

Quarterly report

Czech Economic Outlook

Economy Reluctant to Take Off



©iStock

■ **Two years of weak growth for Czech economy** After last year's stagnation, we expect GDP to grow by 0.8% this year and 1.5% next year, a weaker outlook than our previous forecast. Growth should be driven mainly by rising domestic demand but is likely to be held back by a slow recovery in household purchasing power and subdued industrial activity.


■ **Inflation should fall below 2% in 2025** However, we expect it to remain in the upper half of the CNB's tolerance band until the end of the year, averaging 2.5% in 2024. Next year, we forecast a decline to 1.8% on the back of still-weak consumer demand and lower energy and fuel prices. Core inflation should remain slightly above 2% in 2025, reflecting accelerating house price growth.


■ **CNB to cut repo rate to 3%** We expect the central bank to continue cutting interest rates by 25bp at each meeting until May 2025. The economy, whose weaker potential growth points to a lower terminal rate, should be the main driver of further monetary easing. However, the CNB board's communication remains hawkish, making higher rates a risk.


■ **Market rates on the way to stabilisation** Compared to our previous forecast, the lower outlook for CZK market interest rates reflects faster monetary policy easing by the ECB and Fed and a lower CNB terminal rate. However, we do not see much room for CZK IRS to fall further despite the ongoing monetary policy rate-cut cycle.

■ **Koruna could do well next year** Increased uncertainty and the slow economic recovery are likely to prevent the koruna from strengthening significantly this year. In 2025, however, the Czech currency should appreciate below EURCZK 25, supported by both developments in global FX markets and a gradual improvement of GDP growth.

 **Jan Vejmelek**
(420) 222 008 568
jan_vejmelek@kb.cz

 **Jana Steckerová**
(420) 222 008 524
jana_steckerova@kb.cz

 **Martin Gürtler**
(420) 222 008 509
martin_gurtler@kb.cz

 **Kevin Tran Nguyen**
(420) 222 008 569
kevin_tran@kb.cz

 **Jaromír Gec**
(420) 222 008 598
jaromir_gec@kb.cz

Still moving forward at a snail's pace



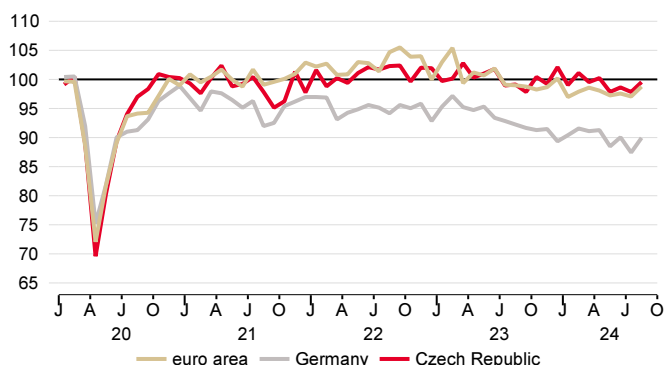
Jan Vejmelek
(420) 222 008 568
jan_vejmelek@kb.cz

In the July edition of the *Czech Economic Outlook*, we voiced our expectations that, following a relatively weak first half of the year, economic activity would begin recovering at a faster pace in the second half. We liked the second-quarter performance, with real GDP growth coming in at 0.4% qoq, identical to the first quarter. **Unfortunately, the summer holiday months indicated that the recovery has little impetus**, which is not too surprising given the weak data coming from Germany. The Czech economy appears reluctant to take off.

Industrial production was negatively impacted by the summer holidays in July, but August compensated for this.

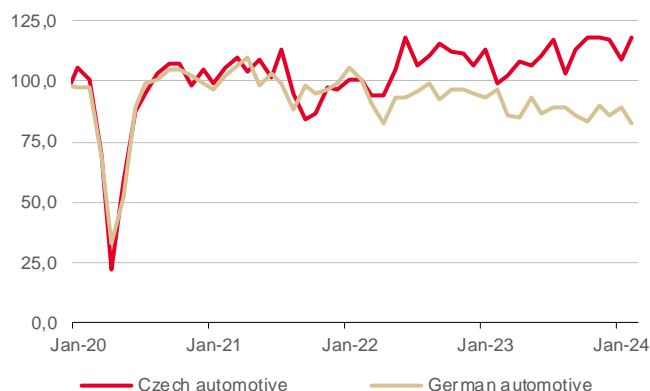
In fact, we need to view July and August as a single whole to get a meaningful picture, primarily because of the summer holidays, with companies and employees taking mainly July off in some years and August in others. It appears that this year, holiday leaves at large production companies were concentrated more in July, resulting in a weaker start to the quarter. On the other hand, August saw improvement. This was apparent in the manufacturing industry data, which indicated growth in car factory output, with production not hit by resurgent outages in component supply this time.

Czech industrial production compared to Germany and the euro area (real, SA, 2019=100)



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

Order books in the Czech and German automotive industry (real terms, SA, 2021=100)



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

Note: The relevant producer price index (PPI) was used as a deflator for Czech industrial new orders data, which are only available in nominal terms.

But massive floods hit the country in September.

We believe the Czech automotive industry started September on a positive footing. Unfortunately, however, the last month of the third quarter was hit by disastrous floods. In the case of industrial production, floods are likely to have had a significant negative impact through direct damage to production plants, supply chain disruption and limited workforce availability.

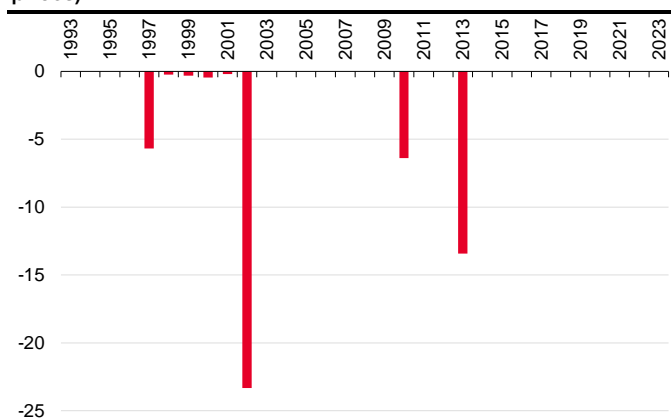
While constraining economic activity for the short term, the economic bounce-back seen after natural disasters typically supports economic growth in the medium term.

In terms of growth dynamics, natural disasters typically have an impact in the form of the J-curve. The impact is negative in the immediate aftermath of such episodes, while production is paralysed by the adversity. Added to this, households must first of all take care of themselves and their relatives and friends and protect their assets from subsequent damage – and may therefore not be working at all. However, this impact tends not to be too heavy. As time passes, the effect of the renewal/replacement of assets and infrastructure destroyed by the floods should outweigh the initial losses, and temporarily boost economic growth. However, on the whole, the impact is difficult to estimate.

The floods themselves lead to the destruction of assets which is subsequently reflected in the 'balance sheet' of the country's economy. Looking back at the historical national accounts, we can see that losses linked to disasters, which are almost exclusively caused by floods in this country, were dramatic in 1997, 2002, 2010 and 2013. The heaviest asset impairment was recorded in 2002, with the amount exceeding CZK23bn in the then current

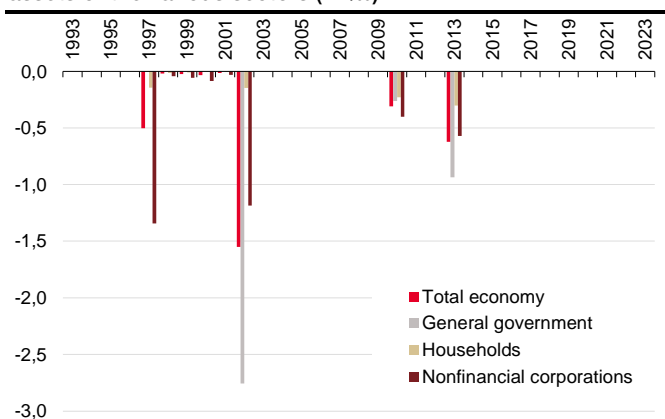
prices, implying that 1.6% of the value of all non-financial assets was destroyed. For comparison, the figures for 1997 and 2013 were 0.5% and 0.6%, respectively. From a sector perspective, the earlier floods had the heaviest impact on non-financial companies, and in 2002 they also affected the governmental institutions sector quite significantly. To a considerable extent, it is due to the fact that the floods that year hit infrastructure and also Prague, in which the governmental sector is concentrated. From the perspective of the national economy the impacts on the household sector were relatively moderate, as the non-financial asset losses caused by the disasters amounted to 0.1% of the total value in 1997 and 2002.

Change in assets: losses from disasters (in CZKbn, current prices)



Source: CZSO, Economic & Strategy Research, Komerční banka

Proportion of asset losses from disasters in total non-financial assets of the various sectors (in %)



Source: CZSO, Economic & Strategy Research, Komerční banka

We do not expect this year's floods to cause significantly greater losses than those identified in the wake of earlier floods. The government has responded by increasing the expenditure allocated to flood damage repairs both this year and next. The planned deficit in the state budget has been increased by CZK30bn for this year and CZK10bn for next year. As Jaromír Gec notes in *Fiscal Policy*, the above are probably the upper boundaries of the estimate. He discusses the parameters of the state budget proposed for 2025 in Box 2.

An inflationary undercurrent is emerging from the recovering housing market.

Inflation is back in the CNB's tolerance band, monetary policy rates are declining slowly but surely, and the issue of residential housing is resurfacing again due to rising real estate prices. The real estate market recovery has surpassed both our and the CNB's expectations so far. Real estate prices are now steadily pushing consumer inflation down, but this could change very soon should the accelerating house-price growth be gradually reflected in the imputed rent component. Kevin Tran Nguyen discusses real estate prices and the resulting inflation threat in Box 3. He notes that intensifying house-price growth next year constitutes a clear risk to inflation, as the core component could remain elevated, precisely because of higher housing-costs. The widening mismatch between demand and supply on the housing market looks set to place even more upward pressure on house prices and contribute to a further deterioration in housing affordability in this country, which already has one of the least affordable housing markets in the EU.

The key geopolitical event in the last quarter of this year is the US presidential election. Jana Steckerová already discussed the election in a special box in the summer edition of *Czech Economic Outlook*. In this autumn edition, she reverts to this topic (see Box 1) due to the change of candidate for the Democrats, with Kamala Harris replacing the serving president, Joe Biden.

We wish you a beautiful, colourful autumn, and not only thanks to Komerční banka's *Czech Economic Outlook*!

Table of Contents

| | |
|--|-----------|
| External environment and assumptions | 5 |
| Box 1: US presidential election – higher volatility, deeper deficits | 6 |
| Macroeconomic forecast | 11 |
| Monetary policy | 16 |
| Fiscal policy | 18 |
| Box 2: Budget proposal for 2025 and MinFin’s outlook promise continued consolidation | 20 |
| Summary forecast table..... | 24 |
| Czech IRS market and government bonds | 25 |
| Czech FX market | 31 |
| Banking sector | 35 |
| Box 3: Housing could be the inflationary bogeyman in 2025 | 39 |
| Key economic indicators | 44 |
| Disclaimer | 45 |

External environment and assumptions

Key central banks to continue cutting rates



Jana Steckerová
(420) 222 008 524
jana_steckerova@kb.cz

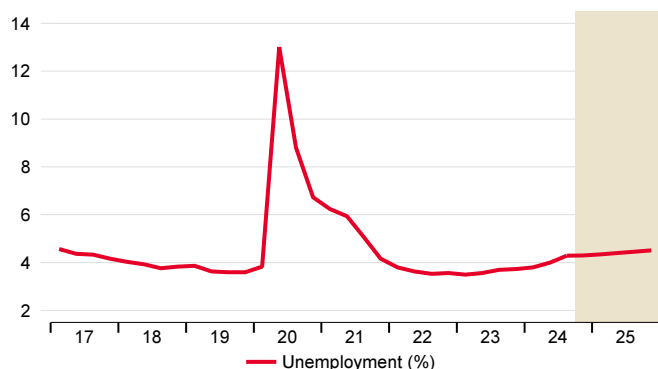
Inflation is slowing in the US and euro area. In the eurozone, it has even fallen below the ECB's 2% target, where it will likely remain for most of next year. Thus, we think the ECB will continue to ease monetary policy until the deposit rate reaches its neutral level. We estimate this at 2.5%, where it should arrive in June next year. The eurozone economy should grow moderately next year, and despite slowing of the US economy we don't expect a recession in the US. Gradual monetary easing by the Fed should allow for a soft landing. We expect two more 25bp rate cuts this year and the same pace next year every quarter until the key rate reaches 3.25–3.50%.

Fed likely to cut rates all the way down to 3.25–3.50%.

US: Economy surprisingly resilient

The Fed started its monetary easing cycle in September when it cut the key interest rate by 50bp to 4.75–5.00%. At the same time, it published a new median interest rate outlook (dot-plot), which sees a further 50bp of cuts this year and 100bp next year. This is fully in line with our current forecast, which sees 25bp cuts in both November and December, with similar moves every quarter next year. That would see the key interest rate drop to 3.25–3.50%, which we consider neutral. The dot-plot median projection sees the terminal rate lower at the moment but has been gradually raising it. At the start of this year, the median Fed rate outlook assumed a neutral rate at 2.5%, while it is now 2.9%. And even that is not the final level, in our view. Financial markets are pricing in a decline to 3.25–3.50% at this point, in line with our forecast. This also shows that the markets do not expect the US economy to fall into recession. If they did expect that, market interest rates expectations would have to be well below where the terminal interest rate stands currently, i.e. below 2.9%.

US labour market remains tight



Source: Macrobond, SG Cross Asset Research/Economics

Labour market surprised positively, but signs of cooling are evident.

US economy remains resilient (GDP, %, qoq)



Source: Macrobond, SG Cross Asset Research/Economics

Labour market developments are now key to determining the pace of monetary easing.

In our view, concerns about rising unemployment were why the Fed cut rates by 50bp in September and not 25bp. However, the September labour market data surprised significantly to the upside in all respects. Non-farm payrolls came in at 254k, while the market consensus was for 150k. The unemployment rate fell from 4.2% to 4.1%, while wages rose 0.4% mom, with the August figure revised up one-tenth to 0.5% mom. It should be added, however, that the new jobs were mainly added in the public sector, healthcare, education, leisure and hospitality. These are mostly lower-paid jobs, where, moreover, a large number of employees work part-time. At the same time, the September non-farm payrolls print does not much

corroborate either the household surveys, which indicate that the labour market is deteriorating rapidly, or the ISM surveys from the businesses' side.

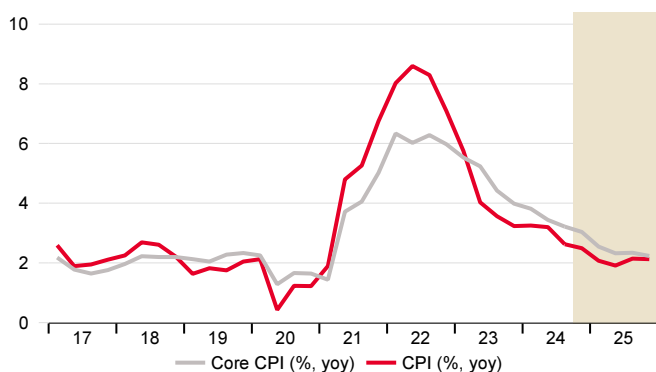
Data from real economy surprise to the upside.

Retail sales surprised to the upside in the recent months and there where better-than-expected results from August industrial production, as well. Overall, therefore, we expect solid economic growth of 2.2% qoq annualised in the third quarter of this year after the 3% recorded in 2Q. In 4Q, we estimate growth to slow to 1.6% qoq. For the whole of this year, we expect GDP growth to reach 2.5%, followed by 2.0% next year. Corporate profit margins are still high, while households are not lacking appetite to spend. The Fed's continuing monetary policy easing should facilitate the soft-landing scenario for the economy.

Inflation remains elevated, but we expect further moderation.

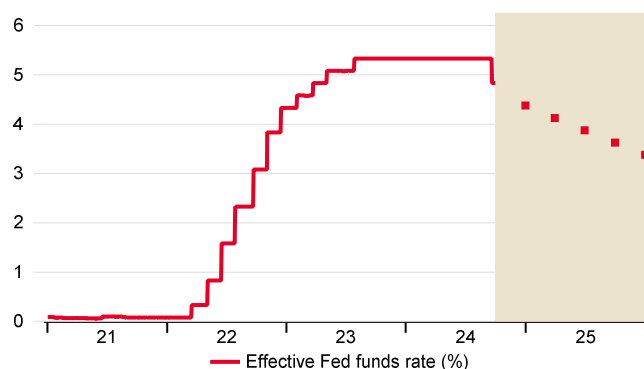
Conversely, price developments could hamper interest rate cuts. Headline consumer price inflation fell by a tenth in September versus August to 2.4% yoy, but consensus expected a more pronounced slowdown to 2.3% yoy. Core inflation also surprised to the upside, accelerating to 3.3% yoy versus expected stagnation at 3.2% yoy. In annualised month-on-month terms, core prices rose at a faster pace than the Fed's 2% target for the second month in a row (4.2% mom annualised in September). We estimate inflation to average 2.9% this year and 2.1% next year. But the risks are concentrated in the upward direction.

Inflationary pressures are easing in the US



Source: Macrobond, SG Cross Asset Research/Economics

Fed likely to cut rates again in November

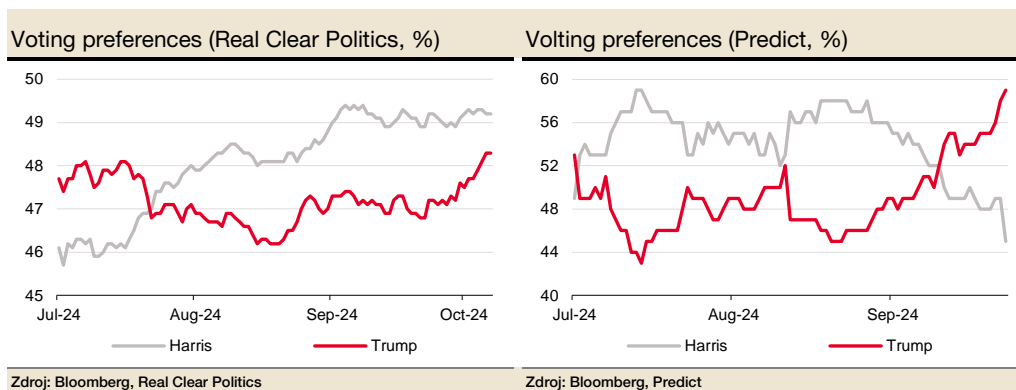


Source: Macrobond, SG Cross Asset Research/Economics

Box 1: US presidential election – higher volatility, deeper deficits

The US presidential election on 5 November will see Democrat candidate Kamala Harris face Republican nominee Donald Trump. In terms of the impact, what matters is not only who wins, but also whether or not the winning party manages to win control of both houses of Congress.

Fiscal discipline not a priority for Trump or Harris. The national budget deficit will therefore remain close to \$2tn over the next few years and will increase rather than decrease. In Trump's case it will be because of tax cuts, while in Harris' case it will be higher spending. Trump's previous tax cuts are still in place and are set to expire at the end of 2025 (TCJA-2017). If extended, it would cost an additional \$3.6tn over the next ten years. Trump would most likely extend tax credits, but Harris would likely preserve them to some extent too. She has already promised not to raise taxes on households earning less than \$400k a year. At the same time, even Treasury Secretary Yellen has hinted that the tax cuts could be extended. The reason is simple – their non-renewal, and hence tax increases, could mean lower GDP growth by 0.5pp as early as 2026.



The most striking difference between the two candidates is their attitude to corporate taxes. Trump plans to reduce them from 21% to 15%. This, together with maintaining the 2017 tax cuts, would offer the prospect of higher economic growth but also deeper budget deficits. The country's higher debt burden would then put upward pressure on longer-dated bond yields. These rose by 50bp in the two weeks after the election of Trump and the Republican Congress in November 2016. At the same time, the curve slope increased, as the Fed kept rates near zero at the time. However, the election of Joe Biden in 2021 had a similar effect. The prospect of deeper deficits, combined with accelerating inflation, led to a 50bp widening of the spread between the 2y and 10y bonds. Thus, whoever wins, upward pressure on longer US interest rates is likely, which could also mean a rise for European, and hence Czech, market interest rates.

Harris, on the other hand, proposes to raise corporate taxes from 21% to 28%. But even if she wins, the deficit would probably deepen. Spending is already rising under Biden, but his ambitious \$1.8tn plan to rebuild the US economy was cut because of opposition from Democratic senator Joe Manchin. The latter is not seeking re-election, so Harris could eventually have an easier time pushing for more spending.

Short interest rates will be determined by Fed monetary policy. Trump has already said that he will let Fed chair Powell finish his term (to May 2026), while at the same time he would like more control over the Fed. But he would need the support of Congress to make such changes. Currently, the president appoints only seven FOMC members. The remaining five, who have voting rights, are the presidents of the individual Federal Reserve Banks, over whom the president has no authority.

A Trump administration would also likely lead to higher inflation and thus possibly slower Fed rate cuts. One channel through which a rise in prices could occur is the introduction of additional tariffs, or an increase in them. The tariffs Trump introduced in his previous term (aluminium, steel, washing machines, dryers and solar panels) are still in force. Under the Biden administration, they have been supplemented by a tariff on imports of electric cars from China, among others. In his televised debate with Harris, Trump said that he would consider imposing tariffs of 20% on all imported goods and of 60–100% on goods from China. As in the past, the introduction of tariffs would lead to a one-off increase in the price level rather than a constant growth in the price level. This would rather be reflected by a shift of production back to the US, where it is more costly. Moreover, the introduction of tariffs would not be fully reflected in final prices. Initially, the tariffs would be reflected in oversupply of goods and therefore higher US imports. Later, countries with high export dependence on the US (Germany, Switzerland, Italy) would be particularly affected, and of course, China would suffer most.

Another channel through which prices could rise after the elections is immigration policy. In the event of the deportation of large numbers of illegal immigrants that Trump is pushing for, the labour market could tighten further, putting upward pressure on wages and hence prices.

