Monetary Policy Report

Summer 2023

Czech National Bank —— Monetary Policy Report —— Summer 2023

CNB CZECH NATIONAL BANK

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This Monetary Policy Report was approved by the CNB Bank Board on 10 August 2023 and (with some exceptions) contains the information available as of 21 July 2023. By means of this document, the CNB fulfils its statutory duty to regularly inform constitutional officials and the public about monetary developments. Unless stated otherwise, the sources of the data are the CZSO or the CNB. All the reports published to date, along with the underlying data, are available on our website. A large part of the data we evaluate in our monetary policy decision-making can be found in the Chartbook, which is a parallel publication to the Monetary Policy Report.

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We maintain price stability

Under the Constitution of the Czech Republic and in accordance with primary EU law, the primary objective of the Czech National Bank is to maintain price stability. The central bank contributes to sustainable economic growth by maintaining a low-inflation environment. We have been pursuing price stability in an inflation targeting regime since 1998.

We are transparent

Our monetary policy is based on a publicly announced inflation target of 2% and open communication with the public. We believe that by being transparent and predictable, the central bank assists households and companies in their economic decision-making.

We look to the future

A decision made by the CNB Bank Board today will affect inflation 12–18 months ahead. The CNB's forecast describes the most likely future path of the economy as seen by our Monetary Department's economists. The Bank Board is kept informed about the forecast under preparation, discusses the contours of the emerging baseline scenario and asks for potential additional forecast scenarios to be drawn up. The forecast is produced four times a year and, along with a discussion of related risks and uncertainties, is the key, but not the only, input to the CNB Bank Board's monetary policy decisions.

We decide on rates

The CNB's main monetary policy instrument is the two-week repo rate. The decision on the level of this rate sends an impulse through the financial market to the whole economy, ultimately affecting inflation in such a way as to keep it close to the target. The Bank Board meets eight times a year to discuss monetary policy issues. When making rate decisions, the members of the Bank Board discuss the current forecast and assess the newly available information and the risks and uncertainties of the forecast.

Governor’s foreword

Dear Readers,

It is my pleasure to present the summer issue of the Monetary Policy Report. The Report is one of the main inputs to the Bank Board’s decision-making on CNB monetary policy.

At our August meeting, my Bank Board colleagues and I kept interest rates unchanged. The two-week repo rate remains at 7%, the highest level since 1999. All seven board members voted in favour of this decision.

Our decision is underpinned by a new macroeconomic forecast, which is presented in detail in this Report. Its baseline scenario implies a gradual decline in interest rates from 2023 Q3 onwards. In addition, the Bank Board discussed two other scenarios. The first simulates the potential impacts of elevated inflation expectations, while in the second domestic demand recovers faster than in the baseline scenario. The appropriate response to the risks described in both scenarios is to keep rates at the current level for longer than in the baseline scenario.

The CNB’s interest rates are high enough to ensure that inflation returns to the target in all three scenarios considered. The tight monetary policy stance is slowing growth in koruna bank loans to households and firms and hence also in the quantity of money in the economy. Taking into account the inflation outlook one year ahead, real interest rates are distinctly positive for the first time in many years. Monetary conditions, which reflect interest rates and the exchange rate level, are the tightest in twenty years.

Although inflation fell from 18% in September 2022 to 8.8% in July 2023, it is still at unacceptable levels. The Bank Board confirms its determination to continue fighting inflation until it is fully under control, i.e. stabilised close to the 2% target. Interest rates will therefore remain relatively high for some time. At each of the meetings ahead, we will base our decision mainly on an assessment of newly available data and of the fulfilment of the forecast.

The Bank Board assures the public that the CNB’s actions will be sufficient to restore price stability in accordance with its statutory mandate. In addition, the Bank Board is ready to react appropriately to any materialisation of the risks of the forecast.

On behalf of the Czech National Bank

Aleš Michl

Governor

The decision, and the current outlook and its risks

At its August meeting, the Bank Board kept the two-week repo rate unchanged at 7%. This monetary policy stance will ensure that inflation returns to the 2% target. The decline in inflation is broadly in line with the CNB's previous outlooks. Annual consumer price inflation slowed to single digits in June and will continue to fall over the next few months. The downward trend in annual inflation will temporarily halt in the autumn, but only as a result of the statistical effect of the energy savings tariff applied at the end of last year. After it fades out, inflation will fall sharply to close to 2% at the start of next year. Its decrease is being fostered by the rapid unwinding of growth in foreign prices (especially energy prices, but also food commodity prices), which until recently were a significant source of growth in domestic costs. Demand in the domestic economy, which is being dampened by tight monetary policy, is also having an anti-inflationary effect. The deep year-on-year decline in household consumption is continuing and investment activity is also falling. The weak demand is creating conditions for a decrease in inflation, especially core inflation, and, in turn, inflation expectations. Consistent with the baseline scenario of the Monetary Department's forecast is therefore a decline in market interest rates over the entire outlook. However, the Bank Board assessed the risks of the forecast and the uncertainties of the outlook as being significant and tilted to the upside. This assessment is underpinned by two additional scenarios. The first one illustrates the risk of a slower decline in inflation expectations in the domestic economy. The second one captures the risk of a stronger recovery in consumer demand arising from a rapid decline in the saving rate from its current high level.

The high inflation is receding. According to the June data, it has fallen to single digits (9.7%), with all its components contributing to the decline. It continued to decline in July (8.8%). This is due largely to fading inflation pressures from abroad. The decline in energy prices from last year's extreme levels is helping to stabilise energy prices for households and – together with base effects – is also causing a marked year-on-year drop in fuel prices.

Core inflation is also falling. This reflects a number of factors, including restrictive monetary policy. A drop in real household income, coupled with a high saving rate, is reducing households' consumer demand (Box 1 discusses the causes of households' higher propensity to save). In turn, the substantial year-on-year decline in private consumption is cooling the demand-pull inflation pressures.

The tight monetary policy stance has fostered an increase in mortgage interest rates and a marked cooling of the property market (Box 2 discusses the increased mortgage rates). The observed halt in the previous strong growth in new residential property prices is playing an important role in reducing core inflation by slowing growth in the cost of owner-occupied housing in the form of imputed rent.

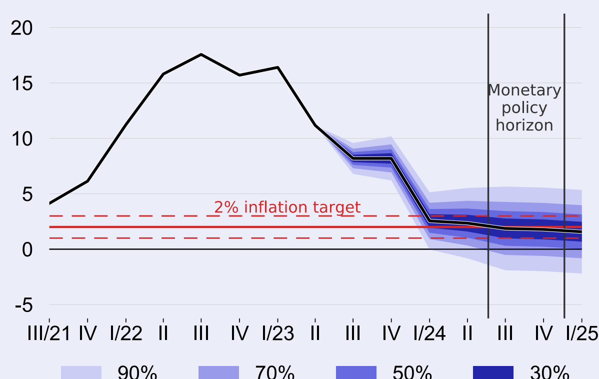
According to the forecast, inflation will decline further in the summer months. The downward trend will then halt temporarily. However, this will be due solely to statistical base effects reflecting last year's government support in the area of energy prices. The energy savings tariff which was in place from October to December 2022 temporarily lowered annual inflation and will conversely increase it this year. Inflation will fall sharply to close to the 2% target at the start of next year, despite a gradual depreciation of the koruna. The latter will be a result of further growth in foreign interest rates amid a decrease in domestic rates.

Domestic economic activity remains subdued. GDP is falling slightly year on year. This is due largely to households' very weak consumer demand, which has been falling in absolute terms for six consecutive quarters. Its decline is due to a drop in real household income and a high saving rate. The latter reflects households' caution stemming from the rapid growth in the cost of living and the elevated interest rates (the pass-through of monetary policy to client rates is described in Box 3).

So far, corporate investment has not provided a major growth impulse either. Like household consumption, fixed investment is being dampened by the high domestic interest rates. Rates on euro-denominated loans are meanwhile rising, making them less attractive to domestic firms than they were until recently. Additions to inventories, especially of materials, semi-finished products and unfinished

Inflation will fall sharply to close to the 2% inflation target at the start of next year

headline inflation; y-o-y in %; confidence intervals in colours



The domestic economy will return to appreciable growth next year

y-o-y changes in % (unless otherwise indicated); changes in pp compared to previous forecast in brackets

	2023	2024	2025
Headline inflation (%)	**11.0**	**2.1**	**1.7**
	(-0.2)	(0.0)	-
GDP	**0.1**	**2.3**	**2.7**
	(-0.4)	(-0.7)	-
Average nominal wage	**8.7**	**7.8**	**6.3**
	(-0.1)	(0.0)	-
3M PRIBOR (%)	**6.9**	**4.8**	**3.7**
	(0.1)	(0.2)	-
Exchange rate (CZK/EUR)	**23.9**	**24.7**	**24.6**
	(0.1)	(0.3)	-

Green indicates a shift of the forecast to higher levels, or to a weaker koruna exchange rate, compared with the previous forecast. Red indicates a shift in the opposite direction.

production, are also weakening. This is linked with the renewed smooth operation of global supply chains.

Net exports and general government consumption are fostering economic growth. The contribution of net exports is a consequence of limited domestic demand dampening imports and of relatively robust Czech exports, which rose by 7% year on year in 2023 Q1.

Overall, economic activity will be broadly flat this year and return to significant growth next year. Faster growth will be countered next year by the government's fiscal policy focused on reducing structural deficits in the form of a consolidation package.

Wage growth is currently elevated but remains negative in real terms. Looking ahead, still low unemployment will boost the bargaining power of employees, who will seek to regain their share of income in the economy as a whole. The rapid wage growth will therefore dissipate only gradually. However, this will not reverse the disinflation process.

The decline in inflation pressures from abroad and the subdued domestic economic activity, together with the current tight monetary policy stance, are creating a desirable environment for the ongoing process of domestic disinflation. Looking at current price developments, it is clear that the acute inflation pressures in the domestic economy have mostly faded out and annual inflation is heading towards the 2% target. In the baseline scenario, this situation is consistent with interest rates returning towards their neutral level. However, the price outlook is still subject to a number of risks.

Two scenarios have been prepared to capture these risks. The first one illustrates the risk of a slower decline in inflation expectations, which could delay the return of inflation to the target. The scenario takes into account the observed high inflation expectations of households, firms and analysts. It involves a slower return of expectations to the 2% target and the related implications for price-setting. In this scenario, even keeping rates at the current level is not sufficient to fully mitigate the impacts of elevated expectations and inflation remains well above the target for most of next year. Faster wage growth is also a contributing factor.

The second scenario captures the risk associated with the current high saving rate. A faster return of the saving rate to levels close to the long-run average would provide a significant impetus to household consumption, which has long been subdued. The subsequent stronger recovery in domestic demand leads to greater inflation pressures and a need for tighter monetary policy. Despite that, inflation converges to the target somewhat more slowly in this scenario as well.

Both scenarios thus call for caution with regard to easing monetary policy and support keeping rates at the current level.

The Bank Board assessed the risks of the forecast and the uncertainties of the outlook as being significant and tilted to the upside. The threat of inflation expectations becoming unanchored and the related risk of a wage-price spiral, which would lead to renewed demand-pull pressures and persistent inflation, are the main upside risks to inflation. A longer effect of expansionary fiscal policy is also an inflationary risk. The general uncertainties of the outlook include the future course of the war in Ukraine, the availability and prices of energy, and the future monetary policy stance abroad.

I. ECONOMIC DEVELOPMENTS ABROAD

The euro area economy will emerge only gradually from the energy crisis, which has significantly affected Germany in particular. The subdued growth in economic activity in the effective euro area this year will be due to slowing global demand growth and monetary policy tightening. An expected recovery in services will have the opposite effect. Industrial firms are facing a decreasing number of orders. The uncertainty regarding energy prices has meanwhile receded and the supply chain problems have faded out. Lower energy prices have been reflected in lower inflation pressures, especially in industry. A correction is also expected in other industrial producer price categories. By contrast, core consumer price inflation remains surprisingly strong. This was the main reason why the ECB raised rates further at its June and July meetings.

The inflation pressures in the global economy are decreasing amid a downturn in economic growth, due partly to monetary policy tightening by major central banks

Large world economies are losing growth momentum and (with the exception of China) will not pick up visibly until 2025 (see Table I.1). Global food prices are falling, container transport prices are decreasing and metal prices have stabilised (see Chart I.1). This is helping to reduce the inflation pressures. Headline inflation is falling in most advanced countries on the back of cooling demand for goods, tighter monetary conditions and diminishing problems in global supply chains. However, core inflation is proving more persistent, primarily because of unrelenting price growth in the services segment. Nonetheless, according to the latest S&P PMI Global survey of corporate managers, demand for services is also weakening and firms' price expectations are moderating. Most major central banks are nearing the end of their tightening cycles, and monetary conditions are expected to be gradually eased next year (see Chart I.2). Growth in international trade will be more subdued this year due to demand shifting from goods to services and to lower investment in an environment of high interest rates. It will not recover until next year.

In the second half of this year, the US economy will go through a shallow recession in a context of tight monetary conditions, depletion of accumulated savings and a gradually cooling labour market. Weakening demand for goods is visible in consumer price inflation, which is being kept high by price growth in the services segment. However, their strong dynamics will also fade gradually. The Fed's key interest rate is expected to peak at 5.5%.

By contrast, the Chinese economy is on the verge of deflation. Its growth this year is estimated at around 5%, but this is largely due to last year's relatively low base. The Chinese economy is suffering from low confidence of households and firms and a protracted property market crisis, which is being reflected in weak

Table I.1

Economic growth in large world economies except China will not accelerate visibly until 2025

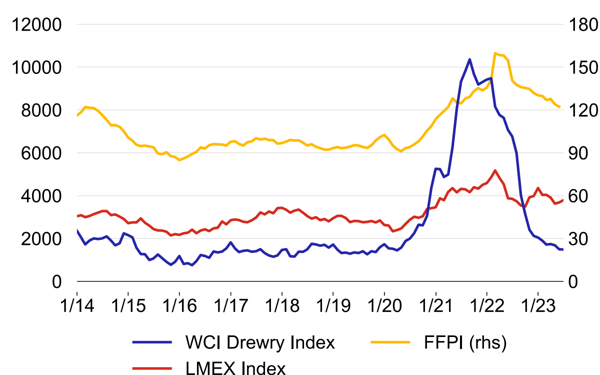
real GDP; y-o-y changes in %; source Oxford Economics, CF

	2022	2022 Q4	2023 Q1	2023	2024	2025
Euro area	3.5	1.8	1.0	0.5	0.9	1.7
USA	2.1	0.9	1.8	1.6	0.5	2.1
China	3.0	2.9	4.6	5.5	4.8	4.6
United Kingdom	4.1	0.6	0.2	0.1	0.4	1.4

Chart I.1

Lower commodity prices are fostering a decrease in inflation pressures, and the renewed functioning of supply chains is being reflected in falling container transport prices

indices; source Bloomberg, Food and Agriculture Organization of the United Nations



Note: The Drewry WCI index captures container sea transport on eight major routes between the USA, Europe and Asia as assessed by Drewry Maritime Research. The LMEX index is a weighted index of six basic metals (aluminium, zinc, nickel, copper, lead and tin) on the London Metal Stock Exchange. The FFPI is the food price index of the United Nations Food and Agriculture Organization. It captures movements in global market prices of 55 agricultural commodities and food items and is regarded as an indicator of future inflation and price trends in the food industry.

investment and consumption expenditure. It is expected that the central bank will ease monetary conditions again and the government will support the economy with additional fiscal measures.

