

Quarterly report

# Czech Economic Outlook

## Fasting over: growth ahead



©iStock

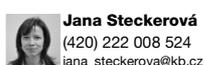
■ **Economy starting to recover** After last year's contraction of 0.2%, we expect GDP growth of 1.4% this year and an acceleration to 2.2% next year. The recovery should be driven by renewed growth in domestic demand, both consumption and investment. Continued increases in real wages should help boost household spending. In contrast, industrial activity will remain weak this year.

■ **Inflation to remain close to central bank's 2% target** We expect headline inflation to reach 2.1% this year and fall to 1.8% next year. While food prices should decline this year, core and regulated price growth are likely to remain above 2%. In 2025, monetary tightening will be fully reflected in core inflation and lower wholesale energy prices in regulated prices.

■ **CNB to continue its gradual rate cuts** The bank board attributes its ongoing cautious approach to the rapid rise in services prices and the weaker koruna. We expect a 50bp cut at each of the next three meetings. By the end of the year, we expect the repo rate to be at 3.5%, which should be the terminal rate for the current monetary cycle.

■ **Market interest rates unlikely to fall too far** Higher terminal interest rates for the ECB, the Fed and the CNB will prevent a more pronounced decline in CZK market interest rates and thus also in CZGB yields.

■ **The koruna may appreciate slightly over the rest of the year** We expect renewed appreciation vs the euro, mainly in connection with improving domestic economic fundamentals. However, global sentiment will continue to favour the US dollar.



## Economy warming up as temperature rises



**Jan Vejmelek**  
(420) 222 008 568  
jan\_vejmelek@kb.cz

You have just opened the spring edition of Komerční banka’s *Czech Economic Outlook*. In the preceding edition, I headlined my editorial with *The worst is over*, and at a distance of about three months I am quite content to note that the Czech economic activity has really rebounded. Our January forecast was titled *A sleepy start for the economy*. With a relatively good degree of confidence we can now already say that the **Czech economy is really starting to recover, although the road ahead will be bumpy, as the first months of this year have shown.**

Although the German economy is expected to remain stagnant this year, the global environment does not look bad at all.

**In particular, Czech industry will have to contend with economic stagnation in Germany and persistently high energy prices.** Despite the significant drop in the unregulated component of energy prices since it peaked in the summer of 2022, end-customer electricity and gas prices have remained tens of percent above the levels observed before the war in Ukraine. This is also attributable to the significant increase in the regulated components of energy prices since the beginning of this year. The country’s key trade partner, Germany, saw real GDP decline by 0.1% last year. For comparison, the Czech Republic posted a decline of 0.2% while the euro area as a whole grew by 0.4%. With growth of 2.5%, the US showed by far the best result in the developed world last year. For the first three months of this year, the data released on both sides of the Atlantic have been surprisingly positive on the whole. Thus, the US economy is poised to repeat its strong performance of last year. The threat of a recession in the US, which looked very real a few months ago, has almost disappeared now. We believe Germany will remain stagnant but that the euro area as a whole will improve by 0.6% this year. For Czech exporters, it is crucial that they are part of the production chain and, ultimately, German exports to the US.

The data published so far this year have surprised on the upside

For Czech exporters, the success of German exports to the US is crucial

Economic Surprise Index



Source: Leading Indicators, Citi, Economic Surprise Index, Macrobond, Economic and Strategy Research, Komerční banka

EURbn



Source: German Federal Statistical Office, Macrobond, Economic and Strategy Research, Komerční banka

The slump in real wages brought household consumption to its knees last year.

**Consumer demand is the main reason that the Czech Republic is lagging behind the rest of the EU and is still one of the few countries where GDP remains below the pre-pandemic level.** The significant plunge in household consumption was mainly related to the drop in real wages by a magnitude not seen in other OECD countries. The purchasing power of Czech workers’ wages had reached 2017/2018 levels by the end of last year.

Inflation returning to target has fundamentally changed the situation; consumer sentiment is improving.

**The return of inflation to the central bank’s 2% target has caused a fundamental change: growth in real wages is gradually leading to an improvement in household sentiment.** Indeed, the consumer confidence indicator climbed to its highest value since October 2021 in March, having gradually grown throughout the first quarter of this year. The respondents’ answers show that the better mood was clearly helped by the return of inflation to the central bank’s target, as mentioned above, and the related increase in household purchasing power.

Furthermore, following a revision of the national accounts for 2023, the situation does not look as bad as the original data suggested. The data for the final quarter of 2023 showed quarter-on-quarter growth, with real GDP growing by 0.4%. For 1Q24, we expect it to be one-tenth higher. Economic growth should be around 2% in annualised terms for the rest of this year. Consequently, the pre-pandemic level of GDP should be finally reached in the current quarter.

**Inflation has returned to the central bank's target**



Source: CZSO, Economic and Strategy Research, Komerční banka

**Czech household sentiment begins to improve at last**



Source: CZSO, Economic and Strategy Research, Komerční banka

**Inflation stayed firmly at the central bank's 2% target in February and March.** For the rest of this year, it will oscillate around the target, and next year it will even fall slightly below on average. It is therefore clear that the CNB's rates are high and will be cut again. The level of the neutral rate is the main question that Czech bankers and others are currently trying to answer, as this will allow them to determine the level toward which the key rates may converge. Whether the real equilibrium (or neutral) rate, referred to as  $r^*$  (or r-star), has changed due to the current or expected economic development is a question being tackled by the US Fed, the European Central Bank, and the Czech National Bank. The ECB has released its first strategic outline concerning its set of instruments, as analysed by Jana Steckerová in *Box 1*. In early May, the CNB is expected to publish its view of the equilibrium real rate. Jaromír Gec discusses the level of  $r^*$  for the Czech economy and the international context in *Box 2*. Further to the increases made to the Fed and ECB equilibrium rates by our Société Générale colleagues and to the indications provided by the CNB board, we have increased our assumption for the neutral rate of the Czech economy by 50bp to 3.50% for the 2W repo rate at which we should arrive by the end of this year.

**The long-running decline in Czech real interest rates has ended**



Source: Economic and Strategy Research, Komerční banka  
 Note: the real interest rate is calculated as the nominal (3M PRIBOR) rate net of inflation expectations (average of the financial analysts' and non-financial companies' expectations based on the CNB's respective surveys).

**Inflation has reached the target and will stay within the tolerance band, interest rates will go down while real wages will go up, and the economy as a whole will grow.** With the spring edition of Komerční banka's *Czech Economic Outlook* we can thus look forward to not only warm and sunny days but also more favourable news from the Czech economy. Enjoy the read!

## Table of Contents

<b>External environment and assumptions .....</b>	<b>5</b>
Box 1: ECB's revision of the operational framework has not answered many questions .....	8
<b>Macroeconomic forecast .....</b>	<b>10</b>
<b>Monetary policy .....</b>	<b>16</b>
Box 2: Central banks signal risk of rising real interest rates.....	17
<b>Fiscal policy.....</b>	<b>20</b>
<b>Summary forecast table.....</b>	<b>24</b>
<b>Czech IRS market and government bonds .....</b>	<b>25</b>
<b>Czech FX market .....</b>	<b>30</b>
<b>Banking sector .....</b>	<b>33</b>
<b>Key economic indicators.....</b>	<b>37</b>
<b>Disclaimer .....</b>	<b>38</b>

## External environment and assumptions

### No recession, but no dazzling growth either



**Jana Steckerová**  
(420) 222 008 524  
jana\_steckerova@kb.cz

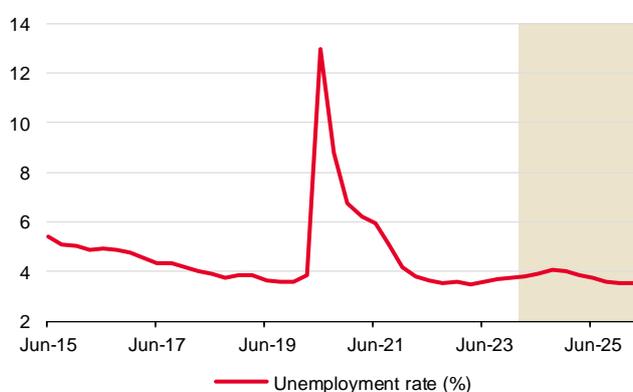
Since the release of our January *Czech Economic Outlook* publication, the data released in the United States has surprised to the upside. The labour market has still been able to generate a large number of new jobs, which in turn has been reflected in positive consumer sentiment and an increased willingness to spend. Companies enjoyed solid profit margins and stated that they did not plan layoffs. At the same time, inflation likewise surprised to the upside. For these reasons, we have changed our forecast and now expect decent growth in the US instead of a mild recession. Inflation should gradually return to the Fed's target, but at a slower pace than we had previously anticipated. We have thus postponed our forecast for the first interest rate cut from June 2024 until March 2025. In contrast, we believe that the European Central Bank will implement a 25bp rate cut in June and do so every quarter until 2H25, when the deposit rate reaches 2.5%. However, there is also a considerable risk that monetary easing could occur later or to a lesser extent than we currently assume.

### US: Fed rate cuts only in 2025

The labour market will have to cool before the rate cut cycle can start.

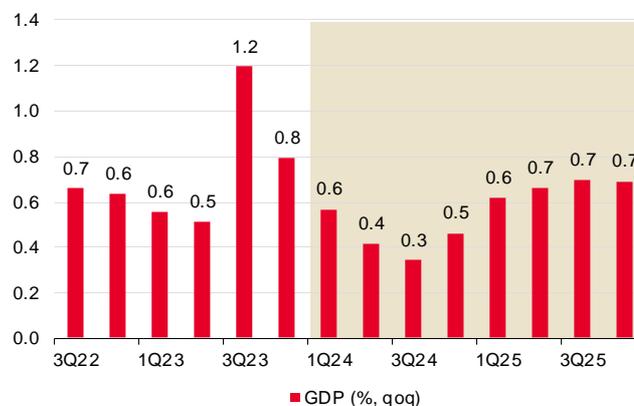
**We expect the US economy to grow moderately in the coming quarters.** Our previous estimate was for a mild recession in the second and third quarters of this year. However, the data published so far does not support such a scenario. The number of new jobs created since the beginning of the year has been a positive surprise. In March, the number of new jobs totalled 303 ths. vs 270 ths. in February. In order to categorise the situation on the labour market as easing, the number of new jobs would have to fall below 150 ths. On the other hand, initial claims for unemployment benefits remain low (210 ths. on average since the beginning of the year). Moreover, companies have not announced any intentions to lay off employees. This is related to their still solid profit margins, which are traditionally one of the first indicators of an impending recession. Leading indicators also point to moderate economic growth. The ISM manufacturing index returned above the 50-point mark in March after 16 months in contractionary territory. At the same time, car production has been recovering, with car sales growing solidly in the first three months of this year. On the other hand, the housing market remains in limbo due to high mortgage rates. Overall, we expect the US economy to repeat last year's performance in 2024, growing by 2.5%. The risk is skewed towards an even better outcome. In 2025, our estimate calls for GDP growth of 2.3%.

The US labour market remains tight



Source: Macrobond, SG Cross Asset Research/Economics

No recession in the US economy



Source: Macrobond, SG Cross Asset Research/Economics

A slowdown in the pace of rent growth would be needed to bring inflation back on target.

**An easing in the labour market will be one of the conditions for the US Federal Reserve to start the interest rate cut cycle.** The main one, of course, will be a more sustainable

return of inflation to the 2% target. This would require, above all, a slowdown in the growth of imputed rents, the largest item in the US consumer basket. Rent prices rose 5.7% yoy in March. For inflation to return to target, this pace would need to slow to 3.5%. And this would require an easing in the labour market, as rental prices are closely linked to trends in employment. In addition to rent prices and domestic demand pressures, the upcoming US elections are also a risk to future inflation developments. The possible re-election of Donald Trump could lead to renewed trade wars and the introduction or increase of tariffs on imported goods from Asian countries. However, it must be said here that, in the past, the introduction of tariffs has not led to a longer-term rise in prices. In fact, this has been mainly due to a shift in production to less efficient producers.

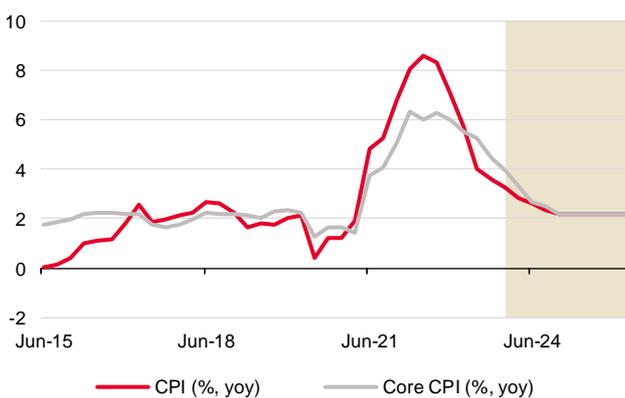
We have postponed rate cuts to 2025.

**For the above reasons, we have pushed back our forecast for the first 25bp interest rate cut to early 2025.** We expect further moves of the same magnitude to follow every quarter until the key interest rate reaches its neutral level, which we now estimate at 3-3.25% (our previous forecast assumed it at 2.75-3.00%). The Fed dot plot median sees this rate lower (at 2.6%) but discussions are already underway within the FOMC as to whether it should be higher.

China should also benefit from the improved performance in the US.

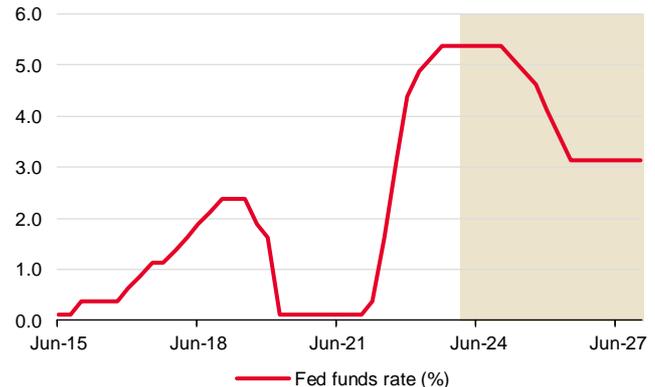
**The Chinese economy should also benefit from the US economy avoiding a recession this year due to higher exports of goods.** China's performance last year fell short of expectations, and it is not certain that it will achieve the 5% growth target this year either. Since the beginning of the year, there has been a growth in external demand and thus a better performance of Chinese industry. Household consumption is also recovering, the impact of which we are seeing more in services than in goods. Infrastructure investment should also be better this year. The property market, on the other hand, is likely to decline further, despite lower interest rates and the easing of government austerity measures. Households are likely to be discouraged from acquiring property due to low incomes, high prices in major cities, a low housing supply and a lack of confidence in local developers. The situation could be partly offset by the government's social housing programme and the transformation of Chinese villages. Overall, our estimate is for GDP growth of 5.0% this year and 4.3% next year.

US: inflationary pressures persist in the economy



Source: Macrobond, SG Cross Asset Research/Economics

US: we shifted our rate cut forecast to 2025



Source: Macrobond, SG Cross Asset Research/Economics

### Euro area: first rate cut in June

Household consumption will fuel growth.

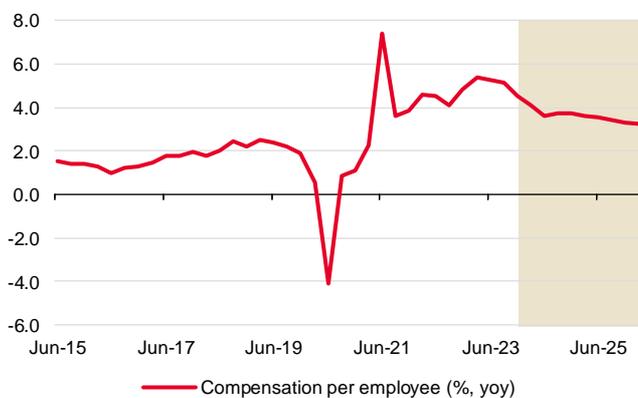
**The eurozone economy should recover slightly this year.** We expect household consumption to be the main driver of the recovery, supported by robust wage growth, low inflation, higher net interest income and fiscal policy. Moreover, the savings rate is still about 1.5pp higher than it was on average between 2013 and 2019, with excess savings reaching more than 7% of GDP. The labour market remains tight. In March, the unemployment rate was

at an all-time low of 6.4%. Thus, there were 2.3 unemployed persons per job vacancy, compared to 3.3 in 2019 and 6.9 in 2015. The tight labour market is also the main reason why demand still outweighs supply in some sectors. Typically, this is in services, but the prevalence of demand is also evident in some industrial sectors, such as machinery and equipment manufacturing. At the same time, the tight labour market and the associated strong wage growth is likely to cut into companies' profit margins this year. Although these margins are still high compared to pre-pandemic levels, rising wage costs are likely to cause them to decline and thus result in weaker investment activity by firms. Overall, we expect only moderate growth of 0.6% in the euro area economy this year, after 0.5% last year, and a solid 1.3% forecasted for next year.

Germany should avoid a recession this year, but the mood is rather pessimistic.

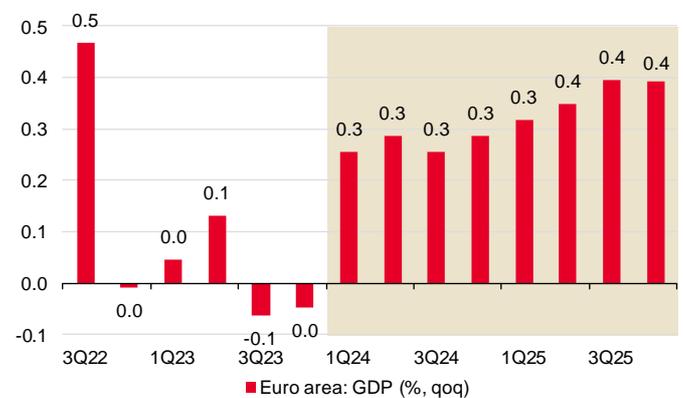
**Germany should also avoid a recession this year.** So far, Germany has paid the price for its strong industrial orientation and China's economic weakness. However, structural changes have been taking place since the pandemic, with an increasing volume of German exports going to the United States (10% in 2023) and a smaller volume going to China (6%). The improved prospects for the US economy should therefore be reflected in a better performance of the German economy. German industrial production, which has already grown solidly in the first two months of this year, is also beginning to show signs of recovery, although it remains some 8% below its pre-pandemic level. Overall, Germany will have to deal with difficult issues in the coming period, such as energy supplies from Russia, the green transition, weaker demand from China, rising labour costs and a debt brake that does not allow for deeper structural changes. Therefore, we believe that household consumption should be the driver of the recovery, supported by falling inflation and solid wage growth. To sum up, we expect the German economy to stagnate this year after a 0.1% contraction last year. We expect GDP growth of 1% next year.

Wage growth is fast by European standards in EA



Source: Macrobond, SG Cross Asset Research/Economics

Household consumption should fuel the growth



Source: Macrobond, SG Cross Asset Research/Economics

Inflation in the euro area likely to fall below 2%, but core prices should remain high.