The two candidates also have different positions on geopolitics. Trump would like to end the war in Ukraine via negotiated agreement. There could be changes in the US position on NATO, of which Trump has been critical in the past. He also plans to increase defence spending from 2% to 3% of GDP. Harris would probably continue Biden's policy. She is a bigger supporter of green policies and like Biden would probably invest massively in promoting alternative energy sources. Trump, on the other hand, would increase oil production.

Regardless of which party wins, volatility will rise in the financial markets ahead of the election. According to the options market, EURUSD volatility will be about four times higher than usual the day after the election. Equity markets will be sensitive to tax changes and the introduction of tariffs, while the US dollar and Treasury yields will be more sensitive to developments in the deficit, geopolitics and regulatory issues. At the same time, corporate earnings releases, which kicked off in mid-October, and Fed policy are more important to equity markets at the moment than the presidential election itself. Deeper deficits will put upward pressure on long-term interest rates. Central Europe is more likely to benefit from a Harris victory, except the Hungarian forint, where we would expect depreciation.

Jana Steckerová
(420) 222 008 524
jana_steckerova@kb.cz

China: The government's package is a boost to confidence

China gets fiscal package boost.

In our last *Czech Economic Outlook*, we stated that the continued good health of the US economy should help China. However, this has not been the case – the data out of China has been disappointing. Thus, unusually, the Politburo began to deal with economic issues in September (it normally does so in April, July and December), which shows the extreme seriousness of the situation. In the aftermath, the central bank unveiled a massive package to boost economic growth, including a cut in the basic seven-day repo rate from 1.7% to 1.5%. The reserve requirement ratio was cut by 0.5pp, representing around RMB1tn that can be used for further lending. The rate is expected to be reduced by another 25-50bp by year-end. In addition, the minimum down payment on all types of property was reduced to 15%.

5% growth target could be achieved.

The government's package is a significant boost to confidence in the Chinese economy and increases the likelihood of the property market stabilising. The 5% growth target could thus be achieved. At the same time, however, there is still insufficient stimulus to end the threat of deflation. A package to address the current problems would need to include support for low-income households, increased social security payments, better public services, easing the debt burden on local governments (for example, by further increasing fiscal transfers) and ensuring that banks are solidly capitalised so that they can deal with non-performing loans. From the information now available, it seems that the government could take such steps, either at the end of this year or immediately after the US elections.

Eurozone: Inflation below ECB target

Moderate growth in euro area likely to be fuelled by household consumption.

We expect the euro area economy to grow moderately this year and next. We estimate GDP growth of 0.7% this year and 1.0% next year. Household consumption should be the

main driver, supported by rising real disposable income and a high excess savings. The savings rate is still around 1.5pp higher than it was on average in 2013-2019, with excess savings reaching more than 7% of GDP. The rate is likely to remain high, but we do not expect it to rise further. The unemployment rate is still at historical lows (6.4% in September). This should continue, as companies are in good financial shape and so prefer to retain employees even if they don't need them given the poor demographics.

Inflation below ECB target in 2025 as well.

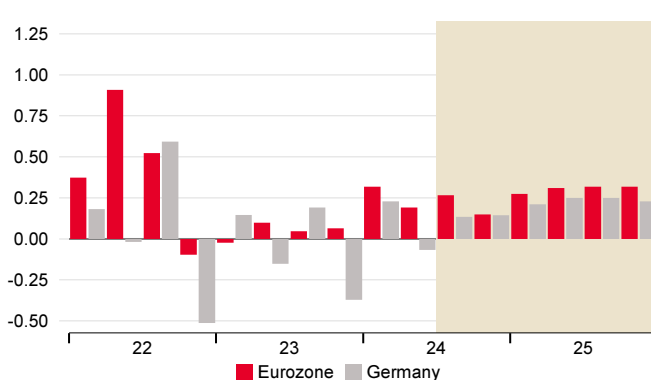
Eurozone inflation fell from 2.2% in August to 1.8% yoy in September, while its core component slowed to 2.7% yoy. We forecast inflation to be just below 2% next year, driven by lower energy prices and easing core pressures. Core inflation should come in at 2.2–2.3% from May next year due to slower wage growth. The services sector, which is facing staff shortages and where consumer prices were up 4% yoy in September, is a risk. Overall, however, inflationary pressures should be easing in the euro area, bringing the issue of slowing economic growth to the fore. The ECB will thus continue to cut interest rates, in our view. We expect 25bp cuts at the December, March and June meetings, stopping when the deposit rate reaches 2.5%.

Wage growth is currently strong by European standards in EA



Source: Macrobond, SG Cross Asset Research/Economics

Household consumption should fuel the growth (% qoq)



Source: Macrobond, SG Cross Asset Research/Economics

German industry still below pre-pandemic levels.

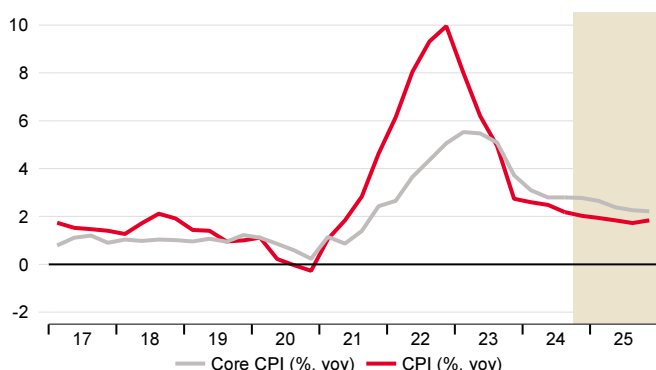
The German economy contracted by 0.1% qoq in 2Q. Private consumption (-0.2% qoq) and investment (-2.2% qoq) surprised negatively. The outlook for the third quarter is not too rosy either. Although industrial production surprised with 2.9% mom growth in August, this mainly reflected better automotive industry performance due to the end of the holiday season, when strong 19.3% mom gain in August followed a contraction by 8.2% mom in July. Despite the strong increase in August, industrial production on average is 1% below the 2Q average for the summer months. Thus, if industrial activity does not jump significantly in September, it will drag on GDP. Moreover, industry remains 10% below its pre-pandemic level. It is paying the price for high energy intensity, rising wages in combination with falling productivity and the associated decline in competitiveness, the costly green transition and the cooling demand from China. Between June 2023 and June 2024, around 123k workers were laid off in the sector.

We don't expect a recession, but if there is one, it should be shallow.

All this is reflected in the leading indicators. The September manufacturing PMI fell to its lowest level in a year at 40.6 points, and the ZEW index component assessing the current situation was at its lowest level since the pandemic. On the other hand, consumer confidence, which had fallen sharply at the start of the war in Ukraine, is on the rise. Households, businesses and the government sector are in good shape, which should prevent Germany from falling into a deeper recession. We estimate moderate growth this year of 0.1% seasonally adjusted and 0.7% next year. However, the risks are to the downside, and hence

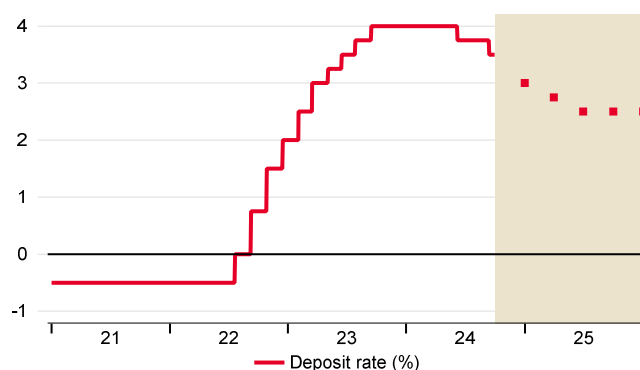
a technical recession. But it would likely not be deep or long given still-large financial cushions available to households and firms.

Inflation in the euro area below 2%



Source: Macrobond, SG Cross Asset Research/Economics

ECB to continue cutting rates



Source: Macrobond, SG Cross Asset Research/Economics

CEE: Regional central banks to cut rates more sharply next year

First rate cut in Poland likely in April next year.

The National Bank of Poland kept interest rates unchanged in the third quarter. However, the bank board is increasingly discussing cuts, as after the October meeting Governor Glapinski hinted that the first cut could come as early as 2Q25. Other board members expressed similar views. We now envisage 100bp of easing next year. We expect the first 25bp rate cut in April, with more to follow in July, September and November. Inflation is likely to jump back up to 5% yoy in January due to the reduction in support measures, but from the spring months it should start to fall due to the base effects.

Hungarian central bank likely to leave rates unchanged for rest of year.

In September, the Hungarian central bank cut interest rates by a further 25bp to 6.5%. The main reason was slowing inflation, which fell from 4.1% yoy in July to 3.4% yoy in August. The trend did not stop in September, when inflation reached 3%. At the same time, core inflation jumped to 4.8% yoy. After the September meeting, Deputy Governor Virág confirmed that the central bank's target for the end of this year – key three-month interest rate of 6.25-6.50% – is unchanged. Given the central bank's preference for stability in the HUF, whose exchange rate has depreciated above EURHUF 400, we lean towards interest rate stability for the rest of this year. At the beginning of March 2025, the six-year mandate of central bank governor Matolcsy ends. Prime Minister Orbán has already said that current finance minister Mihály Varga will take his place. Once he takes office, we would expect the central bank to be more dovish. Thus, we see 150bp of interest rate cuts during the first half of next year. Developments after the US presidential election will be important for the HUF. In the event of a Kamala Harris victory, the forint could come under selling pressure and weaken significantly above EURHUF 400. On the other hand, in the event of a Donald Trump victory, the HUF could benefit, which could open up room for discussion on lower interest rates later this year.

Macroeconomic forecast



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

Major changes

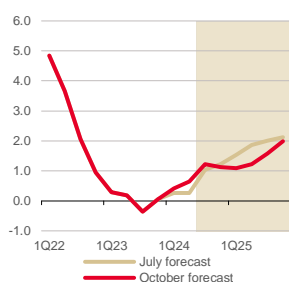
GDP:

We expect the Czech economy to grow by 0.8% this year and accelerate to 1.5% next year. After last year's stagnation, there will be a recovery although GDP growth will be relatively low. Compared with our July forecast, which predicted growth of 0.7% in 2024 and 1.9% in 2025, the economic outlook has worsened. This is due to there being only moderate growth in household consumption and real wages, as well as ongoing problems in the industrial sector.

Inflation:

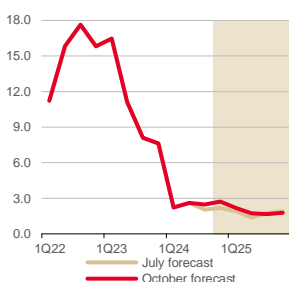
We expect inflation to average 2.5% this year and 1.8% next year, which are rather small changes compared to our previous forecast (2.3% and 1.7%, respectively). The fall in inflation to below the CNB's 2% target in 2025 should be related to the impact of still weak domestic demand and a decline in energy and fuel prices. However, core inflation is likely to remain above the CNB's target next year due to accelerating house price growth.

Changes to GDP forecast (% , yoy)



Source: CZSO, Economic & Strategy Research, Komerční banka

Changes to CPI forecast (% , yoy)

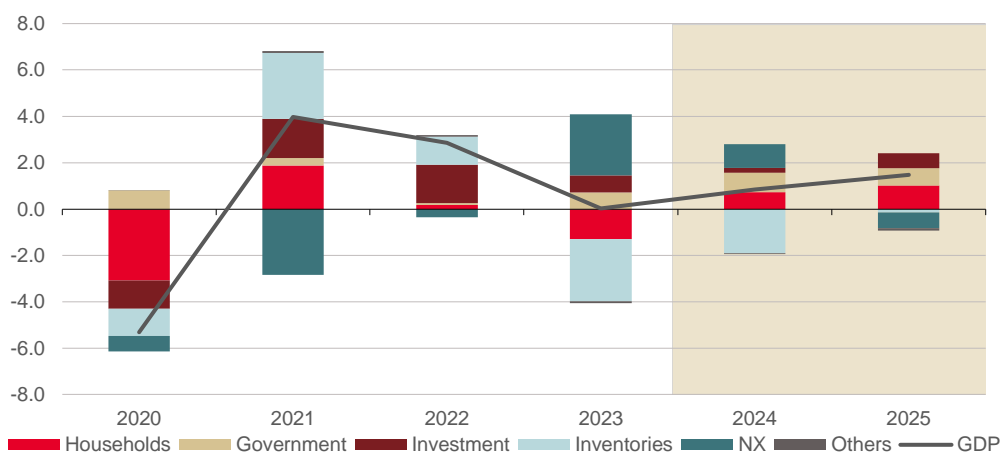


Source: CZSO, Economic & Strategy Research, Komerční banka

The economy is facing strong headwinds

The Czech economy posted decent growth in 1H24, but leading indicators point to a slowdown in 2H24, in our view. The September floods may also have an impact. Although household consumption continues to recover, it is still well below pre-pandemic levels. Only moderate real wage growth is contributing to this. Household purchasing power is thus recovering very slowly from the previous downturn. Moreover, the deteriorating economic outlook is having a negative effect on domestic demand. The previously expected stronger economic recovery in 2H24 has not materialised yet, as industrial activity remains subdued due to cyclically weaker demand and structural problems in some economies. This is particularly true for the German economy, which in turn is important for that of Czechia. We therefore expect the Czech economy to grow only slowly in 2024 and 2025. Continued subdued domestic demand and lower energy and fuel prices should push inflation slightly below 2% next year, according to our forecast. However, core inflation is likely to remain above the CNB's target, pushed up by accelerating house price growth.

Domestic demand to be the main driver of modest economic recovery (% , pp, yoy)



Source: CZSO, Economic & Strategy Research, Komerční banka

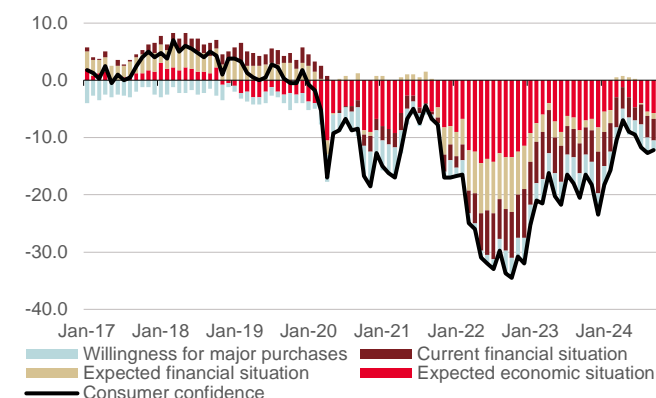
Two years of subdued growth for the Czech economy

Despite its growth in 1H24, we cannot speak of a significant recovery in the economy.

GDP grew by 0.4% qoq in both 1Q and 2Q. This was supported by the continued increase in household consumption, which at -5.2% in 2Q was still well below the pre-pandemic level of 4Q19. Moreover, household consumption growth slowed from 0.8% qoq in 1Q to just 0.2% qoq in 2Q. Meanwhile, real wages followed a similar trend. They have been rising steadily on a qoq basis for more than a year, albeit still at a moderate pace given the previous sharp decline. Real wage growth also slowed significantly in 2Q. As a result, consumer purchasing power remains significantly lower than prior to the pandemic. In addition to the development in household income, the slowdown in spending can be explained by a renewed deterioration in consumer sentiment since May. In 2Q, sentiment was above its long-term average for the first time since 2021, but it fell back below this level in 3Q, registering a retreat of 4.2% qoq. Consumers were particularly negative about the expected economic situation for the coming year. In terms of domestic demand, government consumption contributed significantly to economic growth in 1H24, with an average growth rate of over 1% qoq. Fixed investment was volatile, falling by 1.2% qoq in 1Q before rising by 1.9% qoq in 2Q. Compared with the pre-pandemic period, fixed investment was 10.6% higher in 2Q. The contribution of net exports to qoq GDP growth was on a declining trend. This was likely influenced by the gradual pass-

through of weak industrial production and the fading of the positive effect of exports of previously unfinished production, as well as by increasing domestic demand reflected in higher imports.

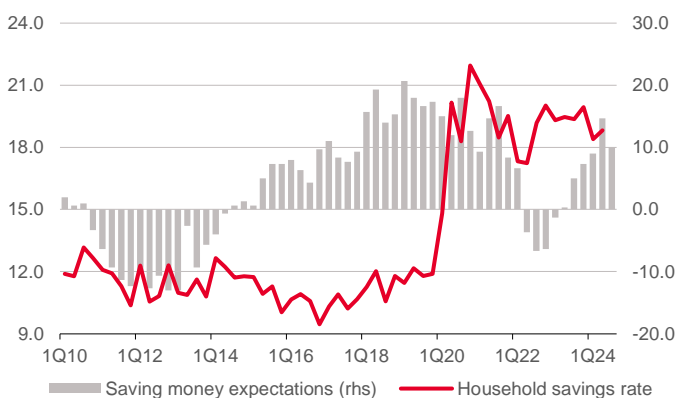
Consumer confidence fell due to the expected deterioration of the economic situation (balance of answers in %, SA)



Source: CZSO, Economic & Strategy Research, Komerční banka

Note: While the expected economic situation refers to the performance of the economy as a whole, the expected and current financial situation assesses the state of household finances. Expectations always refer to the next 12 months.

Household savings rate and expectations for saving money remain high (% , SA)

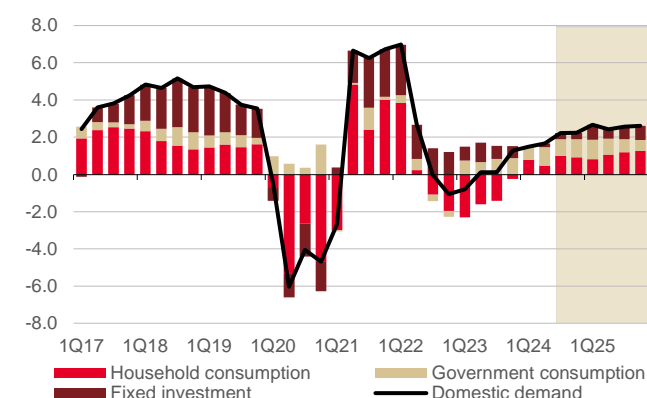


Source: CZSO, Economic & Strategy Research, Komerční banka

Note: Expectations for saving money during the next 12 months are expressed as a balance of answers in % based on a survey by the Czech Statistical Office.

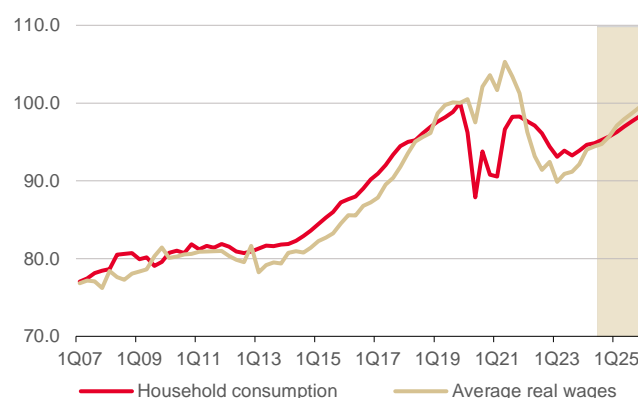
We expect the pace of economic growth to slow in 2H24. We estimate that the economy grew by 0.2% qoq in 3Q and expect the same pace in 4Q. Given the widespread flooding in September, where the impact on the economy is difficult to quantify, our estimate for 4Q is subject to downside risks. Structurally, we expect moderate qoq growth in household consumption and fixed investment, continued buoyant growth in government consumption and a negative contribution from net exports in both quarters. The increase in domestic demand, including both household consumption and fixed investment, is likely to be restrained by the prospect of weak economic growth as the stronger recovery originally expected for 2H24 has not materialised yet. In addition to consumer confidence, business sentiment also deteriorated in 3Q, falling by 1.4% qoq. It has not been above its long-term average since 2022. The industrial sector is facing persistently weak demand for industrial goods, which should increasingly be reflected in the results of foreign trade. Moreover, leading industrial indicators do not point to an improvement either. As discussed below, we also expect the weaker real economy to be reflected in slower wage growth than we had originally forecast, thus providing less support for household consumption. Developments in retail sales and services so far suggest that consumer demand will continue to grow only gradually. For the time being, the high level of accumulated savings is not being reduced either – on the contrary, households are continuing to save at a higher rate.

Government and household consumption to support domestic demand this year, investment to strengthen in 2025 (% , pp, yoy)



Source: CZSO, Economic & Strategy Research, Komerční banka

Real wages and household consumption will not return to pre-pandemic levels until 2026 (4Q19=100)

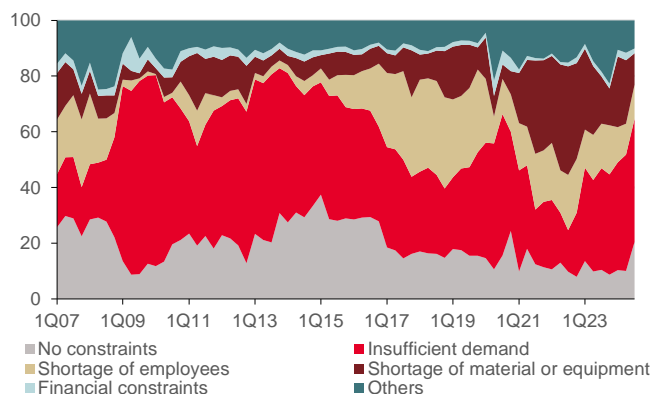


Source: CZSO, Economic & Strategy Research, Komerční banka

The outlook for the Czech economy has worsened since our previous forecast in July.