The slowdown in global demand growth amid tighter monetary conditions will be reflected in a temporary stagnation of the effective euro area; growth in economic activity will not recover significantly until 2024

Annual GDP growth in the effective euro area was 0.5% in 2023 Q1 (see Chart I.3). In quarter-on-quarter terms, economic activity even fell slightly, so the economy failed to avoid a technical recession[1] caused mainly by a drop in household and general government consumption in euro area countries. Growth in investment and net exports, which were boosted by the fade-out of supply chain problems, had the opposite effect. However, the economy would have contracted much more strongly had it not proven highly resilient to the energy crisis. Storage filling rates in Europe were at record highs at the end of the heating season. The southern euro area economies and France coped better with the difficult situation in the winter, while Germany saw a further quarter-on-quarter decrease in GDP and is thus below the pre-pandemic level.

The effective euro area saw no significant upswing in economic activity in 2023 Q2,[2] although household and government consumption did return to growth. The tightening of monetary conditions has started to cause firms' investment activity to weaken, and a decline in new orders and inventories is also visible. The fall in orders is being reflected in worse sentiment, especially in German industry (see Chart I.4). According to a survey of German firms, the decline in total orders (both domestic and foreign) picked up pace. In the survey, firms also expressed concerns about persistent inflation and tightening financial conditions. Producers responded to the decline in orders by cutting production. By contrast, activity in services in the euro area rose in Q2 as consumer confidence improved following the end of the energy crisis, amid relatively low and stable unemployment. Households were faced with a drop in real income, but their willingness to spend – especially on services – is returning now that the concerns about the energy crisis have faded away. Recent data from Spain indicate another strong summer tourist season.

The subdued growth of the effective euro area this year will be due mainly to the impacts of the slowdown in

Chart I.2

Next year is expected to be characterised by decreasing interest rates

interest rate level in % at year-end according to Bloomberg Economics forecast; source Bloomberg

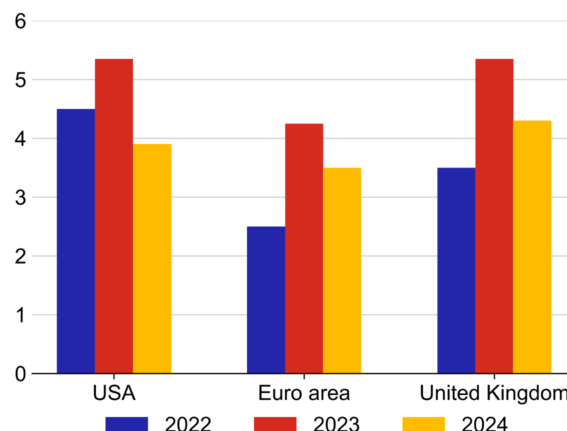


Chart I.3

The subdued performance of the effective euro area is due above all to a downturn in Germany

annual GDP growth in %; contributions in pp; seasonally adjusted

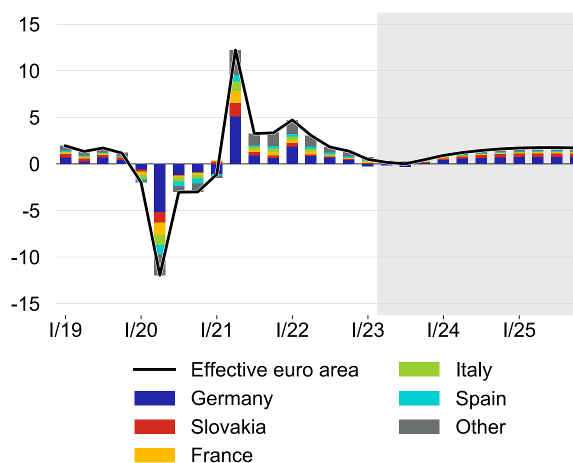
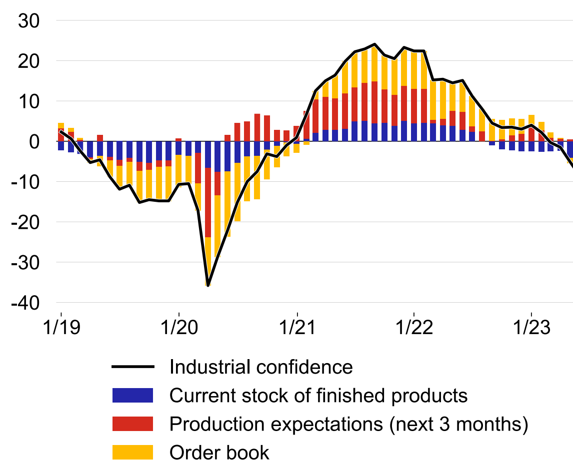


Chart I.4

The decline in orders is being reflected in worse sentiment of German industrial firms

German industrial confidence indicator; contributions in pp; source European Commission



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1 A technical recession is defined as quarter-on-quarter decline in seasonally adjusted real GDP in at least two successive quarters.

2 According to Eurostat's flash estimate, GDP in the effective euro area increased by 0.1% quarter on quarter and 0.3% year on year in 2023 Q2. This figure is not included in the forecast, as it was released on 31 July, i.e. after its closing date.

global demand growth and tightened monetary policy on domestic demand, amid falling orders in industry. Firms are meanwhile facing substantially less uncertainty, especially as regards energy prices. The supply chain problems have faded out as well. Economic growth will also be supported by renewed household spending on services, especially in Q2 and Q3. Effective euro area GDP will grow by just 0.3% overall this year[3] and accelerate to 1.3% next year. The output gap will turn negative in 2023 Q3 and remain so until mid-2025.

The drop in natural gas and electricity prices has fostered a rapid retreat of producer price inflation, but disinflation has been slower in terms of core prices

The Brent crude oil price fluctuated within a narrow range from the start of May until mid-July, when it started to rise slightly. Market sentiment is still being affected by uncertainty regarding future developments in the global economy and the unsatisfactory economic recovery in China. However, sizeable production cuts by OPEC+ coupled with relatively solid seasonal demand have begun to be felt on the market. The Brent crude oil price outlook remains slightly falling towards USD 70 a barrel at the end of 2025. The natural gas price in Europe neared a two-year low at the end of May and remains below the LNG price in Asia. The filling rates of storage facilities in Europe and Asia are above average. Hot weather in both regions, which is increasing demand for electricity for air-conditioning, is preventing the price from falling more markedly. Renewed growth in natural gas prices is expected before the next winter as demand increases.

The current decline in producer prices in the effective euro area is due mainly to falling prices of energy – oil, gas and electricity (see Chart I.5). The energy component of industrial producer prices started to decrease year on year in May and its year-on-year decline will peak at around 20% in September. By contrast, the price pressures in core prices will recede more slowly as the lower energy prices and weaker demand for industrial goods manifest themselves only gradually. The price growth associated with the previously overloaded supply chains is also decreasing in intensity. Inflation expectations in industry have therefore fallen to pre-pandemic levels across the large euro area countries (see Chart I.6). The core component will undergo a slow correction towards year-on-year growth of 1% by the end of 2023. Overall, industrial producer price inflation in the effective euro area will reach just 0.6% in 2023 (as against 35% last year). In 2024, these prices will even go down slightly on average.

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3 In view of the expected recession in the USA in the second half of 2023, however, it is possible that the effective euro area economy will start to contract again.

Chart I.5

The year-on-year decline in industrial producer prices in the effective euro area will be driven this year by the energy component

y-o-y changes in %; contributions in pp; seasonally adjusted

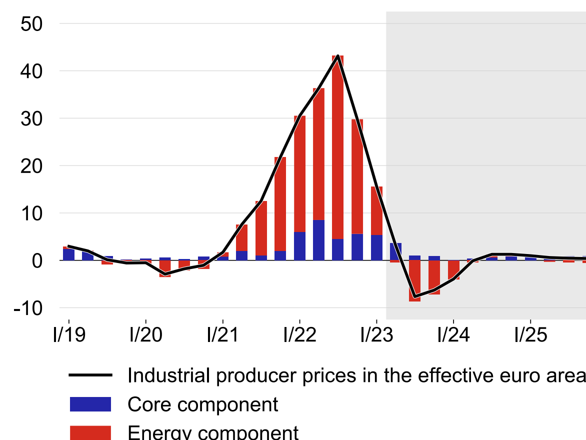
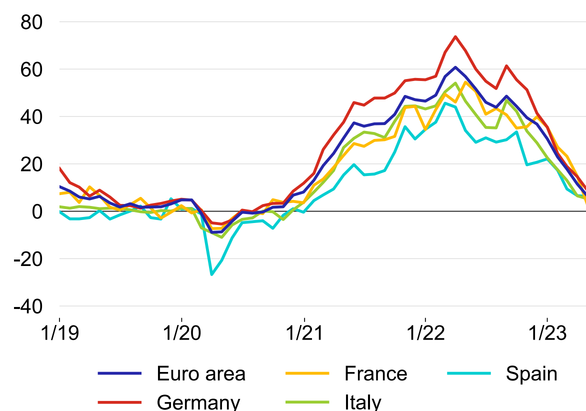


Chart I.6

Inflation expectations in industry have fallen to pre-crisis levels in the large European economies

expectations regarding selling prices over next three months; balance of answers; source European Commission



Industrial producer price inflation in the effective euro area *is one of the main forecast areas with regard to the external environment. It is monitored separately for categories closely linked with prices of oil, gas and electricity, which are included in the energy component of industrial producer prices and have a share of about 40%. Inflation in the other industrial sectors corresponds to the core component of foreign industrial producer prices, which is important, among other things, for assessing the price competitiveness of the domestic economy.* ***Consumer price inflation in the effective euro area****, as measured by the Harmonised Index of Consumer Prices (HICP), has only an indirect effect on the Czech economy via the foreign monetary policy stance, as the ECB's inflation target is defined in terms of the HICP.*

Consumer price inflation in the effective euro area has been declining since the end of 2022 and is expected to fall below 3% in mid-2024. Besides a marked decrease in inflation pressures stemming from energy prices, there will also be a gradual slowdown in producer price inflation, which will pass through to goods prices. Price pressures in the services segment will fade only gradually, mainly on account of robust demand for services. The evolution of core inflation, which has so far stayed above 5% year on year in the euro area and has seen no change in its current momentum either, will be crucial for a return of inflation to the ECB's 2% target. This is generating concerns at the ECB as to whether it will achieve its inflation target in the foreseeable future.

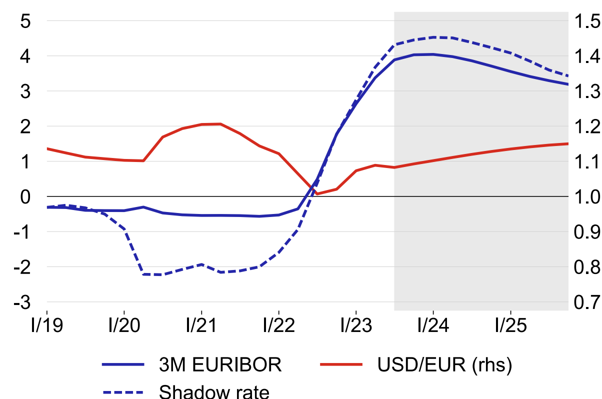
The ECB and the Fed both raised their interest rates further in the summer

The ECB is continuing to fight still high inflation. As expected, it raised rates at its June and July meetings, by 0.25 pp in each case. A further monetary policy tightening in September is not ruled out either. This would bring the deposit rate to 4%. According to market expectations, the 3M EURIBOR will stay above 4% at least until the end of 2024 Q1 (see Chart I.7). As well as raising its interest rates, the ECB is continuing to reduce its balance sheet. This is reflected in the shadow rate estimate, which is above the 3M EURIBOR. The tightening of ECB monetary policy is starting to be felt in tighter credit conditions, and year-on-year growth in loans to households and corporations has slowed substantially (see Chart I.8). In the case of households, where loans are dominated by mortgages, growth in loans even fell below the pre-pandemic level in April 2023. The euro appreciated slightly against the dollar in Q2. The expected wobble in US economic activity in the second half of 2023 speaks in favour of further appreciation of the euro. However, the Fed believes in the robustness of the US economy and therefore increased its key interest rate by 0.25 pp to 5.25%–5.50% in July.

Chart I.7

The market interest rate outlook reflects further tightening by the ECB and the reduction of its balance sheet

3M EURIBOR and shadow interest rate in %; USD/EUR nominal exchange rate

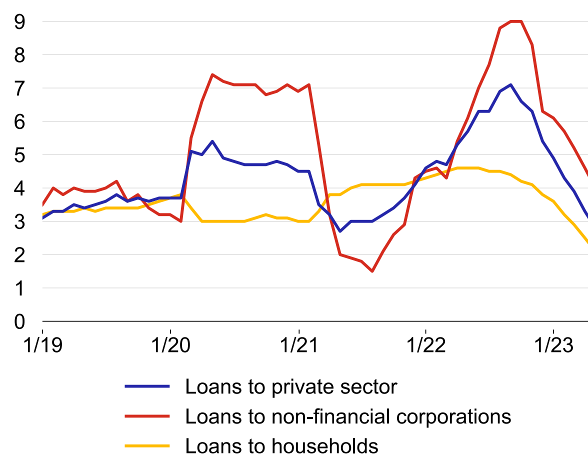


The ECB's interest rate increases and the end of reinvestment of maturing assets under the asset purchase programme are now fully reflected in tighter monetary conditions. *Lending growth in the euro area has therefore weakened. According to the latest bank lending survey, credit standards (approval criteria) for loans to firms and loans for house purchase are being tightened markedly. Demand for loans is falling sharply, mainly because of rising interest rates, lower fixed investment financing needs and a weakening property market.*

Chart I.8

Growth in loans to households and firms in the euro area is slowing sharply

year-on-year growth in volume of loans by recipient; adjusted for sale of loans, securitisation and cash pooling; source ECB



COMPARISON WITH THE PREVIOUS FORECAST: Economic developments abroad

		2023	2024	2025	
GDP (in the effective EA)	y-o-y changes in % pp	**0.3** (-0.3)	**1.3** (-0.1)	**1.7** -	The expected growth of the effective euro area is slightly below the previous forecast in 2023 and 2024, due to a worse condition of euro area industry and partly to data revisions.
Consumer prices (in the effective EA)	y-o-y changes in % pp	**6.5** (-0.4)	**2.9** (0.2)	**1.9** -	The inflation outlook is slightly lower this year, owing mainly to a sharper decline in energy prices; in 2024, expected inflation is slightly higher than in the previous forecast.
Producer prices (in the effective EA)	y-o-y changes in % pp	**0.6** (-3.6)	**-0.4** (-0.5)	**0.6** -	Industrial producer prices have been revised downwards due to a further drop in commodity prices and transport costs resulting from the improved functioning of supply chains.
Brent crude oil price	USD/barrel	**77.5** (-3.1)	**72.7** (-3.1)	**70.4** -	The Brent crude oil price outlook has shifted lower; it remains on a downward path.
3M EURIBOR	% pp	**3.5** (0.3)	**3.9** (0.8)	**3.4** -	The market interest rate outlook has shifted higher in response to the ECB's more forceful communications and its determination to achieve the inflation target.
Exchange rate	USD/EUR	**1.08** (0,01)	**1.12** (0,01)	**1.14** -	The expected euro-dollar exchange rate has shifted towards a slightly stronger euro as a result of the ECB's hawkish tone and the expected weakening of US economic activity.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value or a shift to a weaker dollar, while a red label indicates a decrease in value or a shift to a stronger dollar)

II. THE REAL ECONOMY AND THE LABOUR MARKET

Following subdued performance in the first half of this year, economic activity will start growing again. This will be due mainly to a recovery in household consumption, caused primarily by renewed growth in real income. In addition, the contribution of net exports, reflecting the good export performance of the Czech economy, will play an important role in GDP growth. The finalisation of unfinished production and the release of accumulated inventories linked with receding supply chain problems will contribute to this to a substantial extent. Investment activity will rebound this year in an environment of solid corporate profitability. Investment by firms in new technology and renewable energy sources will be accompanied by investment by general government. In whole-year terms, the Czech economy will be broadly flat this year due to a weaker first half of the year and will thus still operate below its potential. GDP will return to growth next year, despite the fiscal consolidation package, which will partly dampen growth mainly in household consumption and to a lesser extent in investment. The labour market will not cool further but rather will start to overheat again. The unemployment rate will go up only gradually, amid broadly stable employment. Year-on-year nominal wage growth is continuing to rise. It will significantly exceed inflation at the start of next year but then start to ease gradually.

