serious setback in progress to bring inflation back towards target. Hence, longer rates would be higher than outlined in our baseline forecast, and the real economy would be adversely affected in terms of slower growth and higher unemployment.

2) A recession suddenly spirals due to lagging effects of tight policy, implying lower GDP, higher unemployment, and lower inflation. Central banks respond to mitigate the effects by cutting policy rates more aggressively than forecast. All of which drives longer interest rates lower than outlined in our baseline forecast, even if steepening of the yield curve and rising term premiums limit the effect.

Two interest rate scenarios



Sources: Macrobond and Handelsbanken

Looking more concretely at the risks to the outlook, we consider the following key arguments.

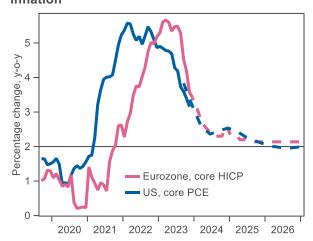
Firstly, evidence of entrenched inflation may show once more, relating to previously mentioned key drivers. However, other upside risks to inflation persist, such as renewed tensions in the Middle East (which could push energy prices upwards) and related conflict in the Red Sea, which has already propelled freight prices sharply higher. While such developments cannot be counteracted with monetary policy, they could delay a return to inflation targets and change the balance of risks for central banks. Lastly, a new round of rising inflation expectations (e.g. if central banks soften too quickly, or even worse appear to be de facto raising their inflation targets) which could force central banks to pull the brake once again.

Secondly, surprisingly large lagging effects of monetary policy tightening, and/or unexpected, ill-timed fiscal policy tightening coming now, could knock the soft landing off course and cause a recession to spiral. Lately, fiscal policy has mostly been singing in harmony with monetary policy, after possibly having been excessively expansionary in 2021. The US sticks out in this regard with its renewed expansion in 2023, now shifting back to

contractionary policy this year - with potential disruptions from election year unrest. Add to that the fiscal tightening in Germany and the budgets of various indebted countries around the world.

Apart from the above, we are mindful of additional positive surprises to the supply side of the economy. Productivity gains and fixed investment in tech and sustainable energy would result in higher GDP and lower-than-forecast unemployment. Inflation would still fall in this scenario and hence policy rate cuts should be expected to start as planned. However, over the medium- to longer term, the higher rate of return on investments would also cause the neutral rate of interest rate to exceed our baseline assumption, implying that central banks would lower rates less than anticipated. Hence, long rates would remain higher despite rates cuts in 2024.

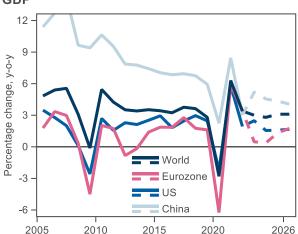
Inflation



Sources: Macrobond, Eurostat, BEA and Handelsbanken

Graph appendix

GDP



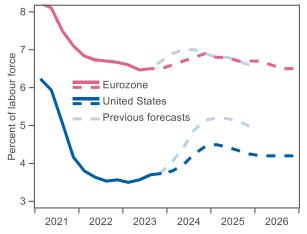
Sources: Macrobond, IMF and Handelsbanken

Long-term interest rates



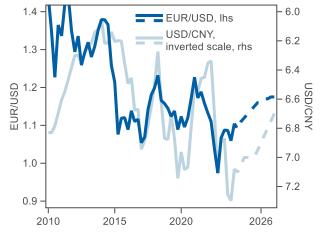
Sources: Macrobond and Handelsbanken

Unemployment



Sources: Macrobond, BLS, Eurostat and Handelsbanken

Exchange rates



Sources: Macrobond and Handelsbanken

Theme article: Monetary policy

Ready, steady, slow!

Growing evidence of disinflation is paving the way for central bank rate cuts, but markets are expecting too much too soon. We expect the Fed to lower its rate in May and the ECB to follow suit in June. This is before inflation has stabilised at central banks' targets, so we believe they will adopt a careful approach to normalising their policy that allows them to monitor how markets, activity and inflation develop. Policymakers find comfort in truncated upside risks to inflation and rates remaining in inflation-fighting, restrictive territory, and are increasingly motivated to support a soft landing.

On the verge of a soft landing

Recent trends in consumer price inflation suggest that the scene is set for rate cuts during the first half of 2024, while unemployment is as good as glued to record lows. Markets see victory against inflation as a 'done deal' and expect both the Fed and the ECB to cut rates by almost 150bp during 2024. Are central banks on the verge of cutting rates to avoid a sharp rise in unemployment and yet still defeat inflation? The short answer is "Yes!" The longer answer, however, includes several "ifs" and "buts".

While central bank doves are armed with a set of convincing arguments that support immediate interest rate cuts in the near future, the hawks have not yet run out of ammunition to defend their 'wait and see' stance. For example, inflation remains above target we lack a convincing narrative for the surprise fall in inflation. The argument that the rise in inflation was nothing more than a transitory phenomenon is unsatisfying given that price shocks spread through the economy as companies faced little resistance when they passed on higher input costs to customers and added markups. Moreover, the flipside of continued low unemployment is that there is little evidence of receding labour market cost pressures.

Challenging trade-offs persist

The first stage of disinflation primarily reflected the fading impact of supply price shocks and receding supply-demand imbalances originating from the pandemic. Monetary policy's main contribution was to constrain second-round effects and prevent a wage-price spiral and rising long-term inflation expectations. The second phase of disinflation is generally expected to be more challenging - partly because it involves components that tend to be more persistent. The second phase is also harder to tackle because it involves a growing element of trade-off between the risk of inflation remaining too high versus unemployment rising too much. The current policy stance is considerably restrictive and a fixation on the costs related to inflation becoming entrenched above the target would imply risks increasingly becoming skewed towards overtightening. An example of an overly restrictive strategy is one whereby rate cuts are conditioned on inflation having stabilised at its target. An aggressive strategy, such as that expected by the markets, may risk halting the disinflation process by stimulating demand, in particular in the current environment in which labour markets remain tight.

Central banks are likely to favour cautious rate cuts that allow monitoring of how markets, activity and inflation develop

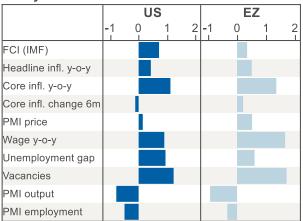
We believe the recent easing in consumer price inflation will motivate a gradual shift in central bank communication towards a more forward-oriented approach with greater focus on a soft landing. However, as disinflation is unlikely to be completed during 2024, we believe markets are expecting too much too soon. Central banks are likely to favour a careful strategy with cautious rate cuts, allowing them to monitor how markets, activity and inflation develop. We believe such an approach will bring inflation back to target with only a mild rise in unemployment.

Central bank dashboard for 2024

Central bank communication has repeatedly underlined the importance of data dependency. The analyses of inflation developments and the nearterm outlook will remain central when assessing the timing of rate cuts during 2024. In particular, central banks will need to see evidence of consumer price inflation continuing its gradual descent in order to motivate cuts. Declining labour market cost pressures and easing labour market tightness are also key to confirming sustainable disinflation. The outlook for demand will garner more attention as monetary policy becomes more concerned with rising unemployment as the upside risks to inflation

have been truncated. However, the thresholds for changes in economic activity to delay or push forward rate cuts should remain high. For example, rising unemployment is not a condition for rate cuts and should not be the main trigger. The prevailing financial conditions provide central banks with information about the transmission and credibility of monetary policy, confidence in the economic outlook and risk of financial stress. While we do not believe that supportive financial conditions would delay rate cuts, we argue that signals of stress could well trigger more aggressive cuts. Lastly, a key requirement for determining the appropriate path of rate cuts is an assessment of the current monetary policy stance and the extent to which the impact of previous hikes lingers in the pipeline.

Policy rate dashbord



*Notes: The scale is standardised. Inflation refers to deviation from 2 percent and other variables refer to deviation from mean. The sample starts 2010. Positive unemployment gap means unemployment below trend. Higher financial conditions (FCI) indicates looser financial conditions. Sources: Macrobond and Handelsbanken

The chart above provides a rough illustration of how the dashboard currently signals slowing, but still-elevated consumer price inflation, and persistent labour market tightness. Economic activity momentum (measured by PMI) is subdued, but the policy trade-off in terms of rising unemployment has so far been limited. High policy rates are partly offset by favourable conditions in other parts of the financial system, such as the stock market.

Inflation momentum is slowing

The key trigger behind the shift in market expectations towards earlier and more aggressive central bank rate cuts is the continued decline in consumer price inflation. The recent fall in momentum in the eurozone is particularly striking,

while there are more observations confirming the slowing inflation momentum in the US (see chart).⁴

The key trigger behind the shift in market expectations towards more aggressive rate cuts is the continued fall in inflation

We expect central banks to be hesitant about cutting rates based on volatile monthly changes. However, the easing trend in momentum means a further easing in y-o-y inflation during H1 2024 as price increases in H1 2023 gradually drop out of the annual inflation measure.