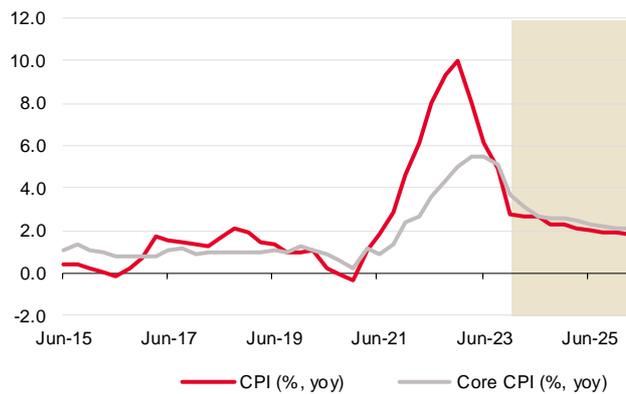
**Inflation in the euro area slowed to 2.4% year-on-year in March.** The core component of inflation (2.9%) also fell below 3%. We expect headline inflation to fall below 2% in the autumn, due to the high comparison base and the impact of wholesale gas and energy prices. However, we expect core inflation to remain above 2.5% throughout the year. This is due to expected high unit labour costs, which we estimate will rise by 3.6% this year after 6.1% last year. This would leave prices in services in particular under pressure, which rose by 4% year-on-year for the fifth month in a row in March.

We expect the first ECB rate cut in June.

**Despite higher core prices, we expect the ECB to proceed with its first 25bp rate cut in June this year, as many officials have already hinted.** More should follow in September and December. How far interest rates fall will depend on where the long-term neutral rate lies. The central bank is now holding a large amount of government bonds, which is pushing down

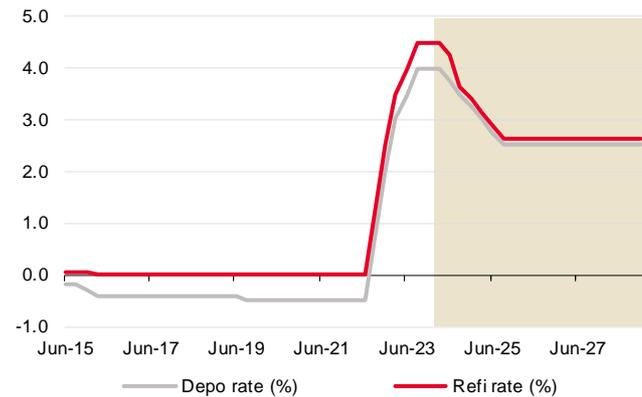
yields on medium- and long-dated bonds. The pace of balance sheet reduction remains slow and is unlikely to accelerate significantly this year. There are also structural changes due to the climate transition, digitalisation, the use of artificial intelligence and geopolitics, which complicates the assessment of the current cyclical position of the European economy. The combination of all these factors has led us to conclude that the equilibrium interest rate is now higher than we had originally anticipated. Instead of 2%, we now see it at 2.5%. This is what the deposit rate should reach in 2H25. However, there is a risk that 1Q wage developments and the wage bargaining results that should be released at the end of May will surprise to the upside, which could lead to a postponement of the June rate cut or fewer rate cuts this year. We discuss ECB policy more in *Box 1*.

**Inflation in the euro area should fall below 2%**



Source: SG Cross Asset Research/Economics

**We expect the first ECB cut in June**



Source: SG Cross Asset Research/Economics

**Box 1: ECB’s revision of the operational framework has not answered many questions**

**In mid-March, the European Central Bank published the results of a review of its operational framework.** The main change that emerged from the revision was an adjustment to the width of the interest rate corridor. With effect from 18 September, the difference between the deposit rate and the refinancing rate will be reduced to 15bp from 50bp currently. Thus, if the central bank cuts the deposit rate by 25bp in June and September, as we forecast, the deposit rate will be at 3.5% and the main refinancing rate (MRO) at 3.65% in September. The aim of this move is to increase banks’ interest in raising liquidity through the main refinancing operations, keeping short-term market rates close to the level of the deposit rate and ensuring low market volatility.

**The European Central Bank has also discussed the possibility of increasing the minimum required reserves ratio (MRR),** which currently stands at 1% and bears zero interest. The aim of a possible increase in the MRR would be to reduce the losses incurred by the ECB and national central banks from charging interest on excess liquidity at the deposit rate. A one percentage point increase in this rate would drain EUR165bn of excess liquidity from the European banking system, saving the Eurosystem cca EUR6.5bn per year.

**The ECB will continue to use a wide range of instruments to provide liquidity.** These will include weekly and three-month credit facilities (MROs and LTROs), structural long-term credit facilities (longer than three months) and structural securities portfolios in future years. The latter two instruments should, according to the ECB, contribute significantly to meeting the structural liquidity needs of banks. The new facilities would probably be characterised by

longer maturities rather than favourable rates and would target the private sector debt as opposed to the public sector one.

**However, the review did not provide answers to some fundamental questions.** It is still unclear on what the structural bond portfolio should look like, what the optimal size of the ECB's balance sheet is or why the central bank is not seeking a faster return of the yield curve to its positive slope, which would in turn encourage long-term savings and investment. Regarding structural bond portfolios, it is not yet clear whether or not they could include government bonds. In our view, it is likely that they will not. A structural bond portfolio would therefore need to focus primarily on private sector assets and would need to be relatively small, probably no larger than EUR750bn. The ECB has confirmed that the portfolios acquired under the APP and PEPP programmes will continue to be reduced. The quantitative easing is now running at a pace of EUR45bn per month, and we believe it should continue at this pace until at least the end of 2028. However, we do not yet know what the optimal level is from the ECB's perspective. We believe it could be around 20% of European GDP. These questions will hopefully be better answered in the context of the strategic review in 2025 and the review of the operational framework in 2026.

**Jana Steckerová**  
+420 222 008 524  
jana\_steckerova@kb.cz

## CEE: regional banks to be cautious in easing monetary conditions

The Polish central bank is likely to stay on hold for longer after last year's rate cut.

**Poland's central bank has left interest rates unchanged since October last year when it cut them by 25bp to 5.75%.** Given the revised forecast for the US central bank, we do not expect further monetary easing for the rest of this year. Polish inflation has slowed considerably (to 1.9% yoy in March). However, the zero VAT rate on food expired in April, and the government is likely to unfreeze energy prices in the middle of the year. As a result of these measures, inflation should jump to 6% in September. The stability of interest rates is also supported by relatively strong domestic fundamentals. The combination of these factors should favour the Polish zloty. In the second quarter, the zloty should hover around EUR/PLN 4.25. Given geopolitical events (US presidential elections, war in Ukraine), we then expect it to weaken towards EUR/PLN 4.50 by the end of this year.

The Hungarian central bank is likely to continue to cut interest rates.

**The Hungarian central bank continued to ease monetary conditions in 1Q24.** It cut the key three-month deposit rate by 100bp in February, with a further 75bp cut to 8.25% in March. The subsequent press conference was strongly hawkish in tone, with the central bank stressing that it planned to be cautious in its next steps and that the previous vigorous easing of monetary conditions was unlikely to be repeated. For these reasons, we have also reduced our expected rate cuts to 50bp at each meeting in 2Q, with our 3Q forecast already assuming rate stability until 1Q25. This would take the three-month deposit rate to 6.75% by the end of the year. Given the difficult geopolitical situation, we expect the Hungarian forint to trade in the range of EUR/HUF 390-400 in 2H24.

# Macroeconomic forecast

## With inflation in the rear-view mirror, economic growth lies ahead



**Martin Gurtler**  
(420) 222 008 509  
martin\_gurtler@kb.cz

### Major changes

#### GDP:

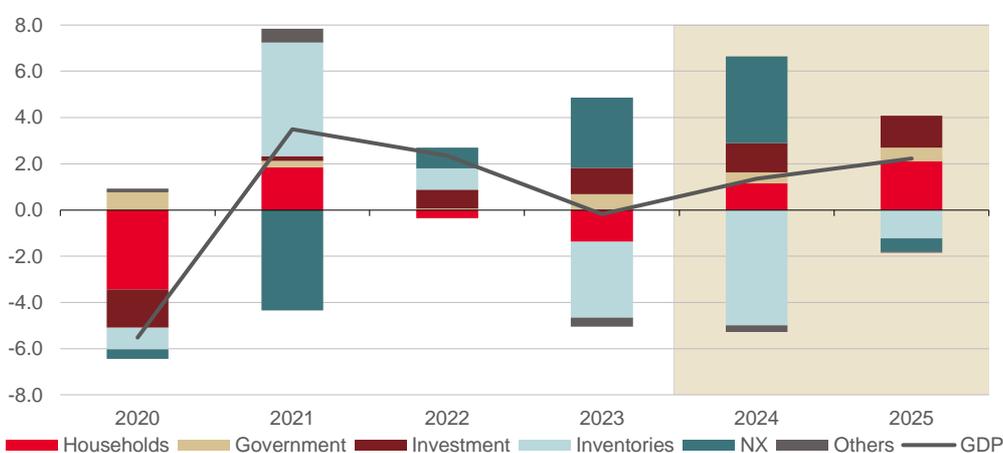
After a contraction of 0.2% last year, we expect the economy to grow by 1.4% this year and accelerate to 2.2% next year. Compared with our January forecast, we have raised our GDP growth estimate for this year from the original 0.8%, while leaving it unchanged for next year. We still expect a pick-up in domestic demand to be the main driver of the economic recovery.

#### Inflation:

While inflation reached 10.7% last year, we expect it to fall to 2.1% this year and further to 1.8% next year. In our January forecast we had predicted higher inflation for both years (2.7% and 2.2% respectively). Core inflation is likely to remain above the central bank's target this year due to continued rapid growth in services prices, but should be within the central bank's tolerance band. We expect core inflation to decline to 1.9% next year as a result of excessive monetary tightening.

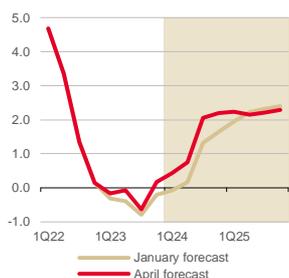
The Czech economy is gradually recovering and we expect it to return to pre-pandemic levels in 2Q24. Renewed growth in domestic demand should contribute to the recovery. Inflation fell to 2% earlier this year and we expect it to remain close to the CNB's inflation target for the rest of this year and next. Real wage growth should therefore continue, helping to improve households' purchasing power. Their consumption, which was the main reason for the economy's weak performance last year, should thus gradually increase. Conversely, the positive impact of net exports, supported by exports of previously unfinished goods, is likely to gradually fade. Demand for industrial goods remains subdued, so industrial output is set to remain weak this year despite a slight improvement.

We expect the economy to grow by 1.4% this year and 2.2% next year (% , pp, yoy)



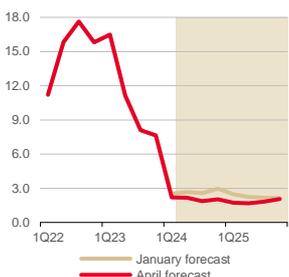
Source: CZSO, Economic & Strategy Research, Komerční banka

### Changes to GDP forecast (% , yoy)



Source: CZSO, Economic & Strategy Research, Komerční banka

### Changes to CPI forecast (% , yoy)



Source: CZSO, Economic & Strategy Research, Komerční banka

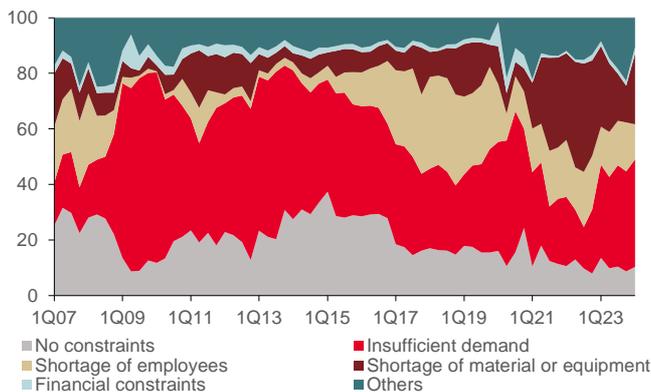
### The Czech economy is gearing up for better outcomes

**The economy recovered in 4Q23.** After a sharp contraction of 0.8% qoq in 3Q23, which was affected by a temporary shortage in the supply of auto parts, GDP grew by 0.4% qoq in 4Q23. This was higher than our January forecast (+0.2% qoq), driven by stronger domestic demand and exports of previously unfinished goods. The contribution of net exports to qoq GDP growth (+3.9pp) was the second-highest in the history of the time series. However, it was offset by a negative contribution from inventories of the same magnitude. Foreign trade data showed strong exports of automobiles. It is their production that has been most affected by input shortages in the past, so stocks of unfinished goods have risen rapidly. As supply chains return to normal, these inventories are now gradually being completed and reduced. The good news for the economy going forward is the renewed growth in household consumption. Although it was still 8% below its pre-pandemic level in 4Q23 and a major reason for the economy lagging behind the rest of the EU, it rose by 0.5% qoq in line with our forecast. Rapid fixed investment growth of 2% qoq also contributed to the recovery in domestic demand. For 2023 as a whole, the economy contracted by only 0.2%, also thanks to the upward revision of 1H23 data. According to the revised data, GDP grew by 0.3% qoq in both 1Q and 2Q23.

**We estimate that economic growth accelerated to 0.5% qoq in 1Q24.** Its structure should be similar to that of 4Q23. We estimate that household consumption grew by 0.6% qoq. Leading indicators of retail trade and services sales remain volatile but show an upward trend.

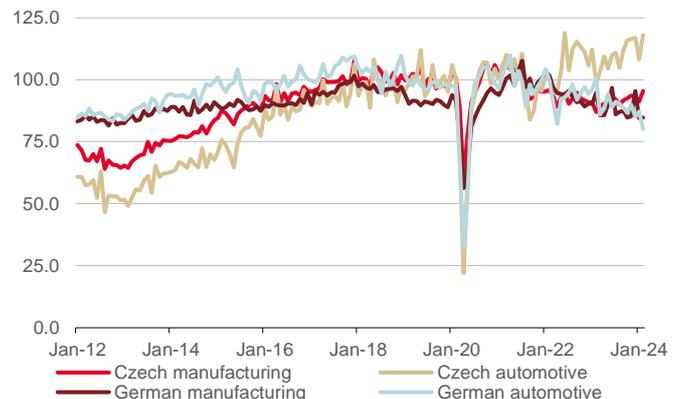
This is likely to be related to renewed growth in real wages. The sharp decline in household purchasing power over the past two years has been the main reason for the downturn in consumer spending. Another positive factor is consumer sentiment, which rose steadily over the course of 1Q24 and reached its highest level since October 2021 at the end of the quarter. Households expect the overall economic situation to improve, including their personal finances. They are also less concerned about further increases in consumer prices. However, the propensity to make major purchases remains low. We also expect fixed investment to continue to grow, supported by EU funds. Net exports should have maintained their positive contribution in 1Q24, albeit at a lower level, which we expect to be offset by a negative contribution from inventories, as in 4Q23. Thus, the completion and disposal of previously unfinished production should continue. However, we estimate that industrial production was flat qoq in 1Q24. Weak demand for industrial goods remains a major concern, which, together with still high energy prices, is also affecting the economy in neighbouring Germany. Insufficient demand was cited as the main constraint to output growth in 1Q24 by almost 40% of Czech industrial firms surveyed by the statistical office.

Insufficient demand has been the main constraint on industrial production growth (%)



Source: CZSO, Economic & Strategy Research, Komerční banka

Czech car producers outperform the rest of the industry and German competitors in terms of new orders (real, SA, 2021=100)



Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka  
 Note: For Czech data of new industrial orders, which are only available in nominal terms, the corresponding producer price index (PPI) is used as a deflator.

We are forecasting that the economy will return to pre-pandemic levels as early as 2Q24.

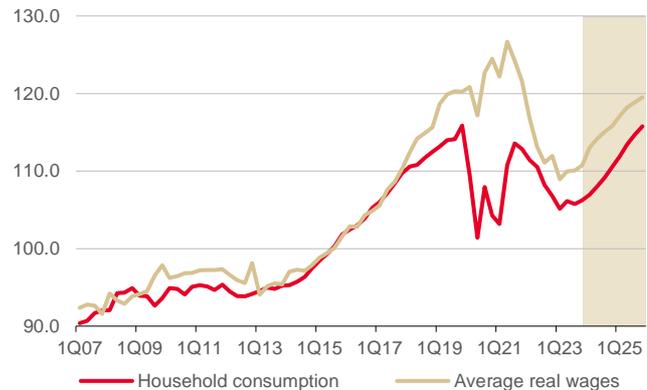
**We expect the economy to grow by 1.4% this year, thanks to a recovery in domestic demand, and to accelerate to 2.2% in 2025.** Compared with our previous forecast, the estimate for this year is higher (we expected 0.8% in January), while the estimate for next year remains unchanged. We continue to expect the recovery in domestic demand, including growth in fixed investment, to be the main source of economic growth. Investment should be positively influenced by global trends towards greater regionalisation of production processes, the decarbonisation of economies or the substitution of capital for scarce labour. Household consumption should be supported by continued real wage growth, higher confidence in the economy and a high level of accumulated savings. However, as in the previous forecast, we do not expect consumption to return to pre-pandemic levels until 2026. Its recovery is likely to be gradual, as we expect real wage growth to be moderate given the previous decline, and also because part of household savings is invested in less liquid financial instruments. The fall in interest rates is reflected in a renewed interest on the part of households to invest in real estate, which could contribute to a significant reduction in accumulated savings.

We expect household savings, which have continued to rise, to gradually decline over the forecast horizon (in % of disposable income, SA)



Source: CZSO, Economic & Strategy Research, Komerční banka

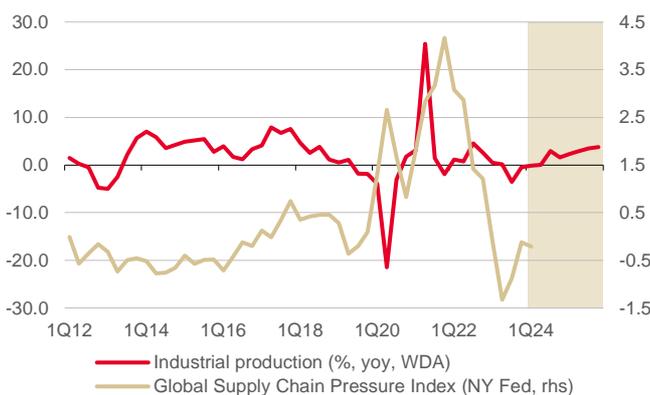
Renewed real wage growth will contribute to a recovery in household consumption (2015=100)



Source: CZSO, Economic & Strategy Research, Komerční banka

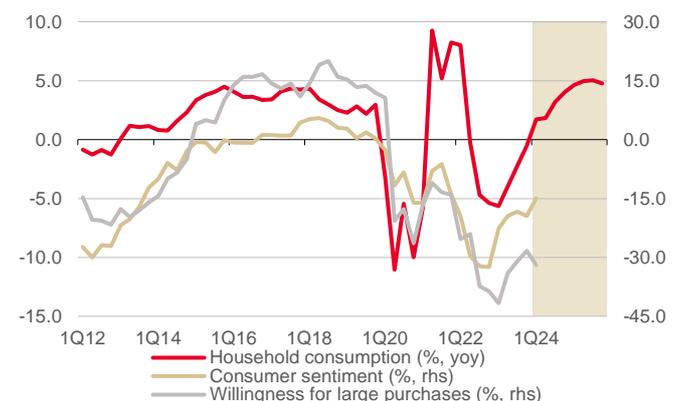
**The contribution of net exports to GDP growth is set to be very positive this year, mainly due to exports of previously unfinished goods.** These were particularly strong at the turn of the current year. This should be accompanied by a very negative contribution from inventories. We now expect industrial production to rise by 1.1% this year, compared with our January forecast that it would be roughly flat. While this remains a not very optimistic outcome, leading indicators point to some recovery in industry. Moreover, the weighted automotive industry has seen an increase in real new orders in recent months. In this respect, car producers are outperforming the rest of the domestic industry and their German competitors. The automotive industry may also have some order backlogs from the previous period. Growth in other sectors of the economy is likely to be higher. The retail sector should benefit from the recovery in consumer demand and we forecast sales growth of 3.7% excluding car sales. We expect construction to grow by as much as 4.9%, supported by lower interest rates, the use of EU funds and, importantly, a very low base of comparison.