Domestic economic activity will be broadly flat this year due to subdued performance in the first half of the year; next year economic growth will be driven by a recovery in household consumption

The problems in global value chains are rapidly disappearing. This is visible, for example, in a decreasing share of industrial firms reporting shortages of materials as a factor limiting production (see Chart II.1) and in news of the completion of unfinished motor vehicles. These factors will contribute to the finalisation and export of unfinished production and the release of related inventories, boosting the positive contribution of net exports to GDP growth. Households' financial situation will begin to improve in the middle of the year as their real income starts to grow again, resulting in a recovery in real consumer demand growth. Firms' profitability will remain solid and will be reflected in an investment recovery and wage growth. Overall economic activity will thus start to rise again in year-on-year terms in mid-2023 (see Chart II.2), although GDP will be broadly flat in 2023 as a whole.[4] In 2024, the economy will grow by 2.3%. Its recovery will be dampened by the fiscal consolidation package.[5] In 2025, GDP growth will pick up to 2.7%.

Chart II.1

The global supply chain problems have almost disappeared from the perspective of Czech industry

share of domestic industrial firms in % reporting shortages of materials or equipment as factor limiting production; smoothed by HP filter (lambda = 1); source CZSO business survey

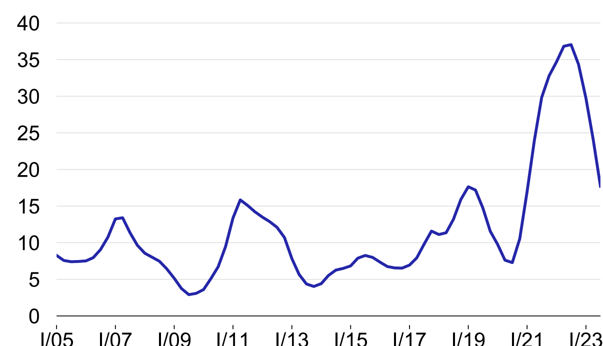
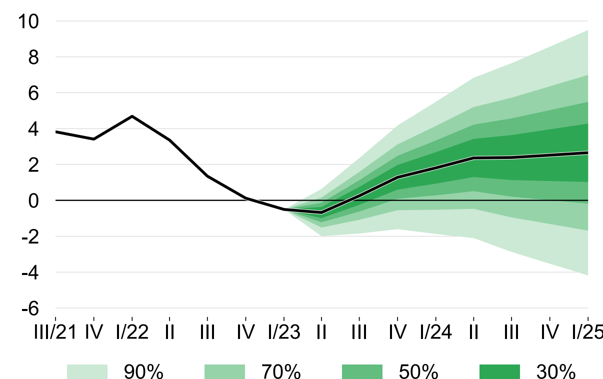


Chart II.2

Following a year-on-year decline in the first half of the year, economic activity will start to grow again and accelerate further in 2024

y-o-y changes in %; seasonally adjusted; confidence interval



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4 According to a preliminary CZSO estimate, Czech GDP increased by 0.1% quarter on quarter and declined by 0.6% year on year in 2023 Q2. This is broadly in line with the CNB forecast. This figure was published on 31 July 2023.

5 The CNB forecast takes into account the version of the fiscal consolidation package that passed its first reading in the Chamber of Deputies on 14 July 2023.

Household consumption will begin to increase in quarter-on-quarter terms in mid-2023 on the back of renewed growth in real income

Adverse household sentiment[6] and still high inflation reducing households' real purchasing power led to a further decline in household consumption in the first half of 2023. As the high inflation gradually decreases, growth in households' real income will start to recover gradually this year. This will result in a halt in the year-on-year decline in real private consumption at the end of the year (see Chart II.3). Household consumption will thus decrease by around 3.5% in 2023 as a whole.

Real household income will continue to rise next year. Together with a drop in the saving rate, this will result in brisk growth in consumer demand. The latter will be dampened, though, by the fiscal consolidation package, especially in the first half of the year. The effect of the package will strengthen slightly further in early 2025. Household consumption will thus go up by almost 4% overall next year and pick up further in 2025.

Growth in households' nominal gross disposable income will be driven over the entire forecast horizon by a broadly stable contribution of wages and salaries (see Chart II.4), which will reflect an overheating labour market. Growth in gross disposable income will slow below 10% in the second half of 2023 and increase only moderately in the next two years. This will be due mainly to lower growth and a subsequent decline in property income and entrepreneurs' income from their recent high levels. The contributions of other current transfers and social benefits, including repeated pension increases and some other support fiscal measures, will weaken gradually.

The saving rate will remain above the long-term average for the next two years and decline only gradually from its current level

The saving rate edged down in 2023 Q1 but remains high (see Chart II.5). Households' consumer sentiment is still lacklustre. Households are mostly creating precautionary savings on concerns about the energy crisis and rapid growth in prices (this topic is discussed in detail in Box 1 at the end of this section). Consumption is also being depressed by falling demand for loans, reflecting – like the growth in deposits – higher interest rates. These factors will gradually diminish in the quarters ahead and the propensity to save will accordingly start to decline slowly. The saving rate will not return to its long-term average until 2025. The impacts of a faster decline in the saving rate are described in a scenario in section IV.

Chart II.3

Household consumption will keep falling in year-on-year terms for most of 2023 and start to grow again only at the year-end; general government consumption will grow at a subdued pace

household and general government consumption; y-o-y changes in %; constant prices; seasonally adjusted

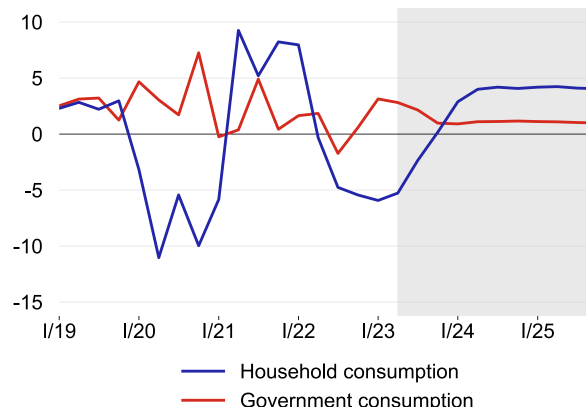
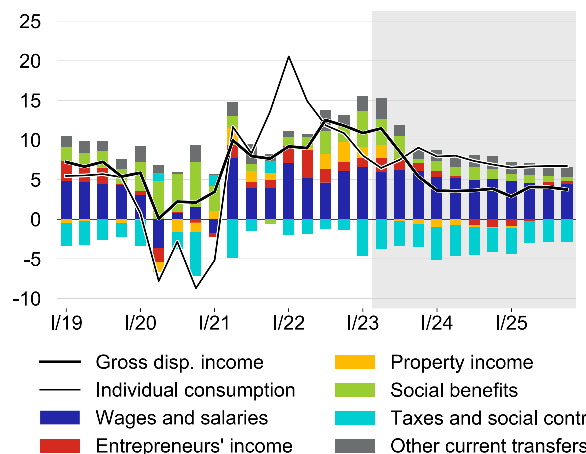


Chart II.4

Growth in nominal disposable income will gradually slow this year, due mainly to lower contributions of entrepreneurs' income and property income, while wages and salaries will grow at a broadly steady rate

household consumption and gross disposable income; y-o-y changes in %; contributions in pp; current prices; seasonally unadjusted



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6 According to the July business cycle survey data, consumer confidence and business confidence remain below their long-term averages. However, consumer sentiment improved appreciably month on month.

Exports will record solid growth for the rest of the year as the problems with component and material shortages recede and external demand subsequently recovers

Input supply problems are ceasing to hamper the export-oriented part of the domestic economy (especially the automotive industry) (see Chart II.1). Growth in external demand will recover slightly in quarter-on-quarter terms in the second half of the year. High growth in Czech exports will be fostered mainly by the completion and subsequent export of unfinished products (see Chart II.6). Slower growth in energy costs, which constrained production in energy-intensive sectors throughout 2022, will have the same effect.

Together with a recovery in import-intensive fixed investment, import growth will be supported by a gradual recovery of household consumption. However, year-on-year growth of imports will be lower than that of exports. Net exports will thus make a significant positive contribution to GDP growth throughout 2023. Next year, the difference between growth in exports and imports will shrink, but the contribution of net exports will remain positive. In 2025, it will be broadly neutral (see Chart II.6).

Following a year-on-year decline in the first half of the year, fixed investment will return to growth, driven by the still good financial condition of firms and subsequently recovering external demand

The overall financial condition of firms remains more than solid, as evidenced by increasing profit rates. Firms will therefore continue to invest in the renewal and expansion of production and in renewable energy sources and energy savings, which will offer them protection against potential issues next winter. Investment activity will be supported further by the fade-out of problems in value chains. By contrast, the long high domestic and gradually rising foreign interest rates will dampen the investment appetite of firms. The tightening of domestic monetary policy has given rise to a decline in households' investment in dwellings. Private fixed investment will thus be broadly flat overall this year. Increasing government investment will therefore remain the driver of growth in total fixed investment this year (see Chart II.7). In addition to the absorption of EU funds, government investment will increase due to a one-off purchase of military helicopters.[7] Fixed investment will grow by around 0.5% overall in 2023.

Growth in fixed private investment will pick up pace next year as external demand recovers. In the first half of the year, however, it will be dampened slightly by the

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7 The investment will amount to CZK 14 billion, distributed evenly over Q2 and the rest of 2023.

Chart II.5

The saving rate is high and will decline only gradually

households' saving rate in %; seasonally adjusted

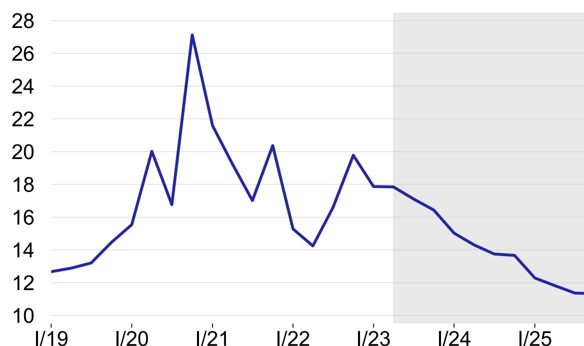


Chart II.6

Imports and above all exports will achieve solid growth rates due to the unwinding of supply chain problems and later a recovery in demand

real exports and imports; y-o-y changes in % and CZK billions; seasonally adjusted

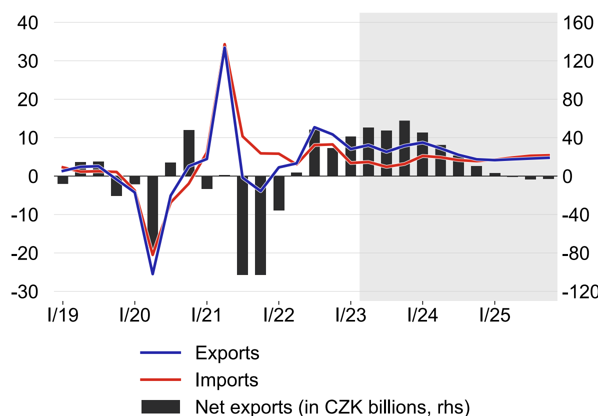
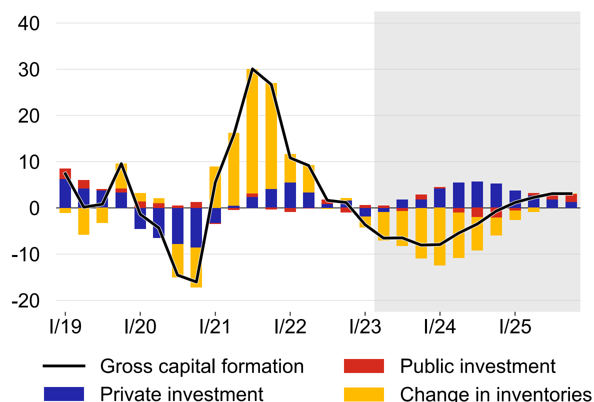


Chart II.7

Growth in total gross investment will be affected predominantly by additions to inventories until the end of 2024

investment activity; y-o-y changes in %; contributions in pp; constant prices; seasonally adjusted



fiscal consolidation package. Conversely, general government investment will decrease due to a slow start to the absorption of EU funds at the beginning of the new programme period coupled with base effects. Fixed investment will rise by 4.5% in 2024 as a whole. In 2025, its growth will slow to the steady-state level of around 3%.

Amid weakening problems on the supply side of the economy, change in inventories will remain well above its long-term level until the end of 2023, although it will decrease (see Chart II.8). This is because firms will be able to complete their forced stocks of unfinished products, as the supply disruptions are expected to fade out in the second half of 2023. Total gross capital formation growth will thus stay negative this year due to declining additions to inventories. Total investment will also decrease next year, due mainly to the high base for change in inventories in 2023. Total investment will rise by around 2.5% in 2025.

Fiscal policy will make a roughly neutral contribution to GDP growth this year and dampen it significantly next year due to the consolidation package

Real government consumption growth will increase above 2% this year in whole-year terms (see Chart II.3). This will be due to both an increase in public expenditure mainly in health care and education linked with the arrival of Ukrainian nationals, a rise in the total amount of housing benefits paid and higher intermediate consumption expenditure. Growth in nominal general government consumption will slow in the years ahead due to wage savings and cuts in operating expenditure under the consolidation package.