Core inflation



Notes: Eurozone refers to HICP excl. energy, food alcohol and tobacco, US refers to PCE excl. energy and food. Sources: Macrobond, BEA, Eurostat and Handelsbanken

Our forecasts imply rate cuts once y-o-y core inflation in both the eurozone and the US is between 2.5 and 3 percent. At this point, policymakers should be convinced that the upside risks have been sufficiently truncated. Nevertheless, central banks will continue to monitor inflation momentum. In the short run, we expect them to be particularly sensitive to momentum trends that indicate a rise in inflation.

The search for evidence of sustainable progress in disinflation involves monitoring a variety of aggregates and the dynamics between them. For example, both the Fed and ECB analyse a range of indicators to assess trends in underlying inflation.⁵ In general, recent trends in these indicators should also contribute to boosting confidence that the fall in consumer price inflation is both sustainable and broad-based. At the same time, several underlying

⁴ The drop in momentum in the eurozone partly reflects a significant drop in November and December inflation, which was around 3 percent m-o-m, annualised.

⁵ See for example the Atlanta fed underlying inflation dashboard and "<u>Underlying inflation measures: an analytical guide for the euro area</u>" in ECB Economic Bulletin, Issue 5/2023.

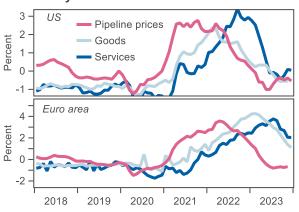
inflation indicators, measured y-o-y, remain elevated.

Service inflation not overly concerning

The fact that service price inflation remains elevated may be subject to debate among policymakers. The chart below illustrates the dynamic profile of the initial inflation impulse for goods and service price inflation.⁶ Business survey indicators follow a similar pattern as pricing plans for the manufacturing industry normalised in the first half 2023 but remain elevated for the service sector.

Inflation doves may argue that the dynamics suggest that service price inflation will continue to decline along the same lines as goods prices. However, we believe that central banks are more likely to be hesitant to cut interest rates while service prices remain elevated. We agree that the dynamics of goods prices are a poor guide to service prices, partly because the services sector has a larger share of labour costs. The fact that the decline in pricing plans among companies in the service sector has stalled at levels above normal also challenge the view of a continued decline in service prices.

Inflation dynamics



Sources: Macrobond and Handelsbanken Notes: Standardised scale. Goods excludes food & energy, US services refers to CPI services less rent of shelter

Nevertheless, rate cuts should not be conditional on a normalisation of service inflation. There are valid arguments to support a view that service prices could remain higher than normal without challenging the inflation target. For example, service prices remain low in relation to the long-term trend in the relative price of services to goods. The absence of a full easing in service price inflation, however, requires goods price inflation to fall below trend.⁷ Hence, by focusing on core inflation, policymakers should find the confidence to cut rates even if service price inflation remains elevated.

Wage pressures still a concern

A lack of hard evidence of a sufficient easing in wage cost pressures is a key factor that is delaying rate cuts. The ECB, in particular, has underlined the need for proof that the upcoming wage negotiations will result in contained wage growth. Given that official wage statistics are released with a significant lag, we believe the ECB will be reluctant to cut rates before June. Data up until the third quarter of 2023 shows no sign of easing wage cost pressures. A monthly indicator of wage growth based on online job postings indicates a downward trend (albeit still high) during the second half of 2023 (see chart).8

A lack of hard evidence of a sufficient easing in wage cost pressures is a key factor that is delaying rate cuts

Wage growth in the US has come down from its peak but remains high compared to the decade before the pandemic. Business survey data from the National Federation of Independent Business (NFIB) also provides somewhat ambiguous signals for small businesses. While the indicator for actual compensation outcomes shows a downward trend in 2023, the indicator for compensation plans over the next three months increased during the second half of 2023 and was close to its peak in December.

Labour markets remain tight

Continued evidence of easing labour market tightness is required to remove any residual resistance to rate cuts. At the same time, we do not expect continued low unemployment to delay rate cuts on either side of the Atlantic. In contrast, our soft-landing scenario implies that central banks will cut rates in advance to contain the increase in unemployment. Improved matching of job applicants

two-thirds of CPI service price inflation. As shelter inflation falls back from the currently high levels, this creates room for non-shelter service inflation to remain elevated.

⁶ The initial inflation impulse is represented by a composite pipeline indicator based on prices of raw materials, freight prices, PMI pricing plans and producer prices.
⁷ For further detail on this subject for the eurozone, see our

⁷ For further detail on this subject for the eurozone, see our Macro Comment "<u>Do not expect service price inflation to normalise and do not worry too much about it</u>". In the US, the contribution from shelter prices currently accounts for around

⁸ See Pawel Adrjan & Reamonn Lydon, "Wage Growth in Europe: Evidence From Job Ads", Bank of Ireland, Economic Letter, Vol 2022, No. 7.

with job postings is expected to support the further easing of labour market tightness.

US wages and job openings rate



Sources: Macrobond and Handelsbanken Notes: Job openings rate refers to non-farm and the series is detrended (linnear trend)

Job openings in the US have eased considerably from the peak, signalling the continued easing of wage costs during 2024. In the eurozone, the falling vacancy rate also suggests cooling labour market conditions, supporting the downward trend in the wage tracker (see chart). This is also reinforced by easing labour shortages in the manufacturing sector, while shortages remain closer to peak levels in the service sector.

Eurozone wages and vacancy rate



Sources: Macrobond and Handelsbanken Notes. Wages refers to wages & salaries in the business economy according to ECB:s labour cost index (LCI) Vacancies refers to business Economy and the series is detrended

Greater focus on activity momentum

Since the start of the hiking cycle, monetary policy decisions have primarily been motivated by inflation outcomes and concerns about rising long-term inflation expectations. With falling inflation and long-term inflation expectations anchored at the target, however, central banks can afford a gradual shift towards a more forward-looking approach, with greater focus on concerns about economic activity. This does not represent a shift in central banks' loss

functions, but rather reflects the fact that inflation risks on the upside have been curtailed.

The combination of low momentum in consumer price inflation and slowing economic activity should be a warning light on central bank dashboards

This means that the first phase of central bank action is coming to an end and the next step is to prepare the economy for a soft landing. The risk related to maintaining higher rates for too long primarily unwarranted costs in unemployment and income, but also includes a scenario whereby inflation becomes entrenched between below the target. The trade-off unemployment and inflation has so far been limited, but recent data confirms continued weak demand in the eurozone and suggests a weakening in the US. While this alone may not trigger rate cuts, the combination of low momentum in consumer price inflation and slowing economic activity should already be a warning light on central bank dashboards, particularly in the case of the ECB and the Fed.

Business and consumer survey indicators representing demand and employment plans will remain central to assessing the appropriate policy path required to manage a soft landing. Signs of companies' deteriorating hiring plans should, in particular, increase the probability of rate cuts.

Policy stance will remain restrictive

The ECB and the Fed, along with central banks in many countries, have raised interest rates at a record pace from record-low levels. Evidence detailing the lags from monetary policy to demand and prices is mixed, which illustrates that business cycles and their associated policy responses are never identical. Nevertheless, there is little support for a view that the passthrough from the recent hiking cycle has yet to have a full impact on the economy. Policy rates peaked in July in the US and in September in the eurozone, six and four months ago. In addition to lagged effects, there is also wide agreement that the current monetary policy stance is restrictive on both sides of the Atlantic. This implies a continued drag on activity and downward pressure on inflation until monetary policy normalises.

There are many reasons to be humble when making conclusions about the appropriate policy path from hereon. For example, there is still considerable uncertainty around remaining ripple effects of past shocks, as well as how contractionary the current policy stance is. However, both the Fed and the ECB should be confident that policy rates would also remain restrictive after the implementation of gradual rate cuts during 2024. In the current environment with ongoing disinflation, well-anchored inflation expectations and weaking economic activity, this should make policymakers more comfortable about starting to lower rates. Moreover, declining inflation expectations, in lock-step with easing actual inflation, implies that the policy stance would otherwise in practice be tightened.

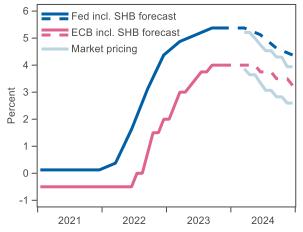
Policy rates would also remain restrictive after gradual rate cuts during 2024

Markets expecting too much too soon

Monetary policy's impact on the economy works through its influence on the entire yield curve and central banks need to reflect market reactions in their communications. Moreover, markets may affect central banks' behaviour. When market rates increased during the autumn of 2023, for example, Fed officials alluded to the fact that this could reduce the need for additional Fed rate hikes. Employing the same rationale, lower yields could also reduce the need for rate cuts. For example, a mismatch, whereby market interest rates are too low compared to the stance favoured by central banks, may render central banks hesitant to lower rates if they assess that it could risk triggering further downward pressure on market rates. However, central banks should be able to manage expectations and guide market rates, rather than the other way around. Moreover, markets and central banks are guided by the same data. Hence, the timing of both actual and expected rate cuts during the course of 2024 should be determined by the inflation outlook.