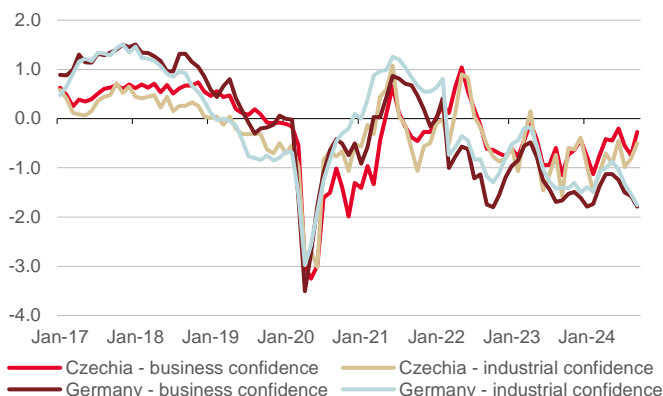
We expect economic growth to be weak at 0.8% this year and to accelerate slightly to 1.5% in 2025. In our previous forecast we expected growth of 0.7% in 2024 and 1.9% next year. The slight upward revision of the estimate for this year is due to a better economic outcome in 1H24. However, we have revised down the GDP estimates for 2H24 for the reasons mentioned above, which has subsequently contributed to the lower growth forecast next year. We expect domestic demand to be the main source of growth in the Czech economy in both 2024 and 2025. Net exports should also make a positive contribution this year, but this will be offset by a negative contribution from inventories. This will be the effect of the completion, destocking and export of previously unfinished production. However, the effect of falling industrial production and weak external demand should be fully reflected in the negative contribution of net exports next year. After a decline of 0.8% last year, we expect industrial production to fall by a further 1.1% this year and increase only slightly by 0.5% next year. Our forecast for the Czech economy is significantly influenced by our assumptions for that of the German one. We assume that the economy of Czechia's largest trading partner will more or less stagnate this year and grow only slightly by 0.7% next year.

Insufficient demand is the main constraint on production growth for 44% of Czech industrial companies (%)



Source: CZSO, Economic & Strategy Research, Komerční banka

Business and industrial confidence remain low in Czechia and Germany, with the latter showing a negative trend (z-score, SA)



Source: CZSO, Ifo, Economic & Strategy Research, Komerční banka
Note: Indicators for Czechia are based on the CZSO business survey, while those for Germany are based on data from the Ifo Institute. Z-scores are calculated using time series from 2005 onwards.

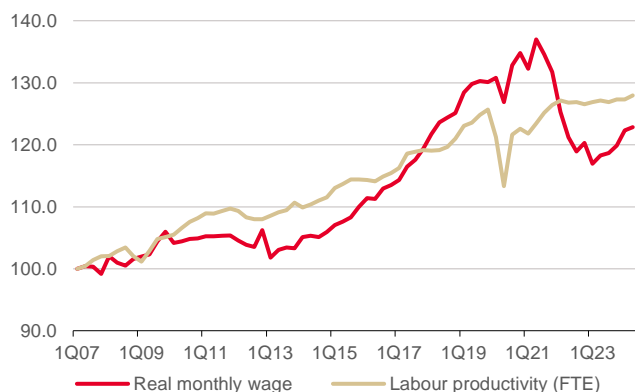
We expect wage growth to remain moderate, so the recovery in household consumption is likely to continue only gradually.

Household purchasing power recovering very slowly

According to our forecast, average wages will rise by 6.6% this year and 5.8% next year.

This is lower in both years than our July forecast, which predicted wage increases of 7.4% in 2024 and 6.2% in 2025. The downward revision is driven by the already observed growth in 2Q, which was below our estimate. Meanwhile, the financial position of the corporate sector as a whole remains favourable. However, wage bargaining is likely to reflect expectations of a weak economic outlook, offsetting workers' demands for compensation in light of the earlier sharp decline in real wages. Given the moderate growth in nominal wages, household purchasing power will thus recover only gradually. While real wages fell by a total of almost 12% in 2022 and 2023 due to strong inflation, we expect them to grow by 4.1% this year and 3.8% next year. As a result, real wages are unlikely to return to pre-pandemic levels before roughly mid-2026 – and we expect the same for household consumption. Despite the weak economy, the labour market remains tight. The unemployment rate has increased only marginally so far and we do not expect it to rise significantly over the forecast horizon. The adjustments in the labour market are taking place through lower job creation rather than through the layoffs of existing employees. This is reflected in the number of vacancies offered by employment offices, which are lower by around 6% yoy. Nevertheless, employment is likely to increase significantly this year due to the inclusion of Ukrainian refugees in the statistics. The inflow of foreign workers should also support employment growth in the coming years.

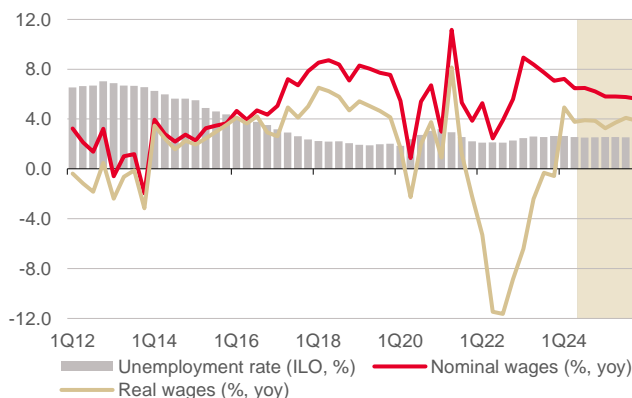
Real wages are lagging behind stagnant labour productivity, so their further growth may not be inflationary (1Q07=100)



Source: CZSO, Economic & Strategy Research, Komerční banka

Note: Labour productivity as a ratio of real GDP to full-time equivalent employment

We expect real wages to see an increase of around 4% in 2024 and 2025, after a 12% decline previously



Source: CZSO, Economic & Strategy Research, Komerční banka

Inflation to fall below 2%, but rising house prices pose a risk

Inflation is likely to remain in the upper half of the CNB's tolerance band until the end of the year. According to the latest data for September, inflation rose to 2.6% yoy from 2.2% during July and August. Compared to our previous forecast, consumer price growth was faster in 3Q. This was mainly due to higher food prices and, to a lesser extent, regulated prices. Core inflation continued to decline gradually, in line with our forecast, to 2.3% yoy in September. We expect headline inflation to rise further over the rest of the year to slightly below 3% yoy. This is mainly due to the statistical effect of last year's lower base, which was already at work in September. The base effect is related to the fact that market prices for household electricity and gas, as well as food prices, have started to decline from their peaks gradually in 2H23. The risks for the rest of the year are mainly in regards to food and fuel prices, which have been very volatile in recent months and therefore difficult to predict. Global factors have contributed significantly to this. Core inflation is likely to remain above 2% yoy until the end of the year, in our view.

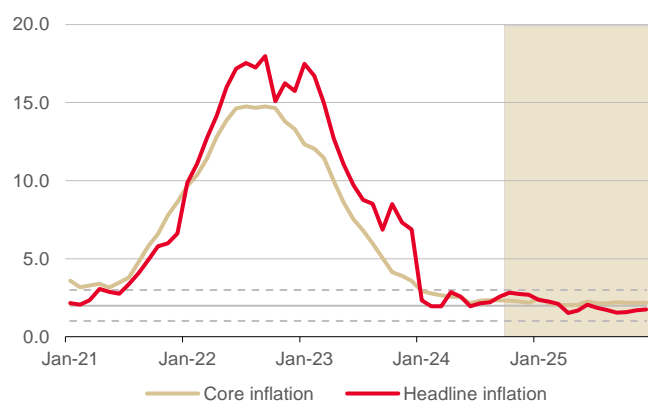
We expect core inflation to remain above 2% in 2025 due to accelerating house price growth.

After 2.5% this year, we expect inflation to fall to an average of 1.8% next year, mainly supported by lower energy and fuel prices. Compared with our July forecast, the estimate for both years is slightly higher. Last time, we expected inflation to average 2.3% in 2024 and 1.7% in 2025. The revision for this year is largely due to developments in recent months, as described in the previous paragraph. For next year, we still see a chance that inflation will fall below the central bank's 2% target. We expect regulated prices to rise by less than 2% in 2025. We expect a positive effect from lower market prices for household electricity and gas, which are yet to fully reflect the previous normalisation of prices on the wholesale markets. The published price lists of some suppliers show that the decline in the market components of household energy prices should continue in 2025. The effect of lower market prices for electricity and gas is likely to be partly offset by increases in the regulated components. However, we do not expect the increase in the regulated components of energy prices to outweigh the positive effect of lower market prices. Due to lower market prices, the cost of covering transmission losses for energy distributors should be significantly lower than last year. On the other hand, renewable energy payments are likely to increase. Fuel prices should also develop positively next year. Apart from heightened geopolitical tensions in the Middle East, we see no fundamental reason for the oil price to remain at elevated levels. Conversely, we expect crude oil prices to fall in 2025 as a result of slower global economic growth and a trend away from fossil fuels, both of which should translate into lower demand for crude oil. The price of Czech oil imports should also be reduced next year by the significant appreciation of the koruna against the US dollar. This should be strongly supported by

developments in global FX markets, where we expect the US dollar to weaken against the euro.

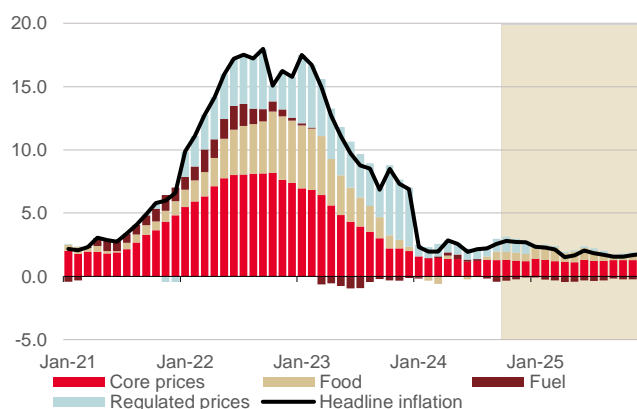
We expect food price growth and core inflation to be above 2% in 2025, with the latter influenced by renewed house price increases. Food price growth above 2% in 2025 was already included in our previous forecast, as we continue to expect a negative impact from lower global agricultural harvests due to the effects of climate change. It is possible that these effects are already pushing up food prices. What has changed significantly since our July forecast is the estimate for core inflation. We have raised it from the original 1.7% for 2025 to the current 2.2%. This is due to renewed house price growth, which has accelerated much more than we had expected. As we discuss in *Box 3*, we expect this to be reflected in higher imputed rent growth. In addition, paid rents are also likely to increase as rising house prices are likely to lead to a renewed deterioration in the affordability of owner-occupied housing. On the other hand, lower affordability should limit house price growth. Our current estimate of core inflation for 2025 assumes that imputed and actual rents will rise by a total of 3-4%. Since rents account for about a quarter of core inflation, this would imply that the remaining core prices would grow by close to 1.5%. Indeed, we continue to expect this part of the consumer basket to show the effects of continued weak consumer demand, only moderate wage growth and tight monetary policy. Overall, however, we see the risks to our core inflation estimate in 2025 as skewed to the upside, due to potentially faster house price growth or its more significant pass-through to imputed rents, as well as a higher persistence of rapid services price growth.

Core inflation to remain slightly above 2% next year as house price growth accelerates (% , yoy)



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

Lower regulated price growth and cheaper fuel to contribute to inflation falling slightly below 2% in 2025 (% , pp, yoy)



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

Monetary policy



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

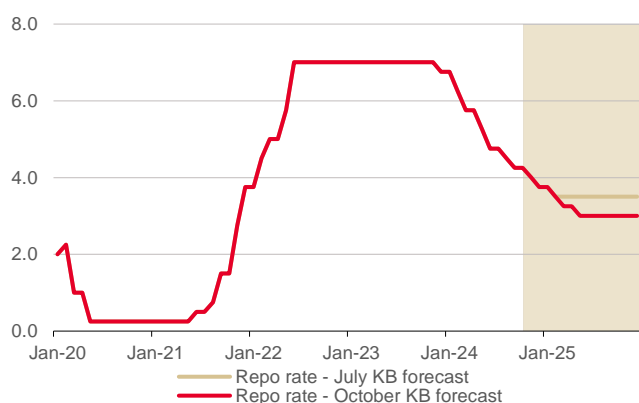
Gradual but deeper CNB rate cuts

The central bank continues to cut interest rates, albeit at a slower pace. The main reason for its cautious approach remains the continued rapid rise in services prices. However, this is strongly countered by the weak performance of the economy. We expect interest rates to be cut by 25bp at each of the monetary policy meetings until May 2025. At that point, the repo rate should reach its terminal level, which we have lowered in our forecast from 3.5% to 3.0%. The estimated lower potential growth of the economy will work in this direction. Meanwhile, the resumption of house price growth should not be an obstacle to further interest rate cuts – but it could become a reason to tighten macroprudential measures on mortgage lending.

We see the balance of risks to the CNB's August forecast as tilted to the less inflationary side.

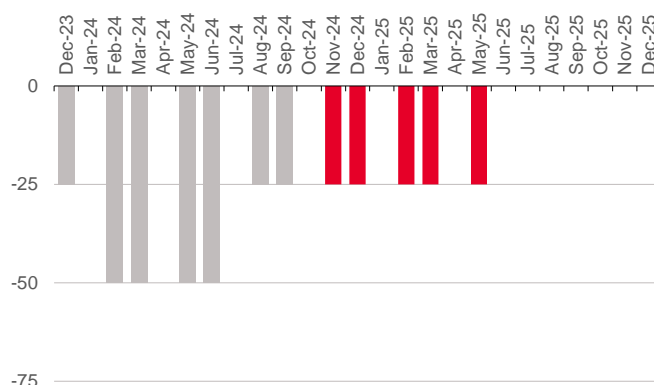
The Czech National Bank (CNB) slowed its pace of monetary easing in 3Q. While it lowered interest rates by 50bp at each of its four monetary policy meetings between February and June, the CNB cut rates by 25bp in August and September. This was in line with our July forecast. As a result, the key repo rate now stands at 4.25%. In contrast to previous quarters, the decline in the repo rate was somewhat faster than the CNB staff forecast. The repo rate averaged 4.6% in 3Q, while the CNB forecast was 4.7%. The central bank's August forecast was much more pessimistic about the decline in interest rates than the previous ones, when it expected the repo rate to be close to 4.5% by the end of 2024, i.e. even higher than the current level. The repo rate was then expected to fall to 3.5% by end-2025 and close to 3% by end-2026, which the CNB's monetary department considers to be its neutral level. Inflation in 3Q was higher than the CNB forecast, but as was the case in our forecast, this was mainly due to higher food and regulated prices. Core inflation in 3Q was broadly in line with the central bank's expectations, as was the koruna's exchange rate. GDP and household consumption developments in 2Q were also in line with the CNB forecast. In its latest forecast, however, the CNB expects GDP growth to accelerate significantly from 0.4% qoq in 2Q to 0.8% qoq in 3Q and 0.9% qoq in 4Q. Consequently, the CNB expects the economy to grow by 1.2% this year and accelerate to 2.8% next year. However, we think this is too optimistic, as we discuss in more detail in the *Macroeconomic forecast* section. Wage growth was well below the CNB forecast. In 2Q it reached 6.5% yoy in nominal terms for the economy as a whole and 7.3% yoy in the market sectors (as defined by the CNB), while the central bank had expected 7.2% and 8.2%, respectively. We therefore see the balance of risks to the CNB's August forecast as tilted to the less inflationary side.

We have lowered the terminal repo rate from 3.5% to 3.0%



Source: CNB, Economic & Strategy Research, Komerční banka

We expect the CNB to cut the repo rate by 25bp per meeting

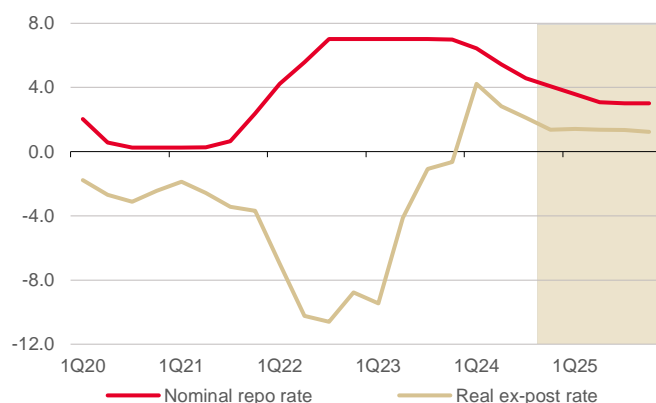


Source: CNB, Economic & Strategy Research, Komerční banka

We have lowered the repo rate terminal level estimate in our forecast from 3.5% to 3.0%.

We expect the CNB to cut interest rates by 25bp at each meeting until May next year, when the repo rate should reach its terminal level of 3%. The bank's rationale for only gradual rate cuts remains unchanged. The main reason is the persistence of rapid growth in services prices. It is still close to 5% yoy (and even around 6% yoy, according to the HICP methodology), while goods price growth is well below the target of 2%. In its August forecast, the central bank expects headline inflation to be 2.0% and core inflation to be 2.3% next year. In both cases, this is not fundamentally different from our forecasts. While we expect core inflation to be slightly above 2% yoy for much of next year, we do not think this should prevent further rate cuts. As mentioned in the *Macroeconomic forecast* section, this should be mainly due to the effects of rising house prices, while the remainder of core prices should be below 2% yoy.

The issue of rising house prices is likely to become increasingly important for the central bank. The question, however, is to what extent monetary policy is currently able to effectively influence house prices through its standard channel, i.e. interest rates. House price growth has accelerated significantly in recent quarters, even though interest rates remain high. This is underlined by the fact that mortgage rates are still close to 5%, while not fully reflecting the past and expected decline in monetary policy rates – we write more about the mortgage and real estate market in the *Banking sector* section. The persistent upward pressure on house prices in Czechia is primarily a manifestation of the failure of structural policies with the persistence of strong excess demand vs supply in the property sector as a consequence. Until this problem is resolved, house price growth is likely to remain a chronic problem for the Czech economy. In addition, the high level of accumulated household savings and pent-up demand from previous years may exacerbate the current situation. The CNB has other tools at its disposal to regulate the housing market that are likely to be more effective now. These are the DSTI and DTI limits for mortgages, which, unlike the LTV limit, are not in force at the moment. Thus, their reintroduction would make sense in the current context.

Monetary policy remains restrictive (%)


Source: CNB, Economic & Strategy Research, Komerční banka

Services prices still rising rapidly (HICP, %, yoy)


Source: Eurostat, Economic & Strategy Research, Komerční banka

In our forecast, we have lowered the terminal level of the repo rate from 3.5% to 3%. The bank board's communication on this has changed from an initial range of 3.5-4.0% to 3.0-3.5%. Our estimated slower potential output growth supports a lower level for the terminal repo rate. We estimate the potential growth of the Czech economy to be in the range of 2.0-2.5%, down from around 3% before the pandemic. In our view, a weak economy in which the current level of interest rates is too restrictive, should be the main driver of further monetary easing. Our forecast for the CNB rate is broadly in line with our assumption of monetary easing in the euro area, as we expect the ECB deposit rate to reach its terminal level in June of next year. This should limit the impact on the koruna's exchange rate. However, given the continued hawkish comments from the central bank's board and the potential for higher core inflation next year, the risks to our CNB rate forecast are skewed to the upside.

Fiscal policy



Jaromír Gec
(420) 222 008 598
jaromir_gec@kb.cz

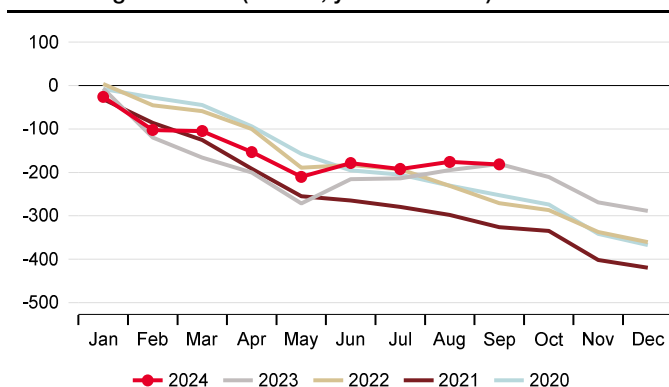
Budget deficit to ease further next year

Additional flood spending will increase this year's state budget deficit to CZK270bn, according to our estimates. Although a CZK30bn increase in the deficit to CZK282bn has been approved, the amendment contains a maximum estimate of flood damages, and so the deficit may end up lower, in our view. Next year, the cash balance of the state budget should ease to -CZK240bn. As a share of GDP, we expect the general government deficit to narrow to 2.6% this year and to close to 2% in 2025. In both years, Czech public finances should see a significantly better balance than the EU average. The impact of fiscal policy on economic activity should be broadly neutral next year following this year's restriction related to the consolidation package. We expect total public debt as a share of nominal GDP to rise slightly in the coming years but to stabilise gradually. In fact, the current legal framework obliges continued consolidation of public finances.

Floods should require increase in expenditure of CZK40bn maximum

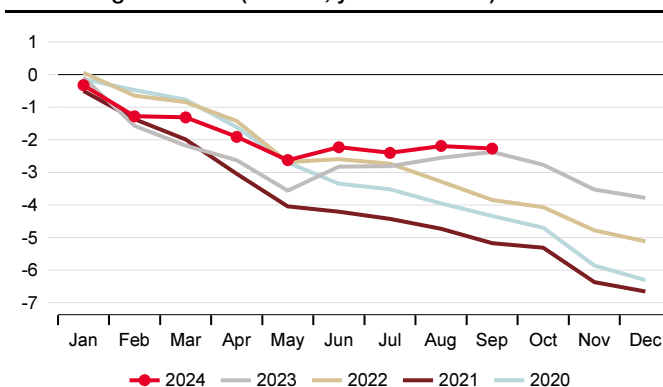
At the end of September, the state budget ran a deficit of CZK181.7bn. Year on year, it was roughly at the same level as last year. In terms of seasonality, in recent years, with the exception of 2023, the September deficit has tended to widen slightly on a monthly basis. This year's month-on-month deterioration of CZK6bn is therefore not significantly out of line with this trend. As a share of GDP, the general government deficit in the first nine months was 2.3%, the lowest figure since 2019.