Czech industry is now broadly flat yoy, but global supply chains operate without major problems



Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Household consumption is set to be the main source of economic recovery, with the improvement in consumer sentiment pointing to renewed growth



Source: CZSO, Economic & Strategy Research, Komerční banka

**We see the risks to our GDP forecast mainly coming from abroad.** These relate to the performance of the German economy and, in particular, its industrial sector, on which the production of many domestic companies depends. Although still at relatively low levels, leading indicators for German industry have bottomed out in recent months, giving rise to hopes of at least a partial improvement in the situation. Nevertheless, the German economy is

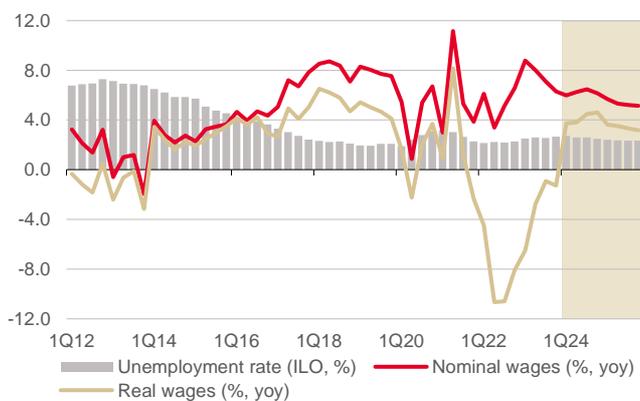
likely to be roughly stagnant this year. We therefore expect the Czech economy to grow mainly on the back of recovering domestic demand, and its growth rate will determine the performance of the economy as a whole. All this will depend to a large extent on the strength of real wage growth.

**Real wages to rise, but household purchasing power to recover slowly**

We do not expect real wages to return to pre-pandemic levels until 2026, leading to only a gradual recovery in household consumption.

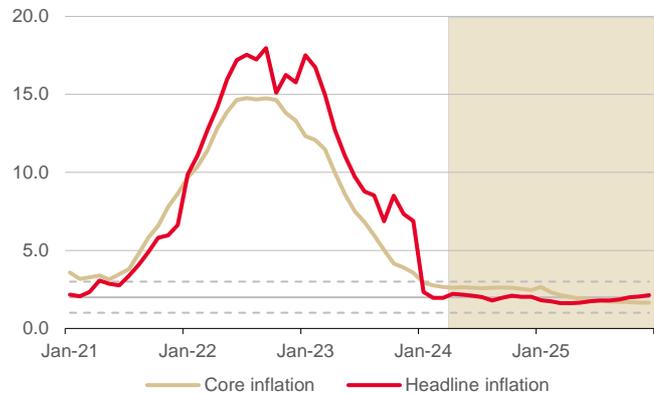
**We expect nominal wages to grow by 6.2% this year and 5.4% next year.** Compared with our January forecast, growth is lower this year and higher in 2025 (we originally expected 6.9% and 5.2% respectively). Real wages have risen on a qoq basis for the third consecutive quarter in 4Q23, thanks to the rapid fall in inflation. However, their growth has been moderate and has so far fallen short of our expectations. Real wage qoq growth is likely to accelerate this year, as shown by the leading indicators for 1Q. For 2024 as a whole, we forecast average real wage growth of 4.2%, but this follows a decline of around 11% in the previous two years combined. As with household consumption, our forecast assumes that average real wages will not return to pre-pandemic levels until 2026. Higher demands on the side of employees due to the earlier sharp decline in their purchasing power, the favourable financial situation of companies and the ongoing tightness of the labour market should contribute to further real wage growth. In our view, labour shortages will remain a limiting factor for economic growth over the forecast horizon. We expect the ILO unemployment rate to remain below 3% and the share of unemployed (MLSA) at below 4%. Employment continues to grow qoq, likely due to the inflow of foreign workers, and we expect this to continue. Efforts by the current government and pressure from companies to ease regulations on the employment of foreign workers should also help.

**Continued labour market tightness and declining inflation help to restore real wage growth**



Source: CZSO, Economic & Strategy Research, Komerční banka

**Headline and core inflation to remain within the central bank's tolerance band (% yoy)**



Source: CZSO, CNB, Economic & Strategy Research, Komerční banka

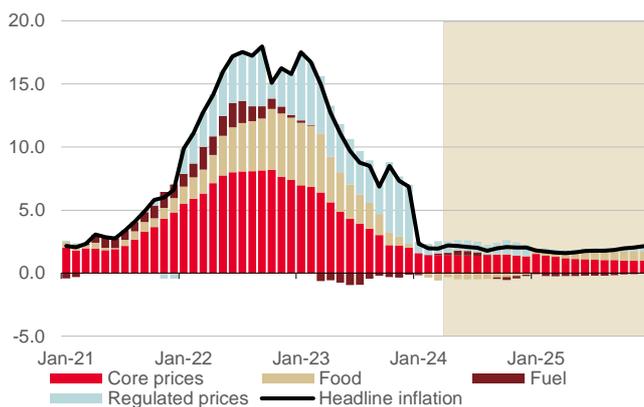
Inflation fell sharply to 2% yoy at the beginning of the year and we expect it to remain close to that level. Although core inflation is likely to remain above 2% yoy this year, it should be within the CNB's tolerance band.

**Inflation to stay near 2% both this year and next**

**Consumer price growth slowed considerably at the beginning of the year to the central bank's target of 2%.** From 7.6% yoy in 4Q23, inflation fell to an average of 2.2% in 1Q24 and reached 2% yoy in February and March. Part of this sharp decline was due to the fact that annual inflation was kept higher in 4Q23 by the purely technical effect of the low comparison base associated with the introduction of the special energy tariff in autumn 2022. However, the weaker effect of the traditional price adjustment at the beginning of the year also had an impact, as we estimate that seasonally adjusted core prices rose by 0.6% qoq in 1Q24. This compares with growth of 1.7% qoq in 1Q23 and 3.4% qoq in 1Q22. In our January forecast, we expected a rapid easing of price pressures in early 2024, although our estimate of headline inflation in 1Q was slightly higher than the reality (2.5% yoy). Core inflation was lower than in our forecast and the decline in food prices was also faster. In contrast, regulated prices rose at a quicker pace.

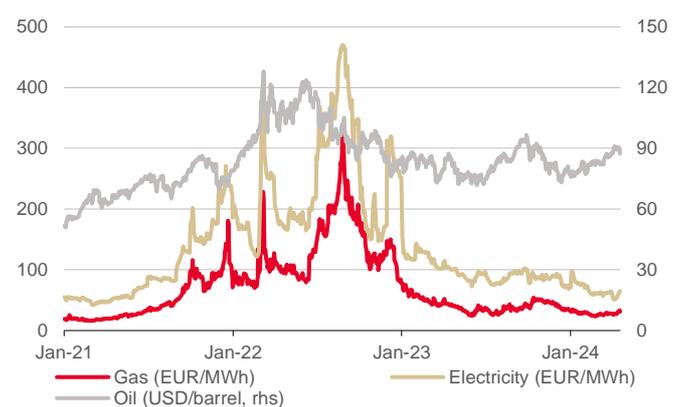
**We expect inflation to average 2.1% this year and to fall to 1.8% next year.** This is lower than our previous forecasts for both years back in January, when we predicted inflation of 2.7% in 2024 and 2.2% in 2025. In particular, the fall in food prices should keep headline inflation close to the 2% target this year. We expect food prices to decline by more than 1% this year and by more than 2% if the lower VAT is taken into account. This is the estimate for the food price index used by the central bank. In addition to food and non-alcoholic beverages, it also includes alcohol and tobacco products, the prices of which are expected to rise this year due to higher excise duties. The decline in food and non-alcoholic beverages prices alone should therefore be even higher. Core inflation fell below 3% yoy at the beginning of the year and was 2.7% yoy in March, within the central bank’s tolerance band but still above the 2% target. We expect a similar trend for the rest of the year, with core inflation close to 2.5% yoy. This is due to continued rapid growth in services prices at around 5% yoy, which are usually the most persistent component of inflation. By contrast, goods prices are flat yoy, according to the latest data for March. As monetary policy has been tighter than optimal for some time and is likely to remain so, we expect this to be reflected in core inflation with a time lag. We therefore expect core inflation to be 1.9% next year, i.e. slightly below the inflation target. However, the effect of tight monetary policy will be partly offset by the recovery in domestic demand that we expect.

**While food will become slightly cheaper this year, core and regulated price growth will remain above 2% (% , yoy)**



Source: CZSO, CNB, Economic & Strategy Research, Komerční banka

**Wholesale electricity and gas prices fell to 1H21 levels, while oil became more expensive**



Source: Macrobond, Economic & Strategy Research, Komerční banka  
 Note: These are spot prices on wholesale energy markets.

**According to our forecast, regulated price growth will reach 6.1% this year, with energy prices remaining the main driver.** The continued strong growth in regulated prices is mainly due to the significant increase in regulated energy prices from January. However, this has been offset by the decline in market energy prices since the end of last year. Indeed, wholesale electricity and gas prices have been falling steadily and have now even reached 1H21 levels. This favourable effect should gradually be reflected in prices for final consumers. After a sharp increase in January due to more expensive regulated components, household electricity and gas prices fell slightly mom in February and March. This decline should continue for the rest of the year, reflecting lower wholesale prices. As a result, this should dampen the increase in annual growth in regulated prices that is likely to occur towards the end of this year due to the lower comparison base from 4Q23. However, together with the easing of core inflation and the annual decline in food prices, the acceleration in regulated price growth should not increase headline inflation, which we now forecast to remain close to 2% yoy throughout 2024. We also expect the decline in wholesale energy prices to keep regulated price growth below 2% next year.

**Risks to our inflation forecast are mainly related to geopolitical events.** These can be reflected in higher commodity prices, as is currently the case with oil prices, which are rising due to the conflict in the Middle East. Beyond commodity prices, geopolitical tensions can also pose a risk to supply chains, as demonstrated by the shipping problems in the Red Sea. Overall, these risks could lead to higher inflation than we had initially forecast.

## Monetary policy



**Martin Gurtler**  
(420) 222 008 509  
martin.gurtler@kb.cz

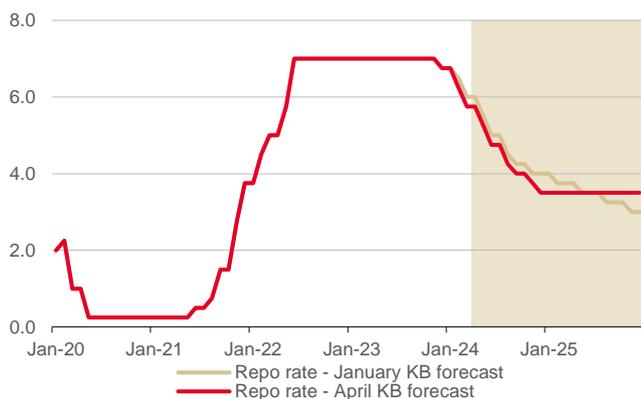
### All CNB rate cuts during this cycle to take place this year

While headline inflation has fallen to the 2% target, the central bank’s key repo rate has remained high at 5.75%. It is therefore likely to fall further, but only gradually, as the bank board has indicated. The main reasons for this, according to the central bank, are the weak koruna and the persisting high services inflation. We expect a 50bp cut at the next three meetings and a decline in the repo rate to 3.5% by the end of the year. In our view, this should also be the terminal level to which interest rates will fall during the current monetary policy cycle. The board has been talking about raising the terminal rate for some time. The CNB is expected to publish the results of its analysis of the terminal rate level at the May meeting.

Both headline and core inflation are likely to be lower this year than the CNB expected in its February forecast.

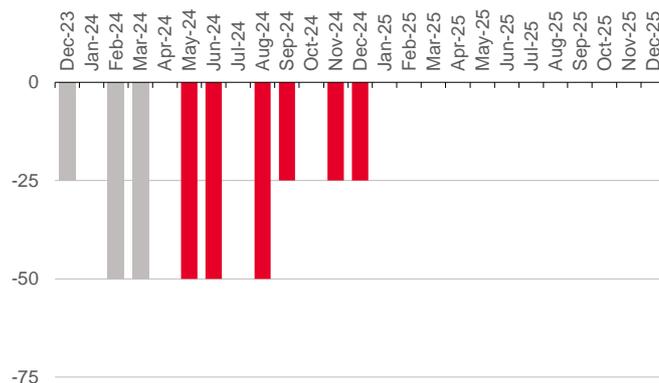
**Inflation was much lower than expected by the central bank, despite a stronger economic recovery.** In its February forecast, the CNB expected headline inflation to average 2.9% yoy and core inflation to average 3.5% yoy in 1Q24. In reality, both headline and core inflation were 0.7pp lower than the CNB forecast. Meanwhile, GDP qoq growth was 0.4pp higher, as the CNB had forecast stagnation in the economy in 4Q23. Household consumption surprised on the upside, falling by 0.5% yoy in 4Q23, whereas the CNB had expected a decline of 0.8% yoy. Average nominal wages were broadly in line with the central bank’s expectations. However, the koruna exchange rate was significantly weaker. It averaged EUR/CZK 25.1 in 1Q24 vs the CNB’s forecast of EUR/CZK 24.7, i.e. 1.6% weaker. Thus, although there are risks associated with both lower and higher inflation, on balance we assess it as slightly less inflationary. In its February forecast, the CNB expected headline inflation of 2.6% and core inflation of 2.9% in 2024 as a whole. These seem too high compared with our forecast (2.1% for headline and 2.6% for core inflation), especially given the price developments at the beginning of the year. Moreover, our forecast is based on the assumption of faster economic growth this year (1.4% vs 0.6% in the CNB forecast).

With inflation down to the 2% target and core inflation within the CNB’s tolerance band, we have brought forward all repo rate cuts to this year (%)



Source: CNB, Economic & Strategy Research, Komerční banka

We expect the CNB to cut rates by 50bp at each of the next three meetings, with the repo rate falling to a final level of 3.5% by the end of the year (repo rate changes in bp)



Source: CNB, Economic & Strategy Research, Komerční banka

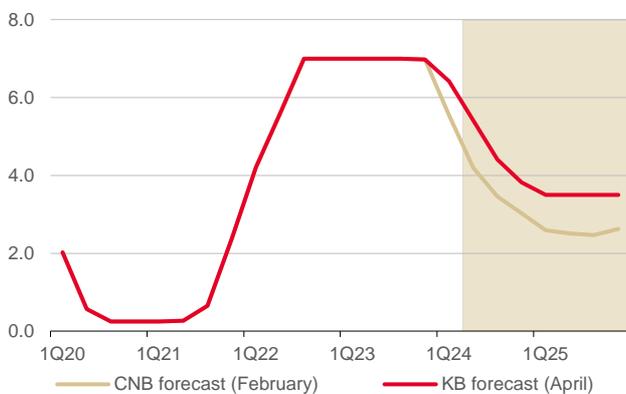
**Despite the very restrictive level of interest rates, the bank board has ruled out jumbo cuts.** According to the CNB’s February forecast, the repo rate should have fallen to an average of 5.5% in 1Q24. However, the bank board continued to favour a more gradual decline, and the actual average level of the repo rate ended up being about 1pp higher. The impact of the higher rates was partly offset by the weaker koruna. The weakening of the koruna and the continued rapid rise in services prices were the two arguments cited by

the board members to justify their preference for continuing with only gradual rate cuts. Statements to date suggest that the majority of the board has been reluctant to cut rates by more than 50bp per meeting. The CNB cut the repo rate by 50bp at its February and March meetings to the current level of 5.75%. We expect the central bank to continue with the same pace of rate cuts at its upcoming May, June and August meetings. We then expect standard 25bp cuts for each of September, November and December. With headline inflation already at the 2% target and core inflation within the tolerance band, monetary policy is likely to continue to be tighter than necessary – at least in 1H24.

According to our forecast, CNB rates will continue to fall only gradually to the final 3.5%, which should be reached by the end of this year.

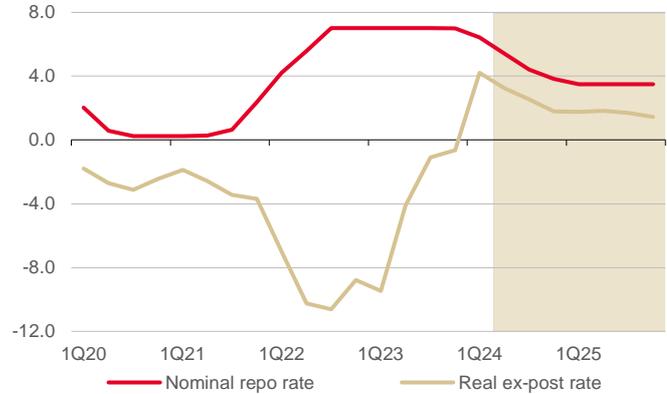
**We expect the key policy rate to end its decline at 3.5% by the end of this year.** In our forecast, we have shifted all of the CNB’s rate cuts to this year. The reason for this is the aforementioned inflation trend combined with the traditional monetary policy lag. The bank board, led by Governor Michl, has long stated that it wants to keep interest rates higher than in the past. A similar view is now being expressed by the ECB and the Fed. Moreover, at its May meeting, the CNB is expected to publish the results of an analysis of where the equilibrium or policy-neutral level of interest rates currently stands. While the central bank has so far been steering rates towards 3%, the board has said that its members would prefer the rate in the 3.5% to 4% range. We think the lower boundary of the interval is more likely and have thus raised our forecast for the repo rate’s terminal level from 3.0% to 3.5%. In view of the above, however, it is still unclear whether interest rates will remain at this level because of a higher equilibrium rate (see *Box 2*) or because the board simply wants to maintain a restrictive monetary policy stance for a longer period in order to avoid inflationary risks and the equilibrium rate will ultimately remain unchanged.