Current market pricing implies that both the Fed and the ECB will cut rates by almost 150bp during 2024, starting before summer. Our view is that markets are expecting too much too soon in terms of rate cuts. As market pricing is reversed, it usually brings with it some heightened volatility in risk assets. Nonetheless, we do not expect this to be so pronounced that it would trigger a negative feedback loop to the economy.

Markets expecting too much



Sources: Macrobond and Handelsbanken

Financial conditions are broadly neutral

Assessment of the appropriate policy stance also includes monitoring broader financial conditions. Monetary policy works through and responds to developments in the entire financial system, including bond, equity and housing markets. Broad indices of financial conditions suggest that tight policy rates are partly offset by favourable conditions in other parts of the financial system, such as the stock market.

Financial conditions that deviate from a normal correlation with the business cycle or interfere with the desired policy stance could, however, influence monetary decisions. In particular, a sharp deterioration in financial conditions would be a strong signal for central banks to cut rates earlier (and possibly make other accommodative actions). Should financial conditions become more accommodative than considered appropriate to curb inflation, this could contribute to delayed rate cuts.

Gradual rate cuts from Q2 2024

Based on our assessment of the outlook for economic activity and inflation, we believe central banks will start a gradual easing of monetary policy in Q2 2024. However, there are several sources of uncertainty. Firstly, the past few years have been a strong reminder that the future is full of surprises and that forecasts are uncertain. Conclusions about the appropriate monetary policy stance also depend on how data is interpreted in addition to being guided by risk tolerance.

After three years with major shifts in economic activity, inflation and policy, in addition to ongoing conflicts and geo-political tensions, uncertainty about the outlook remains significant. Evidence suggesting that the downward trend in inflation is

coming to a halt, or even reversing, would delay rate cuts, while evidence supporting faster disinflation or a steep downturn in economic activity could imply earlier and further rate cuts. Concerning risk tolerance, we believe policymakers will favour a strategy of truncating upside risks to inflation, acknowledging that this implies a risk of lower economic activity and higher unemployment. In our view, this reduces the probability of aggressive rate cuts and suggests a more careful approach. The exact timing of rate cuts should not be exaggerated, but testing the patience of financial markets, households and corporations poses a risk of a recessionary feedback loop. Against this backdrop, we expect gradual rate cuts to start before inflation has stabilised at the target, rather than steeper cuts after inflation has stabilised at the target.

Eurozone

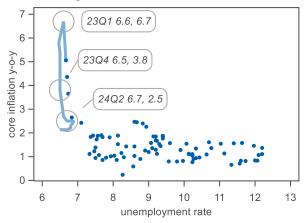
Prepare for a soft landing but stay buckled up

The prospects of a soft-landing for the eurozone economy have increased, despite the absence of GDP growth since late 2022. We expect continued disinflation, albeit at a slower pace, and easing labour market tightness to allow the ECB to start cutting rates in June, which should support a gradual recovery in GDP growth and contain the rise in unemployment. We forecast that inflation will return to target during the first half of 2025 and that unemployment will peak just below 7 percent at the end of 2024, before gradually falling towards 6.5 percent by the end of 2026.

A soft landing is increasingly plausible...

The recent fall in inflation coupled with continued low unemployment suggests that a soft landing is within reach. At the end of 2023, core inflation in the eurozone had fallen to 3.4 percent, while unemployment remains glued to record lows.

Soft landing



Sources: Macrobond and Handelsbanken Note: Quarterly data

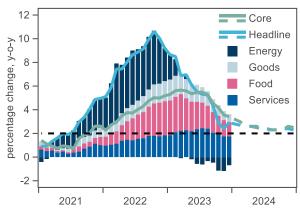
The decline in annual inflation is partly due to base effects, where steep price increases during the second half of 2022 have gradually dropped out of the annual change figure. However, inflation has also delivered a series of downside surprises in recent months, which will bring y-o-y core inflation down by another percentage point during H1 2024.

Goods inflation was the key driver of the surge in core inflation throughout 2022 and has also been a key factor in the disinflation process during 2023 as the ripple effects of supply bottlenecks started to fade. Service price inflation has also eased considerably during 2023, declining from 5.6 percent in July to 4 percent in December y-o-y, and we see a further fall in the pipeline due to gradually falling m-o-m changes during 2023. In recent months, service inflation appears to have levelled out, albeit at a still-elevated level of around 3 percent, m-o-m annualised. The same trend is evident in business survey data, which shows service sector pricing plans have moved sideways at an elevated level

since the middle of 2023. Nevertheless, abovenormal service price inflation does not necessarily challenge inflation returning to target. Service prices are still low in relation to the long-term trend in the relative price of services to goods. Hence, further easing of core inflation could be achieved by a further easing of goods price inflation, a possibility supported by the continued slowdown in goods inflation but challenged by the recent surge in freight prices.

We believe that the fall in y-o-y headline inflation during 2024 will be less pronounced than the decline in core inflation. This reflects the fact that the contribution from falling energy prices will fade and temporarily turn positive, while food inflation continues to ease during the beginning of the year.

Continued disinflation



Sources: Eurostat, Macrobond and Handelsbanken Food includes alcohol & tobacco. Goods refers to non-energy industrial goods

...despite sluggish GDP momentum

Stagnant GDP growth since late 2022 reflects a broad weakening of external as well as domestic demand. Higher interest rates weigh on investment, particularly housing, and households have not been willing to reduce their savings to income ratio to below pre-pandemic levels to support real consumption growth. Weak global demand and the lagged impact of the euro appreciation have

contributed to subdued growth in exports, industrial production and related business services. Business survey indicators and monthly data on demand and production suggest that GDP fell during the final quarter of 2023 and that growth remains sluggish as we begin 2024.

Unemployment is a blessing and a curse

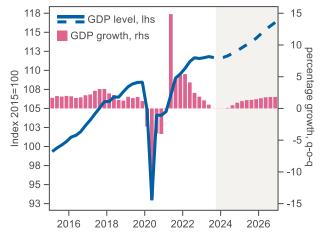
A resilient labour market is a key ingredient in a softlanding scenario. Nonetheless, wage cost pressures remain a concern that could prevent a move to loosen monetary policy and delay the recovery. We expect the weak economic activity to take a toll on jobs growth, while only generating a mild rise in unemployment. A cooling, but still resilient labour supported by business employment expectations, which, despite declining, remain close to their long-term average. Labour market tightness has also eased moderately, reflected in fewer companies reporting labour shortages and a lower vacancy rate. While there are tentative signs of easing wage-cost pressures, wage-cost growth at the end of 2023 was still well above normal. Moreover, current labour market tiahtness could support further inflation compensation demands as wage negotiations across the eurozone take place this year.

We believe the subdued economic momentum, cooling labour market and firmly anchored inflation expectations will help to contain wage increases ahead. Nevertheless, unit labour-cost growth will remain high in 2024 as nominal wage growth eases only gradually and productivity growth remains weak. Hence, continued disinflation implies low or falling unit-profit growth and lower profit share in the economy as whole. While the profit share in some sectors is high by historical standards, e.g. industry, it could prove more challenging in other sectors, including business services and recreation services.

Gradual recovery taking shape

We expect GDP growth to resume in 2024 and a gradual recovery to start in 2025. The key challenge is to preserve the foundations for a recovery and avoid a more pronounced recession in 2024. This is conditional on continued disinflation and the ECB plucking up the confidence to initiate rate cuts. Expectations of a soft landing should then provide a silver lining, boosting business and consumer confidence, preventing companies from cancelling investment plans, destocking and shedding labour despite profits being squeezed by margin compression and low volume growth. In return, growing real household income will gradually contribute to a rise in demand, volumes and profits.

Gradual recovery

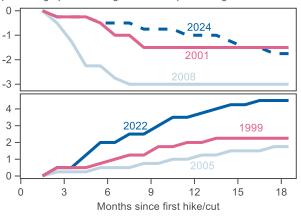


Sources: Eurostat, Macrobond and Handelsbanken

In our main scenario, consumer price inflation stays above target into 2025 and wage growth eases only gradually. In this environment, we expect a cautious easing of monetary policy with three cuts in 2024, followed by five cuts in 2025 as evidence builds of inflation having stabilised at the target. This would include falling unit labour cost growth, supported by a cyclical rise in productivity growth as demand returns. We forecast GDP growth will pick up from 0.4 percent in 2024 to 1.5 percent in 2026. We expect unemployment to peak at 6.9 percent at the end of 2024 before gradually falling back towards 6.5 percent by the end of 2026.

Aggressive hikes, slow cuts

percentage points change since rate peak/trough



Sources: Macrobond and Handelsbanken

Following aggressive rate hikes in response to surging inflation, we expect a slow normalisation with three cuts during 2024, five cuts in 2025 and a final cut in 2026 to 1.75 percent.