State budget balance (CZKbn, ytd cumulative)



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

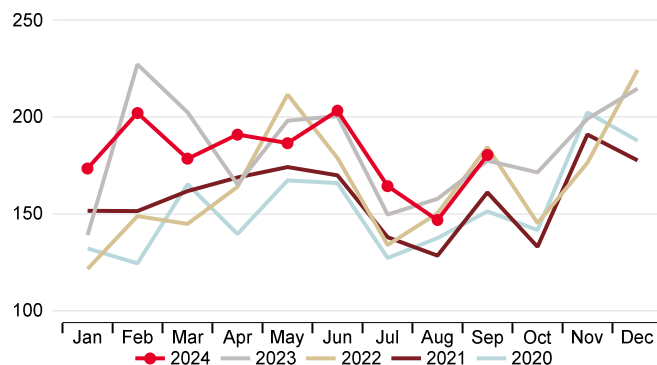
State budget balance (% GDP, ytd cumulative)



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

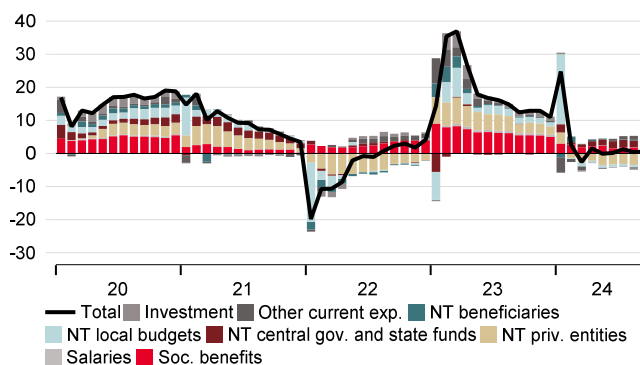
At the end of September, expenditure was CZK9.1bn higher than a year earlier (up by 0.6%). Compared to last year, expenditure on social benefits increased (by CZK27.2bn yoy), mainly due to the indexation of old-age pensions. Expenditure in the chapters on non-investment transfers to state funds (up by CZK20.1bn yoy) and public health insurance funds also increased year on year. Expenditure on servicing public debt (up by CZK20.1bn yoy) was 50% higher than in the previous year. On the other hand, the previous compensation for high energy prices disappeared from non-investment transfers to enterprises (down by CZK50.1bn yoy).

State budget expenditure (CZKbn, non-cumulative)



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

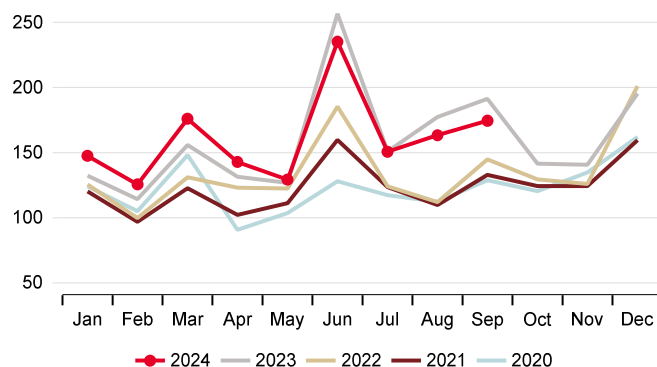
State budget expenditure (% , pp, yoy, ytd cumulative)



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

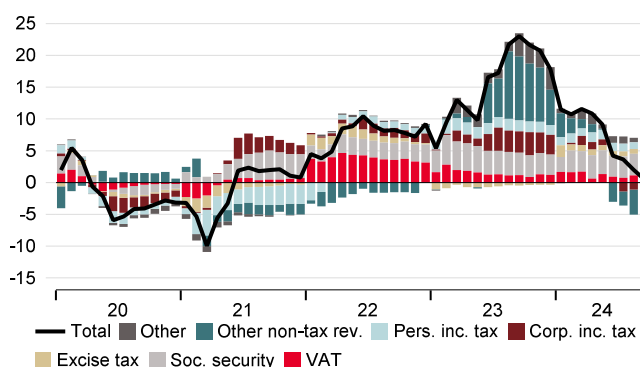
Revenues increased by CZK8bn (+0.6%) year on year in the first nine months of the year, with the largest contributions coming from social security contributions (CZK46.5bn yoy), personal income tax (CZK16bn yoy) and value added tax (CZK12.9bn yoy), offset by lower year-on-year receipts from the EU (down by CZK34.6bn yoy) and from the General Treasury Administration chapter (down by CZK26.6bn yoy). The rise in the largest item by weight, social contributions (+9.1% yoy) probably reflects both solid wage growth and tax changes that took effect at the beginning of this year (reintroduction of sickness insurance for employees, increase in the minimum tax base for self-employed). Nevertheless, the pension system ran a deficit of CZK38.6bn at the end of August this year.

State budget revenue (CZKbn, non-cumulative)



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

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



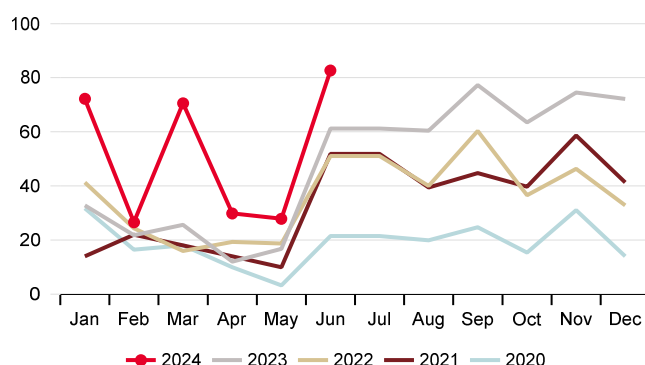
Source: Ministry of Finance, Macrobond, Economic & Strategy Research, Komerční banka
Note: other revenue includes EU funds for example

The revised full-year state budget deficit of CZK282bn may not be fully reached. According to the Ministry of Finance, the CZK30bn increase in expenditure represents the upper limit of flood damage estimates. In our baseline scenario, we therefore assume a deficit of CZK270bn this year.

At the end of June, municipal budgets recorded a surplus of CZK82.7bn. Higher year-on-year revenues (up by CZK22.7bn, +5.2%) combined with only a slight increase in expenditures (of CZK1.3bn, 0.3%) resulted in a CZK21.4bn year-on-year increase in the positive balance. The increase in revenues was related to growth in both tax and non-tax revenues. There was a year-on-year increase in personal income tax receipts due to wage

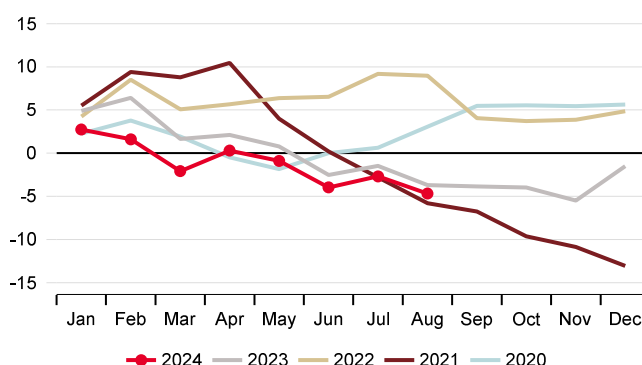
growth but also as a result of consolidation package measures, higher VAT receipts due to higher household consumption and higher corporate income tax receipts due to the payment of quarterly and half-yearly tax advances. For local government, there was a significant increase in property tax revenues. Local government funds in bank accounts continue to accumulate this year. At the end of June, according to the Ministry of Finance, municipalities and regions had a total of CZK558.5bn in their accounts, while their debts amounted to CZK86.3bn. Over the rest of this year, the gradual deterioration of the balance in connection with the payments to cover flood damage should be cushioned by extraordinary transfers from the state budget.

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

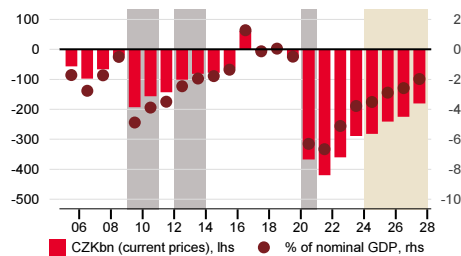
State budget deficit to narrow to CZK240bn next year

For next year, we expect the state budget deficit to fall to CZK240bn, in line with the government's proposal of CZK241bn. We analyse next year's budget in more detail in Box 2. In 2026 and 2027, we expect the state budget balance to reach -CZK225bn and -CZK180bn, respectively, in line with the MinFin's medium-term outlook.

Box 2: Budget proposal for 2025 and MinFin's outlook promise continued consolidation

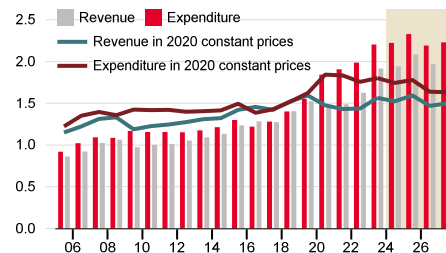
The government proposes a state budget deficit of CZK241bn for next year. Compared to the amended budget for this year, revenues should increase by CZK146bn (7.5%) to CZK2,086bn and expenditures by CZK105bn (4.7%) to CZK2,327bn. The deficit is projected to narrow by CZK41bn (14.5%) compared to this year. The proposed deficit is the lowest since 2019. At constant prices, the negative balance for next year is also the most modest since pre-crisis 2019 and roughly comparable to that of 2010, although at current prices the deficit is CZK85bn deeper. Relative to nominal GDP then, the projected state budget deficit for next year (-2.9% of GDP) is close to the average of 2011 and 2012.

State budget balance – draft for 2025 and MinFin's medium-term outlook until 2027 (cash methodology)



Source: MinFin, CZSO, Economic & Strategy Research, Komerční banka
Note: Grey shading indicates a recession, beige a forecast. The outlook for nominal balances corresponds to the approved budget for 2024, the government's draft proposal for 2025 and the MinFin's medium-term outlook for 2026 and 2027. The outlook for nominal GDP based on the KB forecast.

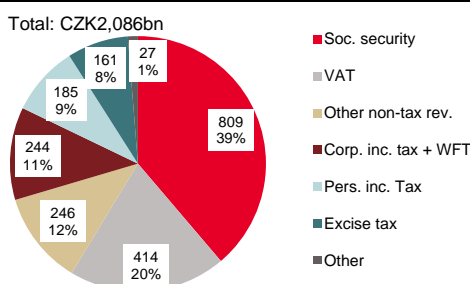
State budget revenues and expenditures – draft for 2025 and MinFin's medium-term outlook until 2027 (cash methodology)



Source: MinFin, CZSO, Economic & Strategy Research, Komerční banka
Note: Deflated by the GDP deflator, the growth outlook and the GDP deflator outlook are based on the KB forecast.

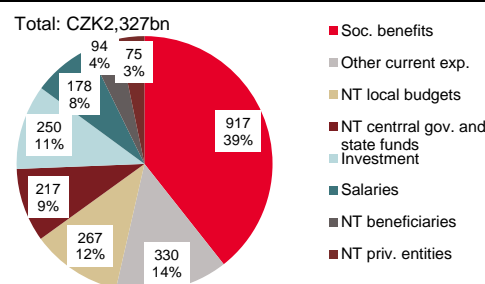
Social contributions, the largest item by weight, is also the main contributor to the year-on-year increase in income of CZK146bn. MinFin expects this item to grow by 7% yoy with the support of wage increases. Even so, the pension account is projected to show a liability of CZK13.2bn next year. In the context of solid wage growth and some adjustments under the consolidation package (with an impact only in 2025), personal income tax collection should also increase notably, by CZK29.2bn (+18.8% yoy). The recovering economy, combined with the low comparative base of this year's budget¹, which foresees less than half of this year's likely WFT (windfall tax) collection, will be reflected in an increase in year-on-year corporate income tax collection including WFT of CZK29.1bn (+13.5% yoy). VAT revenues, the second most important item by weight, are expected by MinFin to increase by CZK27bn (+7%) yoy next year, with nominal consumption growth in particular expected to have a positive impact.

State budget revenue 2025 (CZKbn, % of total)



Source: MinFin, Economic & Strategy Research, Komerční banka
Note: WFT- windfall tax

State budget expenditure 2025 (CZKbn, % of total)



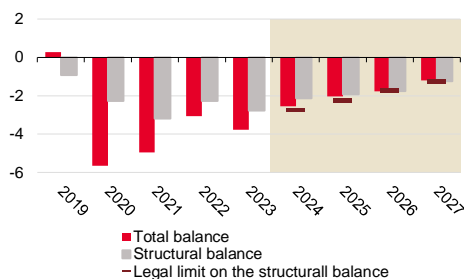
Source: MinFin, Economic & Strategy Research, Komerční banka
Note: NT – non-investment transfers

Investment (capital expenditure) should contribute most to the CZK105bn year-on-year increase in spending next year. The CZK65bn increase (35.2%) in capex should be mainly related to investment in transport infrastructure. The absolute increase in the largest item, social benefits, of CZK24.3bn (+2.7% yoy) is also significant, with pensions the main contributor. The second biggest item in terms of size, "other non-investment expenditure", includes, among other things, "interest and other financial expenditure", which is estimated by

¹ The amendment to the state budget for 2024 has not been published in its complete structure. Therefore, the year-on-year changes in individual items were calculated compared to the original state budget before the amendment.

the MinFin to account for almost CZK100bn (+CZK4.6bn, +4.9% yoy). This is mainly due to the dynamics of public debt in recent years and the high interest costs of government bonds.

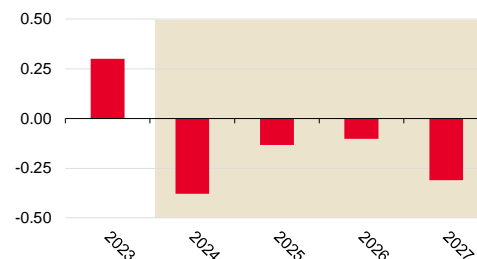
Public finance total and structural balance – KB estimate (% of GDP)



Source: CZSO, Macrobond, Act No. 23/2017 Coll. on the Rules of Budgetary Responsibility, Economic & Strategy Research, Komerční banka

Note: The structural balance is net of the effect of the business cycle and one-off operations.

Fiscal impulse – KB estimate (contribution to GDP dynamics in pp)



Source: Economic & Strategy Research, Komerční banka

Note: The fiscal impulse captures the estimated impact of a change in the structural balance (fiscal discretion) on GDP. Calculated on the basis of a 'top-down' method with a common fiscal multiplier of 0.6.

The economic impact of discretionary fiscal policy measures should be broadly neutral next year. Following the notable easing in the structural deficit of public finances this year, facilitated by the so-called consolidation package, we estimate that fiscal restriction, measured by the approximate aggregate fiscal impulse, will take a negligible 0.1pp off Czech GDP growth next year.

Jaromír Gec
(420) 222 008 598
jaromir_gec@kb.cz

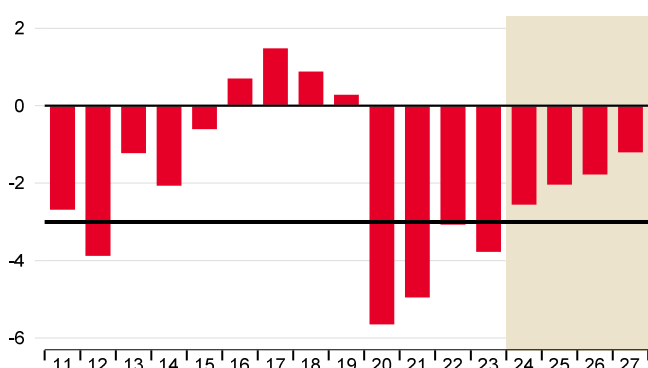
Public finance forecasts

| | 2022 | 2023 | 2024f | 2025f | 2026f | 2027f |
|------------------------|---------|---------|---------|---------|---------|---------|
| Balance (% GDP) | -3.1 | -3.8 | -2.6 | -2.0 | -1.8 | -1.2 |
| Fiscal effort (pp GDP) | 0.9 | -0.5 | 0.6 | 0.2 | 0.2 | 0.5 |
| Public debt (CZKbn) | 2 997.6 | 3 234.0 | 3 504.0 | 3 744.0 | 3 969.0 | 4 149.0 |
| Debt ratio (% GDP) | 42.5 | 42.4 | 43.7 | 44.8 | 45.5 | 45.5 |

Source: CZSO, Macrobond, Ministry of Finance for published data, Economic & Strategy Research, Komerční banka

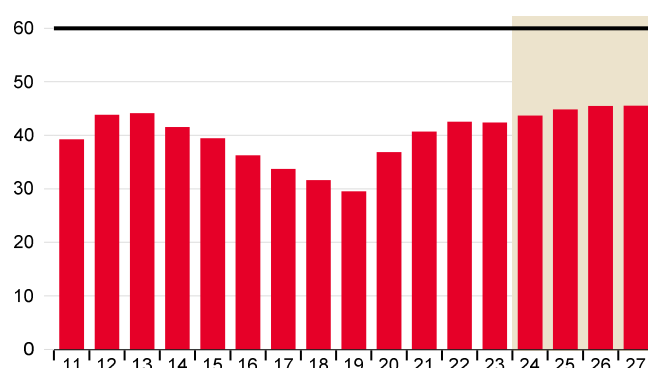
Note: fiscal effort is measured as the year-on-year change in the public finance balance, adjusted for the economic cycle and one-off operations on GDP in pp.

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, public finances will see a deficit of 2.6% of GDP this year vs 3.8% last year.

Public finance deficit below 3% of GDP

This year, we expect the public finance deficit to fall to 2.6% of GDP, even after the upward revision of the state budget. 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. As a share of GDP, the deficit should fall below 3% of GDP for the first time since 2019. Next year, we expect the general government deficit to narrow to 2% of GDP, while the market median estimate of the general government balance for the EU as a whole is currently -3.2% of GDP in 2024 and -2.9% of GDP in 2025. We estimate that the Czech government debt-to-GDP ratio will increase by 0.8pp per year on average over 2024-2027, reaching 45.5% in 2027. Compared with our previous forecast, we expect wider government deficits, mainly due to additional spending related to this year's floods. However, given their one-off nature, we expect the structural balance, i.e. the balance net of one-off and cyclical effects, to remain unaffected by these expenditures.

Structural imbalances in public finances persist, and 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 limit² on structural balances tightens by 0.5pp per year in 2025-2027 from a baseline of 2.75% in 2024³. The next government will therefore be required to continue consolidating public finances under the current version of the law (see chart in Box 2).