The bank board is unlikely to cut the repo rate as quickly as the CNB staff forecast suggests (%)



Source: CNB, Economic & Strategy Research, Komerční banka

Monetary tightening is likely to be excessive this year, with interest rates still high and inflation on target (%)



Source: CNB, CZSO, Economic & Strategy Research, Komerční banka

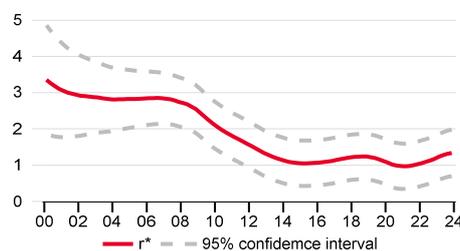
**Box 2: Central banks signal risk of rising real interest rates**

**The debate on the level of the equilibrium real interest rate has resurfaced.** The natural or equilibrium interest rate, or  $r^*$ , is the real<sup>1</sup> interest rate that would prevail in a given economy if it were operating at its potential and inflation were at the inflation target. However, the equilibrium interest rate is in principle an unobserved variable. The main recent debate among academics and economic policymakers has been whether its level, on which market interest rates are largely based, has risen or has the potential to rise in the coming years.

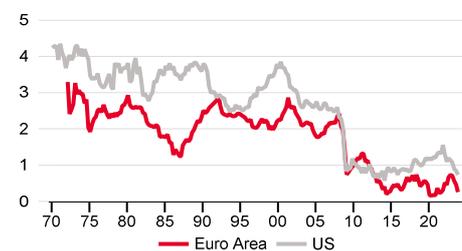
<sup>1</sup> In this text, we understand it in an ex-ante sense, i.e. as the difference between the nominal interest rate and expected inflation.

**In the pre-pandemic period, equilibrium real interest rates tended to fall.** This is true not only for interest rates in the US and the euro area, but also for the Czech Republic, according to our estimate from a small structural model. According to recent research<sup>2</sup>, the structural factors that have contributed to the global decline in real interest rates include low investment activity and the associated decline in labour productivity dynamics. In addition, lower investment has been accompanied by high savings, increased risk aversion and an ageing population. Domestic factors include the Czech economy's progressive convergence with advanced economies. These factors are reflected in our model by the declining growth rate of the domestic economy's potential output (GDP). And the decline in real interest rates abroad (euro area) acts in the same direction. According to some authors, contrary to classical theory, central banks themselves may have contributed to the decline in  $r^*$ , in particular through their communication about its future actions.<sup>3</sup>

3M  $r^*$  in the Czech Republic – KB estimate (%)



3M  $r^*$  in the US and euro area – NY Fed estimate (%)



Source: Macrobond, Economic and Strategy Research, Komerční banka  
 Note: estimation based on a multivariate filter for the Czech economy following Benes and N'Diaye (2004)<sup>4</sup>. In addition to adjustments related mainly to the pandemic period, we have also extended this with a block including an endogenous estimate of the three-month interbank (3M Príbor) equilibrium real interest rate. We used a combination of expected inflation from the CNB's survey of businesses and analysts as inflation expectations in calculating the three-month (3M) ex-ante real interest rate.

Source: Federal Reserve Bank of New York, Economic and Strategy Research, Komerční banka  
 Note: NY Fed estimate based on Holston-Laubach and Williams (2017) model.

**The trend decline in  $r^*$  has not continued over the past two years and, on the contrary, the expected investment overhang may put upward pressure on it in the future.** Long-term influences working towards lower real interest rates, such as the ageing of the population, are likely to persist. However, ECB Executive Board member I. Schnabel said in her March speech<sup>5</sup> that the downward trend could be offset by strong investment activity. According to Schnabel, climate change, geopolitical changes as a result of Russia's invasion of Ukraine and tensions between the US and China (investment in diversifying supply chains) or artificial intelligence and digitalisation, where Europe still lags behind the US and China, will require particularly high levels of investment. Overall, investor expectations of higher private and public investment (including higher defence and pension spending) could put upward pressure on real interest rates. All this could mark the beginning of an extended period in which  $r^*$  diverges from its long-term trend.

**Given the ECB's stance on  $r^*$  and the only gradual pace of balance sheet reduction in the outlook, we have raised the ECB's neutral (and also terminal) deposit rate from 2% to 2.5%.** The possibility of an increase in the equilibrium (nominal) interest rate was also

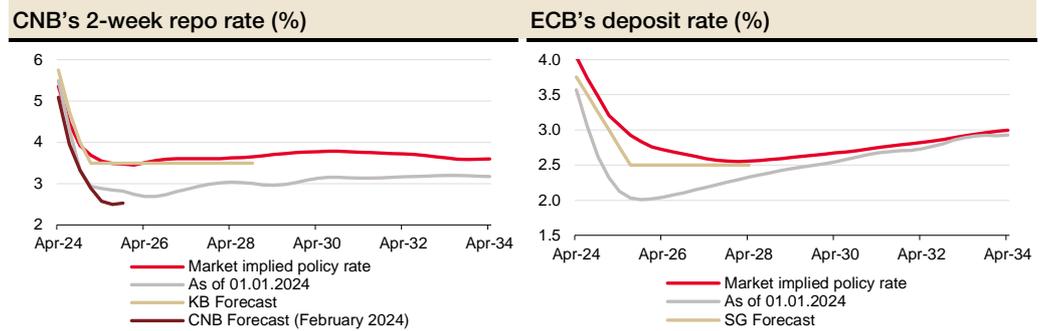
<sup>2</sup> E.g. Cesa-Bianchi et al. op. cit.; Platzer, J., Grigoli, F. and Tietz, R. (2023), "Low for (Very) Long? A Long-Run Perspective on  $r^*$  across Advanced Economies", Working Paper, No 085, International Monetary Fund.

<sup>3</sup> Hillenbrand, S. (2023), "The Fed and the Secular Decline in Interest Rates" Working Paper, Harvard Business School, March.

<sup>4</sup> Beneš, J. and N'Diaye, P. M., (2004). "A Multivariate Filter for Measuring Potential Output and the NAIRU: Application to the Czech Republic," IMF Working Papers 2004/045, International Monetary Fund.

<sup>5</sup> [https://www.ecb.europa.eu/press/key/date/2024/html/ecb.sp240320\\_2-65962ef771\\_en.html](https://www.ecb.europa.eu/press/key/date/2024/html/ecb.sp240320_2-65962ef771_en.html)

indicated by the shift in the distribution of FOMC members' expected long-term fed funds rate in the latest dot plot, as the median rose to 2.6% from 2.5% previously. Our colleagues at SG believe that the Fed's neutral policy rate is actually in the range of 3.00-3.25%.



Source: Bloomberg, CNB, Economic and Strategy Research, Komerční banka

Source: Bloomberg, SG Cross Asset Research/Economics, Economic and Strategy Research, Komerční banka

**The increase in the real equilibrium interest rate is also being discussed by the CNB.**

In their speeches, Board members have repeatedly stated that they believe the real interest rate is higher than before the pandemic, which could lead to a nominal neutral policy rate of 3.5-4%. This would imply a real interest rate of between 1.5% and 2%, rather than the 1% previously considered (with a nominal equilibrium repo rate of 3% and inflation expectations anchored at 2%). Although our model estimate shows that the real interest rate has risen slightly over the past two years, it was still close to 1% in 4Q23, if we are talking in terms of the CNB's real two-week repo rate. The outcome of the central bank's analysis on this issue should be published at the upcoming monetary policy meeting (2 May).

**Financial markets had already begun to price in the possibility of a rise in domestic real interest rates in the range indicated by the central bank.** Forward market contracts imply a nominal domestic policy rate at 3.5-4.0%. Assuming that long-term inflation expectations are anchored, this implies a real rate of around 1.5-2.0%. **We have also raised the CNB's neutral nominal repo rate from 3% to 3.5% in the forecast**, especially in the wake of the increase in the neutral rates of the Fed and the ECB in the external assumptions of our forecast.

**Jaromír Gec**  
 +420 222 008 598  
 jaromir\_gec@kb.cz

## Fiscal policy



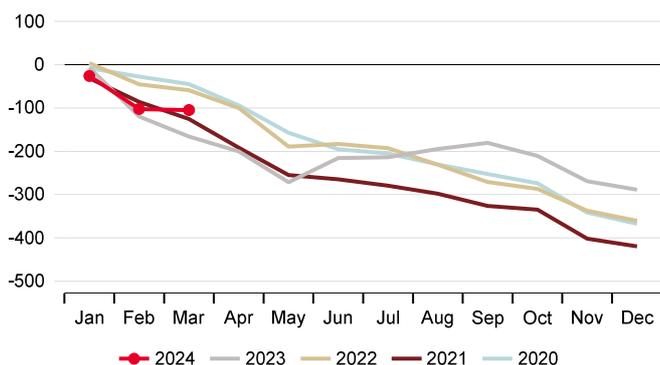
**Jaromír Gec**  
(420) 222 008 598  
jaromir\_gec@kb.cz

### Gradual consolidation is likely to continue

Although this year's state budget did not develop very favourably in the first quarter, in our baseline scenario we still expect the deficit to end the year at CZK250bn, roughly in line with the MinFin's plan. Next year, the deficit should narrow to CZK235bn, but the general election and the buffer up to the legal limits created by the consolidation package skew the risk towards a slightly deeper deficit. The negative public finance balance should fall visibly below 3% of GDP this year for the first time in four years and approach 2% of GDP next year. Total government debt will continue to increase in absolute terms, but only slowly as a share of nominal GDP.

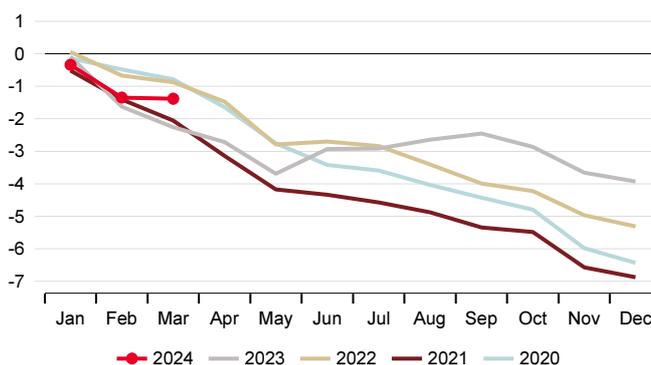
The state budget deficit was still relatively high in the first quarter of this year. At the end of March, the state budget ran a deficit of CZK105bn. In the year-on-year comparison, the deficit was CZK61.2bn shallower, which is mainly related to higher tax revenues. In our view, the revenue side of the state budget indicates a continued recovery in household consumption. The year-on-year decline in expenditure mainly reflects last year's high comparative base, driven by the disbursement of extraordinary aid to households and firms in the context of high energy prices.

State budget balance (CZKbn, ytd cumulative)



Source: Ministry of Finance, Macrobond, Economic & Strategy Research, Komerční banka

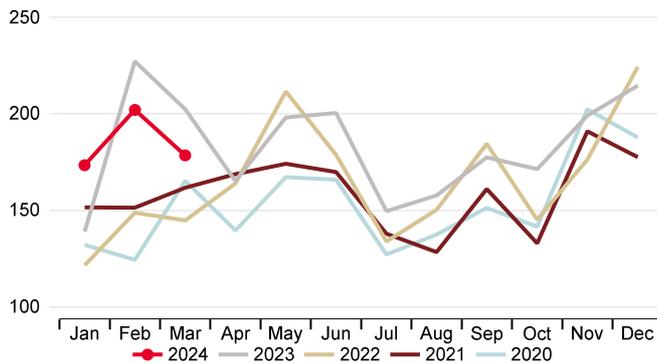
State budget balance (% GDP, ytd cumulative)



Source: Ministry of Finance, CZSO, Macrobond, Economic & Strategy Research, Komerční banka  
Note: Nominal GDP in 2024 according to the KB forecast.

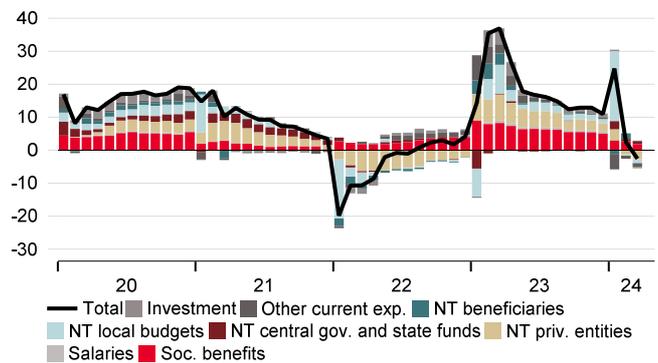
**Expenditure at the end of March was CZK14.6bn (-2.6%) lower than a year earlier.** Compared to 1Q23, expenditure on social benefits increased by a particularly large amount (CZK10.5bn), reflecting last year's extraordinary and this year's regular indexation of old-age pensions. On the other hand, non-investment transfers to enterprises (CZK-15.9bn) fell yoy as a result of last year's compensation for high energy prices, and expenditure on servicing the public debt was also lower (CZK-5.0bn), related to payment of the proceeds of anti-inflationary government bonds last January.

State budget expenditure (CZKbn, non-cumulative)



Source: Ministry of Finance, Macrobond, Economic & Strategy Research, Komerční banka

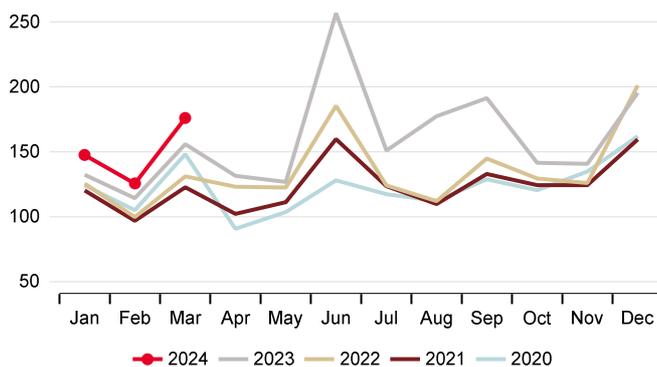
State budget expenditure (% , pp, yoy, ytd cumulative)



Source: Ministry of Finance, Macrobond, Economic & Strategy Research, Komerční banka  
NT – non-investment transfers

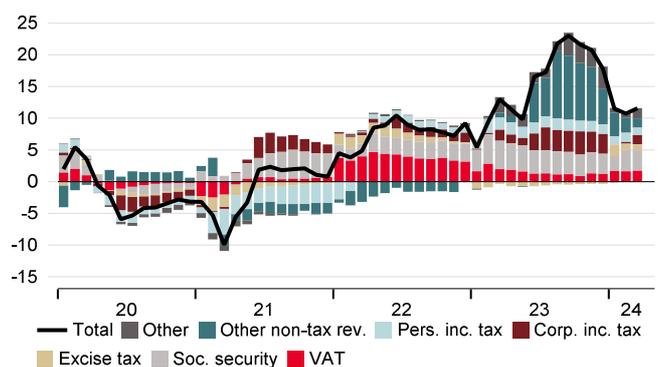
**Revenues increased by CZK46.6bn (11.6%) yoy in the first quarter.** Among the individual items, the largest contributions came from insurance premiums (CZK13.0bn), windfall profits tax (CZK13.0bn), VAT (CZK6.9bn) and DPPO (CZK5.8bn). The solid collection of VAT, the second most important revenue item, with an increase of 8.7% yoy in the first three months of the year, while CPI inflation averaged 2.1% yoy, points to a continued recovery in real household consumption. This is likely to reflect strong nominal wage growth, which we expect to outpace inflation on an annual basis this year. This is also confirmed by the collection of social security contributions, which by the end of March were almost 8% higher than last year, although this is partly related to the tax changes that took effect at the beginning of this year (reintroduction of sickness insurance for employees, increase in the minimum tax base for the self-employed).

State budget revenue (CZKbn, non-cumulative)



Source: Ministry of Finance, Macrobond, Economic & Strategy Research, Komerční banka

State budget revenue (% , pp, yoy, ytd cumulative)



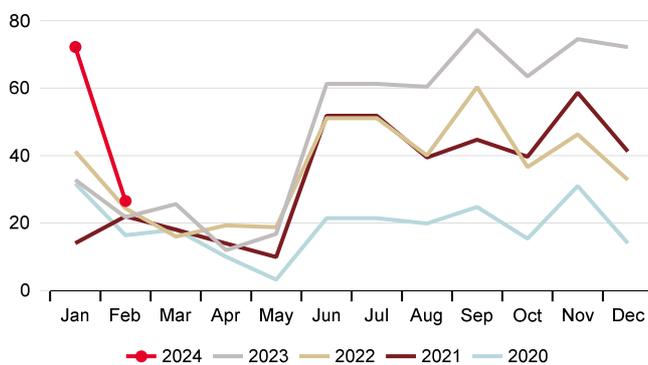
Source: Ministry of Finance, Macrobond, Economic & Strategy Research, Komerční banka  
Note: Other revenue includes EU funds for example

**Despite the relatively high deficit reported for the first quarter, we believe that the full-year budget deficit of CZK250bn is still achievable.** The consolidation package and the abolition of measures related to high energy prices will contribute to its reduction this year. However, the expected recovery of the domestic economy will also play a role. These factors will be partly offset this year by an increase in spending on defence (2% of GDP), education (teachers' salaries), servicing the public debt or payments for state-insured persons to the public health insurance system. All in all, we continue to assume a deficit of CZK250bn for the whole year in the baseline scenario. This is because a number of items do not develop linearly

during the year and therefore the first three months of the year cannot be used to draw firm conclusions about the direction of the full-year balance. However, the balance of risks is skewed towards a widening of the deficit, especially in view of economic growth, which we estimate to be lower than the 2.3% envisaged by the Ministry of Finance in August last year when the budget was prepared. The risk in the same direction on the revenue side is also linked to the significant fall in the price of emission allowances since then.

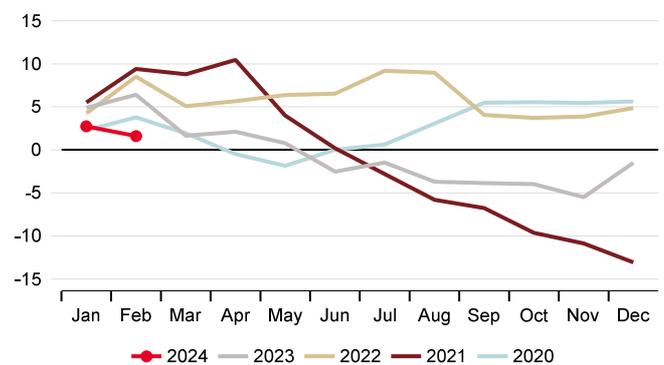
**Last year, local government budgets recorded a surplus of CZK72.2bn.** The year-on-year increase in revenues (CZK98.1bn, +13.2%) exceeded the increase in expenditures (CZK58.7bn, +8.3%), resulting in a year-on-year increase in the positive balance of CZK39.4bn. At the end of the year, according to the Ministry of Finance, municipalities had total assets of CZK479.7bn, while their liabilities amounted to CZK90.1bn.