Sweden

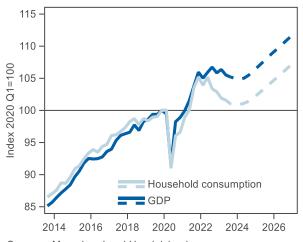
A dovish light at the end of the tunnel?

The Swedish economy contracted last year, and forward-looking indicators point to a continued decline in economic activity this winter. There are also clear signs that the labour market has cooled down, and we expect muted demand for labour this year. Following the easing of price pressures globally, lower domestic economic activity will help put the brakes on inflation. We expect the Riksbank to cut rates this summer, contributing to a pickup in economic activity from the second half of 2024.

Economic activity has slowed down

The Swedish economy has stagnated since 2022 and the downturn is being driven by weaker domestic demand. High inflation and rising interest rates have been eroding households' purchasing power, which has contributed to a sharp decline in household consumption since H1 2022. This decline has been fuelled by a clear slide in the consumption of goods, while the consumption of services has been somewhat higher. At the same time, housing construction has fallen steeply, owing to lower house prices, higher construction costs and more expensive financing. On the other hand, exports and business sector investment (excluding housing investment) have been robust and have helped to maintain growth. The downturn in Sweden has so far been deeper than in most European countries. One reason for this is that the Swedish economy is more sensitive to interest rates. However, its starting point was also stronger than that of many other countries as the Swedish economy recovered more quickly from the pandemic.

Sharp decline in household consumption

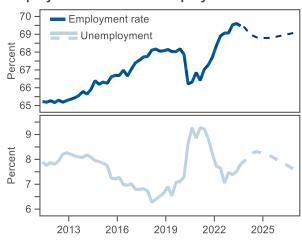


Sources: Macrobond and Handelsbanken

GDP fell in both the second and third quarters of last year, and forward-looking indicators point to a continued decline in economic activity this winter, as high interest rates and inflation continue to dampen demand. With the manufacturing sector seeing higher demand than companies selling to households, the split in the business sector will persist, according to the latest Economic Tendency Survey from the Swedish Institute of Economic Research (NIER). We also expect housing investment to decline further.

We see activity in the Swedish economy picking up gradually from the second half of 2024, when we expect households' real disposable income to rise as inflation falls back and hourly wages to grow by almost 4 percent. Combined with the Riksbank's rate cuts, which we expect to start from the summer, this will boost household consumption again in H2 2024. The recovery should continue in 2025 and 2026, as we see a return to expansionary fiscal policy, improvements in the wider global economy and continued loosening of monetary policy. Overall, we forecast that GDP will be almost unchanged this year and rise by 2.4 percent in 2025 and by a further 2.5 percent in 2026.

Employment rate and unemployment



Sources: Macrobond and Handelsbanken

Deteriorating labour market

There are clear signs that the labour market has cooled. Although employment remains near record highs, unemployment started to rise during autumn 2023, with indicators signalling a further increase in the near term. Companies' employment plans and the number of new vacancies have declined. Furthermore, redundancies continue to trend higher

from last year's lows and the number of hours worked is falling, suggesting that employment will continue to decline. In addition, the number of people registered as unemployed with the Swedish Public Employment Service is starting to rise, albeit from low levels. Overall, our view is that unemployment will continue to rise, peaking at 8.3 percent in the autumn. However, we believe the labour market will weather the downturn relatively well. The employment rate should fall back slightly from the record peak, but we expect it to increase again in 2025 and 2026.

Inflation on its way down to 2 percent

Since October, inflation has trended downwards, after initially having exceeded our previous forecast. In December, headline CPIF inflation was 2.3 percent. Admittedly, this was only just shy of our September forecast of 2.5 percent, but the signal is clearer when looking beyond the volatile electricity price: CPIF excluding energy (CPIFXE) ended up 0.4 percentage points below forecast.

Ahead, inflation looks set to continue on a lower trajectory than previously anticipated. First, global inflation is easing surprisingly quickly. Second, the krona has strengthened more than expected. In addition to these direct effects on imported inflation, domestic conditions are also dampening inflation, as fairly anchored inflation expectations and cooling demand have now put a lid on excessive price and wage setting. We expect these factors to further drive down inflation, reaching 2 percent in the latter stages of 2024.

This inflation forecast is tempered by the poor productivity outlook, paired with relatively high labour cost growth. Indeed, the NIER survey is still signalling elevated business pricing plans for the near term, and combined with a broad range of leading indicators, this means our CPIFXE forecast is somewhat elevated in the near term.

Riksbank pivots to much looser policy

All told, we downgrade our inflation forecast slightly. This hardly upends the conditions for monetary policy, but we now forecast the first rate cut will come in June, marginally earlier than we had forecast in our September report.

However, we expect the Riksbank's policy response to be outsized in relation to these inflation developments. The dovish policy pivot we foresee for the February and March policy announcements will be large for at least two reasons.

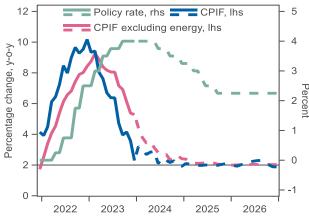
Firstly, the Riksbank has become ensnared in implausibly hawkish forward guidance and will likely revamp its policy rate forecast completely. A policy rate path without projected future cuts was used to drive up long market interest rates in 2022–23, when policy needed to be tightened substantially. But over the course of 2023, the Riksbank held back on lowering its medium-term policy rate, even as its restrictive policy stance was having a greater effect on inflation. It is now forecast revision payback time.

Secondly, the Riksbank has set extraordinarily backward-looking guideposts for what it deems to be target achievement and should be expected to realign this with the more forward-looking practices of its peers. The Riksbank has said that inflation needs to have "been close to the target for a time" before rate cuts begin, which more concretely has meant at least 6-12 months' target achievement, according to published analyses. The global central banking community (e.g. ECB and Fed) is signalling that cuts will start when inflation credibly approaches the target, but before it has actually been reached.

All told, at its February policy announcement, we expect the Riksbank to verbally signal the start of cuts in H2 2024, subject to its forecasts materialising. Then, at the subsequent March meeting, when a full monetary policy report with forecasts is presented, we expect a large downward revision of the Riksbank's policy rate forecast, with a series of rate cuts throughout 2025–26.

After the initial rate cut in June, we expect the Riksbank to maintain a cautious approach that enables cuts also in September and December, see theme article *Ready, steady, slow!*. For 2024, we forecast faster monetary policy normalisation and that the policy rate will be lowered to 2.25 percent.

Rate cuts when inflation approaches target



Sources: Macrobond, Statistics Sweden and Handelsbanken

Note: Full analysis of Sweden can be found in Konjunkturprognosen.

⁹ See theme article "<u>Brave new nominal world</u>", p.p. 9f, Global Macro Forecast, September 2023.

United Kingdom

Stumbling along

While we continue to forecast that the UK will skirt a recession, we believe that it will be a close-run thing with sub one percent growth forecast for 2024 and only a tentative recovery thereafter. On the plus side, while consumer sentiment remains subdued, real earnings are now positive and, as the year progresses, we expect to see both lower inflation and debt costs falling. However, these positives are set against an ever-heavier tax burden and rising unemployment. Hence, the result is continued caution. The coming year will almost certainly see a UK general election, although the new government's economic arsenal will be constrained by already high tax and debt levels, so our forecast is for few economic changes, regardless of the result.

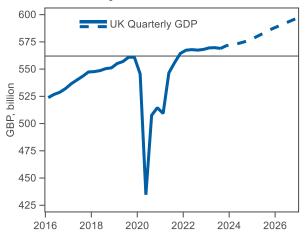
It is growth - but not as we know it

Our outlook for the UK remains one of anaemic GDP growth of 0.6 percent over the course of 2024. We forecast a somewhat hesitant recovery in 2025 and 2026, with GDP projected to expand by 1.5 and 1.7 percent respectively. Our last forecast in September outlined the case for the UK to narrowly miss a recession and instead see a period of low growth as consumers adjust to higher taxes and debt costs, as well as high, albeit falling, inflation. All of these costof-living issues continue to weigh heavily on our outlook. We reiterate our expectation that consumer expenditure will only grow by 0.3 percent in 2024, although we see stronger growth of 1.5 percent in 2025 and 1.6 percent in 2026. Alongside this, we are expecting business leaders to wait for clearer growth across the economy before embarking on any substantive investments.

While we believe that there is light on the horizon, consumers continue to be squeezed. In his recent Autumn Statement, the Chancellor cut National Insurance taxes for employees by 2p per pound of earning but note that this will be more than countered by tax increases, chiefly the non-adjustment of tax thresholds in line with inflation, resulting in the overall tax burden continuing to rise. It may well be that the Chancellor pushes through further tax reductions in the spring budget, but the constrained circumstances of the government's fiscal position do not point to these providing a meaningful boost to disposable income.

More encouragingly, while nominal earnings are falling from their July peak of 8.5 percent to 7.2 percent currently, inflation has fallen faster, resulting in earnings growth in real terms of 1.4 percent in October. We expect this positive trend in real earnings to be sustained over the course of 2024.