² Act No. 23/2017 Coll. on the Rules of Budgetary Responsibility

³ 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

| | Q1 24 | Q2 24 | Q3 24 | Q4 24 | Q1 25 | Q2 25 | Q3 25 | Q4 25 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GDP and its breakdown | | | | | | | | | | | | | | |
| GDP (real, yoy, %) | 0.4 | 0.6 | 1.2 | 1.1 | 1.1 | 1.2 | 1.6 | 2.0 | 0.0 | 0.8 | 1.5 | 2.2 | 2.2 | 2.3 |
| Household consumption (real, yoy, %) | 1.7 | 1.0 | 2.1 | 1.9 | 1.7 | 2.3 | 2.5 | 2.7 | -2.9 | 1.7 | 2.3 | 2.6 | 2.0 | 1.8 |
| Government consumption (real, yoy, %) | 3.2 | 4.4 | 4.0 | 4.3 | 4.5 | 3.7 | 3.1 | 2.5 | 3.5 | 4.0 | 3.4 | 1.2 | 1.8 | 2.1 |
| Fixed investment (real, yoy, %) | -0.1 | 0.7 | 1.1 | 1.1 | 2.7 | 1.7 | 2.2 | 2.6 | 2.7 | 0.7 | 2.3 | 3.1 | 2.6 | 2.4 |
| Net exports (contribution to yoy) | 1.9 | 1.3 | 1.4 | -0.5 | -0.7 | -0.8 | -0.8 | -0.5 | 2.6 | 1.0 | -0.7 | 0.1 | 0.3 | 0.4 |
| Inventories (contribution to yoy) | -2.9 | -2.2 | -2.2 | -0.3 | -0.7 | -0.1 | 0.1 | 0.2 | -2.7 | -1.9 | -0.1 | 0.0 | 0.1 | 0.1 |
| Monthly data from the real economy | | | | | | | | | | | | | | |
| Foreign trade (CZKbn) | 83.3 | 73.9 | 34.4 | 30.6 | 79.6 | 56.3 | 16.8 | 16.9 | 122.5 | 222.2 | 169.7 | 191.0 | 232.7 | 272.1 |
| Exports (nominal, yoy, %) | 0.1 | 4.9 | 12.3 | 3.3 | 3.1 | 0.8 | 2.0 | 2.7 | 0.8 | 4.9 | 2.1 | 5.5 | 5.8 | 5.7 |
| Imports (nominal, yoy, %) | -3.7 | 1.6 | 8.8 | 4.9 | 3.7 | 2.4 | 3.6 | 4.0 | -6.3 | 2.8 | 3.4 | 5.3 | 5.1 | 5.2 |
| Industrial production (real, yoy, %) | -1.0 | -2.1 | 0.4 | -1.9 | -1.1 | 0.4 | 0.9 | 1.8 | -0.8 | -1.1 | 0.5 | 2.6 | 2.3 | 2.3 |
| Construction output (real, yoy, %) | -6.4 | -5.7 | 1.6 | 0.6 | 1.3 | 4.3 | 1.9 | 3.2 | -2.6 | -2.5 | 2.6 | 3.2 | 3.8 | 2.6 |
| Retail sales (real, yoy, %) | 3.4 | 4.4 | 5.2 | 4.3 | 3.0 | 3.1 | 2.5 | 2.9 | -4.4 | 4.3 | 2.9 | 3.1 | 2.5 | 1.8 |
| Labour market | | | | | | | | | | | | | | |
| Wages (nominal, yoy, %) | 7.2 | 6.5 | 6.5 | 6.2 | 5.8 | 5.8 | 5.8 | 5.6 | 8.0 | 6.6 | 5.8 | 5.4 | 4.8 | 4.1 |
| Wages (real, yoy, %) | 5.0 | 3.8 | 3.9 | 3.9 | 3.3 | 3.7 | 4.1 | 3.9 | -2.4 | 4.1 | 3.8 | 3.3 | 2.6 | 2.1 |
| Unemployment rate (MLSA, %) | 3.9 | 3.7 | 3.8 | 3.8 | 4.2 | 3.8 | 3.8 | 3.8 | 3.6 | 3.8 | 3.9 | 3.8 | 3.9 | 4.0 |
| Unemployment rate (ILO 15+, %) | 2.8 | 2.5 | 2.5 | 2.4 | 2.7 | 2.5 | 2.6 | 2.4 | 2.6 | 2.6 | 2.6 | 2.5 | 2.5 | 2.7 |
| Employment (ILO 15+, yoy, %) | 3.7 | 2.1 | 2.1 | 2.2 | -0.7 | 0.3 | 0.5 | 0.6 | 1.5 | 2.5 | 0.2 | 0.6 | 0.3 | 0.1 |
| Consumer and producer prices | | | | | | | | | | | | | | |
| CPI Inflation (yoy, %) | 2.2 | 2.6 | 2.5 | 2.7 | 2.2 | 1.7 | 1.7 | 1.8 | 10.7 | 2.5 | 1.8 | 2.0 | 2.2 | 2.0 |
| Taxes (contribution to yoy inflation) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| Core inflation (yoy, %) (*) | 2.8 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 7.6 | 2.4 | 2.2 | 2.2 | 2.1 | 2.1 |
| Food prices (yoy, %) (*) | -1.2 | 0.0 | 1.1 | 2.2 | 3.5 | 3.0 | 2.0 | 1.6 | 10.0 | 0.5 | 2.5 | 1.9 | 2.0 | 2.1 |
| Fuel prices (yoy, %) (*) | 0.4 | 7.3 | -3.9 | -9.0 | -9.6 | -11.9 | -9.2 | -4.0 | -12.4 | -1.3 | -8.7 | -0.3 | 1.4 | 1.3 |
| Regulated prices (yoy, %) | 6.2 | 5.9 | 5.8 | 7.3 | 1.1 | 0.7 | 1.1 | 1.2 | 27.8 | 6.3 | 1.0 | 1.8 | 2.1 | 2.0 |
| Producer prices (yoy, %) | -0.9 | 1.1 | 1.3 | 0.7 | 0.0 | 0.7 | 0.2 | 0.7 | 5.3 | 0.5 | 0.4 | 1.4 | 1.5 | 1.7 |
| Financial variables | | | | | | | | | | | | | | |
| 2W Repo (% , average) | 6.4 | 5.4 | 4.6 | 4.1 | 3.6 | 3.1 | 3.0 | 3.0 | 7.0 | 5.1 | 3.2 | 3.0 | 3.0 | 3.0 |
| 3M PRIBOR (% , average) | 6.2 | 5.3 | 4.5 | 4.3 | 3.6 | 3.3 | 3.3 | 3.3 | 7.1 | 5.1 | 3.3 | 3.3 | 3.3 | 3.3 |
| EUR/CZK (average) | 25.1 | 25.0 | 25.2 | 25.2 | 25.0 | 24.9 | 24.7 | 24.6 | 24.0 | 25.1 | 24.8 | 24.4 | 24.2 | 23.9 |
| External environment | | | | | | | | | | | | | | |
| GDP in EMU (real, yoy, %) | 0.5 | 0.6 | 0.8 | 0.9 | 0.9 | 1.0 | 1.1 | 1.2 | 0.5 | 0.7 | 1.0 | 1.2 | 1.0 | 1.1 |
| GDP in Germany (real, yoy, %) | -0.1 | 0.0 | -0.1 | 0.4 | 0.4 | 0.7 | 0.9 | 0.9 | -0.1 | 0.1 | 0.7 | 0.9 | 0.8 | 0.9 |
| CPI in EMU (yoy, %) | 2.6 | 2.5 | 2.2 | 2.0 | 2.0 | 1.9 | 1.7 | 1.8 | 5.5 | 2.3 | 1.8 | 1.9 | 1.9 | 2.0 |
| Brent oil price (USD/bbl, average) | 82.7 | 85.6 | 86.4 | 75.0 | 72.0 | 68.5 | 67.0 | 67.5 | 82.5 | 82.4 | 68.8 | 67.7 | 67.4 | 67.8 |
| EUR/USD (quarter eop, year average) | 1.09 | 1.08 | 1.10 | 1.12 | 1.14 | 1.15 | 1.16 | 1.17 | 1.08 | 1.10 | 1.16 | 1.19 | 1.21 | 1.23 |

Source: CZSO, CNB, 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

Market rates on the way to stabilisation

We believe that the decline in koruna market interest rates should soon be over. Indeed, the markets are currently pricing in a similar outlook to our forecast in terms of the pace of cuts and the terminal level of CNB policy rates. Compared to our previous forecast, we are revising the outlook for market interest rates in koruna downwards to reflect faster monetary easing by the Fed and the ECB and a lower CNB terminal rate. We see gross CZGB issuance remaining close to current levels over the rest of the year, even after this year's budget's "flood" amendment. In 2025, we expect gross issuance to increase significantly year on year, but net CZGB issuance to rise only moderately. All in all, in our view, improving global sentiment, combined with ongoing fiscal consolidation, should contribute to a slight tightening of CZGB ASW spreads.

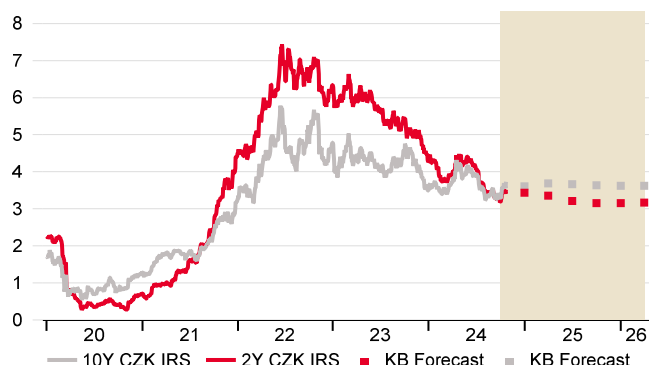
The Czech IRS market: the end of the inversion against the backdrop of global fluctuations

Recent developments in koruna market interest rates have again largely mirrored those in core markets. The global market interest rates decline over the summer in response to deteriorating US economic data and, in particular, concerns of a rapid deterioration in the US labour market was partially reversed in September as the disinflationary process slowed. Meanwhile, koruna interest rates had already seen their spreads widen against their euro area counterparts since July, initially declining less sharply and, on the contrary, outperforming the euro area's upward correction. This may have been due to higher Czech inflation in recent months, which has exceeded market and CNB expectations, as well as the continued cautious rhetoric of the domestic central bank on its next steps. Indeed, CNB board members are still not ruling out a pause in rate cuts at one of their upcoming meetings.

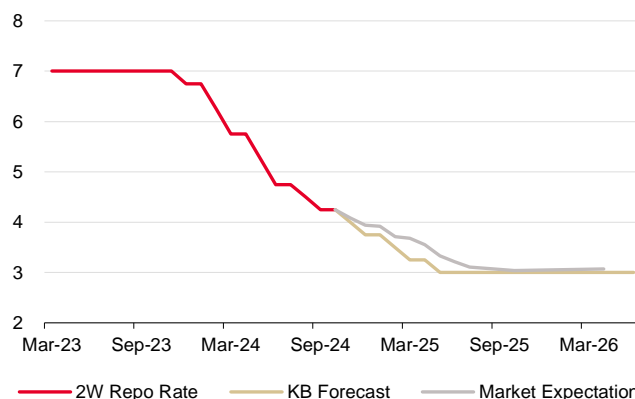
Despite the CNB's continued rate cuts, we do not expect shorter koruna market interest rates to fall much further. This is because market instruments are pricing in both the pace of the repo rate cuts and its terminal level more or less in line with our forecast. The key factors that lead us to revise the entire koruna market interest rate curve downwards from our last (July) forecast are both developments abroad, where we expect faster monetary easing by the Fed and the ECB, and the reduction in the CNB's expected terminal repo rate from 3.5% to 3% (see below for details).

At longer maturities, we expect koruna interest rates to stabilise at around current levels. In the short term, this is likely to stem from high domestic inflation, which we expect to remain at the upper end of the target tolerance band this year, and only a gradual recovery in the domestic economy. The development of market interest rates in the euro area, which we assume will stabilise at close to current levels, also contributes to the low volatility of the CZK IRS in our forecast over the one-year horizon. Over the medium term, we expect external developments to prevent a further decline in longer-term koruna interest rates, as persistently high deficits and rising public debt and its servicing costs in many advanced economies pose a risk for the future. On the other hand, the possible continuation of subdued growth or stagnation in the domestic economy in the context of weak German economic performance poses a risk of further declines in longer-term interest rates.

In our view, there is only limited scope for further reductions in koruna market interest rates. According to our forecasts, rates with shorter maturities could see a slight decline. The longer end of the curve should stabilise more or less near current levels.

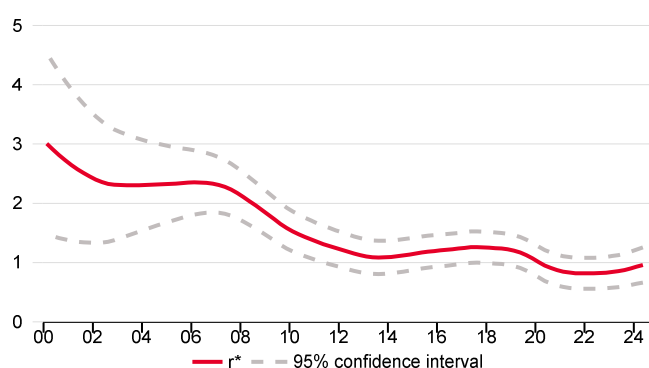
IRS forecast (%)


Source: Bloomberg, Economic & Strategy Research, Komerční banka

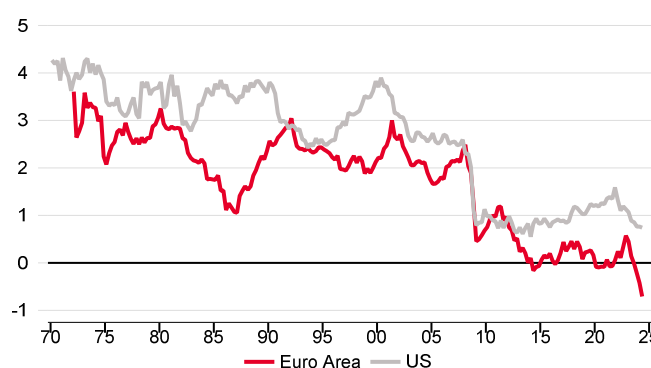
Expected CNB key interest rate path as of 22 October 2024 (%)


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

In our new forecasts, we have lowered our CNB equilibrium and terminal repo rate assumption back to 3%. Some of the factors that led us to raise it to 3.5% six months ago have lost their intensity, at least for the shorter horizon of our forecast. First, Czech central bankers have recently reduced their emphasis on the risk of a higher neutral rate. Whereas before the May meeting, they had said that they saw the rate being within a 3.5-4% range, recently some CNB board members have mentioned a level of 3-3.5%. Second, model estimates (as in April) do not indicate that the equilibrium interest rate has been rising of late. This is evident both from the CNB's monetary department analysis published in early May and from our updated estimate, which currently shows the 3M r^* staying around 1% (also in view of developments abroad and the lacklustre growth of the domestic economy for a longer period). Third, the New York Fed's⁴ estimate of the equilibrium real interest rate in the euro area has been revised significantly downwards, and has even turned negative, specifically to -0.7% in 2Q24. Finally, we now expect the domestic economy's potential output growth to be lower than it used to be (we estimate it at 2-2.5%), which should also push the equilibrium rate lower.

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


Source: Macrobond, Economic & Strategy Research, Komerční banka
 Note: estimate based on a multivariate filter for the Czech economy following Benes and N'Diaye (2004)⁵. 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 Pribor) equilibrium real interest rate. We have 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.

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


Source: Federal Reserve Bank of New York, Economic & Strategy Research, Komerční banka
 Note: NY Fed estimate based on Holston-Laubach and Williams (2023) model.

⁴ Model based on Holston, Laubach, and Williams. 2023. "Measuring the Natural Rate of Interest after COVID-19," Federal Reserve Bank of New York Staff Reports, no. 1063, June.

⁵ 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.

CZK IRS outlook (end of period, %)

| | 4Q24f | 1Q25f | 2Q25f | 3Q25f |
|-----|-------|-------|-------|-------|
| 2y | 3.45 | 3.35 | 3.20 | 3.15 |
| 5y | 3.40 | 3.45 | 3.40 | 3.40 |
| 10y | 3.60 | 3.70 | 3.65 | 3.65 |

Source: Economic & Strategy Research, Komerční banka

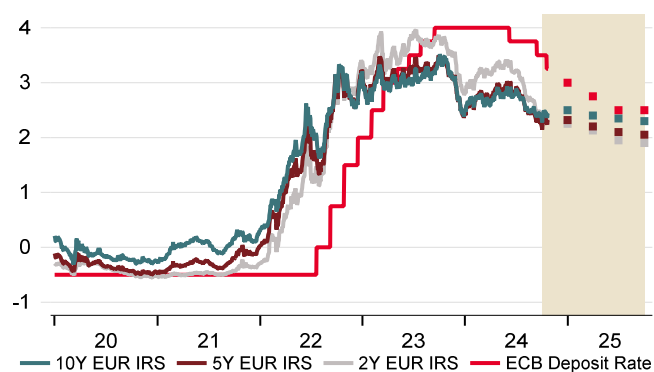
Euro market still offers lower interest rates

Interest-rate hedging conditions in the koruna markets temporarily improved slightly across maturities as foreign interest rates fell. However, after a correction in early October, spot rates are broadly in line with July levels. In the forward market, lower rates can be achieved compared to spot IRS only at shorter maturities. **Visibly lower market interest rates compared to CZK IRS continue to prevail in the euro area.** Moreover, the spread between koruna and euro rates has widened recently, which enhances the relative attractiveness of euro funding.

CZK forward interest rate swaps (% , p.a., vs 6M Pribor)

| | | Maturity | | | | |
|---------|------|----------|------|------|------|------|
| | | 1Y | 2Y | 3Y | 5Y | 10Y |
| Forward | Spot | 3.74 | 3.52 | 3.51 | 3.55 | 3.73 |
| | 3M | 3.56 | 3.47 | 3.48 | 3.55 | 3.74 |
| | 6M | 3.38 | 3.42 | 3.44 | 3.54 | 3.74 |
| | 1Y | 3.33 | 3.41 | 3.45 | 3.57 | 3.77 |
| | 2Y | 3.50 | 3.52 | 3.58 | 3.68 | 3.84 |
| | 3Y | 3.55 | 3.63 | 3.68 | 3.79 | 3.90 |

Source: Bloomberg, Economic & Strategy Research, Komerční banka, as of 22 October 2024

Euro area rates (%)


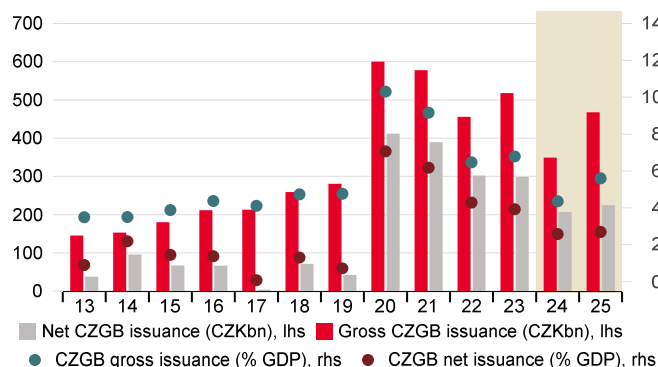
Source: Bloomberg, SG Cross Asset Research/Economics

Gross CZGB issuance likely to rise significantly next year; net only moderately **Lower debt repayments and the easing of the state budget deficit are contributing to significantly lower year-on-year issuance activity this year.** We expect the state budget deficit to head towards CZK270.0bn in 2024 after last year's CZK288.5bn. Combined with other financing needs, especially maturing bond repayments, we estimate gross CZGB issuance of CZK349.1bn this year. The supply of CZGBs would thus decrease by CZK168.9bn year-on-year in 2024, in our view. For 4Q24, the MinFin has kept the indicative volume offered in the primary auctions at CZK75.0bn, as was the case in the first three quarters. However, we expect issuance activity to ultimately be higher. This is because the MinFin regularly issues more than is usually indicated in the issuance calendars (about one-third more so far this year and 50% more in September and October). Overall, we expect bonds worth around CZK70bn in total should be issued in November and December. The supply of CZGBs could thus remain close to current levels in the rest of the year. The MinFin also plans to issue a EUR500m EUR-denominated bond under the local law in November for the first time in more than two years. We estimate that gross issuance of CZK-denominated bonds should rise to CZK467.3bn next year mainly due to higher repayments, assuming the state budget deficit eases to CZK240bn. In net terms, however, the issuance should increase only moderately.

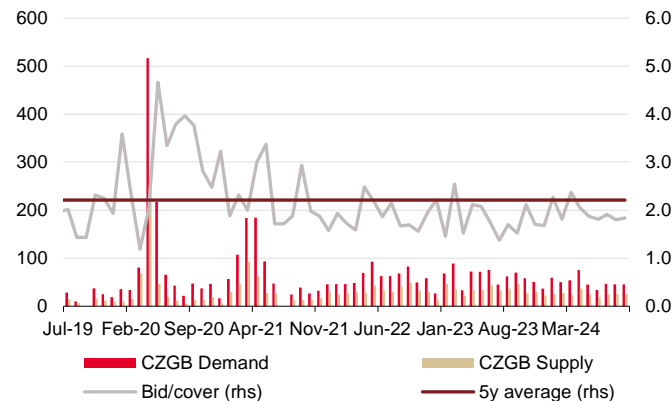
Funding programme and issuance activity (CZKbn)

| | 2024 | | 2025 | |
|---|--------------|--------------|--------------|--------------|
| | MinFin | KB | MinFin | KB |
| State budget deficit | 282.0 | 270.0 | 241.0 | 240.0 |
| Transfers and other operations of state financial assets | 4.4 | 4.4 | 1.9 | 1.9 |
| T-bonds denominated in local currency redemptions | 142.0 | 142.0 | 250.0 | 242.7 |
| T-bonds denominated in foreign currency redemptions | 25.2 | 25.2 | 0.0 | 0.0 |
| Redemptions and early redemptions on savings bonds | 7.5 | 7.5 | 11.2 | 11.2 |
| Money market instrument redemptions | 44.8 | 44.8 | 0.0 | 77.8 |
| Redemption of T-bills | | 9.3 | | 62.8 |
| Redemption of other money market instruments | | 35.5 | | 15.0 |
| Repayments on credits and loans | 0.6 | 0.6 | 0.6 | 0.6 |
| Total financing needs | 506.5 | 494.5 | 504.6 | 574.2 |
| Money market instruments | | 92.8 | | 50.0 |
| T-bills | | 62.8 | | 40.0 |
| Other money market instruments | | 30.0 | | 10.0 |
| Gross issuance of CZK T-bonds on domestic market | | 349.1 | | 467.3 |
| Gross issuance of EUR T-bonds on domestic market/eurobond | | 12.6 | | 25.2 |
| Gross issuance of government savings bonds | | 5.0 | | 1.7 |
| Received credits and loans | | 15.0 | | 15.0 |
| Financial asset and liquidity management | | 20.0 | | 15.0 |
| Total financing sources | | 494.5 | | 574.2 |
| Gross borrowing requirement | | 474.5 | | 559.2 |
| Net CZGB issuance | | 207.1 | | 224.6 |

Source: MinFin, Economic & Strategy Research, Komerční banka

CZGB issuance


Source: MinFin, Economic & Strategy Research, Komerční banka

CZGB primary market (CZKbn)


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

CZGB yield forecast (end of period)

| | 4Q24f | 1Q25f | 2Q25f | 3Q25f |
|--------------------|-------|-------|-------|-------|
| 2y CZGB yield (%) | 3.35 | 3.25 | 3.05 | 2.90 |
| 5y CZGB yield (%) | 3.55 | 3.50 | 3.40 | 3.30 |
| 10y CZGB yield (%) | 3.85 | 3.90 | 3.85 | 3.80 |
| 10y CZGB ASW (bp) | 25 | 20 | 20 | 15 |

Source: Economic & Strategy Research, Komerční banka

Continued fiscal consolidation should keep bond yields at bay

CZGB yields lagged behind IRS developments as ASW spreads widened. Given that we expect a slightly lower-than-planned government budget deficit this year, while the law anchors ongoing fiscal consolidation in subsequent years to enable the structural public finance deficit to reach 1% of GDP in 2028, we believe that spreads between market interest

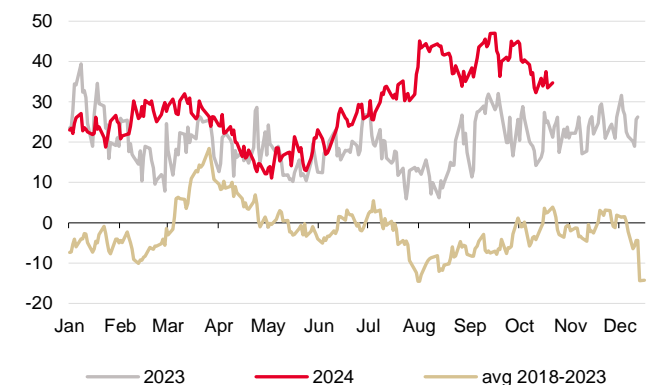
rates and bonds could tighten gradually. Capital outflows from the US into riskier assets against a backdrop of continued Fed rate cuts and a US economic growth slowdown could also support demand for CZGBs next year. Overall, as with market interest rates, shorter maturity yields should tend to fall slightly, while the longer end of the yield curve should roughly stabilise at slightly below current levels, in our view.