Municipal finances (CZKbn, ytd cumulative)



Source: Ministry of Finance, Macrobond, Economic & Strategy Research, Komerční banka

Health insurers' finances (CZKbn, ytd cumulative)



Source: Ministry of Finance, Macrobond, Economic & Strategy Research, Komerční banka

**State budget deficit to fall to CZK235bn next year**

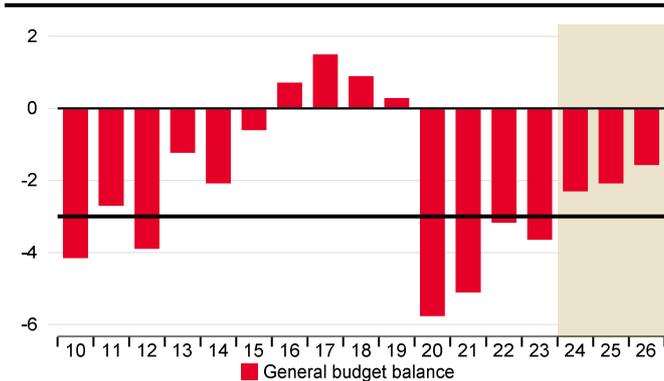
**We expect the state budget deficit to decline moderately in the coming years, in line with the MinFin's medium-term outlook.** According to our estimates, the deficit should reach CZK235bn in 2025 and CZK200bn in 2026. We expect the government to have additional fiscal room of around 0.25pp of GDP (around CZK20bn) next year compared to the maximum structural balances set by the Fiscal Responsibility Rules Act. Thus, if this risk materialises, the deficit may not decline at all next year.

**Public finance forecasts**

	2022	2023	2024f	2025f	2026f	2027f
Balance (% GDP)	-3.2	-3.7	-2.3	-2.1	-1.6	-1.0
Fiscal effort* (pp GDP)	1.0	-0.1	0.3	0.2	0.3	0.5
Public debt (CZKbn)	2 997.6	3 228.4	3 478.4	3 713.4	3 913.4	4063.4
Debt ratio (% GDP)	44.2	43.9	45.8	46.9	47.4	47.1

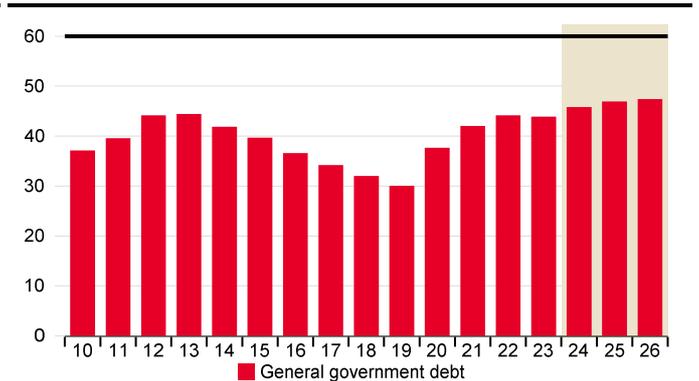
Source: CZSO, Macrobond, Ministry of Finance for published data, Economic & Strategy Research, Komerční banka  
 Note: Fiscal effort is measured as the year-on-year change in the public finance balance, adjusted for the economic cycle and one-off operations on GDP in pp.

Public finance balance (% of nominal GDP)



Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Public debt (% of nominal GDP)



Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

In our view, this year's public finances will end with a significantly lower deficit of 2.3% of GDP after 3.7% of GDP last year.

### Public deficit safely below 3% of GDP

**This year, we expect the public finance deficit to narrow significantly to 2.3% of GDP.**

Overall, the public finance deficit should again be lower than the state budget deficit. However, the traditional surplus of local governments will be partly offset by the deficit of the State Transport Infrastructure Fund. The deficit is expected to fall below 3% of GDP for the first time since 2019. Next year, we estimate the public finance deficit to narrow to 2.1% of GDP. The public debt to GDP ratio is estimated to increase by an average of 0.8pp per year over the period 2024-2027, reaching 47.1% of GDP in 2027.

**Structural imbalances in public finances persist, the law obliges the next government to consolidate.** Although the consolidation package has reduced the mismatch between government revenues and expenditures, the general government structural deficit remains at around 2% of GDP. However, the statutory limits<sup>6</sup> on structural balances tighten by 0.5pp per year in the following years, from a baseline of 2.75% in 2024-2027<sup>7</sup>. The next government will therefore have to continue consolidating public finances under the current version of the law.

<sup>6</sup> Act No. 23/2017 Coll. on the Rules of Budgetary Responsibility

<sup>7</sup> The limit is 2.25% of GDP in 2025, 1.75% in 2026 and 1.25% in 2027. From 2028 onwards, it is 1% of GDP.

## Summary forecast table

	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24	Q4 24	Q1 25	Q2 25	2023	2024	2025	2026	2027	2028
<b>GDP and its breakdown</b>														
<b>GDP (real, yoy, %)</b>	-0.6	0.2	0.4	0.7	2.1	2.2	2.2	2.1	-0.2	1.4	2.2	2.3	2.2	2.4
<b>Household consumption (real, yoy, %)</b>	-2.3	-0.5	1.7	1.8	3.2	4.0	4.6	5.0	-3.1	2.7	4.9	2.7	1.7	2.3
<b>Government consumption (real, yoy, %)</b>	3.7	3.8	3.1	2.8	1.7	1.9	2.5	2.9	3.5	2.3	2.9	1.7	2.2	2.1
<b>Fixed investments (real, yoy, %)</b>	5.0	6.2	6.4	3.0	4.8	3.9	4.7	4.9	4.2	4.5	4.8	3.1	2.5	3.1
<b>Net exports (contribution to yoy)</b>	1.1	5.0	4.2	4.4	5.2	1.3	0.2	-0.7	3.1	3.7	-0.6	0.3	0.4	0.1
<b>Inventories (contribution to yoy)</b>	-2.6	-6.4	-6.5	-5.4	-5.8	-2.2	-1.7	-1.3	-3.3	-5.0	-1.2	-0.3	0.0	0.1
<b>Monthly data from the real economy</b>														
<b>Foreign trade (CZKbn)</b>	-1.1	49.2	72.1	67.2	23.2	46.0	78.0	57.2	124.4	208.4	188.4	217.8	249.1	260.3
<b>Exports (nominal, yoy, %)</b>	-6.7	-0.6	4.8	5.2	12.5	7.9	5.7	4.6	1.0	7.5	5.6	5.7	5.5	5.3
<b>Imports (nominal, yoy, %)</b>	-11.8	-9.3	2.1	2.6	10.1	8.6	5.5	5.8	-6.2	5.8	6.3	5.3	5.1	5.3
<b>Industrial production (real, yoy, %)</b>	-3.5	-0.5	-0.1	0.0	2.9	1.6	2.4	2.9	-0.8	1.1	3.1	2.7	2.3	2.3
<b>Construction output (real, yoy, %)</b>	-1.3	-2.7	-1.0	5.2	8.0	7.6	3.9	3.8	-2.6	4.9	3.7	3.6	2.8	2.5
<b>Retail sales (real, yoy, %)</b>	-3.2	-0.2	2.2	4.1	4.3	4.1	4.0	3.7	-4.5	3.7	3.8	2.6	2.1	2.3
<b>Labour market</b>														
<b>Wages (nominal, yoy, %)</b>	7.1	6.3	6.0	6.3	6.5	6.2	5.7	5.3	7.6	6.2	5.4	4.0	4.3	4.4
<b>Wages (real, yoy, %)</b>	-0.9	-1.3	3.7	3.8	4.5	4.6	3.6	3.5	-2.9	4.2	3.4	1.9	2.2	2.4
<b>Unemployment rate (MLSA, %)</b>	3.6	3.6	3.9	3.5	3.5	3.4	3.6	3.2	3.6	3.6	3.3	3.4	3.6	3.8
<b>Unemployment rate (ILO 15+, %)</b>	2.6	2.6	2.8	2.6	2.6	2.4	2.5	2.3	2.6	2.6	2.4	2.4	2.7	2.9
<b>Employment (ILO 15+, yoy, %)</b>	1.3	1.6	1.1	0.8	1.0	1.0	1.1	1.0	1.4	1.0	0.9	0.4	0.1	0.1
<b>Consumer and producer prices</b>														
<b>CPI Inflation (yoy, %)</b>	8.1	7.6	2.2	2.2	1.9	2.0	1.7	1.7	10.7	2.1	1.8	2.0	2.1	2.0
<b>Taxes (contribution to yoy inflation)</b>	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.0
<b>Core inflation (yoy, %) (*)</b>	5.9	3.9	2.8	2.5	2.5	2.4	2.3	1.9	7.6	2.6	1.9	1.9	2.2	2.2
<b>Food prices (yoy, %) (*)</b>	7.3	2.6	-1.2	-1.3	-1.6	-0.9	0.8	1.8	10.0	-1.3	2.0	2.5	2.0	1.9
<b>Fuel prices (yoy, %) (*)</b>	-15.5	-7.6	0.4	6.9	0.0	-2.4	-1.7	-4.9	-12.4	1.2	-4.0	-4.6	-3.0	-0.9
<b>Regulated prices (yoy, %)</b>	19.9	33.2	6.2	5.7	5.6	6.8	1.0	1.1	27.8	6.1	1.6	2.3	2.2	2.0
<b>Producer prices (yoy, %)</b>	1.3	0.8	-0.7	2.6	2.7	2.3	1.9	1.3	5.3	1.7	1.3	1.0	1.3	1.5
<b>Financial variables</b>														
<b>2W Repo (% , average)</b>	7.0	7.0	6.4	5.4	4.4	3.8	3.5	3.5	7.0	5.0	3.5	3.5	3.5	3.5
<b>3M PRIBOR (% , average)</b>	7.1	7.0	6.2	5.7	4.7	4.1	3.8	3.8	7.1	5.2	3.8	3.8	3.8	3.8
<b>EUR/CZK (average)</b>	24.1	24.5	25.1	25.2	25.0	24.9	24.8	24.8	24.0	25.1	24.7	24.5	24.2	23.9
<b>External environment</b>														
<b>GDP in EMU (real, yoy, %)</b>	0.1	0.1	0.3	0.4	0.8	1.1	1.2	1.2	0.5	0.6	1.3	1.4	1.2	1.2
<b>GDP in Germany (real, yoy, %)</b>	-0.3	-0.2	-0.2	-0.2	-0.1	0.4	0.7	0.9	-0.1	0.0	1.0	1.3	1.1	1.2
<b>CPI in EMU (yoy, %)</b>	4.9	2.7	2.7	2.7	2.3	2.3	2.2	2.0	5.5	2.5	2.0	1.9	1.9	1.9
<b>Brent oil price (USD/bbl, average)</b>	82.4	86.0	81.7	81.0	79.0	77.0	77.7	78.3	82.5	79.7	78.6	76.8	73.4	73.1
<b>EUR/USD (quarter eop, year average)</b>	1.06	1.10	1.08	1.04	1.07	1.05	1.09	1.10	1.09	1.06	1.12	1.20	1.25	1.26

Source: CZSO, MLSA, Bloomberg, Macrobond, Economic & Strategy Research, Komerční banka  
 Note: (\*) these parts of inflation are adjusted for the primary effect of indirect tax changes

# Czech IRS market and government bonds



**Jaromír Gec**  
(420) 222 008 598  
jaromir\_gec@kb.cz

## Searching for a new neutral

Global market interest rates have corrected their earlier decline in recent months. In addition to continued strong data from the US, the ongoing debate about the level of neutral interest rates has also played a role. This has led us to raise our forecast of the CNB's neutral policy repo rate from 3% to 3.5%. Given the ongoing reduction in domestic monetary policy rates and market pricing, we see more room for a decline from current levels at the shorter end of the koruna curve. We also see little room for yields on longer-term CZGBs to fall. We expect gross issuance to remain close to current levels for the rest of the year. We think it will increase slightly next year, but that net issuance will remain roughly similar to this year.

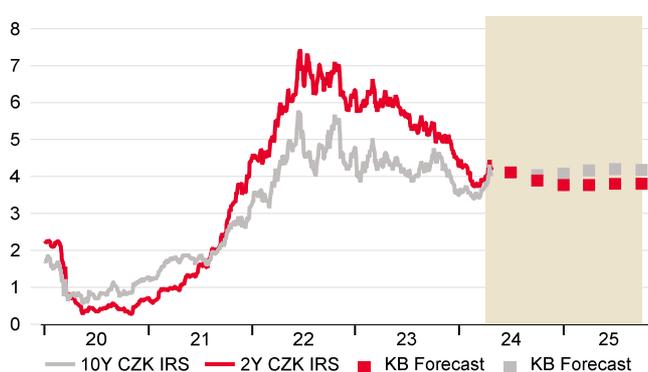
The CNB's higher neutral rate should prevent a further decline in koruna market interest rates with longer maturities. The curve could escape the inversion at the turn of the year.

### Czech IRS market: higher CNB terminal rate prevents a fall in market rates

In recent months, the CZK interest rate curve has corrected the decline seen at the end of last year. Global developments have again played an important role, as the resilience of the US economy and the inertia of inflationary pressures have proved to be more pronounced than the markets had anticipated at the beginning of this year. As a result, the expected number of Fed rate cuts priced in has decreased from the original six 25bp cuts at the start of the year to only two at present. Meanwhile, as we explain in the *External Environment* chapter, we are even more cautious than that, and do not expect the first US rate cut until next year. Reassessment of the ECB's and the Fed's neutral rates has also been priced into longer-dated global market rates. Indeed, central bankers have indicated that the nominal neutral rate is likely to be higher than previously thought as a result of the rise in the real neutral rate. The CNB has sent the same signal to the markets. As a result, we have raised our forecast for the CNB's neutral repo rate from 3% to 3.5% (we write more about this in *Box 2*).

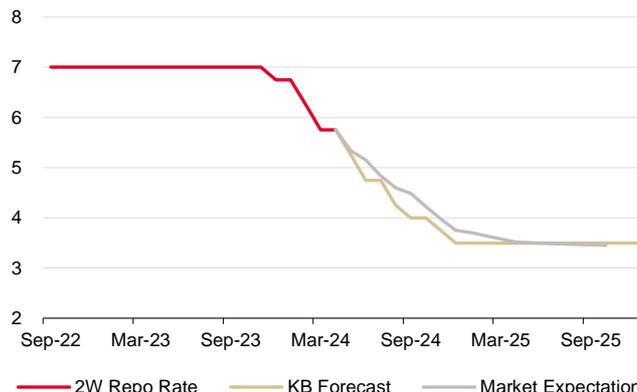
**Market interest rates at shorter maturities should be on track for a relatively larger decline.** In our view, the decline in domestic policy rates could be somewhat faster than markets expect. On the other hand, in view of our reassessment of the CNB's key interest rate to 3.5%, we do not expect a more pronounced decline in koruna market interest rates with longer maturities, as these are already close to levels that we believe are consistent with the new level of the CNB's neutral rate.

IRS forecast (%)



Source: Bloomberg, Economic and Strategy Research, Komerční banka

Expected CNB key interest rate path as of 23 April 2024 (%)



Source: Bloomberg, CNB, Economic and Strategy Research, Komerční banka

**We expect the CNB's rate-cutting cycle to continue, and contribute to a gradual normalisation of the shape of the domestic yield curve.** According to our forecast, the 3.5% equilibrium repo rate will be reached at the end of this year, and we therefore expect the inversion of the CZK curve to disappear at the turn of the year.

CZK IRS outlook (end of period, %)

	2Q24f	3Q24f	4Q24f	1Q25f
2y	4.10	3.90	3.75	3.75
5y	3.95	3.85	3.90	3.95
10y	4.10	4.05	4.10	4.15

Source: Economic & Strategy Research, Komerční banka

**Euro market still offers lower interest rates**

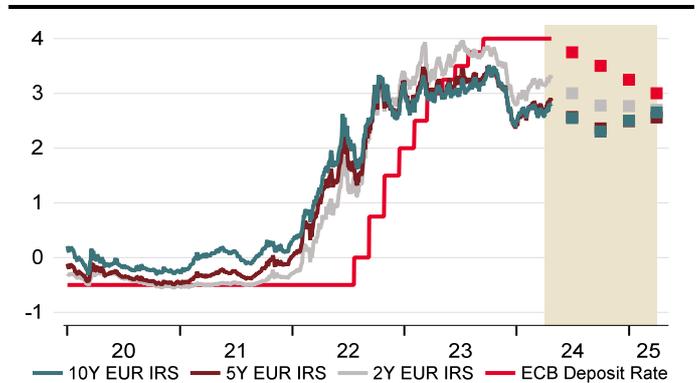
**With the global rise in market interest rates, the conditions for interest rate hedging in the koruna market have deteriorated.** The forward market is showing lower rates than spot IRS. **Interest rates in the euro area market continue to be significantly lower than in the koruna market.** While SG strategists expect euro market interest rates to fall temporarily when the ECB’s cycle of interest rate cuts begins in June, they see a risk that the ECB will ultimately cut rates by less than the cumulative 75bp they envisage in their baseline scenario this year.

Forward interest rate swaps (% , p.a., vs 6M PRIBOR)

	Maturity				
	1Y	2Y	3Y	5Y	10Y
Spot	4.66	4.24	4.10	4.03	4.04
3M	4.20	4.05	3.97	3.95	4.00
6M	3.90	3.87	3.86	3.89	3.97
1Y	3.81	3.81	3.83	3.89	3.98
2Y	3.81	3.84	3.87	3.94	4.02
3Y	3.88	3.90	3.95	3.99	4.07

Source: Bloomberg, Economic & Strategy Research, Komerční banka, as of 23 April 2024

Euro area rates (%)



Source: Bloomberg, SG Cross Asset Research/Economics

**Gross CZGB issuance likely to rise next year, and net to remain roughly flat**

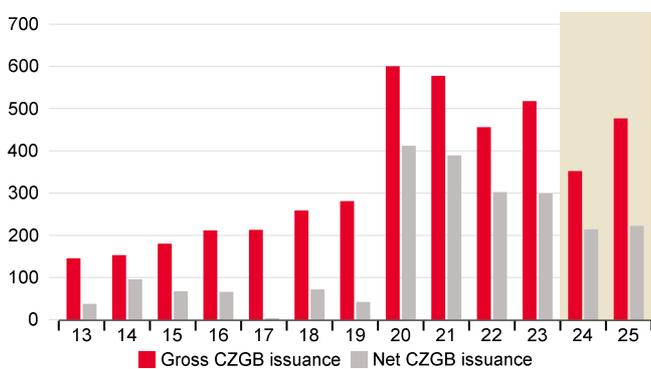
**Lower maturing debt repayments and the easing of the state budget deficit are contributing to significantly lower issuance activity this year.** We expect the state budget deficit to head towards CZK250bn this year, down from CZK288.5bn last year. In light of this, and taking into account other financing needs, especially maturing bond repayments, we forecast gross issuance at CZK352.0bn this year. We therefore estimate that the supply of CZGBs could fall by CZK166bn year-on-year. For 2Q24, the MinFin has kept the indicative amount of CZGBs on offer at CZK75.0bn, the same level as in 1Q. We therefore do not expect the supply of CZGBs to decrease significantly over the rest of the year. The issue of a euro bond is still on the table for this year, with the MinFin preferring to use domestic market to cover foreign currency funding needs. Next year, we expect the gross issuance to rise to CZK476.6bn, mainly due to higher redemptions, assuming the state budget deficit eases to CZK235bn. However, we estimate that net issuance will increase only slightly.