Hesitant recovery in GDP ahead



Sources: Macrobond and Handelsbanken

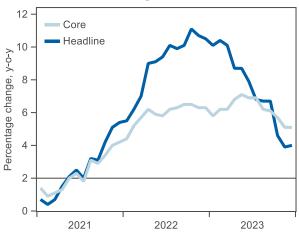
However, inflation remains problematic. UK CPI peaked at 11.1 percent in October 2022 and the latest data for November 2023 has inflation at 3.9 percent, still above its target rate of 2.0 percent. The volatile element of energy prices is now negative, but core inflation, which is largely driven by nominal earnings growth, is still a cause for concern. The good news is that our forecast for sticky inflation appears to have been too pessimistic and we now see inflation falling to its target level by the end of 2024, although we still have to account for rises in the minimum wage and pensions, due in the first half of 2024. Longer term, our expectation is that the falling money supply will pull inflation down below target in the latter half of 2025.

Business investment has the potential to surprise on the upside. Our base case remains one of caution, with business leaders unlikely to be tempted into action by the Chancellor's recent generosity in allowing "full expensing" of investments – at least until there is clear demand for the results of that investment. Fortuitously, the Purchasing Managers Index indicates that growth is possible in the coming

year, but this is a volatile survey. Unless (and until) we see more substantive evidence, our base case remains that, over the next three years, business investment will run at approximately 80 percent of the growth rate seen between 2010 and 2019.

As to the government's fiscal position, this has improved, but only in comparison with the dire forecasts of March 2023. The overall forecast budget deficit for 2023-24 has come down from GBP 132bn to GBP 124bn. However, any rational definition of fiscal sustainability must question the running of such a deficit with taxes at record highs and rising interest rates pushing up the cost of debt servicing. Looking to the current year, and despite the impending election, there are significant constraints on lowering taxes or increasing spending.

Inflation still above target



Sources: Macrobond and Handelsbanken

Labour market set to remain tight

The UK's labour market has undergone something of a transformation in recent years. The immediate situation is difficult to judge since the Office for National Statics has had to suspend the Labour Force Survey (currently being reconfigured to increase the response rate), but the basic structure is clear. The value of a workforce is now better appreciated by employers, who now less frequently let people go at the first sign of a downturn (leading at times to labour hoarding). At the same time, however, employees have generally become more open to flexible earnings that better match the realities of business revenues. As a result, we expect only a modest rise in unemployment, from 4.2 percent currently to a peak of just 5.5 percent in the third quarter of 2024.

Interest rates: how high for how long?

There was clearly some support for further interest rate rises at the December meeting of the Bank of England's Monetary Policy Committee. Our view, however, is that the dissenters who voted to increase interest rates from the current 5.25 percent were looking to drive home the point that the battle to control inflation is not yet over, rather than we should expect further interest rate rises. What is notable is that as interest rates rose over the course of 2023. investors adopted a degree of 'over exuberance' as to what the peak might be. For example, in July last year, markets were expecting interest rates to peak at over 6 percent. Now that the interest rate cycle has turned, we can see this exuberance moving in the other direction, with at least some investors seeking as many as four or five interest rate cuts in 2024. While the economy is hardly booming, we believe that the BoE is keen to emphasise its antiinflation credentials and will leave interest rates at 5.25 percent until June and cut by just 75bp over the course of 2024, ending the year at 4.5 percent. Lastly, wider monetary conditions indicate that inflation is going to become steadily less of an issue in the longer term, with the broad money supply now contracting, partly as a result of the ongoing programme of GBP 100bn in annual quantitative tightening.

GBP to benefit from cautious pace of cuts

Sterling spent much of 2023 being range-bound, trading between GBP 0.89 and GBP 0.86 against the EUR and between USD 1.21 and USD 1.29. In large part, this reflected the fact that all three major central banks tightened at a similar pace, limiting any interest rate differentials. Now, with interest rates peaking, attention is turning to the pace and timing of interest rate cuts. The slightly more persistent outlook for UK inflation and consequent expectation that the BoE will be slower than both the ECB and the Federal Reserve in reducing interest rates points to modest sterling strength throughout 2024. We expect EUR/GBP to drift from 0.86 towards 0.85 by the end of 2025, while GBP/USD will mirror the strength of EUR, moving from 1.27 to 1.38 over the same timeframe.

Norway

Probably no interest rate cuts anytime soon

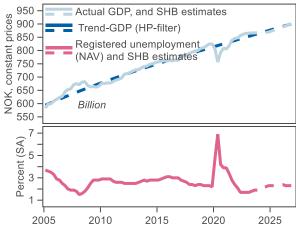
Growth in the Norwegian economy has ground to a halt, and we are likely to see a slight decline in mainland GDP during the winter months. The rise in unemployment still appears to be moderate and we expect wage growth to remain high until 2025. Although we believe that Norges Bank has reached the interest rate peak, we do not expect it to make interest rate cuts anytime soon, and argue that we will have to wait until the second half of this year for a total of three interest rate cuts with a further three cuts in 2025. If we are correct, Norges Bank will approach a neutral policy rate towards the end of 2026.

Activity is slowing from elevated levels

Growth in the Norwegian economy has ground to a halt, and it is probable that we will see a slight decline in mainland GDP during the winter months. According to the companies in Norges Bank's regional network survey, the economy has stagnated throughout the fourth quarter, which is also confirmed by the hard data received so far. Furthermore, the same survey indicates production will drop by around 0.3 percent q-o-q during the first quarter. In general, the outlook has dimmed for most sectors of the Norwegian economy, but especially for construction and trade. Our updated forecasts incorporate the weaker growth signals that we have received from the regional network. If we look at 2023 as a whole, it is likely that growth ended up at around 1.0 percent. This year we expect growth to slow further, however, to almost zero percent, calculated as an annual average. This follows from a weak carry over from last year, combined with a slight contraction during the first quarter. A gradual pickup is expected from the second half of the year, however, against the backdrop of Norges Bank starting its rate cutting cycle, and real wages gradually increasing again. We foresee that this will contribute to GDP growth of around 1.4 percent in 2025, followed by 1.8 percent growth in 2026.

Our estimates imply that activity will remain below its potential level all the way through 2025, however, followed by normalisation in 2026. Given the weak outlook for 2024, unemployment, which so far has increased only marginally from the record lows we saw at the start of last year, will continue to rise moderately throughout the forecast However, supply of labour typically responds to demand, and we note that labour participation has increased in recent years. Thus, with a weak outlook for growth and employment this year in particular, we believe that labour force participation will begin to fall as well. This means that we do not expect to see a marked rise in registered unemployment ahead.

Mainland GDP and registered unemployment



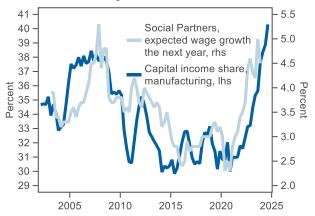
Sources: Macrobond and Handelsbanken

Core inflation gradually easing

We believe that core inflation measured by CPI excluding energy (the CPI-ATE) has passed the peak. After a record listing of 7.0 percent in June, annual growth in the CPI-ATE has now slowed to 5.5 percent. Other indicators of underlying inflation. such as trimmed mean and weighted average, have also shown a clear decline from the peak. Furthermore, the seasonally adjusted rate for the CPI-ATE, expressed in annualised terms, has dropped sharply (when smoothed over the past six months). At the same time, we highlight that the dynamics of price growth have now changed. What started as an imported cost shock, which later spilled over into general retail prices, has now spread further to the point that price growth is largely driven by high wage growth and higher margins for companies. Wage growth will remain elevated also in 2024. Not until the end of the forecasting horizon, do we see core inflation moving more firmly towards target. These topics are explored further below.

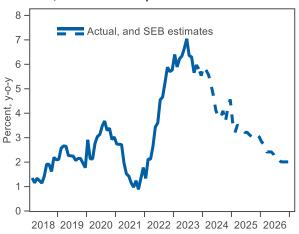
Expected wage growth versus profitability

Within the manufacturing sector



Sources: Macrobond and Handelsbanken

CPI-ATE, actual and expected



Sources: Macrobond and Handelsbanken

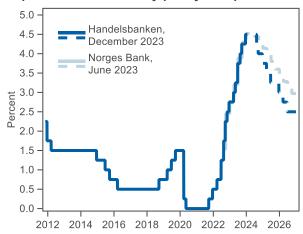
This development in underlying inflation must, among other things, be seen in the context of the marked depreciation of the NOK over the past year. Even though Norges Bank has, once again, taken an active step to strengthen the NOK - which seems to have been successful - the impact of the depreciation over the past year will continue to stimulate high wage growth in the coming year. In Norway, the frontline sector (i.e. manufacturing) sets wages first and is therefore leading the wage growth in the rest of the Norwegian economy. When the NOK exchange rate weakens, profitability in the manufacturing sector improves, which pushes up wage growth and thus also high underlying price growth. Given the past weakening of the NOK exchange rate, wage growth will remain elevated also in 2024. However, with the outlook of a weaker labour market ahead, coupled with a further and gradual appreciation of the NOK, as we expect, wage and inflationary pressures will eventually normalise. But it may still take Norges Bank some time to get the underlying price growth back to the

inflation target of 2 percent, and we believe that coreand total inflation will first reach the inflation target at the end of the forecast period in 2026.