CZGB yield forecast (%)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

10y CZGB ASW (bp)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

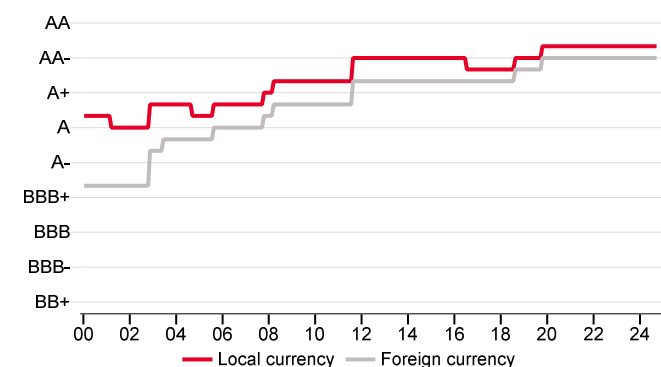
The Czech Republic's credit rating remains unchanged, with stable outlooks from all major agencies. The latest change came in February, when Fitch, like Moody's last November, upgraded the outlook from negative to stable. Last year's outlook downgrade was mainly related to the energy crisis and deteriorating public finances. Both Fitch and Moody's praised the Czech government's consolidation efforts and the reduced energy dependence on Russia in their latest assessments. Fitch also cited as positive the moderation in inflation and the lack of impact of the pandemic and energy shock on the long-term growth prospects of the domestic economy. The Czech Republic still has the best credit rating of any CEE country.

Sovereign rating overview

| | Local currency | Outlook | Foreign currency | Outlook |
|---------|----------------|---------|------------------|---------|
| S&P | AA | STABLE | AA- | STABLE |
| Moody's | Aa3 | STABLE | Aa3 | STABLE |
| Fitch | AA- | STABLE | AA- | STABLE |

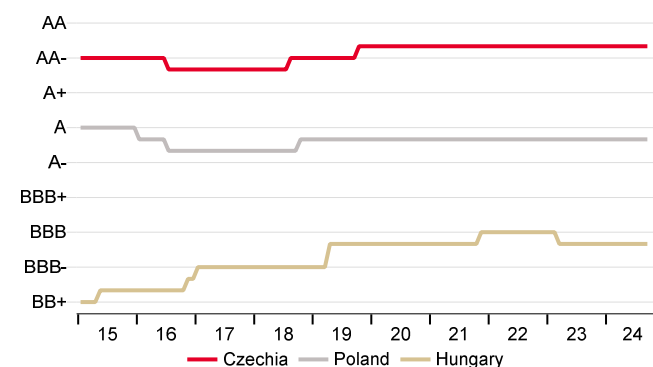
Source: Bloomberg, Economic & Strategy Research, Komerční banka

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



Source: Bloomberg, Economic & Strategy Research, Komerční banka

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



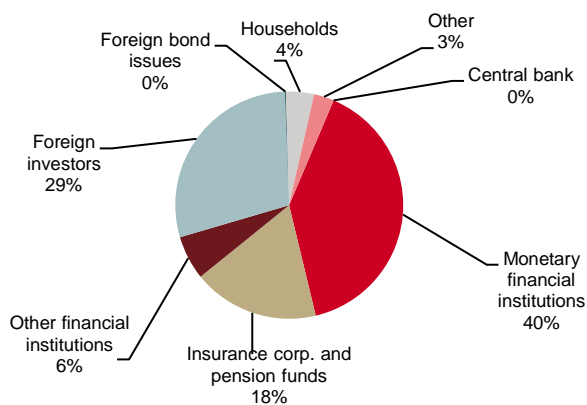
Source: Bloomberg, Economic & Strategy Research, Komerční banka

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 | | |
| 1.25 Feb-25 | 0.3 | 0.0 | 100% | 3.79 | 8 | -4 | 3.17 | -35 | -6 | -4 | -82 | <div><div></div><div></div><div></div></div> | -20 | 0.7 | 3 | -16.7 | 1 | -157.7 | 24 | | |
| 2.40 Sep-25 | 0.9 | 0.0 | 85% | 3.44 | 4 | -1 | 2.57 | -38 | 5 | -5 | -42 | <div><div></div><div></div><div></div></div> | -19 | -0.8 | 15 | 17.0 | 24 | -31.3 | 23 | | |
| 6.00 Feb-26 | 1.2 | 0.0 | 71% | 3.48 | 12 | 19 | 2.51 | -18 | 8 | 10 | -39 | <div><div></div><div></div><div></div></div> | -14 | 1.2 | 1 | 12.2 | 23 | -18.2 | 22 | | |
| 1.00 Jun-26 | 1.6 | 0.0 | 100% | 3.71 | 8 | 17 | 2.74 | 3 | 6 | 0 | -11 | <div><div></div><div></div><div></div></div> | 13 | 0.7 | 2 | -10.8 | 2 | -9.1 | 21 | | |
| 0.25 Feb-27 | 2.2 | 4.6 | 107% | 3.63 | 5 | 12 | 2.65 | 2 | 3 | -11 | -6 | <div><div></div><div></div><div></div></div> | 24 | -1.0 | 18 | -2.2 | 10 | -7.0 | 20 | | |
| 2.50 Aug-28 | 3.6 | 0.0 | 94% | 3.65 | 9 | 22 | 2.68 | 6 | 1 | -8 | 1 | <div><div></div><div></div><div></div></div> | 27 | -1.0 | 17 | 0.7 | 14 | -3.2 | 19 | | |
| 5.50 Dec-28 | 3.5 | 0.0 | 70% | 3.60 | 8 | 23 | 2.64 | 2 | 0 | -8 | -4 | <div><div></div><div></div><div></div></div> | 19 | -0.7 | 14 | 7.3 | 22 | -3.2 | 18 | | |
| 5.75 Mar-29 | 3.8 | 0.0 | 123% | 3.66 | 9 | 27 | 2.70 | 10 | 1 | -6 | 0 | <div><div></div><div></div><div></div></div> | 63 | -0.3 | 7 | 3.2 | 19 | -2.5 | 17 | | |
| 2.75 Jul-29 | 4.3 | 0.0 | 100% | 3.75 | 12 | 32 | 2.75 | 12 | 2 | -1 | 5 | <div><div></div><div></div><div></div></div> | 26 | -0.6 | 13 | -4.1 | 5 | -1.4 | 16 | | |
| 0.05 Nov-29 | 4.9 | 0.0 | 58% | 3.72 | 12 | 28 | 2.67 | 5 | -1 | -5 | 2 | <div><div></div><div></div><div></div></div> | 21 | -1.5 | 22 | 0.9 | 15 | -1.0 | 14 | | |
| 0.95 May-30 | 5.2 | 0.0 | 100% | 3.80 | 11 | 29 | 2.73 | 11 | 1 | -3 | 6 | <div><div></div><div></div><div></div></div> | 28 | -1.1 | 19 | -3.9 | 7 | -0.4 | 13 | | |
| 5.00 Sep-30 | 5.1 | 0.0 | 101% | 3.80 | 13 | 31 | 2.79 | 18 | 1 | -4 | 5 | <div><div></div><div></div><div></div></div> | 29 | 0.2 | 4 | -1.0 | 12 | -0.4 | 12 | | |
| 1.20 Mar-31 | 5.9 | 0.0 | 100% | 3.87 | 13 | 31 | 2.75 | 14 | 0 | -4 | 7 | <div><div></div><div></div><div></div></div> | 30 | -0.9 | 16 | -4.4 | 4 | 0.3 | 10 | | |
| 6.20 Jun-31 | 5.4 | 0.0 | 57% | 3.78 | 12 | 27 | 2.77 | 13 | 0 | -9 | 7 | <div><div></div><div></div><div></div></div> | 27 | -0.6 | 12 | 6.6 | 21 | -0.2 | 11 | | |
| 1.75 Jun-32 | 6.9 | 0.0 | 100% | 3.92 | 11 | 28 | 2.77 | 13 | -1 | -5 | 10 | <div><div></div><div></div><div></div></div> | 31 | -1.3 | 20 | 0.0 | 13 | 0.8 | 7 | | |
| 4.50 Nov-32 | 6.7 | 3.3 | 71% | 3.99 | 12 | 33 | 2.89 | 27 | -2 | -1 | 12 | <div><div></div><div></div><div></div></div> | 37 | 0.1 | 5 | -4.0 | 6 | 1.0 | 5 | | |
| 3.00 Mar-33 | 7.1 | 18.9 | 36% | 4.02 | 11 | 29 | 2.88 | 25 | 0 | -3 | 14 | <div><div></div><div></div><div></div></div> | 40 | -0.5 | 10 | -5.1 | 3 | 1.2 | 3 | | |
| 2.00 Oct-33 | 7.9 | 0.0 | 100% | 4.03 | 12 | 28 | 2.84 | 21 | 0 | -3 | 10 | <div><div></div><div></div><div></div></div> | 36 | -0.6 | 11 | -1.7 | 11 | 1.2 | 2 | | |
| 4.90 Apr-34 | 7.4 | 11.6 | 71% | 4.08 | 13 | 29 | 2.97 | 33 | -1 | -3 | 17 | <div><div></div><div></div><div></div></div> | 45 | 0.1 | 6 | -2.3 | 9 | 1.2 | 1 | | |
| 3.50 May-35 | 8.5 | 15.3 | 82% | 4.11 | 12 | 30 | 2.95 | 27 | -1 | -1 | 16 | <div><div></div><div></div><div></div></div> | 42 | -0.5 | 9 | 1.4 | 16 | 1.2 | 4 | | |
| 3.60 Jun-36 * | 9.2 | 19.2 | 18% | 4.16 | 11 | 29 | 3.00 | 30 | -1 | -2 | 25 | <div><div></div><div></div><div></div></div> | 46 | -1.6 | 23 | 1.6 | 17 | 1.0 | 6 | | |
| 4.20 Dec-36 | 9.0 | 0.0 | 100% | 4.14 | 11 | 28 | 3.01 | 29 | -1 | -1 | 14 | <div><div></div><div></div><div></div></div> | 46 | -0.4 | 8 | 5.5 | 20 | 0.6 | 8 | | |
| 1.95 Jul-37 | 10.7 | 3.0 | 49% | 4.19 | 7 | 24 | 2.97 | 22 | -2 | -3 | 17 | <div><div></div><div></div><div></div></div> | 46 | -1.5 | 21 | 3.1 | 18 | 0.5 | 9 | | |
| 1.50 Apr-40 | 12.9 | 0.0 | 55% | 4.22 | 7 | 23 | 2.99 | 19 | -2 | -3 | 18 | <div><div></div><div></div><div></div></div> | 45 | -1.9 | 24 | -3.4 | 8 | -1.2 | 15 | | |

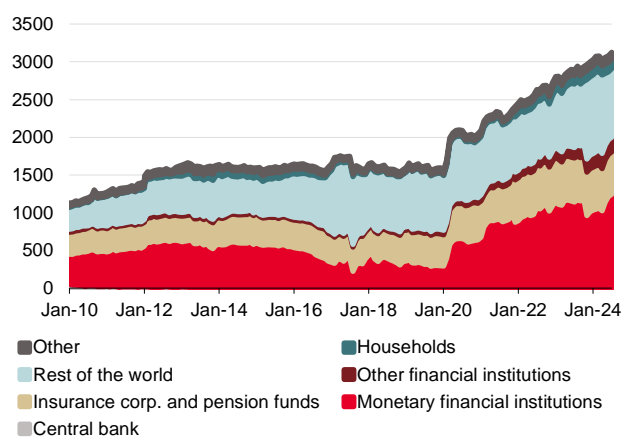
Source: Economic & Strategy Research, Komerční banka; Note: more details in CZGB Auction Alerts

Holdings of CZK government debt (August 2024)



Source: MinFin, Economic & Strategy Research, Komerční banka

Holdings of CZK government debt



Source: MinFin, Economic & Strategy Research, Komerční banka

Czech FX market



Jaromír Gec
(420) 222 008 598
jaromir_gec@kb.cz

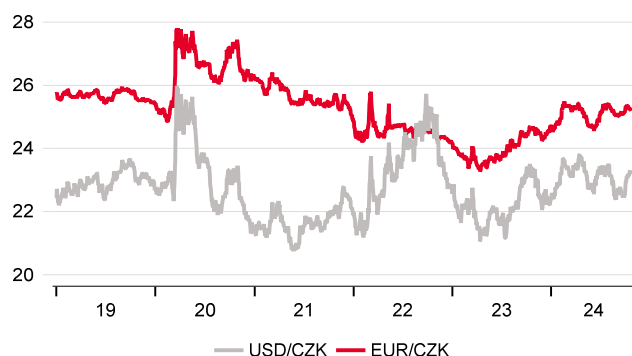
The koruna could do well next year

Increased market uncertainty and the slow recovery of the Czech economy will prevent any significant koruna appreciation this year. However, 2025 should see the Czech currency supported by both developments in the global currency markets and by a gradual improvement in growth in the Czech economy, which should visibly outperform the euro area. Emerging market currencies in general should benefit next year from a decline in risk aversion and a slowdown in US economic growth, as well as from Fed rate cuts, which we believe will be accompanied by significant capital outflows from the US assets. Overall, we expect the koruna to strengthen gradually towards EURCZK 25.0 and to trade just below this level by the end of 1Q25.

Koruna under pressure from global sentiment and weaker economic data

Developments in the global FX markets contributed to the depreciation of the koruna in September. Rising tensions in the Middle East diverted capital flows into safe havens (i.e. the dollar), while emerging market (EM) currencies weakened. In recent weeks, the greenback has also benefited from easing concerns about a US recession. However, we believe that the faster economic growth in the US and higher dollar interest rates that have attracted investors so far, will fade and that long dollar positions should be significantly reduced over the next year. This should be good news for EM currencies. We expect the US dollar to weaken to EURUSD 1.17 by the end of next year.

CZK exchange rates



Source: Bloomberg, Economic & Strategy Research, Komerční banka

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



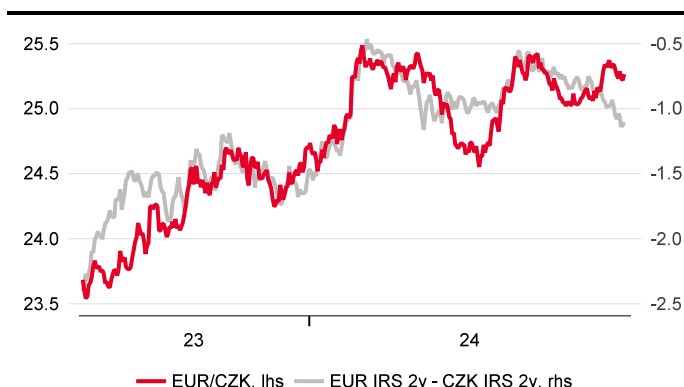
Source: Bloomberg, Economic & Strategy Research, Komerční banka

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.

We have revised our EURCZK forecast to slightly weaker levels over the entire horizon to factor in a slower recovery in the Czech economy and a temporary deterioration in global sentiment towards EM currencies.

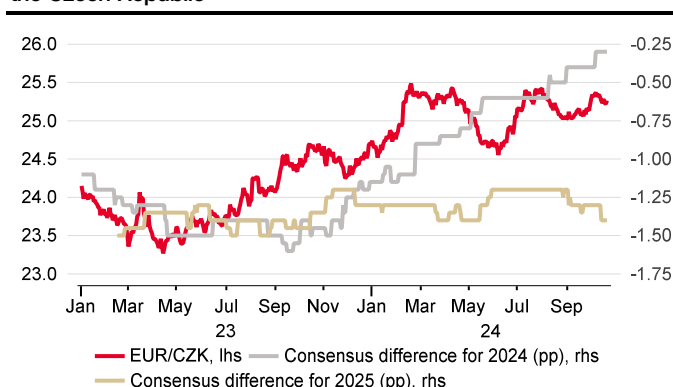
An interest rate differential would imply a stronger CZK vs EUR. The two-year interest rate differential between the koruna and the euro has widened from around 60bp to more than 1pp since the end of July, with koruna rates initially falling somewhat less in response to the deterioration in real economic data in the US and the euro area, and more recently correcting more sharply than its euro counterpart on the back of higher-than-expected domestic inflation and the CNB's still cautious policy. However, we believe that this additional support for the koruna is set to weaken. Over the forecast horizon, we expect the interest rate differential to narrow as a result of ECB monetary easing moving slower than the market expects next year and a higher terminal interest rate in the euro area. At the same time, the future CNB actions implied by market contracts are broadly in line with our forecast.

EUR/CZK and interest rate differential



Source: Bloomberg, Economic & Strategy Research, Komerční banka

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

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

The Czech economy will be slow to take off, but should outperform the euro area next year. Compared to the market consensus, we expect more moderate growth in both the euro area and the Czech Republic, but the Czech recovery should still be stronger than in the euro area. In our baseline scenario, we expect a growth differential of around 0.5pp. According to our model, the equilibrium exchange rate was slightly above EURCZK 25 in 3Q24. As the Czech economy resumes convergence, we expect the equilibrium exchange rate to appreciate gradually. 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 EUR138.1bn at the end of September this year. Relative to the size of the economy, FX reserves amount to more than 40% of annual nominal GDP and remain among the largest in the world.

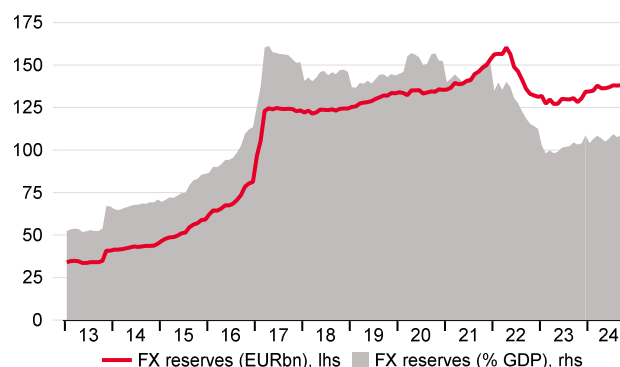
Overall, therefore, we expect the koruna to strengthen gradually. We believe the koruna could still be above EURCZK 25 at the end of this year due to heightened market risk aversion, and that it could remain close to this level in 1Q25 due to the slow take-off of the Czech economy. In our view, appreciation significantly below this level is more likely to occur in 2Q25-3Q25 due to a combination of improving global sentiment and renewed growth in the Czech economy.

Koruna exchange rate forecast (end of period)

| | 4Q24f | 1Q25f | 2Q25f | 3Q25f |
|---------|-------|-------|-------|-------|
| EUR/CZK | 25.15 | 24.95 | 24.80 | 24.70 |
| USD/CZK | 22.45 | 21.90 | 21.60 | 21.30 |
| EUR/USD | 1.12 | 1.14 | 1.15 | 1.16 |

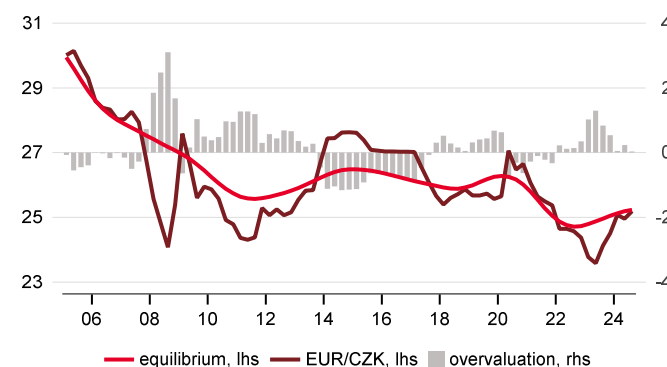
Source: Economic & Strategy Research, Komerční banka, SG Cross Asset Research

CNB's FX reserves



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

Equilibrium EUR/CZK exchange rate

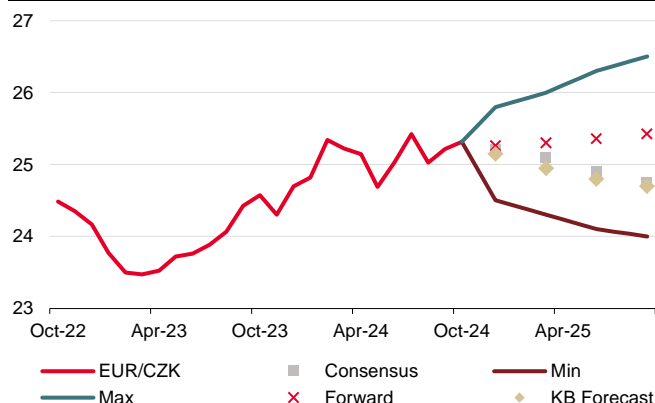


Source: Macrobond, Economic & Strategy Research, Komerční banka
Note: the estimated equilibrium exchange rate is based on a model of the economy's internal (output gap) and external (net export-to-GDP gap) equilibrium.

Exchange rate risks are on both sides

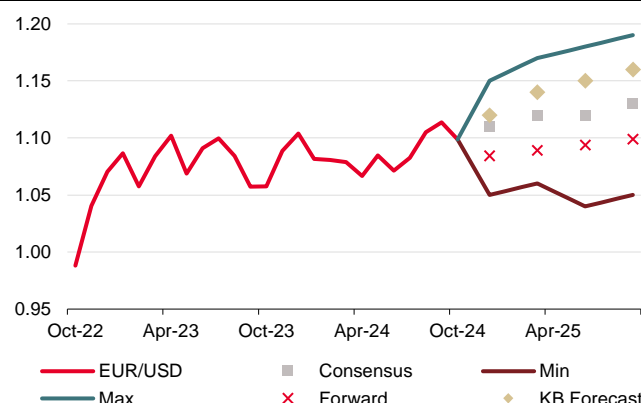
The risks to the interest rate differential are skewed towards a stronger koruna compared to our baseline scenario. For our outlook for ECB monetary policy rates, where we expect a higher terminal rate than the market, we perceive the risks to be tilted towards more monetary easing (as the market suggests). Meanwhile, for CZK market interest rates, we see an upside risk in the short term, given the possibility that the CNB could put the cutting cycle on pause at one of its next meetings, following an expected rise in inflation to close to the upper limit of the tolerance band. **By contrast, there is a risk of a stronger US dollar compared to our forecast**, which could put pressure on emerging market currencies. The speed of the domestic economic recovery amid the continued lacklustre performance of the German economy and the geopolitical situation remain general uncertainties.