Funding programme and issuance activity (CZKbn)

	2024		2025	
	MinFin	KB	MinFin	KB
State budget deficit	252.0	250.0	235.0	235.0
Transfers and other operations of state financial assets	4.4	4.4	1.9	1.9
T-bonds denominated in local currency redemptions	138.0	138.0	254.0	254.0
T-bonds denominated in foreign currency redemptions	24.4	24.4	0.0	0.0
Redemptions and early redemptions on savings bonds	5.0	5.0	11.6	11.6
Money market instrument redemptions	44.4	44.4	0.0	20.0
Redemption of T-bills		9.3		20.0
Redemption of other money market instruments		35.1		0.0
Repayments on credits and loans	0.6	0.6	0.6	0.6
<b>Total financing needs</b>	<b>468.8</b>	<b>466.8</b>	<b>503.1</b>	<b>523.1</b>
Money market instruments		50.0		20.0
T-bills		20.0		20.0
Other money market instruments		30.0		0.0
Gross issuance of CZK T-bonds on domestic market		352.0		476.6
Gross issuance of EUR T-bonds on domestic market/eurobond		24.8		0.0
Gross issuance of government savings bonds		5.0		1.5
Received credits and loans		20.0		10.0
Financial asset and liquidity management		15.0		15.0
<b>Total financing sources</b>		<b>466.8</b>		<b>523.1</b>
<b>Gross borrowing requirement</b>		<b>451.8</b>		<b>508.1</b>
<b>Net CZGB issuance</b>		<b>214.0</b>		<b>222.6</b>

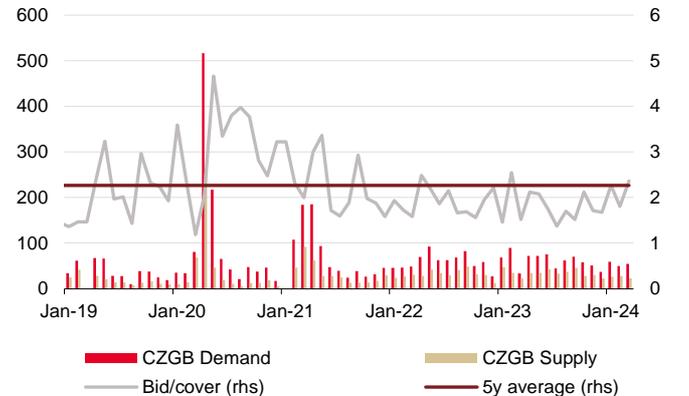
Source: MinFin, Economic and Strategy Research, Komerční banka

CZGB issuance (CZKbn)



Source: MinFin, Economic and Strategy Research, Komerční banka

CZGB primary market (CZKbn)



Source: MinFin, CNB, Economic and Strategy Research, Komerční banka

CZGB yield forecast (end of period)

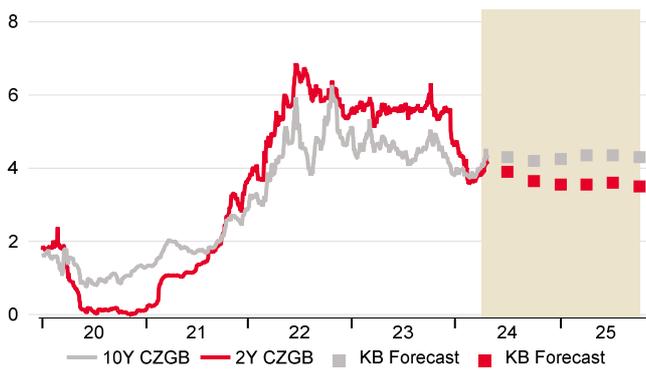
	2Q24f	3Q24f	4Q24f	1Q25f
2y CZGB yield (%)	3.90	3.65	3.55	3.55
5y CZGB yield (%)	4.10	3.95	3.95	4.00
10y CZGB yield (%)	4.30	4.20	4.25	4.35
10y CZGB ASW (bp)	18	18	18	18

Source: Economic & Strategy Research, Komerční banka

Decline in CZGB yields likely to be fairly gradual

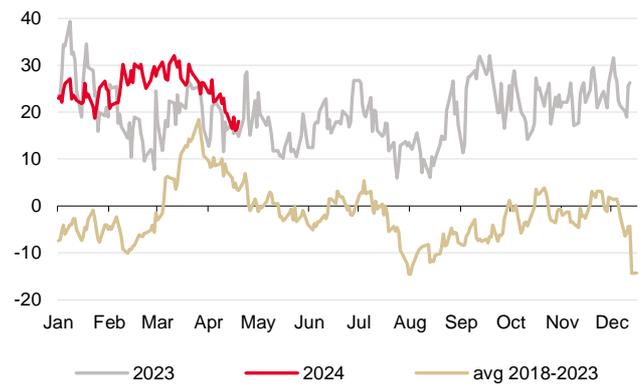
Similarly to the CZK IRS, the CZGB yield curve has risen significantly since the beginning of 2024. This too was probably primarily a reflection of developments in global markets. Overall, as in the case of market interest rates, yields of shorter maturity bonds should have more room to fall this year. The decline in yields at longer maturities on the other hand, should roughly stabilise given that the CNB is pointing to a higher neutral rate.

CZGB yield forecast (%)



Source: Bloomberg, Economic and Strategy Research, Komerční banka

10y CZGB ASW (bp)



Source: Bloomberg, Economic and Strategy Research, Komerční banka

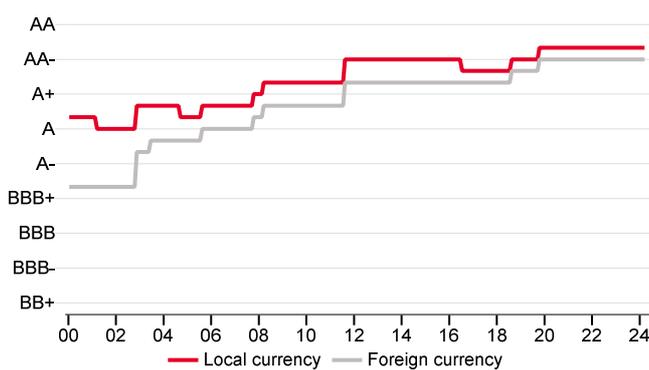
**The Czech Republic’s rating remains unchanged and the outlook is now stable from all major agencies.** In February, Fitch upgraded the Czech Republic’s rating outlook from negative to stable, as did Moody’s last November. The worsening of the outlook to negative in 2022 was mainly linked to the energy crisis and deteriorating public finances. Now, both Fitch and Moody’s are praising the Czech government’s consolidation efforts and the reduction of dependence on Russian energy. However, Fitch also cites as a positive the moderation of inflation and the lack of impact of the pandemic and energy shock on the long-term growth of the domestic economy. The Czech Republic thus continues to have the best rating of all the CEE countries.

**Sovereign rating overview**

	Local currency	Outlook	Foreign currency	Outlook	Next rating review
S&P	AA	STABLE	AA-	STABLE	11.10.2024
Moody's	Aa3	STABLE	Aa3	STABLE	26.07.2024
Fitch	AA-	STABLE	AA-	STABLE	16.08.2024

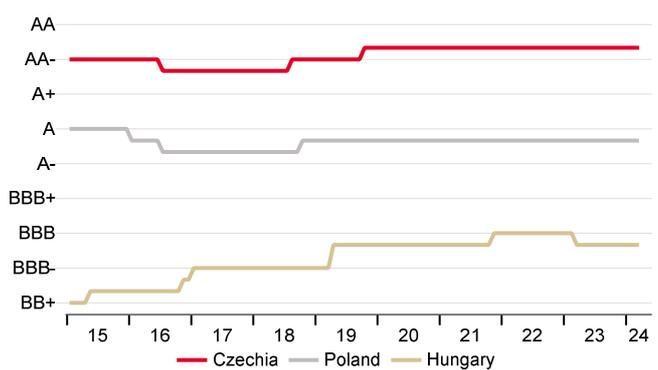
Source: Bloomberg, Economic and Strategy Research, Komerční banka

Czech Republic’s rating (average of Fitch, S&P and Moody’s)



Source: Bloomberg, Economic and Strategy Research, Komerční banka

Rating in CE3 – local currency (avg. of Fitch, S&P and Moody’s)



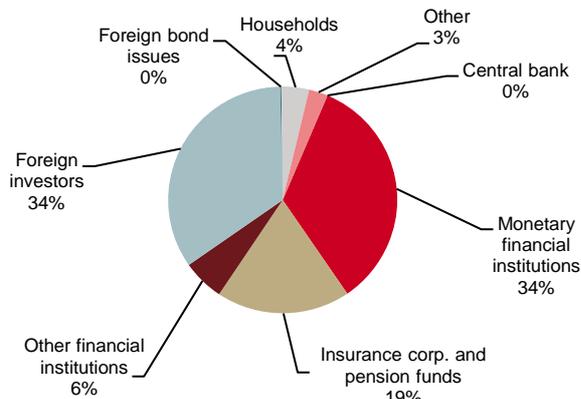
Source: Bloomberg, Economic and Strategy Research, Komerční banka

Government bond overview

Government bond overview									Rich-cheap analysis											
Bond	Dur.	Issued last 90D	Issuance limit	Yield	Δ1W	Δ1M	FX hedged		ASW	Δ1W	Δ1M	Min	90D	Max	Z-Score	Rank	Spline spread	Rank	Carry Roll 90D	Rank
0.00 Dec-24	0.6	0.0	34%	4.72	-24	-3	3.84		-38	8	2	-108		-38	2.3	1	-36.2	1	-66.7	24
1.25 Feb-25	0.8	0.0	100%	4.34	-10	1	3.54		-50	3	-13	-88		-45	1.4	2	-0.5	14	-65.1	23
2.40 Sep-25	1.3	0.0	85%	4.08	-13	30	3.40		-52	6	-1	-57		-15	-1.3	6	17.6	23	-39.0	22
6.00 Feb-26	1.7	0.0	71%	4.00	-16	28	3.33		-40	0	-3	-58		-26	0.1	3	20.5	24	-30.3	21
1.00 Jun-26	2.1	0.0	100%	4.06	-21	23	3.38		-30	1	-7	-33		-1	-1.6	9	10.7	22	-23.8	20
0.25 Feb-27	2.7	4.5	103%	4.03	-23	34	3.32		-21	2	-2	-22		8	-1.8	10	9.4	20	-18.2	19
2.50 Aug-28	3.9	0.0	94%	4.05	-24	43	3.19		-8	2	-2	-9		13	-1.6	8	0.0	15	-11.1	18
5.50 Dec-28	4.0	6.0	70%	4.07	-22	43	3.22		-6	3	0	-13		5	-0.2	4	-1.9	13	-10.7	17
5.75 Mar-29	4.3	0.0	121%	4.09	-28	38	3.23		1	5	-5	-2		16	-1.4	7	-4.3	4	-9.7	16
2.75 Jul-29	4.6	0.0	100%	4.07	-27	40	3.14		-6	4	-1	-7		20	-2.0	14	-2.0	12	-8.8	15
0.05 Nov-29	5.4	0.0	58%	4.08	-26	41	3.11		-5	2	-1	-6		17	-2.1	17	-3.3	8	-7.3	14
0.95 May-30	5.7	0.0	100%	4.10	-27	38	3.09		-2	3	-2	-3		18	-2.4	21	-4.3	3	-6.5	12
5.00 Sep-30	5.3	0.0	101%	4.11	-27	38	3.13		2	2	-5	-3		19	-1.8	11	-3.9	6	-6.9	13
1.20 Mar-31	6.3	0.0	100%	4.12	-27	37	3.07		-2	2	-6	1		20	-2.8	23	-4.1	5	-5.4	10
6.20 Jun-31	5.6	0.0	72%	4.13	-22	39	3.14		2	3	-4	-3		17	-0.8	5	-3.8	7	-6.0	11
1.75 Jun-32	7.2	0.0	100%	4.16	-29	30	3.07		0	-1	-8	2		19	-2.8	22	-3.0	11	-4.1	7
4.50 Nov-32	6.8	27.5	52%	4.18	-30	31	3.14		8	0	-7	9		26	-2.1	19	-3.0	10	-4.4	8
3.00 Mar-33 *	7.5	11.9	11%	4.20	-30	29	3.12		7	2	-7	7		24	-1.8	12	-3.2	9	-3.7	6
2.00 Oct-33	8.2	0.0	100%	4.18	-29	30	3.07		5	0	-7	6		19	-3.3	24	1.6	16	-3.4	3
4.90 Apr-34	7.8	11.7	55%	4.19	-29	27	3.15		10	0	-10	8		28	-2.1	18	2.4	17	-3.6	5
3.50 May-35	8.6	12.1	57%	4.23	-27	27	3.15		9	2	-6	8		25	-2.0	15	3.5	18	-3.1	1
4.20 Dec-36	9.5	0.0	100%	4.21	-28	27	3.18		7	4	-6	5		23	-2.1	16	9.5	21	-3.4	4
1.95 Jul-37	10.9	4.3	40%	4.26	-25	27	3.17		6	3	-5	5		25	-2.3	20	5.0	19	-3.2	2
1.50 Apr-40	13.3	4.1	51%	4.26	-25	26	3.17		7	3	-5	5		25	-1.9	13	-6.7	2	-4.7	9

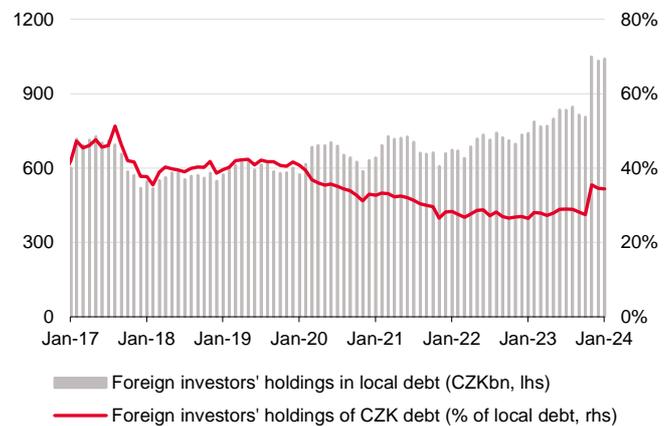
Source: Economic & Strategy Research, Komerční banka; Note: more details in CZGB Auction Alerts

Holdings of CZK government debt (February 2024)



Source: MinFin, Economic & Strategy Research, Komerční banka

The share of non-resident bondholders increased as a result of a one-off transaction between a foreign bank and its subsidiary



Source: MinFin, Economic & Strategy Research, Komerční banka

## Czech FX market



**Jaromír Gec**  
(420) 222 008 598  
jaromir\_gec@kb.cz

### Cautious optimism

The recovery of the domestic economy, together with the CNB's higher terminal rate, should support a resumption of the slight appreciation of the Czech koruna against the euro as the year progresses. Emerging market currencies, on the other hand, will not be helped by global sentiment favouring the US dollar, as has been the case in recent months. In our view, the dollar should maintain its strong position throughout the year, preventing the koruna from appreciating significantly. Overall, we believe that the risks are concentrated on the side of a weaker koruna.

### Global foreign exchange markets driven by strengthening US dollar

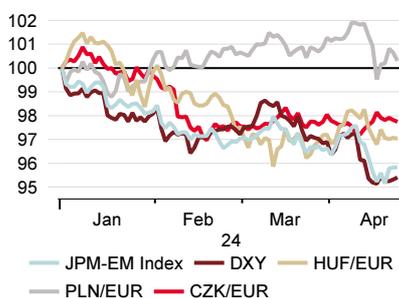
Emerging market currencies have been under pressure from a strengthening US dollar since the beginning of the year. Ongoing geopolitical risks, coupled with robust economic momentum in the US and only slowly receding inflationary pressures there, have helped the US dollar to appreciate by more than 4% in effective terms (measured by the DXY index) since the beginning of the year. As a result, some of the risks described in our January *Czech Economic Outlook* have materialised. As has often been the case in the past, the strengthening of the dollar has been accompanied by a weakening of emerging market currencies over the past quarter. Moreover, their sensitivity to the dollar index (DXY) has increased steadily recently, which has also been the case for the Czech koruna.

CZK exchange rates



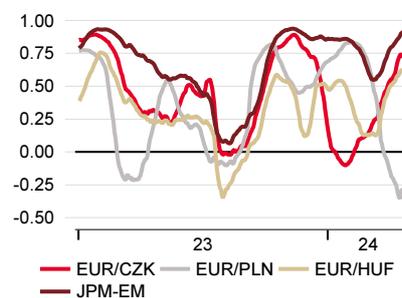
Source: Bloomberg, Economic and Strategy Research, Komerční banka

Performance of CE currencies (1. 1. 2024 = 100)



Source: Bloomberg, Economic and Strategy Research, Komerční banka  
Note: A value above 100 indicates an appreciation of the CZK, PLN or HUF against the EUR or the Emerging Market Currency Index (JPM-EM), or a weakening of the Dollar Index (DXY) from 1 January 2024.

Correlation coefficient of currency pairs with the dollar index DXY



Source: Bloomberg, Economic and Strategy Research, Komerční banka  
Note: 3M rolling correlation. Positive values indicate a positive correlation between the strengthening of the dollar (DXY) and the weakening of CZK, PLN, HUF against EUR or the weakening of the JPM-EM index.

We revised our forecast for the EURCZK to slightly weaker levels. This was mainly due to a narrower interest rate differential and a globally stronger US dollar compared with the assumptions of our January forecast.

### Domestic fundamentals are starting to improve

#### The interest rate differential between the koruna and the euro has stopped narrowing.

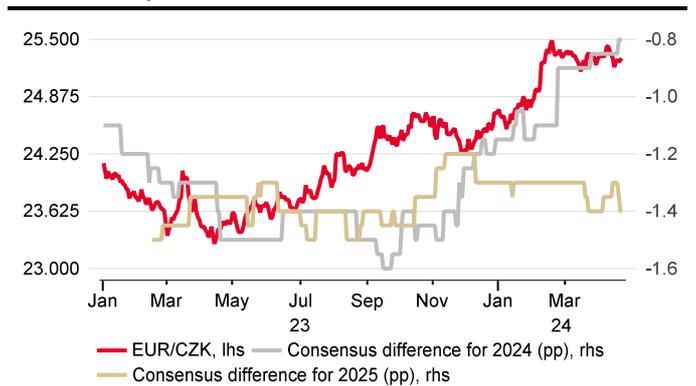
In addition to the global factors mentioned above, the narrowing of the interest rate differential has also contributed to the weakening of the koruna since the beginning of the year. This followed the publication of domestic January inflation, which surprised financial markets with a significantly lower figure. However, the narrowing has come to a halt, and with the gradual pricing-in of the CNB's higher terminal/neutral rate and the rise in dollar market interest rates, the differential has instead widened slightly, which we believe has only been partially reflected in the spot rate so far. Markets continue to expect the ECB to cut policy rates for the first time as early as June this year, and so their euro counterparts have reacted less to the rise in US market rates following the surprisingly strong persistence of inflationary pressures overseas. We do not expect the interest rate differential to intensify depreciation pressure on the koruna in the future either, as the market's perception of the CNB's and ECB's future rate actions is broadly in line with our outlook.