Fiscal policy will have a roughly neutral effect on GDP growth this year (see Chart II.9). The fade-out of some of last year's support measures is offset by the continuation of some of the measures adopted on both the revenue and expenditure sides of public budgets relating to the high inflation and the help with high energy prices. These measures include a temporary extension of the reduced excise duty on diesel (until the end of July 2023), an increase in the VAT registration threshold and the payment of a child-raising bonus in pensions. The discontinuation of the energy savings tariff, the phasing out of some measures to support Ukrainian nationals and a reduction of the extraordinary increase in pensions in June 2023[8] will have the opposite effect. In 2024, GDP growth will be dampened noticeably by the definitive termination of support measures, the fiscal

Chart II.8

Change in inventories will fall sharply this year and will be close to pre-crisis levels over the next two years

change in inventories in CZK billions; constant prices; seasonally adjusted

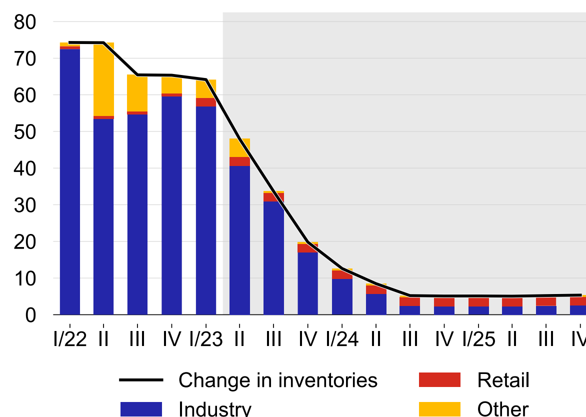
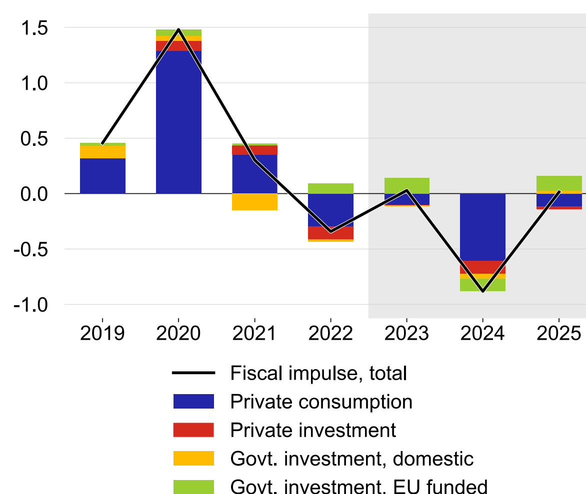


Chart II.9

Fiscal policy will have a roughly neutral effect on growth in GDP and its components this year; it will significantly dampen growth next year, due mainly to the consolidation package

fiscal impulse; contributions to GDP growth in pp



8 As well as the regular January increase, pensions saw an extraordinary inflation-linked increase again in June. The average old age pension will increase by CZK 760 instead of the CZK 1,770 implied by the original indexation scheme.

consolidation package,[9] a fall in absorption of EU funds due to the above-mentioned slow start to the new programme period and a decrease in pension expenditure stemming from the reduction of the extraordinary increase in pensions this year. In 2025, the overall effect of fiscal policy will be broadly neutral, as the dampening effect of the consolidation package will be offset by expected faster absorption of EU funds.

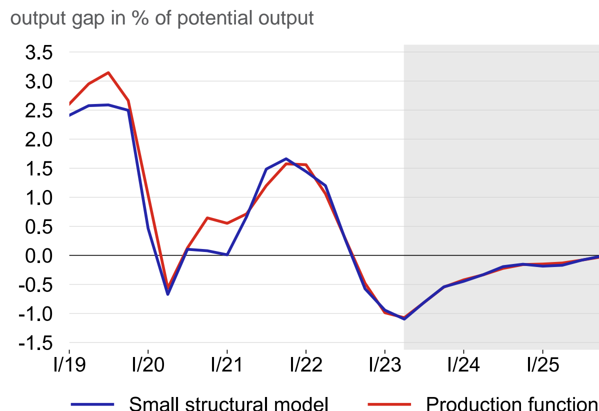
The Czech economy fell below its potential at the end of last year and will remain there until the end of 2025

The shallow recession in the second half of last year and the subsequent broad stagnation in the first half of this year caused the domestic economy to fall below its potential. It will remain there throughout this year (see Chart II.10). This will be reflected on the labour market, where the unemployment rate will rise slightly further. The fiscal consolidation package, which will dampen growth in household consumption and, to a lesser extent, investment, will prevent the output gap from closing fully in 2024 and 2025. Growth in potential output will no longer be held back significantly this year by supply constraints. During 2024, it will start to return slowly to its medium-term rate, which it will converge close to in 2025. The output gap will close from below at the end of 2025.

Chart II.10

The economy will be below its potential, mainly because of the consolidation package, which will dampen domestic demand

output gap in % of potential output



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9 The overall effect of the consolidation package reflected in the fiscal impulse is 1.3% of GDP in 2024 and an additional 0.3% of GDP in 2025. The consolidation package includes the following measures on the revenue side: an increase in excise duties, changes to VAT rates, an increase in real property tax, an increase in contributions for the self-employed, adjustments to personal and corporate income tax, the abolition of tax exemptions, the introduction of sickness insurance, and contributions arising from agreements to complete a job. On the expenditure side, it includes cuts in subsidies for entrepreneurs, a reduction in the volume of public sector pay and cuts in operating and other expenditure.

COMPARISON WITH THE PREVIOUS FORECAST: The real economy and the labour market

		2023	2024	2025	
GDP	y-o-y changes in % pp	**0.1** (-0.4)	**2.3** (-0.7)	**2.7** -	The GDP growth outlook is lower due to lower expenditure on most of its components; economic activity will be dampened by the consolidation package next year.
Household consumption	y-o-y changes in % pp	**-3.4** (-0.8)	**3.8** (-0.4)	**4.1** -	The household consumption forecast is lower this year due to its deeper fall in the first half of the year; the outlook for 2024 is lower, due mainly to the consolidation package.
Government consumption	y-o-y changes in % pp	**2.3** (0.6)	**1.1** (-0.2)	**1.1** -	The government consumption forecast has been revised upwards this year due to higher non-wage expenditure at the start of the year; it is almost unchanged for next year.
Gross fixed capital formation	y-o-y changes in % pp	**0.6** (-2.3)	**4.4** (-0.4)	**3.2** -	This year's slower growth in total investment is due to lower growth in general government investment; in 2024, fixed capital growth will be dampened by the consolidation package.
Net exports	contr. to GDP growth pp	**3.2** (-0.2)	**1.6** (0.1)	**-0.1** -	The contribution of new exports is slightly lower than in the previous forecast due to slightly weaker external demand; it is roughly the same next year.
Employment	y-o-y changes in % pp	**1.0** (0.9)	**0.1** (0.0)	**0.0** -	The faster growth in employment mainly reflects higher observed data at the start of the year.
Unemployment (ILO)	% pp	**2.7** (0.2)	**2.8** (0.0)	**3.0** -	The outlook for the general unemployment rate is higher this year due to higher observed outcomes and a slower recovery in economic activity.
Average monthly nominal wage	y-o-y changes in % pp	**8.7** (-0,1)	**7.8** (0,0)	**6.3** -	This year's slightly lower wage growth reflects the weaker wage growth observed at the start of this year.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value and a red label a decrease)

The long-running downward trend in labour market tightness turned around; the market will get tighter again over the outlook horizon, due mainly to a recovery in demand for labour

The cooling trend on the labour market halted at the start of 2023 (see Chart II.11). Total employment continued to grow in year-on-year terms, reaching the early-2020 level. It will remain broadly flat at this level from next year. The unemployment rate edged down in Q2 and will later start to rise gradually from this level, but it will remain very low from the historical perspective. Wage growth in market sectors, which has been increasing steadily over the last year, will continue to rise in the short term. Year-on-year wage growth will subsequently ease slowly.

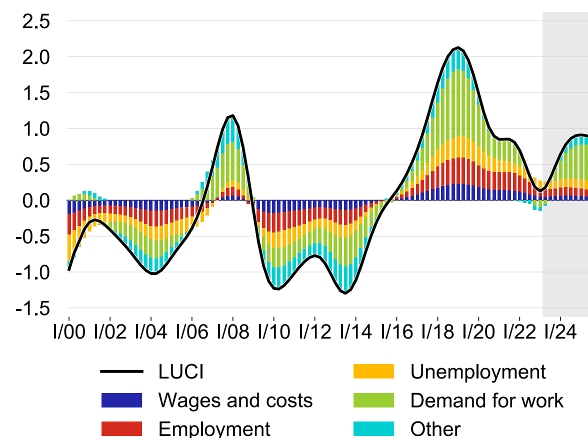
Real income will start to grow again in the second half of 2023 and pick up significantly in 2024

Year-on-year growth in the average nominal wage surged in early 2023 (see Chart II.12), with all sectors contributing. Although wage growth is lagging well behind inflation, pressures fostering sustained brisk wage growth persist, amid persisting good corporate profitability, elevated inflation and a tight real part of the labour market. Wage growth will thus increase

Chart II.11

From the perspective of the LUCI, the labour market will not cool any further but conversely will start to overheat again

LUCI; vertical axis shows standard deviations



slightly further in year-on-year terms this year and fade only slowly later on. Wage growth will also be supported by the expected economic recovery.

The real wage will see a reversal of the downward trend observed in the first half of the year and start to rise in mid-2023. The fall in real income will be at least partly offset in 2024 and 2025, when nominal wage growth will remain very solid amid inflation close to the CNB's 2% target.

Wages will also grow in non-market sectors, albeit at a more modest pace than in the market sector. Wages of soldiers and members of the security forces rose by 10% at the start of 2023. The year-on-year growth was also affected significantly by the education sector. The effect of the extraordinary increase in the wages of selected lowest-income occupation categories last September will fade during the year. In 2024, the forecast takes into account the wage freeze announced for public employees, excluding teachers, whose pay is expected to be raised to 1.3 times the average wage in the economy. The forecast for non-market wages assumes that compensation of employees in the general government sector will go up by 4% in 2025.

Growth in the nominal wage bill is also being affected predominantly by the increased average wage growth this year and the next. To a lesser extent, growth in the total wage bill will also be fostered by a rise in the number of employees in terms of the full-time equivalent. In real terms, the wage bill continued to drop sharply at the start of 2023 (see Chart II.13). This was due to nominal wage growth lagging well behind inflation. However, growth in the real wage bill will turn positive again in the second half of 2023 and pick up significantly in 2024. This will reflect continued brisk wage growth and a rapid decline in inflation back to the inflation target. Growth in real wages and salaries will thus contribute significantly to the recovery in household consumption.

The growth in demand for labour observed in early 2023 will continue

Employment will continue to grow this year, reflecting still solid demand for labour. Growth in employment will later slow and be broadly flat from 2024 Q2 onwards (see Chart II.14). Growth in the number of employees will pick up significantly in year-on-year terms in the second half of the year but will later slow and flatten out. The European Commission's survey expects the number of employees to decline, whereas the index of expected employment and some other high-frequency and leading indicators[10] suggest that corporate

Chart II.12

The brisk nominal wage growth will recede only slowly, due to the situation in the market sector

nominal wages; y-o-y changes; seasonally adjusted; %

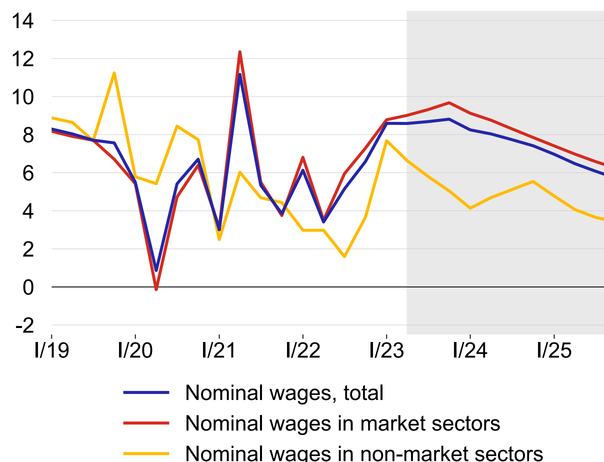


Chart II.13

Growth in the real wage bill will turn positive again in mid-2023 and thus help household consumption to recover

wage bill; y-o-y changes in %

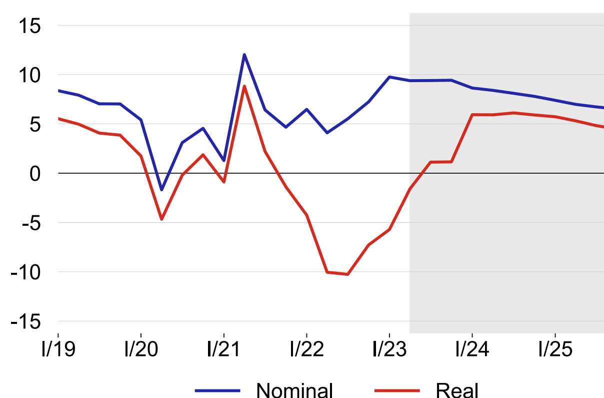
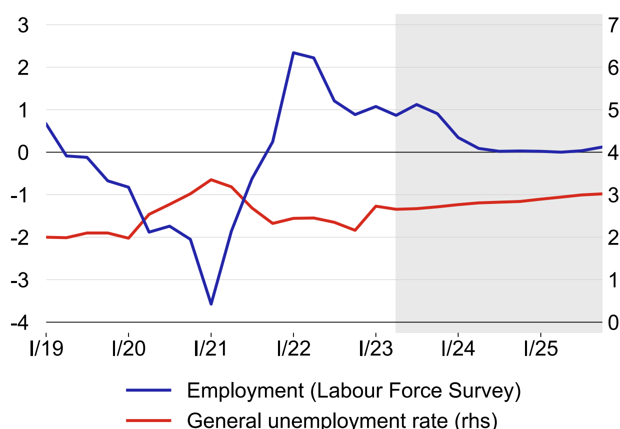


Chart II.14

Employment will grow until the end of the year and unemployment will increase only very moderately

employment; y-o-y changes in %; general unemployment rate in %; seasonally adjusted



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10 For 2023 Q3, the ManpowerGroup index of expected employment is signalling a continuation of the marked rise observed in Q2. The Google Trends scores for "unemployment" and "unemployment benefit" have remained low in recent weeks. The total number of vacancies rose again in 2023 Q2 for the first time in a year.

recruitment, which was still signalling a further cooling of the labour market in late 2022 and early 2023, picked up in line with economic activity in Q2. From the structural perspective, the short-term growth in employment will be driven not only by a rising number of employees but also by growth in the number of entrepreneurs.

The general unemployment rate rose at the start of the year, but this increase was offset by a slight decline in Q2, and only modest growth will follow. The forecast expects a similar trend in the share of unemployed persons.

BOX 1 Reasons for households' current increased propensity to save

Czech households have faced multiple extraordinary economic shocks in recent years. The coronavirus pandemic and the energy crisis were followed by a still ongoing period of very rapid growth in consumer prices. In response to these shocks, which are giving rise to great uncertainty, households are increasing their propensity to save. The saving and consumption behaviour of households directly affects domestic demand and hence plays an important role in overall macroeconomic developments. It is therefore also relevant to the monetary policy decisions of the central bank, as an elevated saving rate means a lower propensity of households to consume. Other things being equal, this implies lower demand pressures and more subdued inflation. By contrast, a sharp drop in the saving rate would mean growth in consumer appetite and upward pressure on inflation.

This box describes the motives behind the current surge in saving, the savings structure by income groups of the population, and the factors that can lead the saving rate to return close to its long-run average.