Expected EUR/CZK path, Bloomberg consensus (as of 22 October 2024)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

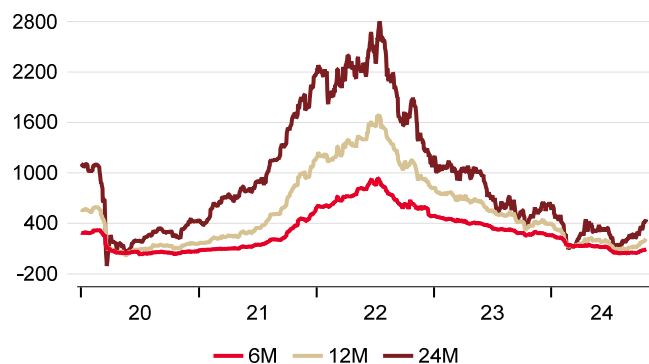
Expected EUR/USD path, Bloomberg consensus (as of 22 October 2024)



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

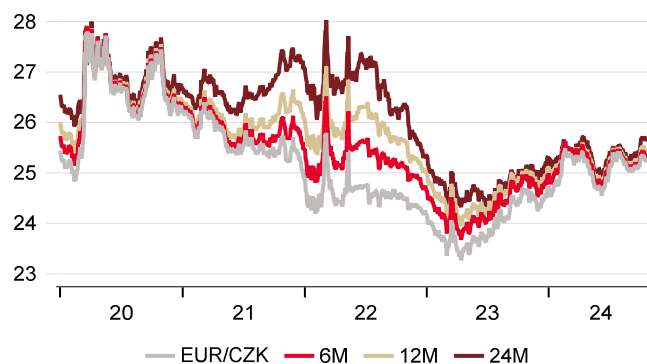
The weakening koruna has improved hedging conditions for exporters. As mentioned above, we do not expect the CZK spot exchange rate to depreciate further, however we do expect the koruna to strengthen gradually against the euro. From the exporters' point of view, we therefore see the current forward exchange rate levels as relatively attractive for potential hedging against exchange rate risk, also in view of the expected narrowing of the interest rate differential.

Forward points



Source: Bloomberg, Economic & Strategy Research, Komerční banka

Forward vs spot exchange rate: EUR/CZK



Source: Bloomberg, Economic & Strategy Research, Komerční banka

Banking sector



Kevin Tran Nguyen
(420) 222 008 569
kevin_tran@kb.cz

Credit flows to inject more strength into the economy next year

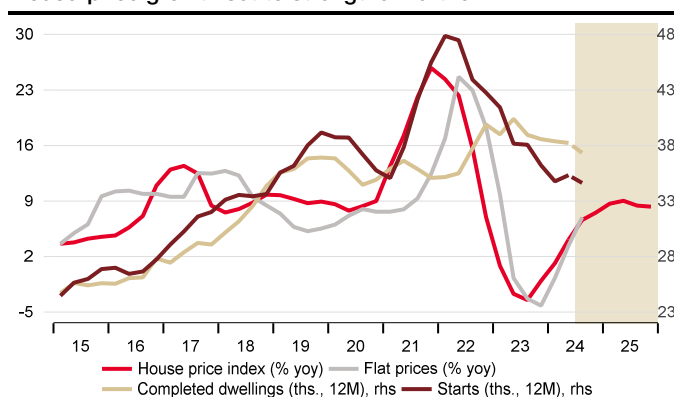
The disparity in the degree of credit impulse recovery between households and corporates remains significant. While household credit demand is rising appreciably – along with the real estate market – the rebound in corporate credit has been subdued. A strengthening in firms' demand in this year and into 2025 is likely to be supported by monetary policy easing and more robust economic growth. Mortgage lending is set to rise further, as we continue to see scope for further reduction, albeit limited, in mortgage rates. This should be reflected in strong house-price growth, driven by both cyclical and structural forces. The high savings rate and large corporate liquidity buffers are keeping the volume of deposits high. However, as interest rates fall, deposit growth should gradually slow. Default rates have held at near-historical lows, even in the face of a weak economy and high interest rates. Nonetheless, credit risk is high in some segments, even if the impact on bank loan portfolios is limited.

We expect lower interest rates and the release of pent-up demand to help the recovery in mortgage and real estate markets. The acceleration in house-price growth poses a risk to inflation.

Real estate and mortgage markets entering a fairly strong expansion phase

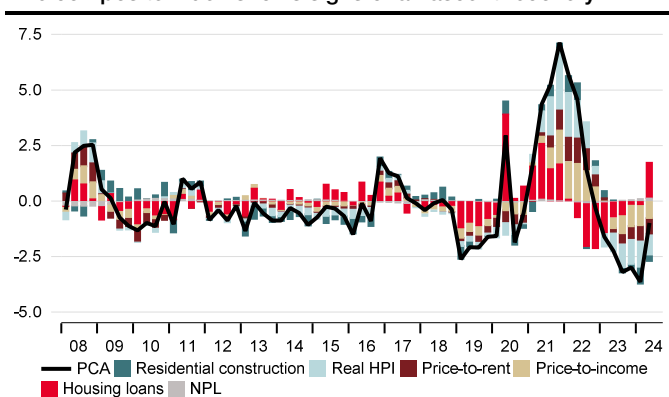
The real estate market has quickly shrugged off the shallow downturn and residential property prices are already rising rapidly this year. The house price index (HPI) showed an increase of 4.1% yoy in 2Q24, with qoq growth almost doubling vs 1Q24 to 2.1% qoq. House prices have thus already returned to their mid-2022 peak, and we expect them to continue to rise at a similar pace to Q2. Asking prices for flats were up by almost 7% yoy in 3Q, with qoq growth accelerating to 2.7% from 2.3% qoq in 2Q. We expect lower mortgage rates, renewed consumer confidence and the release of pent-up demand, boosted by excess savings, to continue to drive house prices up. In addition, the structural and, more recently, deepening imbalance between strong demand for owner-occupied housing and limited construction on the supply side is also likely to play a part. We expect house prices to rise by 4.9% on average in 2024 and a stronger 8.6% in 2025. This is likely to make housing less affordable and pose a threat to sustaining low inflation in 2025. We discuss the housing market in greater depth, including its impact on inflation, in Box 3.

House-price growth set to strengthen further



Source: CZSO, Macrobond. Economic & Strategy Research, Komerční banka
Note: data on dwelling completions and starts (as of August 2024) is extrapolated and only indicative for 3Q24. 12M denotes the 12-month trailing sum.

The composite index shows signs of a nascent recovery

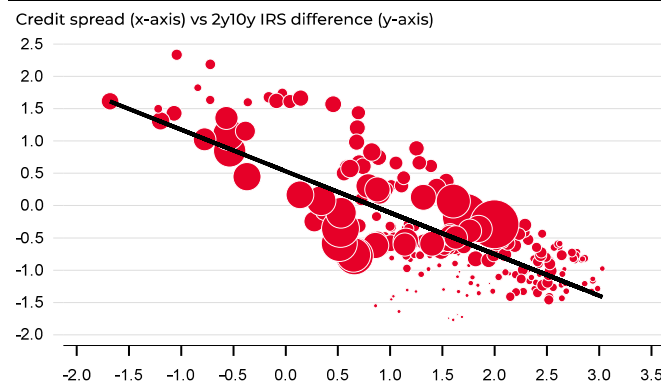


Source: Economic & Strategy Research, Komerční banka
Note: our calculations; PCA = principal component analysis vector. The composite housing index is the result of Principal Component Analysis (PCA). Construed as per Čár, M., & Vrbovský, R. (2019, March). *Composite index to assess housing price development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

Mortgage-lending momentum has strengthened, and this is likely to hold in 2025. New housing loan volumes had risen 86% ytd as of August. The monthly spike in volume was probably attributable to frontloading, as the amendment to the Consumer Credit Act, introducing penalties for early mortgage prepayments, took effect in September. The recovery

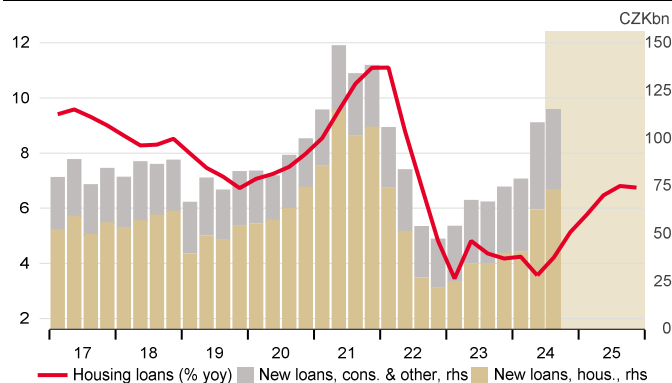
in mortgage lending has been strong, even though the decline in mortgage rates has been quite limited. In comparison, IRS have fallen further in 3Q. This has widened mortgage credit spreads further, although they remain within the historical range. With IRS hovering near the current lower levels, we still see room for mortgage rates to fall from current levels which are a touch below 5%. However, given our expectations of a slow re-steepening of the curve, the room is limited.

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 loans and the weighted average of corresponding market IRS (only an approximation).

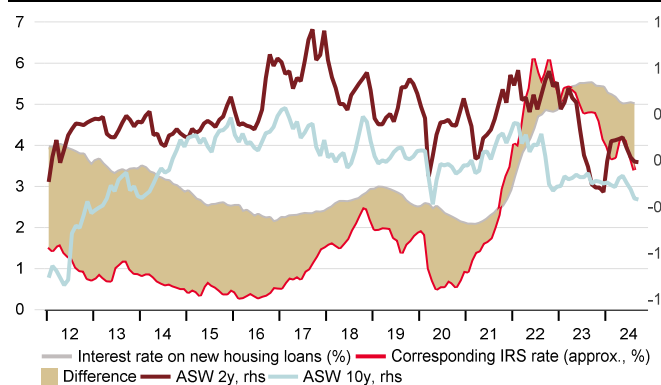
Housing loans stock growth does not fully reflect new loans



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

Further reduction in mortgage rates should improve credit access. Owing to mortgage refinancing concerns, longer fixed-terms rates are likely to remain high and the shift to shorter fixings is more likely to be structural in nature than temporary. This is likely to help improve the effectiveness of monetary policy, or rather speed up the transmission. Due to the mismatch between the onboarding and the drawdown of new loans, new loans in 3Q have yet to be fully reflected in the loan stock. This is also partly why we have lowered our mortgage market growth estimate for this year from 5.5% to 5.1%.⁶ We expect an acceleration to 6.8% in 2025, when deferred drawdowns are likely to have a positive impact.

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



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

Consumer lending has remained strong even in real terms



Source: CNB, Macrobond, Economic & Strategy Research, Komerční banka
 Note: Pure new loans are loans or extensions to loans which enter the economy for the first time.

⁶ Unless otherwise stated, values refer to the end of period yoy growth.

Higher volumes of consumer lending are likely connected to the rebound in mortgage lending. We expect volumes to stay equally strong in 2025.

Contrast between strong credit demand and weak household consumption

Consumer lending remained strong in 3Q and is likely to continue along with the increasing mortgage and real estate market activity. The contrast between the strong rebound in household credit and the only gradual recovery in consumer demand remains. In real terms, the volume of consumer credit is already close to 2019 levels. However, tight monetary policy is slowly feeding through to the growth of non-performing loans. The default rate on consumer loans has risen by 0.2pp since the beginning of the year to 4.2%, which is still low historically. Household credit impulse remained strongly positive in 3Q, but this has failed to be reflected in consumption. We expect these signals to converge over time, with growth in household consumption strengthening mostly. We see growth in consumer credit reaching 9.6% and remaining at a still-high 8.9% in 2025. The household credit-to-GDP ratio is set to increase to 28.1% of GDP in 2025, although this is still below the end-2021 level at 30% of GDP.

Bank loans and deposits (% , yoy)

| | Q1 24 | Q2 24 | Q3 24 | Q4 24 | Q1 25 | Q2 25 | Q3 25 | Q4 25 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| Bank loans | | | | | | | | | | | | | | |
| Total | 7.5 | 6.0 | 5.6 | 5.0 | 5.0 | 5.6 | 6.3 | 6.2 | 5.9 | 6.1 | 5.8 | 6.2 | 6.0 | 5.9 |
| Households - real estate loans | 4.2 | 3.6 | 4.2 | 5.1 | 5.8 | 6.5 | 6.8 | 6.8 | 4.2 | 4.3 | 6.4 | 5.9 | 5.3 | 5.6 |
| Households - consumer loans | 8.5 | 7.9 | 8.7 | 9.6 | 8.7 | 8.8 | 8.7 | 8.9 | 8.7 | 8.7 | 8.8 | 7.6 | 6.2 | 6.3 |
| Corporate loans | 10.7 | 7.2 | 6.8 | 4.4 | 3.7 | 4.3 | 5.4 | 5.5 | 6.0 | 7.3 | 4.7 | 6.2 | 6.2 | 5.9 |
| Deposits | | | | | | | | | | | | | | |
| Total | 8.6 | 6.5 | 5.9 | 5.7 | 6.9 | 8.0 | 6.6 | 5.3 | 9.4 | 6.7 | 6.7 | 4.5 | 4.8 | 4.8 |
| Households | 8.6 | 8.6 | 8.1 | 7.7 | 7.6 | 7.2 | 6.8 | 6.0 | 6.6 | 8.2 | 6.9 | 4.2 | 4.5 | 4.5 |
| Non-financial corporations | 5.4 | 1.3 | 7.5 | 6.6 | 4.3 | 5.4 | 5.9 | 5.2 | 8.1 | 5.2 | 5.2 | 4.3 | 4.0 | 4.8 |
| Others | 11.2 | 6.9 | 1.6 | 1.2 | 7.6 | 11.0 | 6.8 | 4.0 | 16.8 | 5.2 | 7.3 | 5.3 | 5.8 | 5.4 |
| Ratios | | | | | | | | | | | | | | |
| Loans/GDP | 57.4 | 57.1 | 57.3 | 57.0 | 57.3 | 57.5 | 58.3 | 58.2 | 57.0 | 57.2 | 57.8 | 58.9 | 59.8 | 60.5 |
| Deposits/GDP | 93.3 | 93.2 | 92.9 | 88.3 | 94.9 | 96.0 | 94.8 | 89.3 | 91.0 | 91.9 | 93.7 | 93.9 | 94.2 | 94.5 |
| Loans/deposits | 61.5 | 61.3 | 61.7 | 64.6 | 60.4 | 59.9 | 61.5 | 65.1 | 62.6 | 62.3 | 61.8 | 62.8 | 63.5 | 64.2 |
| Interest rates | | | | | | | | | | | | | | |
| Real estate loans | 5.2 | 5.0 | 4.9 | 4.9 | 4.8 | 4.6 | 4.5 | 4.5 | 5.4 | 5.0 | 4.6 | 4.6 | 4.6 | 4.7 |
| Consumer loans | 8.8 | 8.9 | 8.7 | 8.5 | 8.3 | 8.0 | 7.7 | 7.7 | 9.4 | 8.7 | 7.9 | 7.7 | 7.9 | 8.3 |
| Corporate loans | 7.1 | 6.6 | 6.1 | 5.9 | 5.4 | 4.9 | 4.9 | 4.9 | 8.6 | 6.4 | 5.0 | 4.8 | 4.8 | 4.8 |
| Share of NPL | | | | | | | | | | | | | | |
| Real estate loans | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.9 | 1.1 | 1.4 |
| Consumer loans | 4.1 | 4.2 | 4.2 | 4.6 | 4.9 | 5.2 | 5.4 | 5.6 | 3.9 | 4.3 | 5.3 | 6.1 | 6.6 | 7.3 |
| Corporate loans | 2.6 | 2.5 | 2.6 | 2.7 | 2.9 | 3.2 | 3.3 | 3.3 | 2.9 | 2.6 | 3.2 | 3.3 | 3.7 | 4.5 |

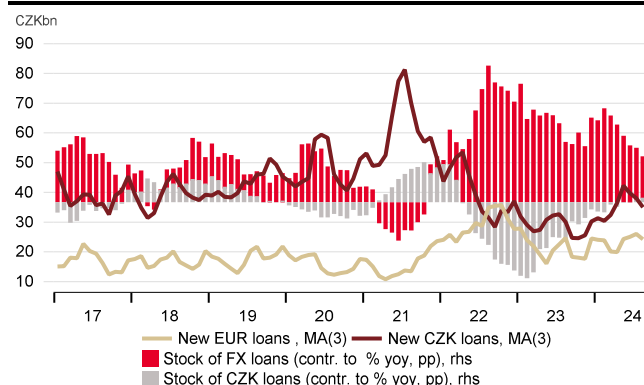
Source: CNB, CZSO, Macrobond, Economic & Strategy Research, Komerční banka
Note: quarterly values are end of period, full-year values are averages.

Corporate-credit demand recovery remains sluggish. More stable economic growth and lower interest rates represent a boost.

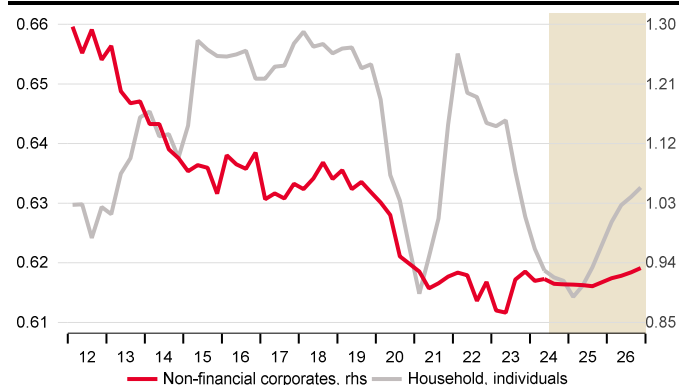
Non-financial corporate credit likely to show a more tangible rise in 2025

Despite increasing slightly, lending by non-financial corporates (NFCs) has remained constrained by tight monetary policy and economic uncertainty. This also reflects weakness in industry, an important source of credit demand. The volume of koruna and euro loans was up 27% and 9% ytd in August. Still, demand for koruna loans remains deeply below average, whereas euro-denominated volume, although below 2022 levels, remains elevated. Further easing of domestic and external monetary policy and a more robust improvement in business confidence are likely to provide a boost. The ongoing recovery in the real estate sector should also help. However, this is likely to be dampened by the growing share of financing flowing through domestic real estate investment funds. In general, non-bank funding is likely to reduce lending. According to Bloomberg data, non-bank corporate bond issuance as of October surpassed last year's entire issuance volume by 27%. Notably, although it is mostly large corporates that have access to this, by the same token, their financial health remains intact. But it is the small and medium enterprises – mostly affected by tight monetary conditions – that would drive the recovery in lending next year.

Sluggish recovery in NFC credit demand

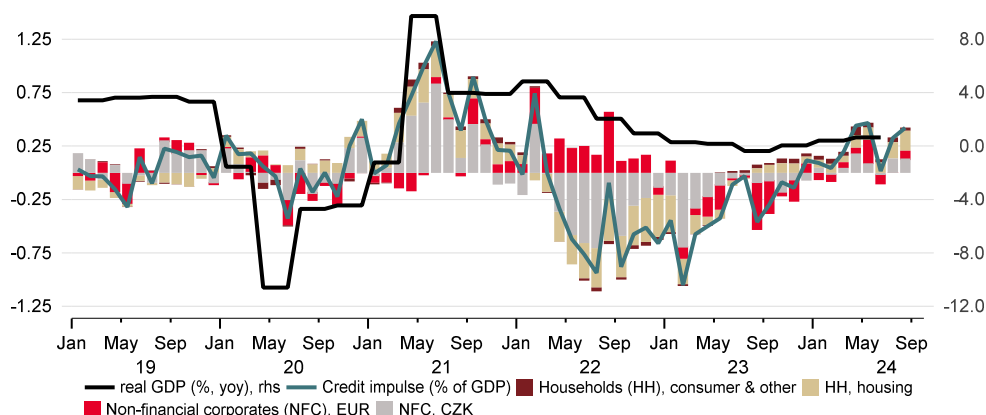


Loan-to-deposit ratios



Financial conditions remain favourable, with IRS at low levels, where they could stabilise. This likely supports the aforementioned debt issuance. Euro-denominated loans still present a relative advantage. However, in terms of the monetary policy rates of the CNB and the ECB, the spread looks set to decrease from the current 100bp to 50bp by mid-2025. Moreover, the 2y IRS EUR-CZK differential remains significantly open in favour of the koruna, which speaks to looser financial conditions on the euro market.

Credit impulse is providing a small uplift to the economy



Source: CNB, 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 the currency denomination for firms. As opposed to monthly credit indicators (as of August 2024), GDP (as of 2Q24) is a quarterly indicator.

The appeal of deposits is set to gradually decline

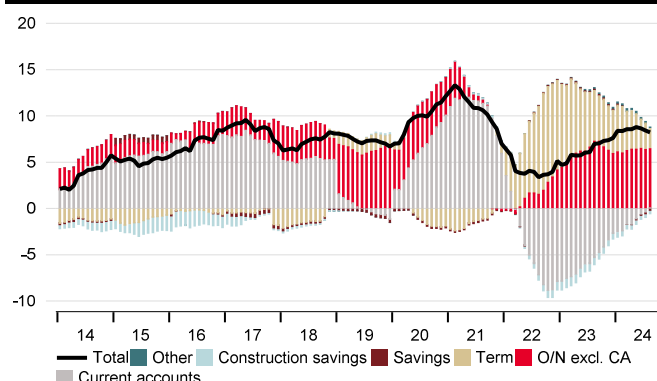
Deposit volumes remain high and the large overhang of deposits over loans persists.

Although interest rates have already fallen considerably, term deposit inflows remain strong. On the household side, this reflects an ongoing high savings rate and on the corporates' side, liquidity hoarding, which limits financing needs somewhat. The breakdown of deposits does not suggest the advent of a sharp rebound in household consumption, as the growth remains concentrated in savings and term deposits. Further decline in interest rates should reduce the appeal of deposits and step up deposit outflows to non-banking solutions. We expect deposit growth to reach 5.7% this year and slow slightly to 5.3% in 2025. The increase in the MRR rate from 2% to 4% is likely to have negligible impact on monetary tightening, especially through lending rates, given the banking sector's high excess liquidity. Given the excess

The high deposit overhang over loans is set to slowly reduce on the back of lower interest rates and the rebound in credit demand.