No interest rate cuts in the near future

Norges Bank defied most predictions and raised the key interest rate to 4.50 percent in December. This together with Norges Bank's signals contributed to raising short-term interest rate expectations, which means that the NOK exchange rate, expressed at I-44, is currently around 3 percent stronger than Norges Bank had previously assumed. We believe the NOK will gradually strengthen and that by the end of 2024, it will be at 11.2 against the EUR. This implies the outlook for the key policy rate trajectory is lower than assumed by Norges Bank. But Norges Bank will probably not implement the first interest rate cut until the major international central banks have done so, in order not to risk another round of depreciationary pressure against the NOK exchange rate. In our view, Norges Bank is unlikely to start cutting interest rates until after the summer holidays, and we envisage a total of three interest rate cuts during the second half of 2024 with a further three cuts in 2025. If our forecast proves correct, Norges Bank will not approach a neutral policy rate until towards the end of 2026.

Expectations for the key policy rate path



Sources: Norges Bank and Handelsbanken

Finland

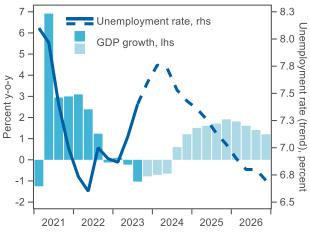
Subdued outlook for 2024

The Finnish economy is currently languishing and although we expect activity to gradually pick up during the year, we forecast that GDP will grow by just 0.1 percent in 2024 from the previous year. In 2025–26 economic growth is set to improve, with domestic demand underpinning activity. The unemployment rate will peak in 2024 and decline in the latter part of the forecast period. Inflation will slow further in 2024 and normalise thereafter at around 2 percent. In parallel, lower interest rates will support the housing market from 2024.

Growth to improve in 2025

The Finnish economy contracted in the second half of 2023 owing to weak domestic demand, and the outlook for the winter months is subdued. However, thanks to lower inflation and interest rates, we believe that activity will begin to pick up during 2024. Despite quarterly GDP growth, the negative carry over from 2023 means that GDP growth for the fullyear 2024 is forecast to be just 0.1 percent. For 2025-26, however, we see stronger economic growth, supported by recovering domestic demand. We expect GDP to grow by 1.7 percent in 2025 and 1.5 percent in 2026. We see inflation declining further in 2024 due to weaker price pressure and expect the normalisation to extend into 2025 and 2026 as inflation returns to 2 percent. As monetary policy loosens in parallel with falling inflation, we expect house prices to rebound moderately in 2024. Unemployment will peak in the early part of 2024 but decline thereafter.

Gradual improvement from latter half of 2024



Sources: Macrobond, Statistcs Finland and Handelsbanken

Exports prospects to brighten

Although overall industrial production contracted last year, some industries fared better than others. The Metals industry (except electrical and electronics) grew quite well, while production in the Chemical, Forest, Electrical and Electronics industries declined. Order intake was weak in 2023, as the value of new orders decreased over the course of

the full year. The value of the Technology industry's order book remains high, thanks to shipping orders received in previous years. Finnish exports grew modestly in 2023, while imports shrank markedly. As the global economy begins to recover, the prospects for Finland's goods exports should gradually brighten during the forecast period, supported by lower interest rates and the need for investment. The digitalisation trend continues to underpin the potential for growth in service exports although these have remained somewhat stagnant in recent years.

Last year, imports decreased more than exports, hence the contribution from net exports to growth was substantial. During the forecast period, export and import growth will normalise from the large fluctuations seen in 2022–23. We forecast that exports will grow by 1.5 percent in 2024 and return to an average growth rate of 3.3 percent in 2025–26. We expect the current account to remain in deficit during the forecast period.

Private consumption bottoming out

Private consumption stagnated last year as households' purchasing power was dampened by the rapid rise in consumer prices and interest rates. As we start 2024, the outlook for consumer spending remains subdued. Consumer confidence remains low, with intentions to spend money on consumer durables hovering at near record lows. In addition, services demand, which previously bolstered private consumption, has more or less stalled. Furthermore, at the end of last year, households became more cautious with their spending, which led to an increase in households' saving rate.

We expect household consumption to gradually recover in the latter part of 2024 as wage increases start to exceed inflation. Furthermore lower interest rates and a less pronounced weakening of the labour market will support household finances and consumption. We forecast that private consumption will grow by 0.5 percent in 2024 and accelerate in 2025–26.

Public investments growing strongly

Investments in general fell markedly in 2023. Investments in residential construction showed a pronounced decline, while investments in non-residential construction also weakened. A more moderate decrease was seen in machinery and equipment investments and other investments. Lower interest rates, lower inflation and a decrease in economic uncertainty will turn private investments into modest growth in the latter part of this year. However, the plunge in building permits and building starts indicates that it will take time before residential construction starts to recover. Nonetheless, we expect the situation to improve slightly in the second half of this year.

We expect the recovery in construction investments to pick up pace in 2025–26. We forecast that machine and equipment investments and other investments will also show solid growth due to the green transition, digitalisation and artificial intelligence investments. Investments in security, border control and national defence, in particular the delivery of the new multirole fighter aircrafts from 2025, will significantly increase public investments during our forecast period. According to our forecast, total investments will grow by 1.2 percent in 2024 and by around 4 percent in 2025–26. The marked increase in public investments should accelerate total investments in 2024–25.

Housing market recovery ahead

The housing market was exceptionally sluggish in 2023, although we note that lower interest rates and changes in the transfer tax improved activity at the end of the year. We also note that prices of old dwellings in housing companies have decreased since summer 2022 and we estimate that they decreased by a further 6.0 percent in 2023. Going forward, we expect that the price trend will start to improve as lower inflation and interest rates and a rise in households' intentions to buy a home lead to higher activity in the housing market.

We forecast that the housing market will start to improve in the spring. However, we expect the recovery to be quite slow and that the pace will vary across Finland. We expect the prices of old dwellings in housing companies to rise by 1 percent in 2024.

Inflation down further

Inflation slowed down markedly towards the end of last year. In December, inflation was 3.6 percent, while the average for 2023 was 6.2 percent. We expect inflation to follow a similar trend this year. Inflation for housing is slowing due to lower interest rates and cheaper energy prices. We also expect

food inflation to subside, while electricity prices will likely remain moderate. Service inflation will be maintained by wage increases. All in all, we expect inflation to normalise to around 2 percent during our forecast period; falling to 2.2 percent in 2024, 1.9 percent in 2025 and settling at 2.1 percent in 2026.

Labour market to recover later this year

Towards the end of 2023, the labour market weakened more rapidly than we had previously anticipated, with the unemployment rate rising to 7.6 percent in November, the highest level since July 2021. Given that the Finnish economy was in a recession at the end of the year, the labour market is set to face more near-term headwinds as the employment expectations of Finnish enterprises (particularly in construction and manufacturing) are weak. At the same time, the number of open vacancies has declined significantly. We expect the labour market situation to start to recover in the latter part of this year as the economic environment improves. We forecast that the unemployment rate will average 7.6 percent in 2024 before declining to 6.8 percent by 2026.

Public finance challenges more serious

The public finance situation has proven to be more severe than was previously assumed by the Finnish authorities. The new government's aim is to strengthen general government finances by EUR 6bn during the 2023–27 parliamentary term. This goal has already faced setbacks as public expenditure is expected to soar due to previously implemented measures, higher debt servicing costs and substantial defence procurement.

At the same time, the economic situation is set to weaken more than previously forecast, resulting in lower-than-expected tax revenue growth. We believe that the public finance deficit will breach the EU's threshold level of 3 percent of GDP in 2023–25, which would place Finland under the EU's excessive deficit procedure. The government will undoubtedly seek new consolidation measures by means of spending cuts and tax increases, which could further hurt economic activity. Rising public debt together with sluggish nominal GDP growth mean that the public debt-to-GDP ratio will rise from 73.3 percent in 2022 to 77.1 percent in 2026.