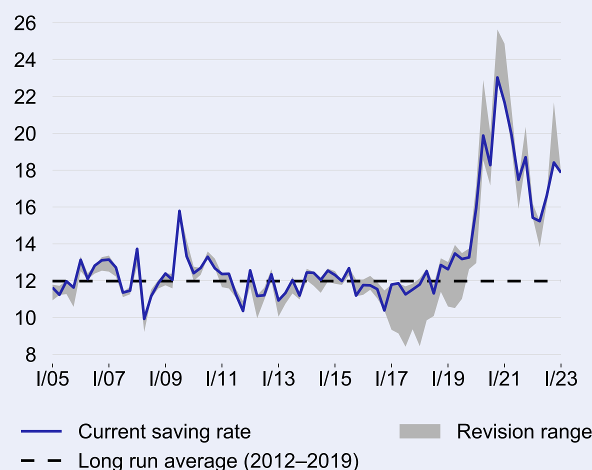
The CZSO defines the saving rate as the ratio of gross savings to gross disposable income. Savings comprise the unused part of gross disposable income.[1] Gross disposable income is obtained by subtracting households' current expenditure, such as taxes and social contributions, from their current income, the largest items of which are wages and salaries, entrepreneurs' profits and social benefits. All these items, including savings, are flow (not stock) variables, hence they represent households' nominal flows in the given quarter. The savings themselves may not be equal to the change in the stock of households' bank deposits, as they may be converted into physical (tangible) investments, such as house purchases, and financial investments.

Since the start of 2020, the saving rate has been well above the average for 2012–2019, when it fluctuated around 12% (see Chart 1).[2] Administrative constraints on households' ability to spend during the first pandemic lockdown in spring 2020 caused the saving rate to rise sharply. The forced decline in households' (nominal) consumption ultimately even outweighed the temporary drop in their income in spring 2020 (see Chart 2). Consumption recovered slightly during the subsequent easing of pandemic measures in the summer, but another wave of anti-pandemic measures introduced in the autumn and winter limited the operation of some shops and services again, narrowing households' ability to consume. By then, the saving rate had reached an all-time high of 23%. In the course of 2021, the anti-pandemic measures were relaxed, households gradually became less cautious,[3] their consumption recovered in both nominal and real terms and the saving rate started to fall (see Chart 3). In mid-2021, however, the decline in the saving rate started to be slowed by other (residual) categories, most notably worsening sentiment due to the energy crisis, growth in inflation above the tolerance band around the central bank's target and increases in the CNB's interest rates. All these factors intensified in 2022. The trend in the

Chart 1

The saving rate has been far above its long-run (pre-pandemic) average in recent years

seasonally adjusted saving rate in %; extent of revisions in pp

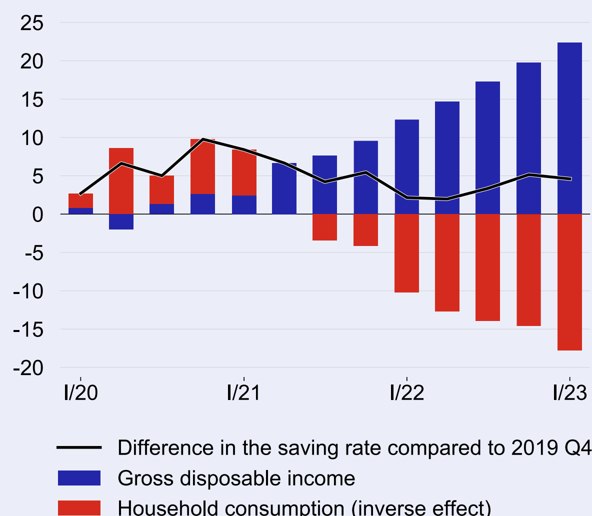


Note: The revisions are explicit from 2017 Q3 onwards, when the CZSO started to publish the seasonally adjusted saving rate. Until then, they mostly stemmed from seasonal adjustment.

Chart 2

The saving rate remains elevated despite brisk growth in nominal household consumption

decomposition of saving rate; changes compared to 2019 Q4 and contributions in pp



saving rate thus reversed in mid-2022 and the rate started to go up again. This mainly reflected increased saving triggered by caution, concerns about the energy crisis and a rapid general rise in consumer prices.

It is interesting to look at the distribution of savings by income quintile (see Chart 4).[4] Until 2019, the four lowest income quintiles together accounted for just 10%–20% of total savings, with the poorest (first) quintile not saving at all. The wealthiest (fifth) quintile created all the rest of the savings, with a saving rate of just below 20%.[5] In 2020, when most shops and services were locked down, the overall saving rate and the saving rate of the four lowest income quintiles both rose dramatically. The wealthiest quintile meanwhile kept saving at roughly the same rate. The savings of the four lowest income quintiles were thus partly forced, and the households concerned started to return to their usual consumer behaviour after shops and services reopened. We estimate that deferred consumption in this period amounted to around CZK 100 billion at constant prices.[6]

A similar situation could arise after the current elevated saving rate episode ends. Between mid-2022 and 2023 Q1, households' savings at current prices were CZK 175 billion higher than would be consistent with the normal pre-pandemic level. If households were hypothetically to release this amount of money still this year, it would represent around CZK 120 billion at constant prices. This could foster growth in household consumption of 5 pp. However, we can assume that the situation this year is different from that in 2020 and that savings are being created mostly by high-income households, who are far less constrained by high prices of energy and other goods and services. In 2022, moreover, their incomes grew faster[7] than those of low-income households, so they were able to put aside a larger proportion of their earnings for precautionary motives. Low-income households, who are now restricted the most in their real consumption by the high inflation and are likely also to have the greatest propensity to consume in the long run, are currently creating very low savings according to the available data. The future release of accumulated savings may therefore not be as huge as it was after the Covid measures were lifted.

The saving rate can be expected to decline gradually to its long-run average of around 12% over the next two years. This decline will be driven by the behaviour of the wealthiest households. It will be due mainly to improving consumer sentiment after the energy crisis fades away and inflation falls to low levels. This will be linked with renewed growth in real household consumption amid slowing nominal income growth and a gradual decrease in interest rates from their highest levels in more than 20 years. However, considerable uncertainty surrounds the pace of this decline in the saving rate. This uncertainty is described in a scenario in section IV.

Chart 3

The saving rate has been higher in recent quarters due to the precautionary motive and the CNB's monetary policy (high interest rates)

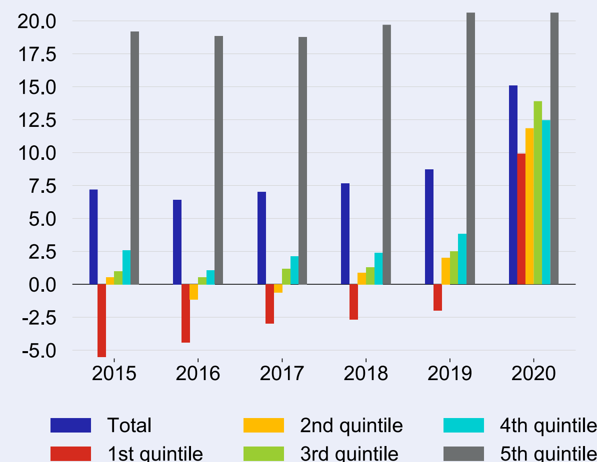
decomposition of saving rate; q-o-q changes and contributions in pp

Note: The decomposition of the saving rate into factors is based on a regression model derived from an ECB box in a specification where the saving rate depends on the unemployment rate (precautionary motive), the Stringency Index (anti-pandemic measures), interest rates and its previous level (other).

Chart 4

High-income households are maintaining the highest saving rate; it did not change much even during the Covid lockdowns

saving rate by income quintile in %



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1 Put simply, the saving rate is the percentage of net (quarterly or annual) income that households set aside. The exact definition says that savings are obtained by subtracting household consumption from the sum of gross disposable income and the change in the net equity of households in pension funds reserves (transaction D.8). However, the latter item is equal to only around 1% of total gross disposable income.

2 The great uncertainty regarding the saving rate is also illustrated by the considerable revisions made to it. During the pandemic, the revisions amounted to almost 4.5 pp.

3 Households' caution in the model in Chart 3 is proxied by the unemployment rate and thus represents households' concerns about potential loss of employment and a drop in income.

4 We use households' satellite accounts from CZSO experimental statistics. The data are available for 2015–2020. They contain net disposable income and its components, final consumption expenditure and net savings broken down by income quintile.

5 The total figure is not exactly equal to the national accounts data, as the saving rate in Chart 4 is calculated as the ratio of net savings to net disposable income. Unlike gross disposable income, net disposable income is adjusted for consumption of fixed capital (depreciation). This may explain why people with the lowest income are able to constantly create negative savings, i.e. consume more than they earn in each period.

6 The calculation method, including the initial estimate of deferred consumption, was described in the box The pandemic has dramatically increased the household saving rate in MPR – Spring 2021.

7 Evidence of growth in earnings last year based on the income distribution is provided in the full-year AEIS data (available in Czech only).

III. INFLATION

Inflation decreased rapidly in Q2 and the downward trend will continue in the months ahead, albeit to a lesser extent. Most of its main components will contribute to the decline. Growth in market prices will slacken over the coming quarters due to rapidly falling cost pressures from abroad and a continued easing of price pressures from the domestic economy. At the same time, the profit margins of domestic producers, retailers and service providers will undergo a gradual correction. However, the downward trend in annual inflation will halt temporarily in 2023 Q4 on account of base effects due to last year's drop in electricity prices caused by the government's energy savings tariff. Once this effect fades out, both headline and monetary policy-relevant inflation will decline sharply to close to the CNB's 2% target at the start of 2024, aided by the previous tightening of monetary policy, and will stay there over the monetary policy horizon.

Inflation will slow further in 2023 Q3 and return close to the 2% inflation target at the start of next year

Annual consumer price inflation will slow further in 2023 Q3, to 8% on average (see Chart III.1).[11] The contributions of core inflation, food prices and administered prices will fall markedly. The contribution of fuel prices will be negative for the rest of the year. The downward trend in inflation will be temporarily interrupted in Q4 by the base effect of last year's drop in electricity prices caused by the government's energy savings tariff (Chart III.2 shows how headline inflation would have evolved without this measure and without the waiver and reintroduction of the fee for renewable sources). For this reason, the contribution of administered prices will increase markedly for a short time (see Chart III.3). As the base effect unwinds, inflation will fall significantly further at the start of next year, when the high administered price inflation will fall and the traditional January repricing of goods and services will take place to the usual extent. Inflation will thus return close to the inflation target at the start of next year and fluctuate near the target until the end of the forecast horizon.

Administered price inflation will remain high this year but will fall sharply at the start of next year

Annual administered price inflation will decrease further in 2023 Q3, amid a parallel fall in consumer energy prices due to favourable prices on wholesale energy markets. Annual administered price inflation will increase sharply for a short time in Q4 (see above). This will be due almost solely to the contribution of electricity prices. It will reflect the aforementioned effect of the extraordinarily low comparison base at the end of last year caused by the introduction of the

Chart III.1

Inflation will fall further in 2023 Q3 and return close to the 2% inflation target at the start of 2024, where it will stay over the monetary policy horizon

headline inflation; y-o-y in %; confidence interval

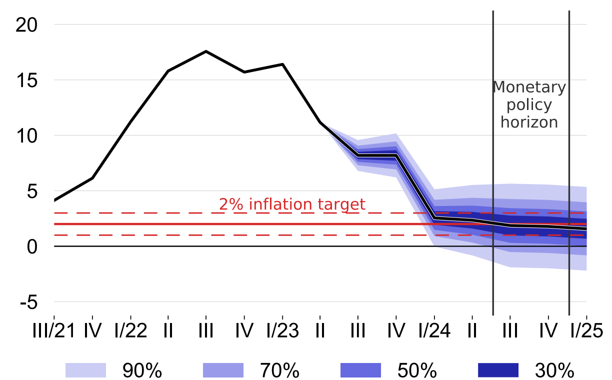
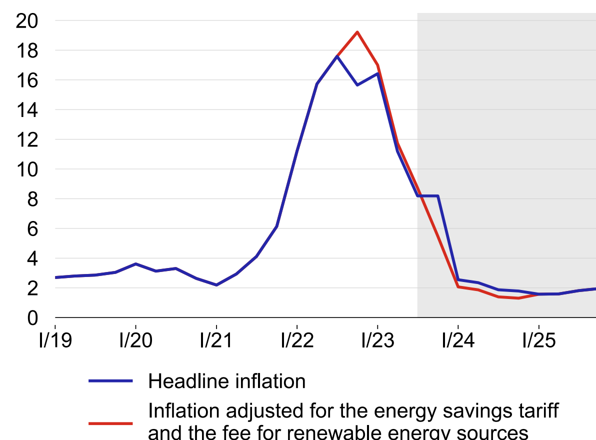


Chart III.2

The government measures to help households with high energy prices affected inflation most of all in 2022 Q4

headline inflation; y-o-y in %



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11 Inflation will decrease to 7% in September 2023.

energy savings tariff, which led to a temporary drop in electricity prices from October to December 2022.

Administered price inflation will fall at the start of next year as this effect drops out and will remain close to 1% until the end of 2025 (see Chart III.4). Consumer prices of gas and electricity excluding fees (i.e. their commodity component) will fall further in January 2024 due to movements in commodity prices on exchanges and to energy prices, which started to fall below the government price caps this year. However, this will be counteracted by the reintroduction of the fee for renewable energy sources,[12] growth in energy distribution fees and the planned measures in the government consolidation package in the form of an increase in the price of the road toll vignette[13] and an increase in the VAT rate on selected administered price items (in particular heat, water supply, sewerage collection and transport).

Within core inflation, growth in prices of goods and services will slow further

Core inflation decreased gradually in Q2 on account of slowing growth in prices of both tradables and non-tradables. Core inflation will slow significantly further in Q3. This will be due to industrial producer price inflation abroad turning negative and to the subsequent spillover of this effect into domestic price categories. The falling core inflation will also be due to a continued decline in the contribution of imputed rent, which is even forecasted to turn negative temporarily in the second half of this year (see Chart III.5). This decline reflects a combination of stabilising prices of new properties and falling growth in construction prices (of both work and materials). Core inflation will thus continue to come down for the rest of this year and all of next year, aided by tighter domestic monetary conditions.

Food price inflation will fall further in the summer

The high food price inflation declined appreciably during spring.[14] The downward trend will continue in the summer months (see Chart III.3). This will be due to falling world agricultural commodity prices and domestic agricultural producer prices.

Annual fuel price inflation will be strongly negative throughout 2023

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12 The waiver of the fee for renewable energy sources approved by the Czech government is in effect from October 2022 until December 2023.

13 The price of an annual road toll vignette will rise by CZK 800 (from CZK 1,500 to CZK 2,300, i.e. by more than 50%) in January 2024. A regular indexation scheme will also be introduced to reflect inflation.

14 See the čnBlog article Odkud se bere zdražování potravin a je Česko opravdu tak výjimečné? (*Where does the rise in food prices come from and is the Czech Republic really so exceptional?*; available in Czech only).