EUR/CZK and interest rate differential



Source: Bloomberg, Economic and Strategy Research, Komerční banka

EUR/CZK and GDP growth differential between the euro area and the Czech Republic

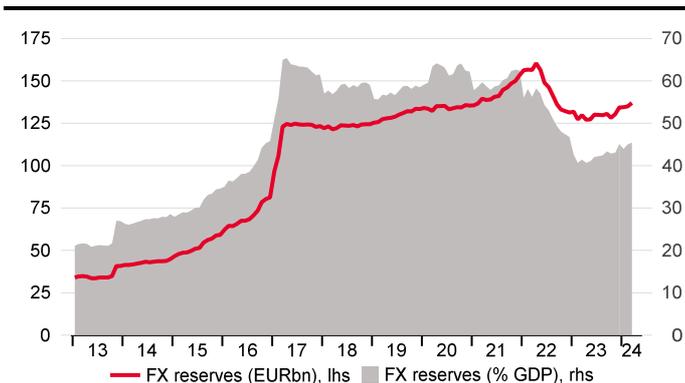


Source: Bloomberg, Economic and Strategy Research, Komerční banka  
 Note: Bloomberg consensus difference: euro area-Czech Republic.

**The Czech economy is expected to grow significantly faster than the euro area.**

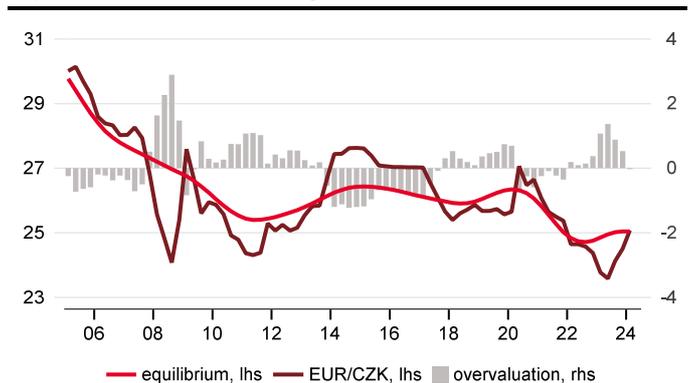
According to the market consensus, this gap is expected to widen over time, with euro area GDP growth next year expected to be 1.4pp lower than that of the Czech economy. We also expect higher growth in the domestic economy, although in our baseline scenario the growth differential next year is somewhat more modest (around 0.8pp). In our view, the depreciation this year has roughly offset the previous overvaluation of the koruna in the equilibrium exchange rate model. A possible increase in the volume of sales from the CNB's foreign exchange reserves, which has been close to EUR300m per month since last September, could also have a stabilising effect on the koruna exchange rate. The central bank's foreign exchange reserves stood at EUR136.9bn at the end of March this year. Relative to the size of the economy, the reserves amount to more than 40% of annual nominal GDP and are still among the largest in the world. All in all, we therefore expect a resumption of the gradual appreciation of the koruna against the euro this year, but this is likely to be hampered mainly by the global strength of the US dollar. According to our colleagues at SG, dollar strength should be supported in the last quarter of the year by increased uncertainty surrounding the US presidential election.

CNB's FX reserves



Source: CNB, CZSO, Economic and Strategy Research, Komerční banka

Equilibrium EUR/CZK exchange rate



Source: Macrobond, Economic and Strategy Research, Komerční banka  
 Note: The estimated equilibrium exchange rate is based on a model of the economy's internal (output gap) and external (net export-to-GDP gap) equilibrium.

**Koruna exchange rate forecast (end of period)**

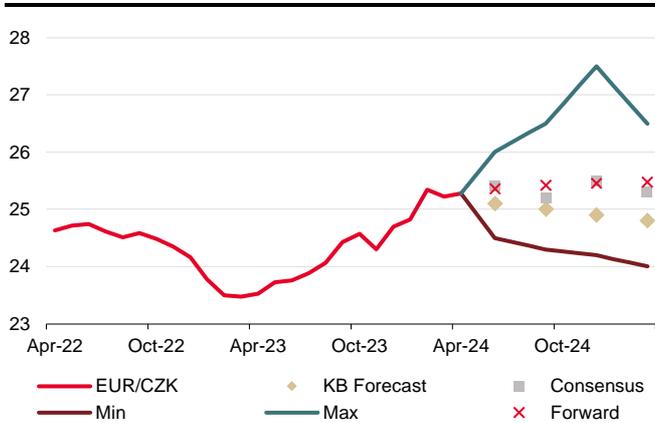
	2Q24f	3Q24f	4Q24f	1Q25f
EUR/CZK	25.10	25.00	24.90	24.80
USD/CZK	24.15	23.35	23.70	22.75
EUR/USD	1.04	1.07	1.05	1.09

Source: Economic and Strategy Research, Komerční banka, SG Cross Asset Research

**Balance of risks tilted slightly towards weaker koruna**

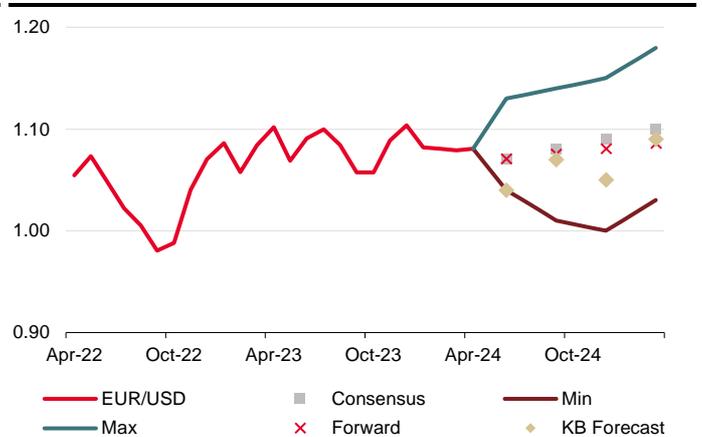
**Global factors could put additional pressure on the koruna.** In our outlook for the ECB's key rates, where we expect three cuts this year, we see a risk of less or later monetary easing. Global sentiment towards emerging markets could be worsened by a possible escalation in the geopolitical situation. One area of general uncertainty is the speed of the domestic recovery over the rest of the year, given the continued weakness of the German economy.

**Expected EUR/CZK path, Bloomberg consensus (as of 23 April 2024)**



Source: Bloomberg, Economic and Strategy Research, Komerční banka

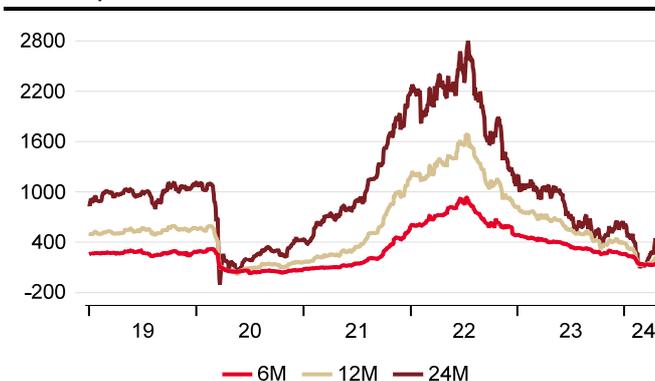
**Expected EUR/USD path, Bloomberg consensus (as of 23 April 2024)**



Source: Bloomberg, Economic and Strategy Research, Komerční banka, SG Cross Asset Research

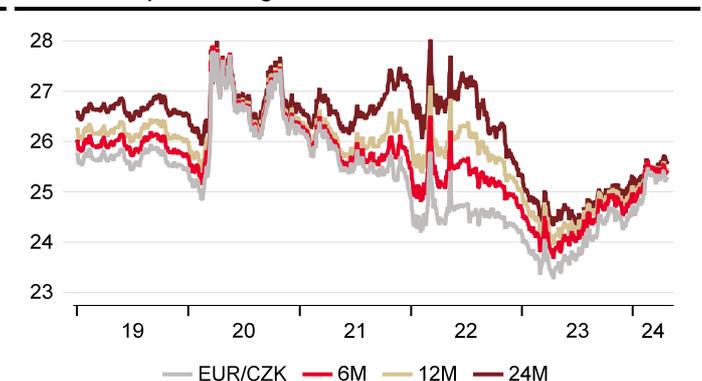
**The weakening of the koruna, together with a renewed widening of the interest rate differential, has improved hedging conditions for exporters.** As mentioned above, we do not expect any further significant widening or narrowing of the interest rate differential. A slight appreciation in the spot rate should therefore lead to a similar movement in forward rates. From an exporter's perspective, we therefore see current market conditions as relatively attractive for potential hedging of exchange rate risk.

**Forward points**



Source: Bloomberg, Economic and Strategy Research, Komerční banka

**Forward vs spot exchange rate: EUR/CZK**



Source: Bloomberg, Economic and Strategy Research, Komerční banka

# Banking sector

## Credit activity likely to help heat up the economy



Kevin Tran Nguyen  
(420) 222 008 569  
kevin\_tran@kb.cz

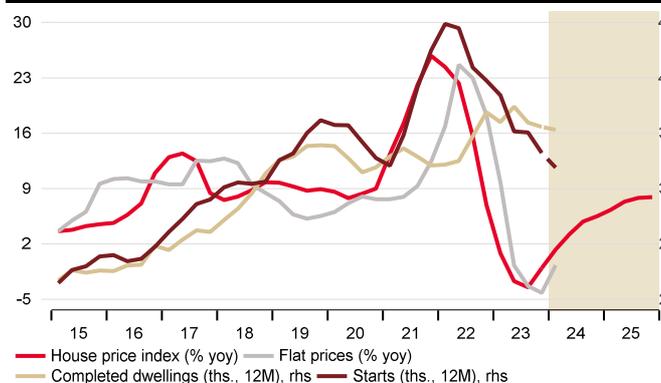
The credit impulse is set to make a more material contribution to the recovery of the domestic economy this year, thanks to the easing of monetary policy and renewed business and consumer confidence. However, a stronger recovery in credit demand is likely to be dampened by the large amount of own funds held by firms and households and still tight monetary policy. The rebound in mortgage lending, helped by falling interest rates, should underpin a resumption of house price growth after the shallow downturn in 2023. We expect corporate credit demand to rise amid lower interest rates and rising aggregate demand. Deposit growth is unlikely to outpace loan growth, as deposit rates continue to fall. Default rates remaining near historical lows is a testament to the fundamentally strong household and corporate balance sheets, which provide a solid springboard from which the economy should be able to rebound this year.

The downturn in the housing market was only moderate and we expect house prices to grow this year. This is likely to be helped by the rebound in mortgage lending.

### Mortgage lending to solidify further and real estate market to heat up

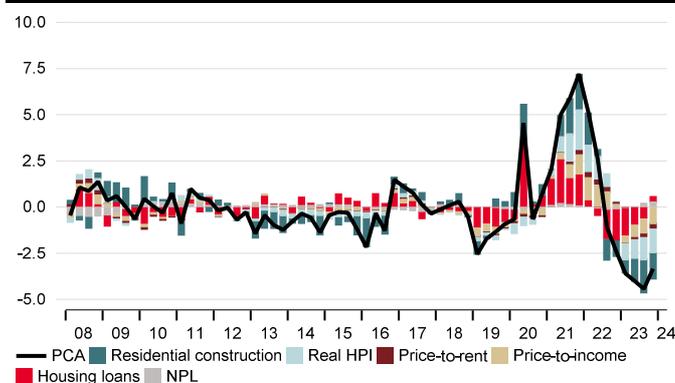
The housing market cooled very slightly, and we expect house prices to start rising again this year. According to the House Price Index (HPI), the value of residential property fell by 1.1% yoy in 4Q23 but rose by 0.9% qoq in seasonally-adjusted terms. We expect house prices to continue to nudge upwards and estimate that they could increase by 5.5% yoy by end-2024. On average, we see house price growth at 3.7% this year and stronger growth of 7.3% in 2025. This should reflect an increase in housing market activity led by the rebound in mortgage lending and renewed consumer confidence. The 1.7% qoq increase in asking prices for flats in 1Q24, which eased the yoy decline to mere 0.7%, implies a pick-up in activity. The high level of household savings and improved mortgage availability, thanks to lower interest rates, should contribute to the release of pent-up demand. This, paired with limited residential construction over the previous two years, should put significant upward pressure on house prices. In terms of price-to-income ratio, housing affordability improved last year, but not enough to offset the previous marked deterioration. Based on our expectations for nominal wage and house price growth, we believe that further significant improvement in housing affordability is unlikely. On the contrary, fundamentally strong domestic demand for own housing and limited residential construction should contribute to its slight worsening.

After a shallow correction, house prices are set to grow again



Source: CZSO, Macrobond. Economic & Strategy Research, Komerční banka  
Note: Data on dwelling completions and starts (as of February 2024) is extrapolated and only indicative for 1Q24. 12M denotes 12-month trailing sum.

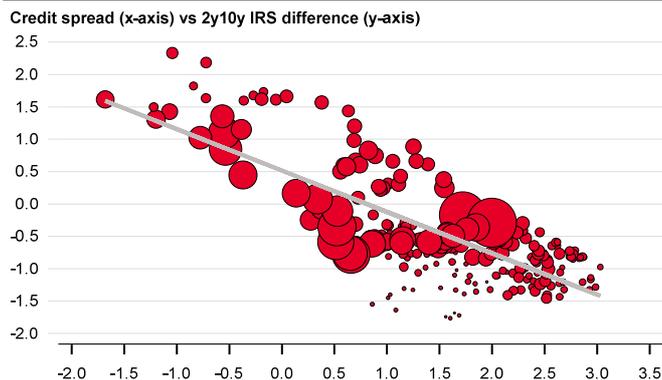
Composite index of the housing market indicates stabilisation



Source: Economic & Strategy Research, Komerční banka  
Note: Own calculations; PCA = principal component analysis vector. The composite index is the result of Principal Component Analysis (PCA). Construed as per Čár, M., & Vrbovský, R. (2019, March). *Composite index to assess housing price development in Slovakia*. [https://www.nbs.sk/img/documents/publik\\_nbs\\_fsr/biatec/rok2019/03-2019/05\\_biatec19-3\\_car.pdf](https://www.nbs.sk/img/documents/publik_nbs_fsr/biatec/rok2019/03-2019/05_biatec19-3_car.pdf).

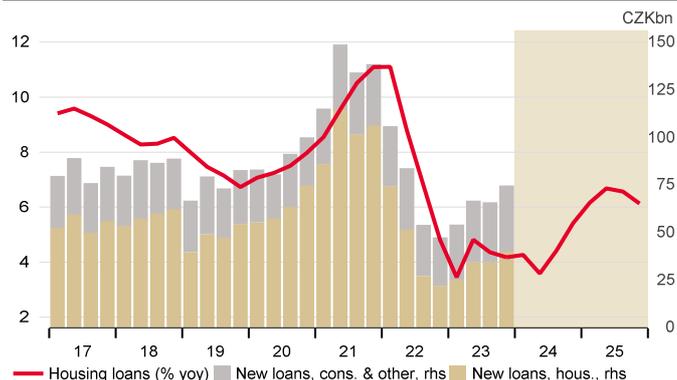
**Mortgage lending is set to gain further momentum.** Compared with 4Q23, the volume of (pure) new loans continued to increase in 1Q24. Renewed consumer confidence, rising house prices and a decrease in mortgage rates are likely to contribute to further gains. Mortgage rates have declined very cautiously so far this year and do not fully reflect the development in market IRS, which has been very erratic. Following a sharp drop in IRS at the onset of this year, market rates have returned to elevated levels (see relevant section above). This has also tightened mortgage credit spreads. Given the level of IRS and our view that they should only show a further modest decline, combined with the persisting inverted yield curve, we see limited scope for reducing mortgage costs.

**Mortgage credit spreads over IRS and 2y10y yield spread (pp)**



Source: CNB, Bloomberg, Macrobond, Economic & Strategy Research, Komerční banka  
 Note: The size of the bubbles represents the volume of new loans. Credit spread is computed as the difference between the realised interest rate on housing loan and weighted average of corresponding market IRS (only an approximation).

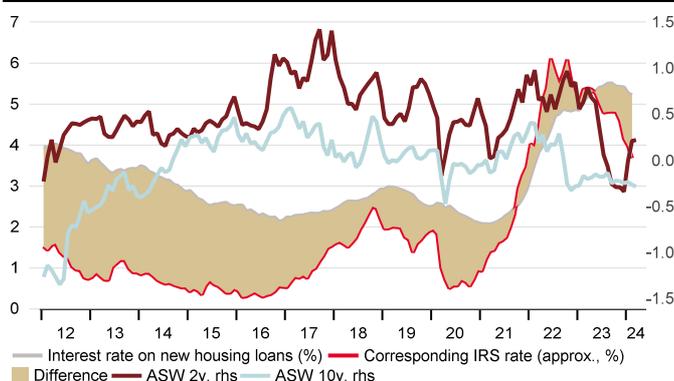
**Mortgage lending to continue to strengthen this year**



Source: CNB, Macrobond, Economic & Strategy Research, Komerční banka

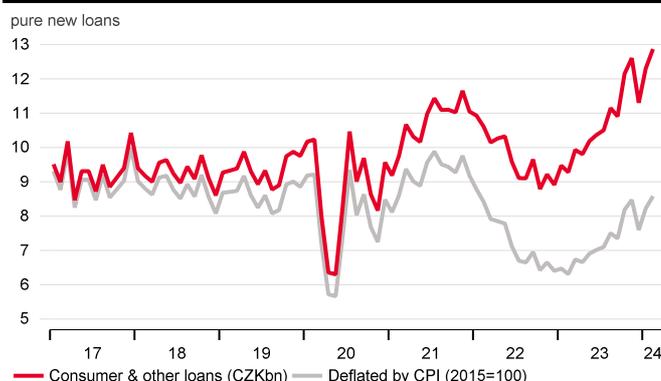
**Nevertheless, we expect a modest reduction in mortgage rates in 2H24, which should help stimulate credit demand.** Given the refinancing concerns, interest rates on longer fixed-term mortgages (>5y) are set to remain high. In view of our expectations regarding the shape of the yield curve, we expect the bulk of mortgage activity to structurally shift to the front-end, compared to the past when longer maturities were preferred. We estimate that the mortgage market will grow by 5.4%<sup>8</sup> in 2024, which should correspond to a volume of new loans of slightly above CZK200bn, on our estimates.

**Normalisation of mortgage rate spreads over IRS (% , pp)**



Source: CNB, Bloomberg, Macrobond, Economic & Strategy Research, Komerční banka  
 Note: ASW of corresponding CZGBs.

**Consumer loans remain subdued in real terms**



Source: CNB, Macrobond, Economic & Strategy Research, Komerční banka

<sup>8</sup> If not stated otherwise, values refer to the end of the period.

Strengthening household consumption is set to boost consumer lending.

### Consumer financing to rise as household consumption continues to rebound

**We expect the strengthening of household consumption to support the rise in consumer financing.** However, in real terms, the volume of consumer credit remains weak. Compared with the 2021 average, it was still around 7% lower in February this year. In terms of GDP, household debt has fallen markedly over the past two years, and we expect it to gradually rise this year. The household credit impulse has recorded positive values since mid-2023, long signalling a recovery in consumer demand. Nevertheless, we expect consumer demand to be primarily supported by solid wage growth and a still high level of savings. Therefore, in terms of the ratio of consumer credit to GDP, we expect indebtedness to rise only moderately by 0.2pp to 4.6% of GDP. We expect growth in consumer credit to slightly accelerate to 8.1% in 2024, from 7.9% in 2023.