Key figures

GDP	Annual average			
	2023p	2024p	2025p	2026p
Sweden*	-0.2 (-0.6)	0.1 (0)	2.4 (2.4)	2.5
Finland	-0.5 (0.1)	0.1 (0.7)	1.7 (1.8)	1.5
Norway. mainland economy*	1.0 (1.2)	0.1 (0.4)	1.4 (1.2)	1.8
Eurozone	0.5 (0.4)	0.4 (0.4)	1.3 (1.5)	1.7
United Kingdom	0.3 (0.4)	0.5 (0.8)	1.7 (1.8)	1.8
United States*	2.5 (2.2)	1.6 (0.4)	1.6 (1.5)	1.7
China	5.2 (5.1)	4.5 (4.4)	4.3 (4.6)	4.1

^{*}Calendar adjusted

Inflation	Annual average			
	2023	2024p	2025p	2026p
Sweden. CPI	8.5	3.8 (3.7)	2.0 (1.9)	2.0
Sweden. CPIF	6.0	2.5 (2.8)	2.0 (2.0)	2.1
Finland	6.2	2.2 (2.3)	1.9 (2.0)	2.0
Norway. CPI	5.5	4.2 (4.1)	2.6 (3.2)	2.3
Norway. CPIATE	6.2	4.6 (4.5)	3.2 (3.5)	2.3
Eurozone	5.4	2.5 (2.7)	2.0 (2.0)	2.0
United Kingdom	7.3	2.9 (3.5)	2.0 (2.5)	1.7
United States. PCE Core	4.1	2.5 (2.8)	2.2 (2.3)	2.0

Unemployment	Annual average			
	2023p	2024p	2025p	2026p
Sweden	7.7 (7.5)	8.2 (8.1)	8.1 (7.9)	7.8
Finland	7.2 (7.1)	7.6 (7.2)	7.2 (6.8)	6.8
Norway*	1.8 (1.9)	2.2 (2.4)	2.3 (2.5)	2.3
Eurozone	6.5 (6.6)	6.8 (7.0)	6.8 (6.7)	6.6
United Kingdom	4.3 (4.2)	5.0 (5.0)	5.4 (5.0)	5.2
United States	3.6 (3.6)	4.1 (4.6)	4.4 (5.1)	4.2

Source: Handelsbanken

*Registered unemployment NAV

In brackets: Handelsbanken Global Macro Forecast September 20. 2023

Exchange rate forecast		End of year		
	2023	2024p	2025p	2026p
EUR/SEK	11.10	10.70 (10.8)	10.20 (10.3)	10.00
USD/SEK	10.04	9.47 (9.56)	8.79 (8.80)	8.51
GBP/SEK	12.75	12.59 (12.13)	12.00 (11.44)	11.76
NOK/SEK	0.99	0.96 (0.99)	0.94 (0.96)	0.93
CHF/SEK	11.98	10.92 (11.02)	10.30 (10.51)	10.00
JPY/SEK	7.12	6.76(6.83)	6.42(6.52)	6.35
CNY/SEK	1.42	1.35(1.35)	1.27(1.28)	1.27
	2023	2024p	2025p	2026p
EUR/USD	1.11	1.13 (1.13)	1.16 (1.17)	1.18
USD/JPY	141.02	140.00 (140)	137.00 (135)	134.00
EUR/GBP	0.870	0.850 (0.89)	0.850 (0.9)	0.850
GBP/USD	1.27	1.33 (1.27)	1.36 (1.30)	1.38
EUR/CHF	0.93	0.98 (0.98)	0.99 (0.98)	1.00
USD/CNY	7.08	7.00 (7.10)	6.90 (6.90)	6.70
	2023	2024p	2025p	2026p
EUR/NOK	11.24	11.20 (10.9)	10.90 (10.7)	10.80
SEK/NOK	1.01	1.05 (1.01)	1.07 (1.04)	1.08
USD/NOK	10.17	9.91 (9.65)	9.40 (9.15)	9.19
GBP/NOK	12.92	13.18 (12.25)	12.82 (11.89)	12.71
CHF/NOK	12.14	11.43 (11.12)	11.01 (10.92)	10.80
JPY/NOK	7.21	7.08 (6.89)	6.86 (6.77)	6.86

Source: Handelsbanken

In brackets: Handelsbanken Global Macro Forecast September 20. 2023

Interest rate forecast	End of year				
Policy rates	2023	2024p	2025p	2026p	
United States	5.375	4.375 (4.375)	2.875 (3.125)	2.50	
Eurozone	4.00	3.25 (3.25)	2.00 (2.50)	1.75	
Sweden	4.00	3.25 (3.75)	2.25 (2.75)	2.25	
United Kingdom	5.25	4.50 (4.50)	2.75 (4.00)	2.25	
Norway	4.50	3.75 (4.00)	3.00 (3.50)	2.50	
Interbank rates	2023	2024p	2025p	2026p	
United States. LIBOR	5.59	4.00 (4.25)	2.80 (3.10)	2.55	
Sweden. STIBOR	4.05	3.23 (3.82)	2.25 (2.85)	2.25	
Euro Area. EURIBOR	3.91	3.30 (3.30)	2.05 (2.55)	1.80	
Norway. NIBOR	4.73	4.10 (4.35)	3.35 (3.85)	2.85	
2 year govt. bond yield	2023	2024p	2025p	2026p	
United States	4.23	3.38 (3.35)	2.82 (3.00)	2.74	
Eurozone (Germany)	2.38	2.21 (2.22)	1.65 (1.91)	1.60	
Sweden	2.88	2.39 (2.72)	2.11 (2.41)	2.12	
Finland	2.41	2.15 (2.25)	1.60 (1.95)	1.65	
United Kingdom	3.98	3.26 (4.55)	2.57 (4.11)	2.42	
Norway	3.54	3.50 (4.05)	3.25 (3.80)	3.00	
5 year govt. bond yield	2023	2024p	2025p	2026p	
United States	3.84	3.37 (3.50)	3.12 (3.24)	3.08	
Eurozone (Germany)	1.93	1.91 (2.13)	1.74 (1.97)	1.79	
Sweden	2.03	2.41 (2.53)	2.31 (2.42)	2.34	
Finland	2.33	2.20 (2.30)	2.00 (2.10)	2.10	
United Kingdom	4.62	3.51 (4.41)	3.09 (4.13)	3.01	
Norway	3.23	3.25 (3.80)	3.15 (3.70)	3.00	
10 year govt. bond yield	2023	2024p	2025p	2026p	
United States	3.88	3.65 (3.65)	3.50 (3.60)	3.46	
Eurozone (Germany)	2.02	2.02 (2.30)	1.97 (2.14)	2.04	
Sweden	2.02	2.63 (2.60)	2.60 (2.54)	2.65	
Finland	2.57	2.55 (2.70)	2.40 (2.45)	2.50	
United Kingdom	3.60	3.75 (4.27)	3.60 (4.15)	3.60	
Norway	3.24	3.30 (3.70)	3.30 (3.60)	3.00	
2 year swap rate	2023	2024p	2025p	2026p	
United States	4.07	3.25 (3.55)	2.73 (3.20)	2.69	
Eurozone	2.80	2.55 (2.78)	1.97 (2.41)	1.90	
Sweden	2.91	2.72 (3.18)	2.42 (2.81)	2.42	
United Kingdom	4.28	3.73 (4.62)	3.04 (4.18)	2.89	
Norway	3.95	3.70 (4.20)	3.45 (3.95)	3.20	
5 year swap rate	2023	2024p	2025p	2026p	
United States	3.53	3.12 (3.40)	2.89 (3.25)	2.88	
Eurozone	2.43	2.31 (2.64)	2.07 (2.42)	2.04	
Sweden	2.38	2.72 (2.94)	2.59 (2.77)	2.59	
United Kingdom	4.98	3.80 (4.41)	3.38 (4.21)	3.31	
Norway	3.43	3.45 (4.00)	3.35 (3.90)	3.20	
10 year swap rate	2023	2024p	2025p	2026p	
United States	3.47	3.29 (3.75)	3.17 (3.70)	3.16	
Eurozone	2.49	2.37 (2.76)	2.24 (2.54)	2.24	
Sweden	2.35	2.90 (2.96)	2.84 (2.84)	2.85	
United Kingdom	3.54	3.87 (4.19)	3.72 (4.23)	3.72	
Norway	3.33	3.60 (3.90)	3.60 (3.80)	3.30	

Source: Handelsbanken

In brackets: Handelsbanken Global Macro Forecast September 20. 2023

Research disclaimer

Risk warning

All investments involve risks and investors are encouraged to make their own decision as to the appropriateness of an investment in any securities referred to in this report, based on their specific investment objectives, financial status and risk tolerance. The historical return of a financial instrument is not a guarantee of future return. The value of financial instruments can rise or fall, and it is not certain that you will get back all the capital you have invested. At times, the expected total returns may fall outside of the above stated ranges because of price movement and/or volatility. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management.

Research disclaimers

Handelsbanken Capital Markets, a division of Svenska Handelsbanken AB (publ) (collectively referred to herein as 'SHB'), is responsible for the preparation of research reports. SHB is regulated in Sweden by the Swedish Financial Supervisory Authority, in Norway by the Financial Supervisory Authority of Norway and in Finland by the Financial Supervisory Authority of Finland. All research reports are prepared from trade and statistical services and other information that SHB considers to be reliable. SHB has not independently verified such information.

In no event will SHB or any of its affiliates, their officers, directors or employees be liable to any person for any direct, indirect, special or consequential damages arising out of any use of the information contained in the research reports, including without limitation any lost profits even if SHB is expressly advised of the possibility or likelihood of such damages.