Chart III.3

Consumer price inflation will slow sharply in 2023 Q3 and at the start of 2024, with most components contributing

structure of inflation; y-o-y changes in %; contributions in pp

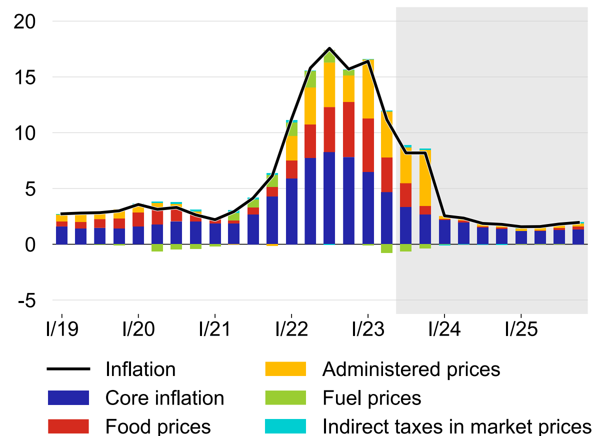


Chart III.4

Administered price inflation will initially decline further; it will rise temporarily at the end of this year on account of a reduced base and will drop sharply at the start of next year

administered prices; y-o-y changes in %; contributions in pp; including taxes

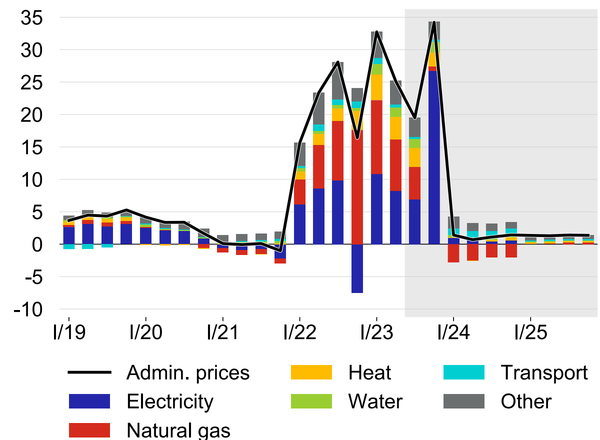
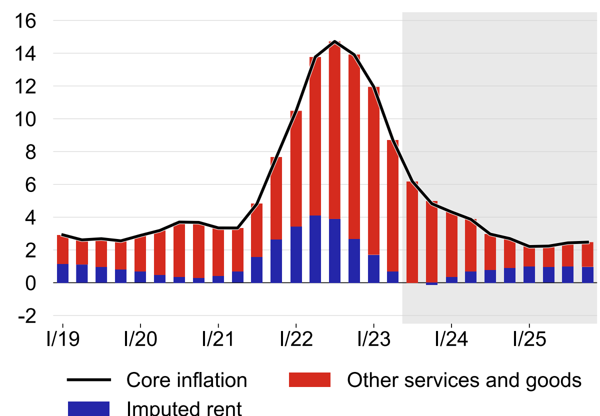


Chart III.5

Core inflation will slow in the second half of this year due to a decline in overall inflation pressures and to the contribution of imputed rent temporarily turning negative

y-o-y changes in %; contributions in pp



The year-on-year decline in prices at filling stations deepened further during 2023 Q2, due mainly to base effects. Aided by the previous appreciation of the koruna, fuel prices will decrease in year-on-year terms throughout 2023, though with diminishing intensity.

The overall cost pressures decreased further in the spring and will continue to ease over the outlook horizon

Growth of total costs in the consumer sector was driven in 2023 Q2 largely by continued high growth in prices of domestic intermediate goods. Growth in costs as a whole slowed further, due mainly to a negative contribution of energy import prices (see Chart II.6).

The overall cost pressures will continue to ease for the rest of this year, due in large part to a continued drop in energy import prices, which will reflect the gradual pass-through of the energy commodity price correction to the domestic economy. The contribution of prices of domestic intermediate goods will also decrease slightly. This will be due mainly to a further gradual slowdown in quarter-on-quarter wage growth. The slightly increasing positive contribution of core import prices will primarily reflect a weakening of the koruna amid subdued growth in the core component of foreign producer prices. The contribution of price convergence will also gradually turn positive again over the forecast horizon.

Growth of total costs will increase temporarily at the start of next year, as the expected positive direct second-round impacts of the changes to indirect taxes contained in the government's fiscal consolidation package will have an inflationary effect on the contribution of domestic costs.[15] The negative contribution of the falling energy import prices will gradually fade out next year. Even so, the overall cost pressures will decrease overall over the rest of next year, as the rapidly abating domestic cost pressures and declining contributions of core import prices will ultimately predominate. Besides a continued slowdown in wage growth, the contributions of domestic costs will reflect the decreasing margins of firms in the intermediate goods sector, which will be forced to respond to the subdued domestic demand. The smaller contribution of core import prices will reflect stabilisation of the koruna and subdued growth in the core component of foreign producer prices.

In 2025, growth of total costs will be driven primarily by the contribution of domestic costs. This contribution will show a steady moderate decline but will remain elevated until the end of the forecast horizon.

Chart III.6

The cost pressures will continue to ease, due to a drop in energy import prices and a decrease in the contributions of the domestic economy

costs in consumer sector; q-o-q changes in %; contributions in pp; current prices; annualised

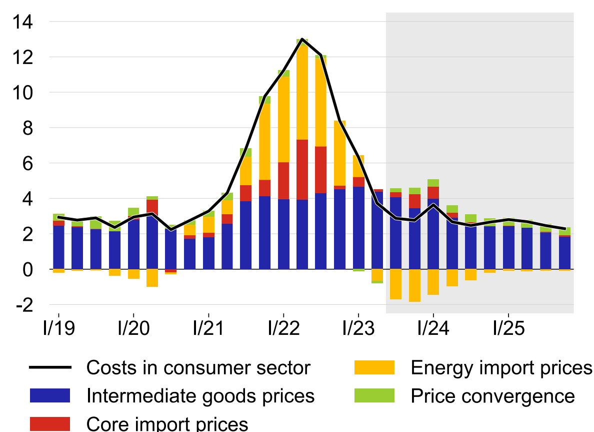
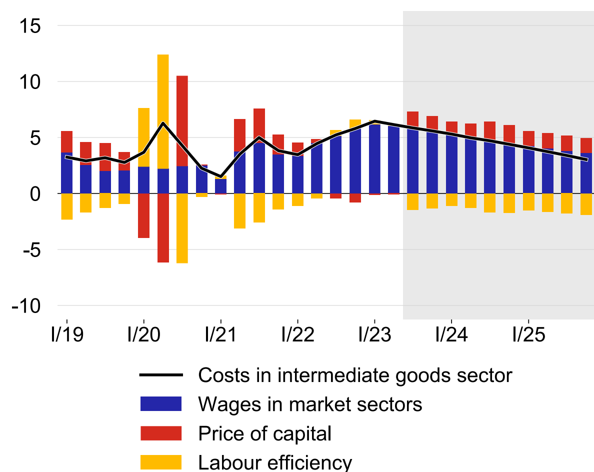


Chart III.7

The domestic cost pressures will ease gradually as the high wage growth steadily fades

costs in intermediate goods sector; q-o-q changes in %; contributions in pp; current prices; annualised



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15 The forecast assumes that the shifting of certain items to categories with a reduced VAT rate will be reflected only partially in a drop in end prices for customers. Firms will retain the remainder of the difference as increased margins. According to the forecast, this effect will be visible across the price vertical in prices of both final consumer goods and domestic intermediate goods.

The domestic cost pressures started to ease gradually in the spring and will continue to fade steadily over the outlook horizon, but will remain elevated

The slowdown in growth in domestic costs (see Chart III.7) in 2023 Q2 was due predominantly to slightly slowing quarter-on-quarter growth in market wages. The contribution of the price of capital to the growth in costs was slightly negative during the spring due to the fading shallow recession in the domestic economy. Labour efficiency meanwhile worsened slightly. This, conversely, slightly increased the domestic cost pressures.

Wage growth will continue to decrease gradually in the second half of this year. Economic activity will start to grow visibly and the contribution of the price of capital to growth in domestic costs will turn distinctly positive again. A simultaneous improvement in labour efficiency will have an anti-inflationary effect and roughly offset the growth in the price of capital. Growth in domestic costs will thus slow further.

The domestic cost pressures will also decline gradually next year, as compensation for the previous decreases in real household income in an environment of fading inflation will cause wage growth to slow. The positive contributions of the price of capital to growth in costs will vary slightly in size depending on the economic growth profile. This effect will be offset by the anti-inflationary effect of continued growth in labour efficiency.

The domestic cost pressures will shrink in 2025 as well, owing to a further slowdown in wage growth. However, neither wage growth nor, consequently, domestic cost growth will slow to their steady-state levels by 2025, under conditions of a long overheated labour market.

The strongly positive gap in mark-ups in the consumer sector will start to decrease gradually next year in response to only slowly recovering domestic demand

The previously strongly positive gap in mark-ups reflects growth in prices far outpacing growth in the costs of domestic producers, retailers and providers of goods and services to households. The gap will start to decrease at the end of this year (see Chart III.8), but the gradual closure of the gap in mark-ups will be temporarily interrupted at the start of next year by the immediate second-round effects of the changes to indirect taxes arising from the government's consolidation package (as described in footnote 15 on the previous page). The overall cost pressures will then gradually fade. Household consumption will recover only gradually from its current low level. As a result, the room for increasing prices faster than costs will disappear next year and profit margins will start to normalise. This will significantly reduce the overall

***Mark-ups in the consumer sector** represent the difference between the prices and marginal unit costs of producers of final consumer goods. The gap in mark-ups shows the deviation of current mark-ups from their steady-state level. A positive gap in mark-ups thus implies a higher-than-usual "profit margin", while a negative gap represents a lower-than-usual one. If the gap increases (decreases) over time, it gives rise to an additional inflationary (anti-inflationary) effect, i.e. upward (downward) pressure on consumer prices going beyond the increase (decrease) in costs.*

Chart III.8

The positive gap in mark-ups will start to narrow gradually next year amid only slowly recovering domestic demand dampened by tightened monetary and fiscal policy

gap in mark-ups on consumer goods in pp

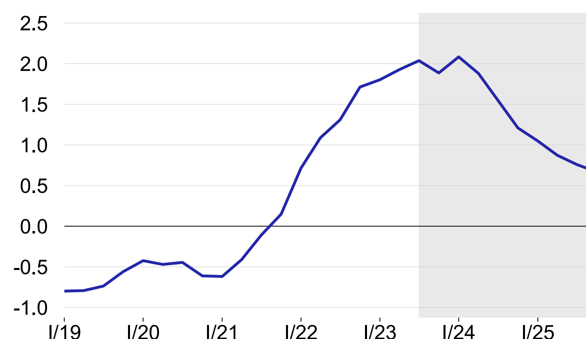
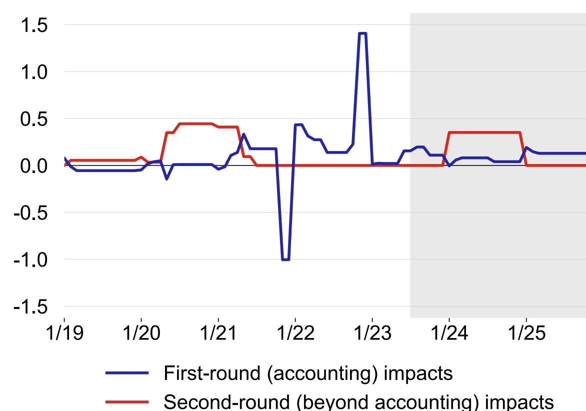


Chart III.9

The first-round and immediate second-round effects of changes to indirect taxes will mainly reflect the planned measures contained in the government's consolidation package

first-round and second-round effects of tax changes; contributions to annual inflation in pp



inflation pressures. Given the broad-based nature of the current increased profitability of domestic firms, the forecast also expects a similar trend in the gap in mark-ups as that for consumer goods in the domestic intermediate goods sector.

Headline inflation will be slightly above monetary policy-relevant inflation

In the second half of 2023, consumer price inflation will be slightly higher due to a 5% rise in excise duty on tobacco in January of this year and a return of excise duty on fuel to its original level.[16] At the start of 2024, the changes to indirect taxes under the government's consolidation package will affect consumer price inflation in both directions and will be moderately inflationary overall. The planned measures that will have an inflationary effect include a 10% increase in excise duties on tobacco and alcohol. Conversely, a reduction in the number of VAT rates and the transfer of selected goods and services between these rates is expected to have an anti-inflationary effect. Overall, these changes will have slightly positive first-round (accounting) effects and will lift consumer price inflation moderately for a short time. At the same time, the forecast assumes that the VAT rate cut will pass through only partially to the prices of the items concerned.[17] For this reason, the immediate second-round effects of these changes are positive and will affect both headline and monetary policy-relevant inflation in 2024. Excise duty on tobacco and alcohol will be raised again at the start of 2025, when it will go up by 5%. Headline inflation will thus be slightly above monetary policy-relevant inflation over the entire outlook (see Chart III.9).

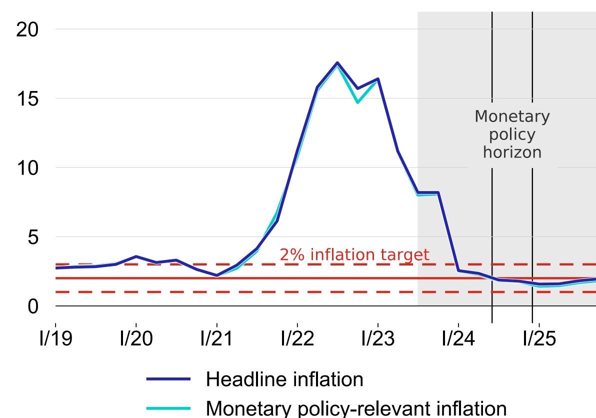
Monetary policy-relevant inflation will stay close to the inflation target over the monetary policy horizon (i.e. in 2024 Q3 and Q4), due in part to the previous tightening of monetary policy (see Chart III.10).

*We distinguish, or explicitly identify, two types of direct effects on prices in relation to **changes to indirect taxes** – first-round effects (or accounting effects in the items concerned) and second-round effects (going beyond accounting effects in the items concerned). The first-round effects are the calculated price changes due to the indirect tax changes implied by full (accounting) pass-through of the tax changes to prices of the relevant items of the consumer basket. The second-round effects capture the immediate price changes going beyond the first-round effects and may be positive or negative. In the case of an indirect tax increase (decrease), they are positive if the prices of the items concerned rise (fall) more (less) than implied by mechanistic pass-through of the tax changes. Conversely, they are negative if prices rise (fall) less (more) than the tax increase (decrease) would imply. The second-round effects affect both monetary policy-relevant inflation and headline inflation. The CNB applies escape clauses to the first-round effects of indirect tax changes and sets interest rates with regard to the outlook of monetary policy-relevant inflation.*

Chart III.10

Monetary policy-relevant inflation will fall to close to the 2% target at the monetary policy horizon; headline inflation will be slightly above it

headline and monetary policy-relevant inflation; in %



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16 Excise duty on petrol returned to its original level in October 2022. According to the assumption of the forecast, excise duty on diesel will return to CZK 9.95 a litre in August 2023.

17 The largest items on which there will be a reduction in the VAT rate are food, construction work and books. The reduction of the VAT rate on construction work will be reflected in inflation via imputed rent. Books are to be exempted from VAT.