#### Bank loans and deposits (% , yoy)

	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24	Q4 24	Q1 25	Q2 25	2023	2024	2025	2026	2027	2028
<b>Bank loans</b>														
<b>Total</b>	5.5	7.0	7.6	6.6	6.7	6.0	6.5	6.7	5.9	6.7	6.6	5.9	5.2	5.0
<b>Households - real estate loans</b>	4.4	4.2	4.3	3.6	4.4	5.4	6.2	6.7	4.2	4.4	6.4	5.3	4.5	4.3
<b>Households - consumer loans</b>	9.9	7.9	7.9	6.9	7.2	8.1	7.7	7.7	8.7	7.5	7.5	6.4	5.3	5.1
<b>Corporate loans</b>	4.3	9.7	10.4	8.6	9.3	6.9	7.1	7.4	5.7	8.8	7.3	6.1	5.5	5.3
<b>Deposits</b>														
<b>Total</b>	8.0	14.4	8.3	8.1	6.7	5.8	7.0	5.6	9.4	7.2	5.8	4.7	4.5	4.7
<b>Households</b>	7.0	7.6	8.9	9.0	8.5	7.5	7.1	6.5	6.6	8.5	6.3	4.5	4.4	4.7
<b>Non-financial corporations</b>	1.2	7.5	5.8	3.5	8.9	7.0	3.8	3.8	8.1	6.3	4.0	3.9	4.1	4.3
<b>Others</b>	14.8	37.8	9.1	10.0	2.4	1.6	9.1	5.3	16.8	5.8	6.3	5.4	5.2	5.1
<b>Ratios</b>														
<b>Loans/GDP</b>	59.2	59.3	59.9	60.1	60.9	60.8	61.4	61.7	59.1	60.4	61.9	62.9	63.4	63.6
<b>Deposits/GDP</b>	95.7	91.1	96.9	99.1	98.4	93.4	99.9	100.5	94.4	97.0	98.6	99.0	99.2	99.2
<b>Loans/deposits</b>	61.9	65.0	61.8	60.7	61.9	65.1	61.5	61.3	62.6	62.4	62.8	63.6	64.0	64.2
<b>Interest rates</b>														
<b>Real estate loans</b>	5.5	5.4	5.2	5.1	4.9	4.7	4.6	4.6	5.4	5.0	4.6	4.7	4.8	4.9
<b>Consumer loans</b>	9.5	9.3	8.8	8.3	8.0	7.5	7.1	6.9	9.5	8.2	6.9	7.1	7.7	8.2
<b>Corporate loans</b>	8.5	8.2	7.4	6.8	5.8	5.2	4.9	4.9	8.6	6.3	4.9	4.9	4.9	5.0
<b>Share of NPL</b>														
<b>Real estate loans</b>	0.7	0.7	0.7	0.8	0.8	0.9	1.0	1.0	0.7	0.8	1.0	1.2	1.4	1.7
<b>Consumer loans</b>	4.0	3.9	4.1	4.8	5.3	5.6	5.9	6.1	3.9	4.9	6.1	6.5	7.6	8.9
<b>Corporate loans</b>	2.7	2.6	2.6	2.6	2.7	2.7	2.8	2.9	2.9	2.7	2.9	3.0	3.8	4.8

Source: CNB, CZSO, Macrobond, Economic & Strategy Research, Komerční banka  
 Note: Quarterly values are end of period. Full year values are averages.

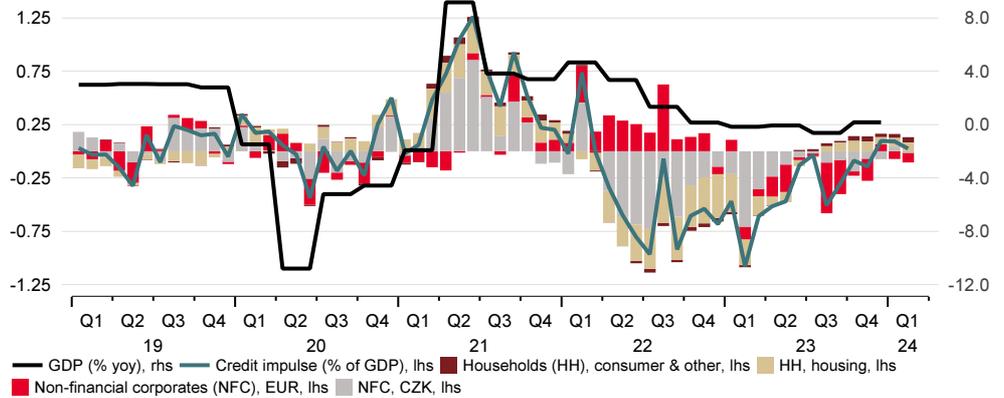
Corporate demand for credit is set to benefit from lower interest rates and a more prosperous environment for investment.

### Firms' investment appetite to strengthen further and so should credit demand

**We expect credit activity of non-financial corporations (NFCs), which has been cooled by tight monetary policy, to recover this year thanks to a gradual reduction in interest rates.** Although last year the volume of koruna and euro-denominated loans fell by more than 27% and 38% yoy, respectively, investment has remained strong, as shown by national accounts data. This likely reflects the high level of own funds and previously raised (cheap) liquidity, which may have partly helped NFCs to bridge tight monetary conditions. Given the still robust balance sheets and high profit margins, this factor is likely to remain in play, which could effectively limit the volume of financing. Nevertheless, the credit impulse is set to boost investment and strengthen materially over the course of the year as interest rates fall and aggregate demand and business confidence rise. The share of foreign currency denominated debt remains slightly above 50%. Euro loans remain attractive thanks to the prevailing relative interest rate advantage. However, this is set to significantly reduce given the earlier and swifter rate cutting of the CNB compared to the ECB. We expect the monetary policy rate differential to narrow to 25bp by end-2024, from 175bp currently. The growth of NFC loans is continuing to be affected by the weaker koruna, which inflates the value of euro-denominated loans. This effect should fade towards the end of the year. We expect

NFC credit to increase by 6.9% in 2024, up 1pp compared to our January forecast, in line with the improved outlook for GDP and investment growth. We expect higher credit demand to come from the rebound in real estate sector, in particular, given its generally higher levels of leverage.

**The credit impulse is set to help fuel the recovery of the economy this year**



Source: GNB, CZSO, Macrobond, Economic & Strategy Research, Komerční banka  
 Note: Credit impulse is defined as the change in the volume of new borrowing, often given as a % of annual GDP. The presented credit impulse represents the yoy change in new borrowing of the non-financial private sector to trailing 12M nominal GDP. It is further broken down according to the use of the loan for households and currency denomination for firms. As opposed to monthly credit indicators (as of February 2024), GDP (as of 4Q23) is a quarterly indicator.

Loan-to-deposit ratios are set to rise gradually this year as deposit interest rates fall and credit activity picks up.

**Growth in deposits likely to lag loan growth this year**

**Deposit growth is set to slow compared to last year as interest rates are cut.**

On the other hand, the recovery in lending should be reflected by higher bank deposits. However, we expect the household and corporate loan-to-deposit ratios to rise gradually, after having substantially declined over the past two years, mainly reflecting lower household consumption and lending paired with high liquidity on the corporates' side. The outflow to non-bank solutions in search of higher returns is likely to intensify in the face of falling interest rates. However, the volume of household deposits is likely to remain high given the commitment made in savings products and interest income. We estimate that deposits will grow by 5.8% this year, lagging the 6.0% growth in loans.

**Defaults in the banking sector remain exceedingly robust**

**Low default rates continue to demonstrate that the financial health of firms and households remains fundamentally sound.**

This in turn provides a solid springboard for an economic recovery this year. However, the tighter financial conditions should still translate, albeit with a delay, to a higher share of non-performing loans (NPL). Still, this should not pose a major risk to healthy loan portfolios. A closer look reveals that NPL volumes have in fact increased in some segments (financial institutions, consumer and housing credit), but their share in total loans remains stable. The exception is consumer credit, where the share has already increased slightly. On the other hand, the situation in the much larger segment of mortgage lending shows no clear signs of immediate significant deterioration.

The share of non-performing loans remains near historical lows, reflecting the good financial health of firms and households.

## Key economic indicators

### Macroeconomic indicators – long-term outlook

		2021	2022	2023	2024	2025	2026	2027	2028
GDP	real, %	3.5	2.4	-0.2	1.4	2.2	2.3	2.2	2.4
Inflation	average, %	3.8	15.1	10.7	2.1	1.8	2.0	2.1	2.0
Current account	% of GDP	-2.7	-4.9	0.4	0.6	0.6	0.7	0.8	0.8
3M PRIBOR	average, %	1.1	6.3	7.1	5.2	3.8	3.8	3.8	3.8
EUR/CZK	average	25.6	24.6	24.0	25.1	24.7	24.5	24.2	23.9
USD/CZK	average	21.7	23.4	22.2	23.6	22.2	20.4	19.5	19.0

Source: CZSO, CNB, Macrobond, Economic &amp; Strategy Research, Komerční banka

Note: KB forecasts are in red

### FX & interest-rate outlook

		23-04-2024	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25
EUR/CZK	end of period	25.2	25.10	25.00	24.90	24.80	24.75
USD/EUR	end of period	1.07	1.04	1.07	1.05	1.09	1.10
USD/CZK	end of period	23.6	24.15	23.35	23.70	22.75	22.50
3M PRIBOR	end of period, %	5.52	4.80	4.15	3.70	3.70	3.75
10Y IRS	end of period, %	4.04	4.10	4.05	4.10	4.15	4.20

Source: CNB, Macrobond, Economic &amp; Strategy Research, Komerční banka, SG Economic Research

Note: KB forecasts are in red

### Monthly macroeconomic data

		VII-23	VIII-23	IX-23	X-23	XI-23	XII-23	I-24	II-24	III-24
Inflation (CPI)	%, yoy	8.8	8.5	6.9	8.5	7.3	6.9	2.3	2.0	2.0
Inflation (CPI)	%, mom	0.5	0.2	-0.7	0.1	0.1	-0.4	1.5	0.3	0.1
Producer prices (PPI)	%, yoy	1.4	1.8	0.8	0.2	0.8	1.4	-1.8	-0.9	0.0
Producer prices (PPI)	%, mom	-0.1	0.2	0.3	-0.1	-0.4	-0.5	2.5	0.5	-0.1
Unemployment rate	% (MLSA)	3.5	3.6	3.6	3.5	3.5	3.7	4.0	4.0	3.9
Industrial production	%, yoy, c.p.	-3.4	-2.2	-7.5	7.3	-2.8	-6.0	-0.4	1.5	n.a.
Industrial sales	%, yoy, c.p.	-2.1	-2.8	-6.7	10.8	-3.5	5.1	2.2	6.0	n.a.
Construction output	%, yoy, c.p.	-0.1	-2.0	0.3	-0.2	-5.1	-3.4	-5.9	3.6	n.a.
External trade	CZKbn (national met.)	-6.6	-6.0	11.5	14.1	29.5	5.7	5.5	34.6	n.a.
Current account	CZKbn	-14.3	6.2	8.5	2.3	15.5	-5.8	6.9	39.2	n.a.
Financial account	CZKbn	-25.1	9.3	30.3	-5.6	32.7	20.1	-13.7	20.6	n.a.
M2 growth	%, yoy	9.3	8.5	8.2	8.0	7.9	8.3	8.4	8.0	n.a.
State budget	CZKbn (YTD cum.)	-214.1	-194.6	-180.7	-210.7	-269.1	-288.5	-26.0	-102.5	-105.0
PRIBOR 3M	%, average	7.11	7.10	7.09	7.05	7.06	6.97	6.63	6.20	5.83
EUR/CZK	average	23.9	24.1	24.4	24.6	24.5	24.5	24.7	25.2	25.3
USD/CZK	average	21.6	22.1	22.9	23.3	22.6	22.4	22.7	23.4	23.3

Source: CZSO, CNB, MF, MLSA, Macrobond, Economic &amp; Strategy Research, Komerční banka

## Disclaimer

The information herein is not intended to be an offer to buy or sell, or a solicitation of an offer to buy or sell any securities. All information and opinions have been obtained from or are based on sources believed to be reliable, but their completeness and accuracy are not guaranteed by Komerční banka, a.s., even though Komerční banka, a.s. believes them to be fair and not misleading or deceptive. The views of Komerční banka, a.s. reflected in this document may change without notice.

Komerční banka, a.s. and its affiliated companies may from time to time deal in, profit from the trading of, hold or act as market makers of securities, or act as advisers, brokers or bankers in relation to securities or derivatives thereof emitted by persons, firms or entities mentioned in this document.

Employees of Komerční banka, a.s. and its affiliated companies, or individuals connected to them may from time to time have a position in or be holding any of the investments or related derivatives mentioned in this document. The authors of this document are not authorized to acquire the investment instruments mentioned in this document. This does not apply to cases when information mentioned in this document represents dissemination of an investment recommendation earlier produced by third parties according to Chapter III of regulation (EU) 2016/958. Komerční banka, a.s. and its affiliated companies are under no obligation to provide any services to their clients on the basis of this document.

Komerční banka, a.s. does not accept any liability whatsoever arising from the use of the material or information contained herein beyond what is required by law. This research document is primarily intended for professional and qualified investors. Should a private customer obtain a copy of this report, they should not base their investment decisions solely on the basis of this document and should seek independent financial advice. The investors must make their own informed decisions regarding the appropriateness of their investments because the securities discussed in this report may not be suitable for all investors.

The performance attained by investment instruments in the past may not under any circumstance serve as an guarantee of future performance. The estimates of future performance are based on assumptions that may not be realized. Investment instruments and investments are connected with different investment risks, the value of any investment can rise and fall and there is no guarantee for the return of the initial invested amount. Investment instruments denominated in foreign currencies are also subject to fluctuations caused by changes in exchange rates, which can have both positive and negative influences particularly on the prices of the investment instrument and consequently on the investment return.

This publication is issued by Komerční banka, a.s. which is a bank/stockbroker according to the applicable legislation and thus regulated by the Czech National Bank. Komerční banka, a.s. applies various measures to prevent conflict of interests in the process of creating this document and other investment recommendations, such as the implementation of an appropriate internal separation including information barriers between different departments of Komerční banka, a.s. in compliance with the requirements imposed by applicable regulation. The employees of Komerční banka, a.s. proceed in accordance with the internal regulations governing conflict of interest.

The evaluation of employees creating this document is never by any means tied with the volume or profit of the trades with instruments mentioned in this document done by Komerční banka, a.s., or the trades of Komerční banka, a.s. with the issuers of such instruments. However, the evaluation of the authors of this document is linked to the profits of Komerční banka, a.s. which also partially include the results of trading with investment instruments.

Information mentioned in this document are intended for the public and the document before its publication is not available to persons not involved in the creation of this document. As per our practice, the issuers do not receive a copy of research reports prior to their publication. Each author of this research report hereby states that (i) the views expressed in the research report accurately reflect his or her personal views about any and all of the securities or issuers at stake.

This document and its contents is not designed for persons with permanent residence or seat in the United States of America and to persons who are deemed as "U.S. persons", as defined in Regulation S under the US Securities Act of 1933, as amended.

This document is not an investment recommendation according to Regulation (EU) No 596/2014 of the European Parliament and of the Council on market abuse and does not constitute investment advisory according to Act no 256/2004 Coll., on Capital market undertakings as amended.

Please refer to our website <http://www.trading.kb.cz> for more details.

**KB ECONOMIC & STRATEGY RESEARCH**

**Chief Economist and Head of Research**



**Jan Vejmelek, Ph.D., CFA**  
(420) 222 008 568  
jan\_vejmelek@kb.cz

**Economists**



**Martin Gürtler**  
(420) 222 008 509  
martin\_gurtler@kb.cz



**Jana Steckerová**  
(420) 222 008 524  
jana\_steckerova@kb.cz



**Kevin Tran Nguyen**  
(420) 222 008 569  
kevin\_tran@kb.cz



**Strategist**  
**Jaromír Gec**  
(420) 222 008 598  
jaromir\_gec@kb.cz

**Equity Analyst**



**Bohumil Trampota**  
(420) 222 008 560  
bohumil\_trampota@kb.cz

**SG GLOBAL ECONOMICS RESEARCH**

**Head of Global Economics**



**Klaus Baader**  
(44) 20 7762 4714  
klaus.baader@sgcib.com

**Euro area**



**Michel Martinez**  
(33) 1 4213 3421  
michel.martinez@sgcib.com



**Anatoli Annenkov**  
(44) 20 7762 4676  
anatoli.annenkov@sgcib.com

**United Kingdom**



**Sam Cartwright**  
(44) 20 7762 4506  
sam.cartwright@sgcib.com



**North America**  
**Stephen Gallagher**  
(1) 212 278 4496  
stephen.gallagher@sgcib.com



**India**  
**Kunal Kumar Kundu**  
(91) 80 6716 8266  
kunal.kundu@sgcib.com



**Korea**  
**Suktae Oh**  
(82) 2195 7430  
suktae.oh@sgcib.com



**China**  
**Wei Yao**  
(33) 1 57 29 69 60  
wei.yao@sgcib.com



**Greater China**  
**Michelle Lam**  
(85) 2 21 66 57 21  
michelle.lam@sgcib.com



**Japan**  
**Jin Kenzaki**  
(81) 3 6777 8032  
jin.kenzaki@sgcib.com



**Latin America**  
**Dev Ashish**  
(91) 80 2802 4381  
dev.ashish@socgen.com

**SG CROSS ASSET RESEARCH – FIXED INCOME & FOREX GROUPS**

**Global Head of Economics, Cross-Asset & Quant Research**



**Kokou Agbo Bloua**  
(44) 20 7762 5433  
kokou.agbo-bloua@sgcib.com

**Head of Fixed Income & Forex Strategy**



**Guy Stear**  
(33) 1 41 13 63 99  
guy.stear@sgcib.com

**Head of Rates Strategy**



**Adam Kurpiel**  
(33) 1 42 13 63 42  
adam.kurpiel@sgcib.com



**Head of US Rates Strategy**  
**Subadra Rajappa**  
(1) 212 278 5241  
subadra.rajappa@sgcib.com



**Shakeeb Hulikatti**  
(91) 80 2802 4380  
shakeeb.hulikatti@sgcib.com



**Ninon Bachet**  
(33) 1 58 98 30 26  
ninon.bachet@sgcib.com



**Jorge Garayo**  
(44) 20 7676 7404  
jorge.garayo@sgcib.com



**Sean Kou**  
(44) 20 7550 2053  
sean.kou@sgcib.com



**Mathias Kpade**  
+33 157294393  
mathias.kpade@socgen.com



**Theodore Kalambokidis**  
+1 212 278 4504  
theodore.kalambokidis@sgcib.com

**Chief Global FX Strategy**



**Kit Juckes**  
(44) 20 7676 7972  
kit.juckes@sgcib.com



**FX Derivatives Strategy**  
**Olivier Korber**  
(33) 1 42 13 32 88  
olivier.korber@sgcib.com

**Head of Emerging Markets Strategy**



**Phoenix Kalen**  
(44) 20 7676 7305  
phoenix.kalen@sgcib.com



**Gergely Urmossy**  
(44) 20 7762 4815  
gergely.urmossy@sgcib.com



**Bertrand Delgado**  
(1) 212 278 6918  
bertrand.delgado-calderon@sgcib.com



**Marek Drimal**  
(44) 20 7550 2395  
marek.drimal@sgcib.com



**Kiyong Seong**  
(852) 2166 4658  
kiyong.seong@sgcib.com



**Vijay Kannan**  
(91) 7010445705  
vijay.kannan@sgcib.com