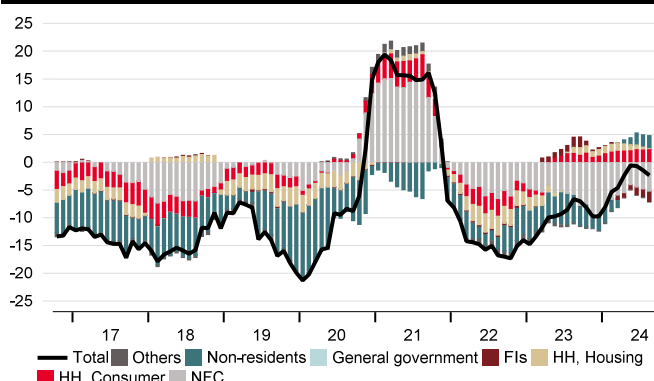
liquidity and the banks' likely efforts to mitigate the impact on net interest income, the increase in the MRR may result in marginally lower deposit rates.

Growth in household deposits reflects a high savings rate



Source: CNB, Macrobond, Economic & Strategy Research, Komerční banka
Note: O/N excl. CA also includes non-term savings deposits.

Increase in NPL volumes is limited to few segments



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

Despite high interest rates and a weak economy, default rates remain low. However, credit risks have increased.

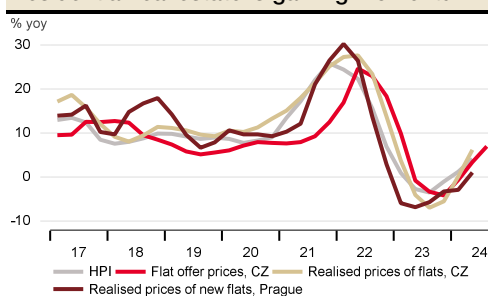
Credit risks on the rise in view of tight monetary policy and weak growth

Default rates are hovering at near historical lows and reflect robust private-sector balance sheets. However, minor cracks are starting to appear. The share of non-performing loans (NPLs) is rising in consumer finance, where interest rates remain elevated. Still, the situation in the much larger mortgage segment remains stable. Moreover, amid the strong rebound, the applicants' risk profile has increased only moderately. In the business sector, the volume of NPLs has increased yoy only for non-residents, albeit only slightly. Nonetheless, given the tight monetary policy and the weak domestic economy, the share of Stage 2 loans (increased credit risk compared to the origination period) is probably on the rise, especially for medium and small enterprises. This was already underway earlier this year, according to CNB data. Still, despite tight monetary policy, overall, default rates remain low.

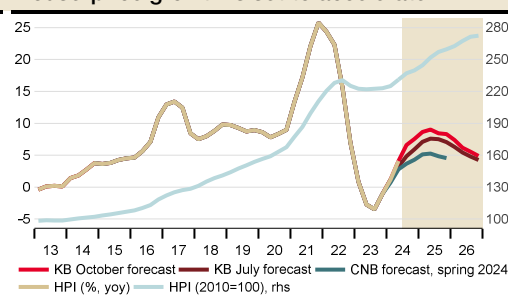
Box 3: Housing could be the inflationary bogeyman in 2025

Real estate has traditionally been one of the most interest rate-sensitive sectors of the economy. With monetary policy easing, albeit still quite restrictive, the real estate market has quickly shrugged off last year's shallow downturn and is recovering at a fairly rapid pace, at least in terms of prices. The renewed strong house-price growth poses the threat of further deterioration in housing affordability for households, but it is also likely to ruffle central bankers' feathers as it represents an upside risk to the inflation outlook. In this *Box*, we assess the potential impact of house-price growth on inflation, based on our expectations for the housing market.

The recovery has been strong despite still-tight monetary policy. This rebound likely reflects the release of pent-up demand, aided by excess household savings. It is also supported by improved credit availability thanks to the CNB's abolition of the DSTI and DTI mortgage limits and the decline in interest rates, although this has so far been rather limited despite the significant fall in market IRS (see *Banking sector*). House prices in 1H24 exceeded both our and the CNB's expectations. In our July forecast, we had expected a 5.9% yoy increase (as per the House Price Index; HPI) by end-2024, while the CNB's spring forecast had assumed 4.3%. However, the HPI already grew at 4.1% yoy in 2Q, with qoq growth vs 1Q nearly doubling to 2.1%. In light of the sharp recovery in the housing and mortgage markets, the accelerating house-price growth poses a threat to sustaining low inflation.

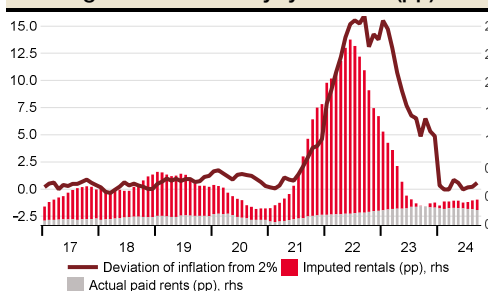
Residential real estate is gaining momentum


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

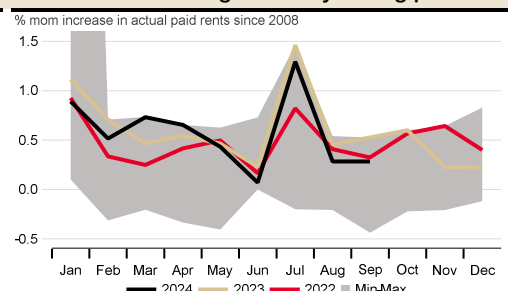
House-price growth is set to accelerate


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

Housing costs have so far contributed to taming inflation through imputed rents (owner occupied housing), which represent 10.3% of the CPI and with actual paid rents make up more than a quarter of core CPI.⁷ The housing contribution to yoy inflation has remained below 0.5pp since 2H23, consisting primarily of slowly receding rent growth, given their usual lagged response to the general price-level development. However, this could change soon, given the house-price growth. Both August and September saw a higher mom rise in imputed rents compared to previous months, printing at 0.6% mom, which most likely reflects the higher housing-market activity.

Housing contribution to yoy inflation (pp)


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

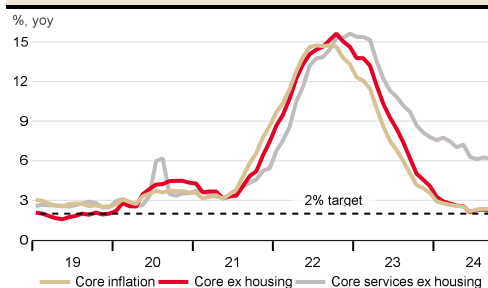
Rents still increasing at a fairly strong pace


Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka
Note: For clarity, the chart does not display the January values for 2008 (9.9%), 2009 (12.6%), 2010 (6.5%) and 2012 (2.4%).

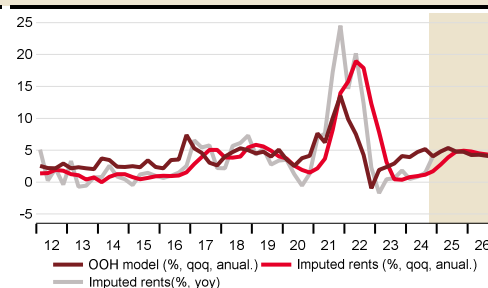
Core inflation ex housing was 2.2% yoy in September, but services inflation remained elevated and represents a key argument for the CNB board to remain cautious on interest rate cuts. Housing costs have so far dampened services inflation. Core services ex housing rose by about 6% yoy in September. We expect it to gradually moderate in view of weak consumer demand, which would offset the increasing housing contribution. Otherwise, the latter would likely drive core inflation significantly above the 2% target in 2025. The combination of a slow fading in rents and an acceleration in imputed rents could contribute more than 1pp to core inflation (see table below). We are leaning towards the lower bound of the estimated impact of housing on core inflation. We expect the contribution of housing to core inflation to be a touch below 1pp and estimate rents in our base case to grow by about 3-4% yoy.

⁷ Housing costs include both actual paid rents and imputed rents. Together, they account for 13.7% of the CPI. In addition to residential property prices, imputed rents also include the cost of building work, building materials, payments for real estate brokerage and other items related to the costs of owner-occupied housing.

Services inflation still at a high level



Imputed rents growth is likely to accelerate



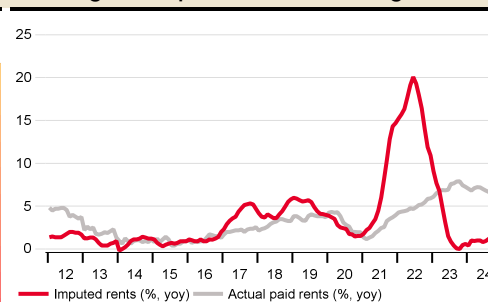
Based on our estimate for house-price growth to average 8.6% in 2025, imputed rents could indeed hit the upper-bound 4% mark. However, there remains considerable uncertainty regarding the remaining components of imputed rents and regarding the timing of the feed through of house prices to it, as in the past it has tended to reflect high house-price growth with a greater time lag and spread. Therefore, the housing market still represents a material risk tilted towards higher inflation in 2025.

Core inflation sensitivity analysis

| % yoy, pp | Imputed rents | | | | | | | | | | | |
|-----------|---------------|------|------|------|------|------|------|------|------|------|--|--|
| | 0.5 | 1.5 | 2.0 | 2.5 | 3.5 | 4.0 | 4.5 | 5.0 | 5.5 | 6.0 | | |
| 1.0 | 0.16 | 0.36 | 0.46 | 0.56 | 0.76 | 0.86 | 0.96 | 1.06 | 1.16 | 1.26 | | |
| 2.0 | 0.23 | 0.43 | 0.53 | 0.63 | 0.83 | 0.93 | 1.03 | 1.13 | 1.23 | 1.33 | | |
| 3.0 | 0.29 | 0.49 | 0.59 | 0.69 | 0.89 | 0.99 | 1.09 | 1.19 | 1.29 | 1.39 | | |
| 4.0 | 0.36 | 0.56 | 0.66 | 0.76 | 0.96 | 1.06 | 1.16 | 1.26 | 1.36 | 1.46 | | |
| 5.0 | 0.42 | 0.62 | 0.72 | 0.82 | 1.02 | 1.12 | 1.22 | 1.32 | 1.42 | 1.52 | | |
| 6.0 | 0.49 | 0.69 | 0.79 | 0.89 | 1.09 | 1.19 | 1.29 | 1.39 | 1.49 | 1.59 | | |
| 7.0 | 0.55 | 0.75 | 0.85 | 0.95 | 1.15 | 1.25 | 1.35 | 1.45 | 1.55 | 1.65 | | |
| 8.0 | 0.61 | 0.81 | 0.91 | 1.01 | 1.21 | 1.31 | 1.41 | 1.51 | 1.61 | 1.71 | | |
| 9.0 | 0.68 | 0.88 | 0.98 | 1.08 | 1.28 | 1.38 | 1.48 | 1.58 | 1.68 | 1.78 | | |
| 10.0 | 0.74 | 0.94 | 1.04 | 1.14 | 1.34 | 1.44 | 1.54 | 1.64 | 1.74 | 1.84 | | |

Source: Economic & Strategy Research, Komerční banka
Note: Own calculations. Values in the table represent a potential impact of rents (y-axis) and imputed rents (x-axis) on core inflation in pp. Scenarios assume unchanged weights.

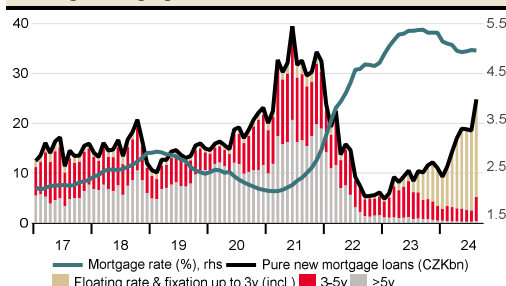
Differing development within housing costs



We expect the housing market to strengthen further and price growth to accelerate.

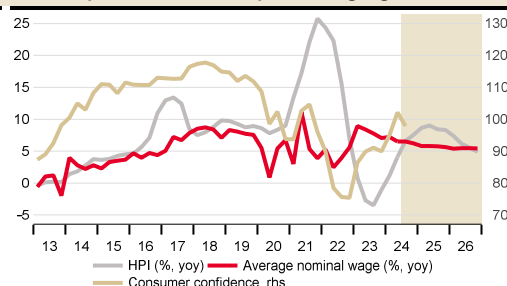
The strong return of households to the housing market reflects to a large extent pent-up demand, which is now being released on the back of lower interest rates and greater confidence in further appreciation of real estate assets. With mortgage rates high, the upper-income percentiles are more likely to be able to access financing. Moreover, they can also draw on excess savings, and it was mostly them that has accumulated the savings. To some extent, this explains the contrast between the sharp recovery in housing and credit demand and the only gradual rebound in household consumption, given wealthier households' lower marginal propensity to consume. Further reductions in mortgage rates should help to broaden credit access and help stimulate housing demand.

Strong mortgage rebound and lower fixed rates



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

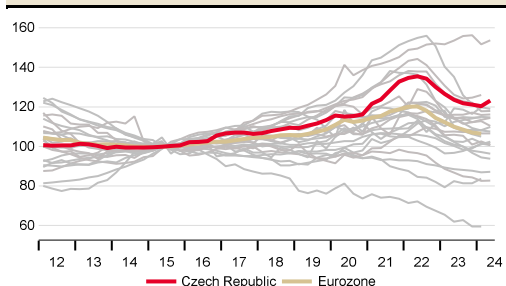
House prices set to outpace wage growth



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

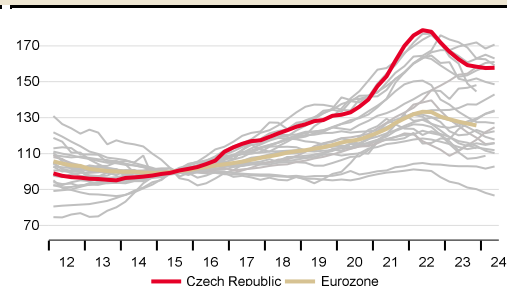
However, the deterioration in housing affordability puts a slight dampener on this. Although affordability has improved slightly, it has only partially offset the previous marked deterioration. It remains one of the worst in the EU. Moreover, the renewed pace of house-price growth is already contributing to it worsening again. This low housing affordability is likely to boost demand for rentals, exerting upward pressure on rents. This may be compounded by the increased appetite for residential real estate assets, which is likely to add to price pressures due to subdued rental yields given high property purchasing prices and high interest rates.

Price-to-income (2015=100)



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

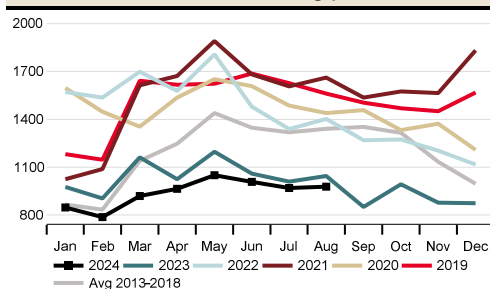
Price-to-rent (2015=100)



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

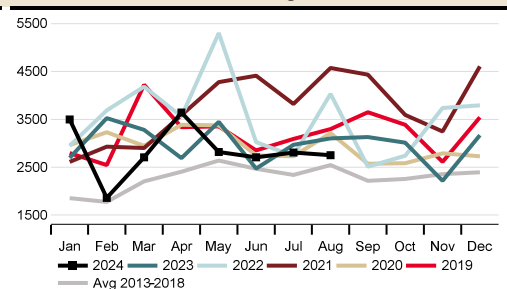
Beyond the abovementioned demand factors, on the supply side, limited construction in previous years is likely to play a part. The deepening imbalance between housing supply and demand may help sustain elevated price pressure. At present, there is little sign of a rapid recovery in residential construction. Notably, the number of completed flats remains solid, although these do not necessarily increase the housing supply to the same magnitude given high levels of pre-sales on these flats and high demand driven by real estate investments.

Number of residential building permits



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

Number of started dwellings



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

While housing is not currently driving inflation out of the tolerance band or away from the vicinity of 2% this year, it looks set to gradually exert upward pressure. Moreover, we even see a risk of a stronger acceleration in housing-costs growth, resulting in a more pronounced impact on inflation compared to our forecast. The dangers are a slower fading of growth in rents, a faster acceleration in imputed rents, or a combination of the two. We expect HPI growth to accelerate to 8.6% on average in 2025. This is likely to be cyclical in nature in view of falling interest rates, renewed confidence, realisation of pent-up demand and a high savings rate. However, structural factors remain in play, such as the mismatch between weak housing supply and fundamentally strong demand for owner-occupied housing, or high demand for residential property investment assets. Housing prices are thus likely to drive core inflation above the 2% target in 2025, and be a cause of concern for central bankers. Nonetheless, we are unsure whether this will move the dial when it comes to the setting of interest rates, in view of the weak Czech economy and subdued price pressures elsewhere. However, there is clearly a risk of restrictive monetary policy continuing in reaction to this. Macroprudential measures to tighten financial conditions and tame cyclical expansion may come into view in the light of the strong housing-market developments.

Kevin Tran Nguyen
(420) 222 008 569
kevin_tran@kb.cz

Key economic indicators

Macroeconomic indicators – long-term outlook

| | | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|-----------------|------------|------|------|------|------|------|------|------|------|
| GDP | real, % | 4.0 | 2.9 | 0.0 | 0.8 | 1.5 | 2.2 | 2.2 | 2.3 |
| Inflation | average, % | 3.8 | 15.1 | 10.7 | 2.5 | 1.8 | 2.0 | 2.2 | 2.0 |
| Current account | % of GDP | -2.1 | -4.7 | 0.3 | 1.4 | 0.3 | 0.3 | 0.6 | 0.8 |
| 3M PRIBOR | average, % | 1.1 | 6.3 | 7.1 | 5.1 | 3.4 | 3.3 | 3.3 | 3.3 |
| EUR/CZK | average | 25.6 | 24.6 | 24.0 | 25.1 | 24.8 | 24.4 | 24.2 | 23.9 |
| USD/CZK | average | 21.7 | 23.4 | 22.2 | 22.9 | 21.5 | 20.6 | 20.1 | 19.6 |

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

Note: KB forecasts are in red

FX & interest-rate outlook

| | | 22-10-2024 | Dec-24 | Mar-25 | Jun-25 | Sep-25 | Dec-25 |
|-----------|------------------|------------|--------|--------|--------|--------|--------|
| EUR/CZK | end of period | 25.2 | 25.15 | 24.95 | 24.80 | 24.70 | 24.55 |
| USD/EUR | end of period | 1.08 | 1.12 | 1.14 | 1.15 | 1.16 | 1.17 |
| USD/CZK | end of period | 23.3 | 22.45 | 21.90 | 21.60 | 21.30 | 21.00 |
| 3M PRIBOR | end of period, % | 4.11 | 3.85 | 3.45 | 3.20 | 3.25 | 3.25 |
| 10Y IRS | end of period, % | 3.73 | 3.60 | 3.70 | 3.65 | 3.65 | 3.60 |

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

Note: KB forecasts are in red

Monthly macroeconomic data

| | | I-24 | II-24 | III-24 | IV-24 | V-24 | VI-24 | VII-24 | VIII-24 | IX-24 |
|-----------------------|-----------------------|-------|--------|--------|--------|--------|--------|--------|---------|--------|
| Inflation (CPI) | %, yoy | 2.3 | 2.0 | 2.0 | 2.9 | 2.6 | 2.0 | 2.2 | 2.2 | 2.6 |
| Inflation (CPI) | %, mom | 1.5 | 0.3 | 0.1 | 0.7 | 0.0 | -0.3 | 0.7 | 0.3 | -0.4 |
| Producer prices (PPI) | %, yoy | -1.8 | -0.9 | 0.0 | 1.4 | 1.0 | 1.0 | 1.7 | 1.1 | 0.6 |
| Producer prices (PPI) | %, mom | 2.5 | 0.5 | -0.1 | 0.2 | -1.2 | -0.3 | 0.6 | -0.4 | -0.2 |
| Unemployment rate | % (MLSA) | 4.0 | 4.0 | 3.9 | 3.7 | 3.6 | 3.6 | 3.8 | 3.8 | 3.9 |
| Industrial production | %, yoy, c.p. | -0.3 | 1.6 | -11.2 | 9.3 | -3.2 | -9.0 | 7.2 | -1.5 | n.a. |
| Industrial sales | %, yoy, c.p. | 3.2 | 6.0 | -9.6 | 12.1 | -2.7 | -8.5 | 8.8 | 1.8 | n.a. |
| Construction output | %, yoy, c.p. | -6.4 | 2.9 | -8.1 | -0.5 | -7.3 | -9.4 | 2.0 | 0.4 | n.a. |
| External trade | CZKbn (national met.) | 4.6 | 20.6 | 25.8 | 21.9 | 14.9 | 26.4 | 10.4 | 14.3 | n.a. |
| Current account | CZKbn | 10.4 | 35.2 | 54.7 | 43.4 | -20.5 | -26.5 | -13.7 | 18.5 | n.a. |
| Financial account | CZKbn | -4.7 | 26.3 | 78.0 | 39.2 | -12.5 | 24.7 | -16.4 | -3.2 | n.a. |
| M2 growth | %, yoy | 8.4 | 8.0 | 6.9 | 7.1 | 6.7 | 6.4 | 5.3 | 5.8 | n.a. |
| State budget | CZKbn (YTD cum.) | -26.0 | -102.5 | -105.0 | -153.1 | -210.4 | -178.6 | -192.3 | -175.8 | -181.8 |
| PRIBOR 3M | %, average | 6.63 | 6.20 | 5.83 | 5.55 | 5.17 | 5.03 | 4.61 | 4.41 | 4.30 |
| EUR/CZK | average | 24.7 | 25.2 | 25.3 | 25.3 | 24.8 | 24.8 | 25.3 | 25.2 | 25.1 |
| USD/CZK | average | 22.7 | 23.4 | 23.3 | 23.6 | 23.0 | 23.0 | 23.3 | 22.8 | 22.6 |

Source: CZSO, CNB, MF, MLSA, Macrobond, Economic & 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 FIC & Commodity Research



Dr Mike Haigh
+44 20 7762 4694
michael.haigh@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



Anamika Misra
+91 8067310385
anamika.misra@sgcib.com



Stephen Spratt
+852 2166 4108
stephen.spratt@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



Kiyong Seong
+852 2166 4658
kiyong.seong@sgcib.com



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



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