COMPARISON WITH THE PREVIOUS FORECAST: Price developments

		2023	2024	2025	
Consumer prices	y-o-y changes in %	**11.0**	**2.1**	**1.7**	The slight downward revision of the inflation forecast this year is due mainly to lower core inflation and, to a lesser extent, to lower growth in fuel prices.
	pp	(-0.2)	(0.0)	-	
Administered prices	y-o-y changes in %	**28.0**	**1.2**	**1.4**	The administered price outlook has shifted slightly upwards for this year due to higher observations in the spring months; the change is negligible for 2024.
	pp	(0.4)	(-0.2)	-	
Core inflation	%	**7.9**	**3.5**	**2.3**	The downward revision of the core inflation forecast is due to a faster-than-expected decline in foreign industrial producer prices and smaller inflation pressures from the labour market.
	pp	(-0.3)	(0.0)	-	
Food prices (incl. alc. bev. and tobacco)	y-o-y changes in %	**10.3**	**0.5**	**0.4**	The food price outlook for next year is slightly higher due to a weaker exchange rate and higher outlooks for some agricultural commodities than in the previous forecast.
	pp	(0.0)	(0.7)	-	
Fuel prices	y-o-y changes in %	**-14.3**	**1.1**	**-0.3**	Fuel prices will decrease slightly more than in the previous forecast this year due to a lower outlook for oil prices.
	pp	(-1.8)	(0.2)	-	

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value and a red label a decrease)

IV. MONETARY POLICY

At its August monetary policy meeting, the CNB Bank Board kept the two-week repo rate at 7%, the discount rate at 6% and the Lombard rate at 8%. The Bank Board assessed the risks of the forecast and the uncertainties of the outlook as being significant and tilted to the upside. Consistent with the baseline scenario of the Monetary Department's forecast is a decline in market interest rates over the entire outlook. Their path reflects fading strong foreign cost pressures and subdued domestic demand this year. Overall, this leads to inflation stabilising at the 2% target at the start of next year. A number of substantial risks and uncertainties are associated with the forecast. The threat of inflation expectations becoming unanchored and the related risk of a wage-price spiral, which would lead to renewed demand-pull pressures and persistent inflation, are the main upside risks to inflation. A longer effect of expansionary fiscal policy is also an inflationary risk. The general uncertainties of the outlook include the future course of the war in Ukraine, the availability and prices of energy, and the future monetary policy stance abroad.

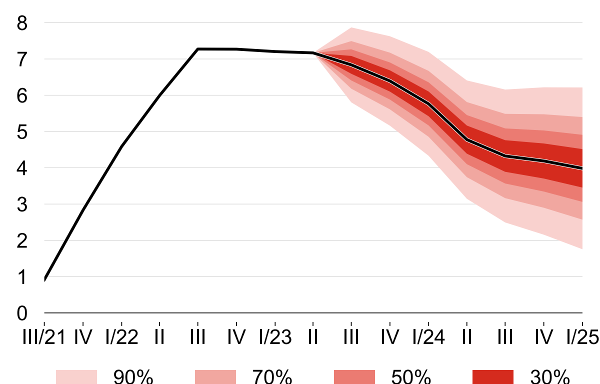
Consistent with the baseline scenario of the forecast is a decline in market interest rates over the entire outlook

The summer forecast implies market interest rates declining until 2025 (see Chart IV.1). This is in line with the fading of the extraordinary inflation pressures stemming from the external environment and of the factors of high inflation in the domestic economy in the form of elevated wage growth and a strongly positive gap in the mark-ups of producers and retailers. The switch of foreign price pressures in the production sector to a deflationary effect combined with a gradual moderation of the high domestic inflation will result in consumer price inflation falling close to the target at the start of next year. Inflation will remain close to the target at the monetary policy horizon, i.e. in the second half of 2024. This opens up room for monetary policy to be eased gradually. According to the baseline scenario, interest rates will start to come down in mid-2023. The anchoring of inflation expectations to the CNB's 2% target remains an important assumption of the baseline scenario of the forecast. This helps inflation return close to the target.

Chart IV.1

Consistent with the baseline scenario of the forecast is a decline in market interest rates over the entire outlook

3M PRIBOR in %; confidence interval



***The confidence intervals of the forecasts** for key macroeconomic variables reflect the predictive power of past forecasts. They are symmetric and linearly widening. In the case of headline inflation, they widen only for the first five quarters and then stay constant. This is consistent with both the past predictive power and the stabilising role of monetary policy.*

The koruna has depreciated recently

The koruna has been showing a slight depreciation tendency since early April, partially reversing the appreciation seen in the previous two quarters. In this period, the koruna has weakened from CZK 23.3 to just over CZK 24 to the euro at the end of July. A narrowing interest rate differential was one of the factors (see Chart IV.3). The depreciation of the koruna might also have been partly due to seasonal demand for foreign currency (the dividend payment period and higher demand for outbound tourism during the summer holidays). The average exchange rate in 2023 Q2 was CZK 23.6 to the euro. This represented a year-on-year appreciation of 4.3%.

The koruna will depreciate further in the quarters ahead

The summer forecast expects the koruna to average CZK 23.8 to the euro in 2023 Q3. The exchange rate will gradually weaken to just above CZK 24.5 to the euro in the quarters ahead (see Chart IV.2). It will be affected by a receding of the wave of positive sentiment and a narrowing interest rate spread vis-à-vis the euro area (see Chart IV.3), which will have a weakening effect. This effect is partly dampened using expert adjustments. A more pronounced depreciation of the koruna will be prevented by a renewed trade surplus due to the fade-out of the issues in global value chains and a lessening of the immediate economic and inflationary impacts of the war in Ukraine.

The market interest rate outlook is slightly higher than the CNB forecast; unlike the central bank, the analysts expect the koruna to be broadly flat

The market outlook for short-term FRA rates has moved lower in recent weeks. In the period ahead, too, the market expects the 3M PRIBOR to decline gradually at the one-year horizon (see Chart IV.4). This outlook is slightly above the interest rate path in the baseline scenario of the CNB forecast. All the respondents in the FMIE survey were expecting the 2W repo rate to be left at its current level at the monetary policy meeting in August. The analysts expect the CNB's key interest rate to be in the wide range of 4.50%–6.25% (5.3% on average) one year ahead.

On average, the analysts in the FMIE and FECF surveys expect the koruna to be close to its current exchange rate of around CZK 24 to the euro one year ahead (see Table IV.1). The exchange rate they expect is thus stronger than the central bank's outlook. On the one hand, this is due to the CNB's relatively hawkish rhetoric, which is keeping the koruna at a stronger level than that based solely on macroeconomic fundamentals. The weak economic activity and narrowing interest rate differential are having the opposite effect. The difference between the minimum and maximum expected exchange rate against the euro one year ahead in the two surveys exceeds CZK 2 and CZK 3 respectively.

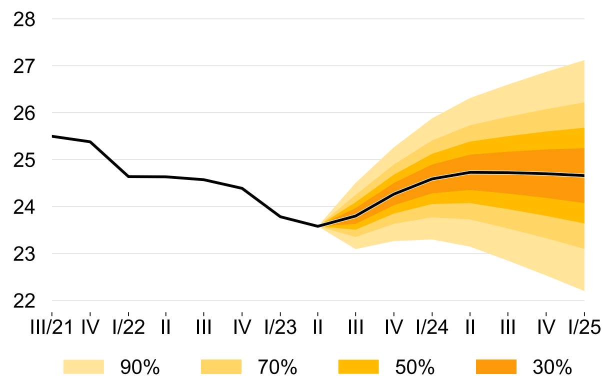
The Bank Board's communications have been indicating that interest rates will be kept at the current level for longer

The Bank Board members' recent media statements indicated that their opinions on interest rates were converging ahead of the August meeting. The majority view across the Bank Board was that the existing interest rate settings were and are tight enough to ensure that inflation falls gradually to the target. Against this, one member noted that monetary policy

Chart IV.2

The koruna will weaken over the next few quarters

CZK/EUR exchange rate; confidence interval

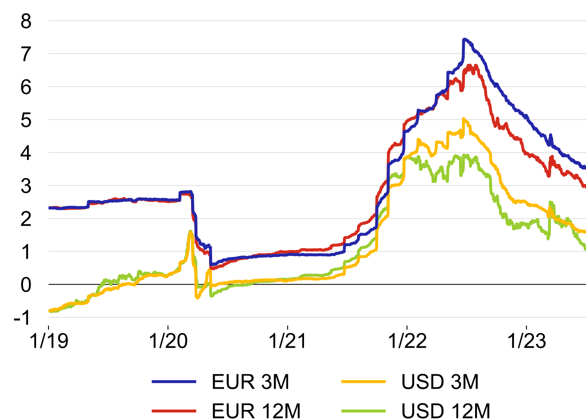


***The monetary policy horizon** is the future time period which the CNB focuses on when making its monetary policy decisions and which reflects the lag in the transmission of monetary policy. By concentrating on inflation at this horizon, the central bank also abstracts from short-term inflation shocks, whose impact monetary policy can control to only a minimal extent.*

Chart IV.3

The interest rate differential vis-à-vis euro and dollar rates is gradually narrowing

pp; differential of Czech money market rates vis-à-vis EUR and USD rates

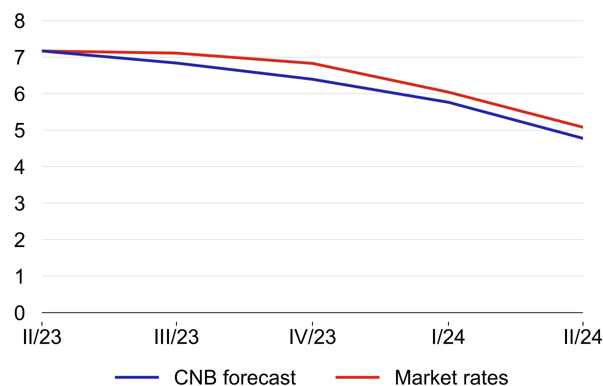


should have been tighter in the previous period, but that the window for raising rates has closed for the moment. Given the very high, albeit gradually falling, inflation, the Bank Board communicated that rates would remain higher for longer. The Bank Board viewed the risks as open in both directions. It was also said that rate cuts were likely to be discussed in the autumn. However, the members assessed market expectations regarding the timing and size of the rate cuts as too optimistic. According to them, the reduction in interest rates will be more moderate than the market currently expects.

Chart IV.4

The market expected rates to be left unchanged at the August meeting; the market outlook is slightly above the CNB forecast

3M PRIBOR; FRA in %



Note: Market rates represent for 2023 Q2 the 3M PRIBOR and for 2023 Q3–2024 Q2 the average values of the FRA 1*4, 3*6, 6*9 and 9*12 rates for the last 10 trading days as of 31 July 2023.

*The **3M PRIBOR market interest rate** is a money market reference rate with a maturity of three months which is closely linked to the CNB's monetary policy rates. The CNB's key rate is the **two-week (2W) repo rate**, paid on commercial banks' excess liquidity as absorbed by the CNB in two-week repo operations. The difference between the 3M PRIBOR and the 2W repo rate fluctuates over time and reflects, among other things, expectations regarding the future path of monetary policy interest rates. This difference has been 0.1 pp since mid-June 2023.*

COMPARISON WITH THE PREVIOUS FORECAST: Interest rates and the exchange rate

Chart IV.5

The interest rate path is slightly higher than in the spring forecast, especially in late 2023 and early 2024

decomposition of changes in 3M PRIBOR forecast in pp

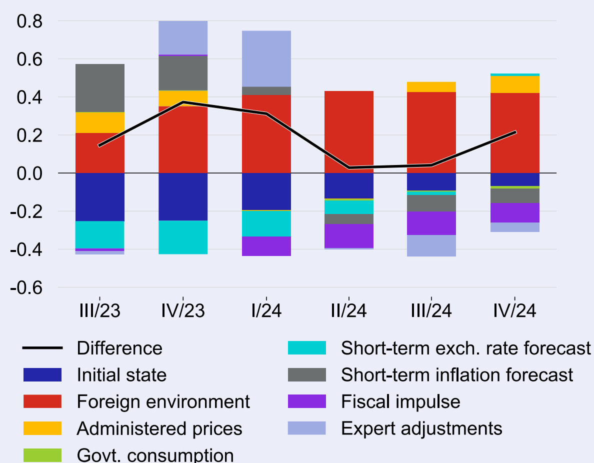
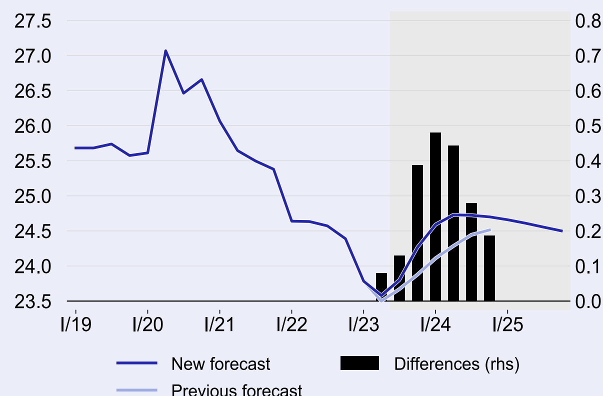


Chart IV.6

The koruna will be weaker than in the spring forecast

change in CZK/EUR exchange rate forecast; differences in CZK – right-hand scale



Comparison of the interest rate path with the previous forecast (Chart IV.5)

- The strongly positive contribution of **the foreign environment** mainly reflects a more pronounced expected tightening of ECB monetary policy, which will outweigh the effect of a somewhat deeper decline in the energy component of foreign producer prices.
- The **initial state** fosters slightly lower rates. This is due primarily to lower energy import prices. Less buoyant domestic wage cost growth and more subdued economic activity and domestic household consumption also have anti-inflationary effects.
- **The short-term exchange rate forecast** for 2023 Q3 causes a downward revision of the interest rate path, as a purely model-based forecast would lead to a weaker exchange rate of the koruna than the one set in the near term. Conversely, **the short-term inflation forecast** fosters higher rates this year.
- The positive contributions of **administered prices** at the end of this year reflect the expected increase in the price of the road toll vignette at the start of 2024.
- The contributions of **general government consumption** and the **fiscal impulse** foster lower interest rates next year due to the impact of the government consolidation package.
- **Expert adjustments** first foster higher interest rates in late 2023 and early 2024. This is due to the inflationary effect of the expected immediate impacts of changes to indirect taxes at the start of 2024, which is expertly reflected in an increase in the gap in mark-ups in the consumer goods and domestic intermediate goods sectors. In the course of next year, expert adjustments are applied which slow the closure of the gap in mark-ups in an environment of recovering domestic demand and a sustained tight labour market. The entire outlook also contains strengthened expert adjustments reducing the effect of the narrowing interest rate differential on the exchange rate, which foster lower rates. These adjustments will prevail in the second half of next year and will be reflected in a moderately negative contribution of expert adjustments as a whole.

Comparison of the koruna exchange rate with the previous forecast (Chart IV.6)

- The shift in the exchange rate to weaker levels at the nearer end of the forecast horizon is due mainly to its **observed levels**. A more quickly narrowing **interest rate differential** vis-à-vis the euro area acts in the same direction. However, its pass-through to the koruna exchange rate is partially expertly reduced. By contrast, **a better expected current account outlook** acts in the opposite direction.