The views contained in SHB research reports are the opinions of employees of SHB and its affiliates and accurately reflect the personal views of the respective analysts at this date and are subject to change. There can be no assurance that future events will be consistent with any such opinions. Each analyst identified in this research report also certifies that the opinions expressed herein and attributed to such analyst accurately reflect his or her individual views about the companies or securities discussed in the research report. This research report does not, and does not attempt to, contain everything material that there is to be said about the company or companies described herein. For additional information about our research methodology please visit, https://reon.researchonline.se/desc/disclaimers.

Research reports are prepared by SHB for information purposes only. The information in the research reports does not constitute a personal recommendation or personalised investment advice and such reports or opinions should not be the basis for making investment or strategic decisions. This document does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for any securities nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. Past performance may not be repeated and should not be seen as an indication of future performance. The value of investments and the income from them may go down as well as up and investors may forfeit all principal originally invested. Investors are not guaranteed to make profits on investments and may lose money. Exchange rates may cause the value of overseas investments and the income arising from them to rise or fall. This research product will be updated on a regular basis.

No part of SHB research reports may be reproduced or distributed to any other person without the prior written consent of SHB. The distribution of this document in certain jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe, any such restrictions.

The report does not cover any legal or tax-related aspects pertaining to any of the issuer's planned or existing debt issuances.

Please be advised of the following important research disclosure statements:

SHB employees, including analysts, receive compensation that is generated by overall firm profitability. Analyst compensation is not based on specific corporate finance or debt capital markets services. No part of analysts' compensation has been, is or will be directly or indirectly related to specific recommendations or views expressed within research reports.

From time to time, SHB and/or its affiliates may provide investment banking and other services, including corporate banking services and securities advice, to any of the companies mentioned in our research.

We may act as adviser and/or broker to any of the companies mentioned in our research. SHB may also seek corporate finance assignments with such companies.

We buy and sell securities mentioned in our research from customers on a principal basis. Accordingly, we may at any time have a long or short position in any such securities. We may also make a market in the securities of all the companies mentioned in this report. [Further information and relevant disclosures are contained within our research reports.]

SHB, its affiliates, their clients, officers, directors or employees may own or have positions in securities mentioned in research reports.

In conjunction with services relating to financial instruments, the Bank may, under certain circumstances, pay or receive inducements, i.e. fees and commission from parties other than the customer. Inducements may be both monetary and non-monetary benefits. If inducements are paid to or received from a third party, it is required that the payment must aim to improve the quality of the service, and the payment must not prevent the Bank from safeguarding the customer's interests. The customer must be informed about such remuneration that the Bank receives. When the Bank provides investment research, the Bank receives minor non-monetary benefits. Minor non-monetary benefits consist of the following:

- Information or documentation about a financial instrument or an investment service that is general in character.
- Written material produced by a third party that is an issuer to market a new issue.
- Participation at conferences and seminars regarding a specific instrument or investment service
- Corporate hospitality up to a reasonable amount.

The Bank has adopted Guidelines concerning Research which are intended to ensure the integrity and independence of research analysts and the research department, as well as to identify actual or potential conflicts of interests relating to analysts or the Bank and to resolve any such conflicts by eliminating or mitigating them and/or making such disclosures as may be appropriate. As part of its control of conflicts of interests, the Bank has introduced restrictions ("Information barriers") on communications between the Research department and other departments of the Bank. In addition, in the Bank's organisational structure, the Research department is kept separate from the Corporate Finance department and other departments with similar remits. The Guidelines concerning Research also include regulations for how payments, bonuses and salaries may be paid out to analysts, what marketing activities an analyst may participate in, how analysts are to handle their own securities transactions and those of closely related persons, etc. In addition, there are restrictions in communications between analysts and the subject company. According to the Bank's Ethical Guidelines for the Handelsbanken Group, the board and all employees of the Bank must observe high standards of ethics in

carrying out their responsibilities at the Bank, as well as other assignments. For full information on the Bank's ethical guidelines please see the Bank's website www.handelsbanken.com and click through to About the Group – Policy documents and guidelines – Policy on Ethical standards. Handelsbanken has a ZERO tolerance of bribery and corruption. This is established in the Bank's Group Policy on Bribery and Corruption. The prohibition against bribery also includes the soliciting, arranging or accepting bribes intended for the employee's family, friends, associates or acquaintances. For full information on the Bank's Policy against corruption please see the Bank's website www.handelsbanken.com and click through to About the Group – Policy documents and guidelines – Policy against corruption.

When distributed in the UK

This document may be distributed in the United Kingdom only to persons who are authorised or exempted persons within the meaning of the Financial Services and Markets Act 2000 (as amended) (or any order made thereunder) or (i) to persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"), (ii) to high net worth entities falling within Article 49(2)(a) to (d) of the Order or (iii) to persons who are professional clients under Chapter 3 of the Financial Conduct Authority Conduct of Business Sourcebook (all such persons together being referred to as "Relevant Persons").

Any person who is not a Relevant Person may not rely on this research report.

UK customers should note that neither the UK Financial Services Compensation Scheme for investment business nor the rules of the Financial Conduct Authority made under the UK Financial Services and Markets Act 2000 (as amended) for the protection of private customers apply to this research report and accordingly UK customers will not be protected by that scheme.

When distributed in the United States

Important Third-Party Research Disclosures:

SHB research is not "globally branded" research and each recipient of SHB research is advised that in the United States, SHB research is distributed by Handelsbanken Markets Securities, Inc., ("HMSI") an affiliate of SHB. HMSI does not produce research and does not employ research analysts. SHB research and SHB research analysts and its employees are not subject to FINRA's research analyst rules which are intended to prevent conflicts of interest by, among other things, prohibiting certain compensation practices, restricting trading by analysts and restricting communications with the companies that are the subject of the research report. SHB has no affiliation or business or contractual relationship with HMSI that is reasonably likely to inform the content of SHB research reports; SHB makes all research content determinations without any input from HMSI.

SHB research reports are intended for distribution in the United States solely to "major U.S. institutional investors," as defined in Rule 15a-6 under the Securities Exchange Act of 1934. Each major U.S. institutional investor that receives a copy of research report by its acceptance hereof represents and agrees that it shall not distribute or provide research reports to any other person.

Any U.S. person receiving SHB research reports that desires to effect transactions in any equity securities discussed within the research reports should call or write HMSI. HMSI is a FINRA Member, telephone number (+1-212-326-5153).

Macro Research

Macro Research

Christina Nyman	Head of Macro Research and	+46 101 877 351	Norway		
,	Chief Economist		Marius Gonsholt Hov	Chief Economist, Norway	+47 22 39 73 40
Helena Bornevall	Deputy Head of Macro Research	+46 101 872 183	Nils Kristian Knudsen	Senior Strategist, FX/FI	+47 22 82 30 10
Claes Måhlén	Chief Strategist	+46 101 876 983	Sara Midtgaard	Senior Economist	+47 90 71 74 14
Johan Löf	Head of Forecasting	+46 101 871 218	UK		
Sweden			James Sproule	Chief Economist, UK	+44 7812 4861 87
Charlotte Asgermyr	Chief FI Strategist	+46 101 870 887	Daniel Mahoney	Senior Economist	+44 7890 3043 77
Anders Bergvall	Senior Economist	+46 101 870 491			
Camila Da Souza Albistur	Data Scientist	+46 101 873 361	Finland		
Martin Nilsson	Economist	+46 722 218 325	Timo Hirvonen	Chief Economist, Finland	+358 10 444 2404
Tommy von Brömsen	FX Strategist	+46 722 218 316	Janne Ronkanen	Senior Economist	+358 10 444 2403
Magnus Lindskog	Senior Economist	+46 101 877 811			
Anton Solberg	Junior Economist	+46 101 879 512			

Debt Capital Markets

Charlotte Wilson Head of Debt Capital Markets +46 8 701 22 45
Anders Holmlund Head of Corporate Bonds +46 8 463 34 56

Sales

Fixed Income Sales/Syndication

Thomas Grandin +46 8 463 45 83

FX Sales

Martin Persson +46 8 463 45 14

Risk advisory and cash management

the Netherlands

Kristiaan Buter +31 20 412 76 94

Sweden

Petter Holm +46 70 215 84 62

Finland

Mika Rämänen +358 10 444 62 20

UK

Chris Yoxall +44 207 578 86 20

Norway

Petter Fjellheim +47 22 82 30 29

Blasieholmstorg 11 SE-106 70 Stockholm Tel. +46 8 701 10 00 Fax. +46 8 611 11 80 Helsinki Itämerenkatu 11-13 FI-00180 Helsinki Tel. +358 10 444 11 Fax. +358 10 444 2578 Oslo Tjuvholmen allé 11 Postboks 1249 Vika NO-0110 Oslo Tel. +47 22 39 70 00 Fax. +47 22 39 71 60 London Handelsbanken Plc 3 Thomas More Square London GB-E1W 1WY Tel. +44 207 578 8000 Fax. +44 207 578 8300 New York Handelsbanken Markets Securities, Inc. 900 Third Avenue, New York, NY 10022-4792 Tel. +1 212 326 5153 Fax. +1 212 326 2730 FINRA, SIPC