Long-term financing conditions have eased during 2023

PRIBOR interest rates have mostly remained flat since the start of this year, declining slightly at longer maturities only. Domestic rates with longer maturities (over 1Y) initially moved broadly in line with rates on foreign markets (see Chart IV.7). Approximately in June, they started to deviate downwards partly, as markets abroad – unlike those in the Czech Republic – still expect central banks to tighten monetary policy further in an effort to tame inflation. Overall, domestic IRS rates have dropped by up to 1 pp at individual maturities since the start of this year. Government bond yields have gone down by roughly the same amount.[18] Long-term financing conditions thus eased in the first half of this year. The negative slope of the domestic IRS and government bond yield curves remained roughly unchanged (see Chart IV.8).

The movements of domestic market rates are being reflected in client interest rates

Domestic client interest rates have stabilised at elevated levels since last autumn following a sharp increase mirroring the growth in monetary policy and market rates. The rate on new loans to non-financial corporations has been fluctuating below 9% (see Chart IV.9) and the rate on genuinely new mortgages remains close to 6%. In June, the rate on new loans for house purchase increased slightly to 5.4% in line with the completion of mortgage refixations, which were agreed well in advance at some banks. Mortgage fixation and the timing of future mortgage refinancing are analysed in Box 2 at the end of this section. The interest rate on new deposits with agreed maturity was slightly above 6% in Q2. However, the overall rate on household deposits is low (2.1%) due to the still significant share of deposits on current accounts with very low interest rates. The gradual pass-through of monetary policy rates to client rates is examined in detail in Box 3 at the end of this section. Real interest rates taking into account inflation expected one year ahead moved further into positive territory, reaching 5.6% in the case of loans to corporations.

Growth in loans to corporations and households has stabilised

Growth in corporate loans has stabilised after a previous slowdown. The annual rate of growth stood at 7.6% in June. The share of foreign currency loans remains high (47.8%). However, its growth has lessened in intensity amid a decreasing interest rate differential vis-à-vis the rest of the world and banks' tighter credit standards in this segment. Corporate

Chart IV.7

Domestic interest rates with longer maturities have mostly decreased in recent months

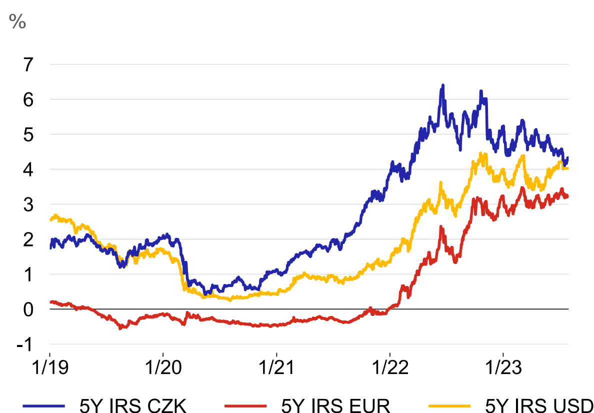


Chart IV.8

The Czech government bond yield curve shifted lower, while its slope remained negative

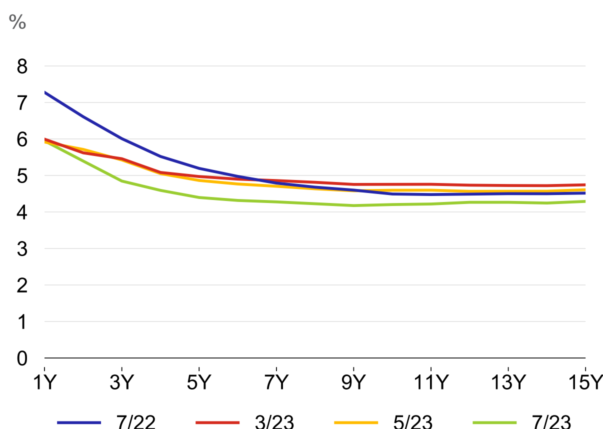
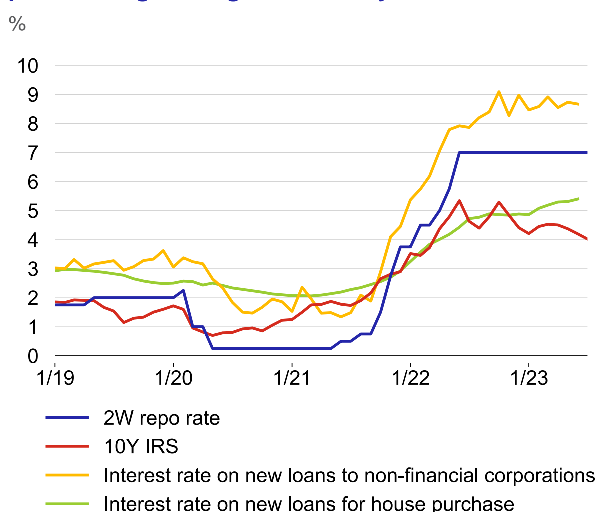


Chart IV.9

Interest rates on loans to corporations and loans for house purchase are elevated following the previous tightening of monetary conditions



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18 The Ministry of Finance has issued CZK 247 billion of government bonds on the primary market since the start of this year. The updated Funding and Debt Management Strategy for 2023 assumes issues amounting to CZK 400–500 billion.

demand for loans as perceived by banks declined in Q2, mainly due to higher interest rates and a lower need to finance fixed investment and working capital and inventories. Demand for short-term loans recorded a larger drop, due to gradually slowing growth in input prices and firms' efforts to reduce their inventories. According to the forecast, growth in loans to firms will continue to slow down in response to the high interest rates and cooled economic growth (see Chart IV.10).

Growth in loans to households for house purchase fluctuated close to 5%. The mortgage market picked up slightly (from the perspective of new loans) in Q2. Part of the banking market perceived an increase in demand for loans for house purchase. The increase in perceived demand was fostered by more favourable prospects for the housing market and by a modest decline in long-term market rates. Despite this, new mortgage loans are still at a lower level than in the previous period, with genuinely new mortgages having declined by 28% year-on-year in June. Higher interest rates are still the main limiting factor. The correction of house prices, which had helped to lower imputed rent within core inflation, recently halted. Demand for consumer credit also recovered despite the protracted tightening of credit standards, due in part to households' need to finance higher expenditure on durable goods. The forecast expects growth in both categories of loans to slow gradually over the rest of this year (see Chart IV.10).

Growth in the quantity of money in the economy increased slightly

M3 growth remained relatively high (see Chart IV.11). As regards the sources of money creation, government debt issuance fostered M3 growth, as did loans to the private sector. As for the sector structure, deposits of households and non-financial corporations and increased money holdings by non-monetary financial institutions relative to the previous year are contributing to the growth in the quantity of money in the economy. The migration of highly liquid overnight deposits to products with higher interest rates decreased. This is reflected in a smaller decline in M1. The ratio of M3 to nominal GDP is below the long-term average.

The risks of the forecast and the uncertainties of the outlook are significant and tilted to the upside

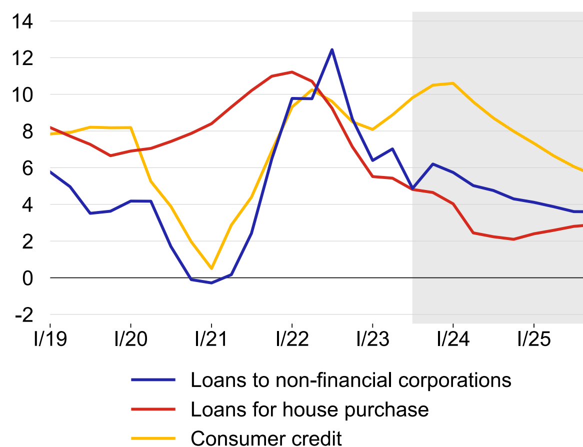
Elevated inflation expectations and their impact on wage growth and pricing, including a slower decline in profit margins, remain an inflationary risk to the forecast. A faster and bigger decline in the saving rate, which may lead to a stronger recovery of consumer demand than in the baseline scenario, is another upside risk to inflation.

The effect of fiscal policy this year and the next is an uncertainty stemming from the domestic economy. The

Chart IV.10

Growth in loans to households and firms will slow

annual rates of growth in %



Note: The annual rates of growth in loans were affected in 2023 Q2 by the purchase of the loans of Sberbank CZ, a.s. by Česká spořitelna in April.

Chart IV.11

M3 growth is relatively high

annual rates of growth in %

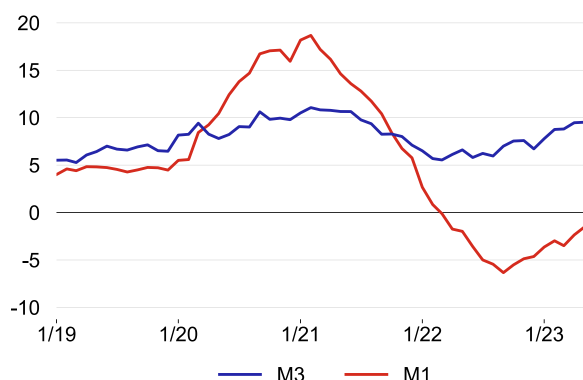
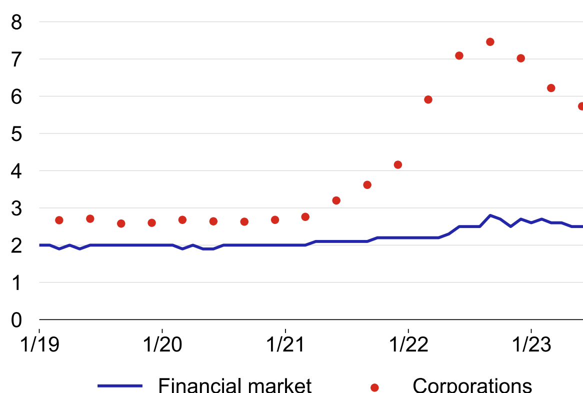


Chart IV.12

Inflation expectations declined further among non-financial corporations at the three-year horizon but remain well above the 2% target

sample of approximately 18 analysts and 150 corporations; %



foreign uncertainties mainly involve the pass-through of the energy component of the foreign PPI to the domestic economy and the impact of monetary policy tightening abroad.

The possibility of a slower decline in inflation expectations towards the CNB's 2% target remains an inflationary risk to the forecast

The anchoring of inflation expectations in the medium term ensures that shocks to inflation tend to dissipate relatively quickly. However, if inflation expectations are not sufficiently anchored to the inflation target, price shocks can cause a persistent increase in inflation or slow its decline. This risk is illustrated by a scenario of elevated inflation expectations with rates kept unchanged for longer (see below).

Inflation expectations have declined but remain well above the 2% target

The available indicators are signalling that there is still a risk of inflation expectations becoming de-anchored, albeit to a lesser extent than before. According to a joint survey conducted by the Confederation of Industry and the CNB, the inflation expectations of non-financial corporations one year ahead stood at 8% in June (see Table IV.1). Three years ahead, they fell to 5.7% but are still well above the CNB's 2% inflation target (see Chart IV.12). Firms are also asked about their producer prices one year ahead. This forward-looking indicator decreased to 8.1% in June. The European Commission's business survey also shows that the share of firms expecting the prices of their products and services to increase in the near term has dropped.

Concerns about rising prices among households are diminishing. The indicator of inflation perceived by households in the European Commission survey is close to an all-time high, but the indicator of the inflation rate expected one year ahead has mostly declined since last spring (see Chart IV.13). According to the CZSO's business survey, consumers remain pessimistic about the future economic situation, though less so than in recent months. The outlook for their financial situation is also still worsening, due mainly to the recent rapid growth in housing-related energy prices.

The analysts continue to project inflation well above the CNB's 2% target at the three-year horizon (in the July FMIE survey they were expecting 2.5% on average). This section of the public is very familiar with the central bank's monetary policy regime and therefore usually has great confidence in its ability to achieve the inflation target in the medium term.

Table IV.1

Analysts' inflation expectations at the three-year horizon have long been above the inflation target, while those of firms exceed 5%

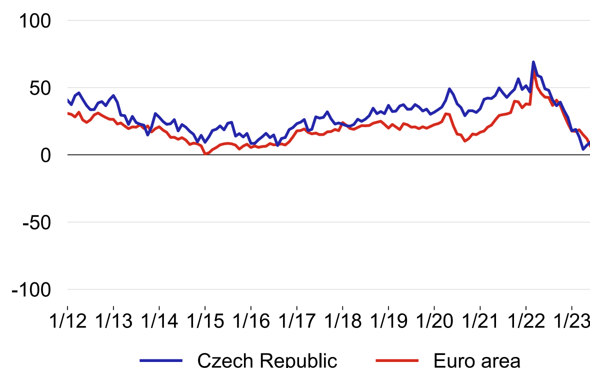
sample of approximately 18 analysts and 150 corporations; 1Y horizon; annual percentage changes unless otherwise indicated

	3/23	4/23	5/23	6/23	7/23
FMIE:					
CPI	3.7	3.5	3.2	3.1	3.1
CPI, 3Y horizon	2.6	2.6	2.5	2.5	2.5
Real GDP in 2023	0.2	0.1	0.3	0.3	0.3
Real GDP in 2024	2.7	2.6	2.7	2.5	2.5
Nominal wages in 2023	7.8	8.2	8.7	8.7	8.5
Nominal wages in 2024	6.0	6.0	6.5	6.5	6.4
CZK/EUR exchange rate (level)	24.2	24.1	24.0	23.9	24.0
2W repo rate (%)	5.6	5.6	5.5	5.4	5.3
1Y PRIBOR (%)	5.5	5.3	5.4	5.3	5.2
Corporations:					
CPI	8.9			8.0	
CPI, 3Y horizon	6.2			5.7	
CF:					
Real GDP in 2023	0.0	0.0	0.2	0.2	0.2
Real GDP in 2024	2.7	2.6	2.7	2.6	2.5
Nominal wages in 2023	8.1	8.4	8.6	8.6	8.5
Nominal wages in 2024	6.3	6.2	6.3	6.3	6.5
CZK/EUR exchange rate (level)	24.2	24.0	23.9	23.9	23.8
3M PRIBOR (%)	5.5	5.4	5.5	5.4	5.3

Chart IV.13

The indicator of the inflation expectations of Czech and euro area households has decreased markedly over the last year

households' inflation expectations in next 12 months according to European Commission Business and Consumer Survey; sample of approximately 1,000 households; balance of answers; expectations can take values from -100 to 100



The inflation expectations of households, firms and the financial markets *fundamentally affect their behaviour and decision-making, and hence also the overall economic situation and the resulting inflation rate. As expectations can be largely self-fulfilling, it is important that central banks monitor them and try to keep them close to their inflation target.*

The domestic interest rate reduction phase may be postponed in a situation of elevated inflation expectations

Consistent with the baseline scenario of the summer forecast is a gradual decline in market interest rates. However, in response to the mitigation of the risk of elevated inflation expectations, the central bank may wait to cut interest rates until it is clear that the drop in inflation towards the 2% target is robust and persistent. To illustrate this risk, a scenario of elevated inflation expectations has been constructed which assumes that interest rates stay at their current level until the end of this year. The scenario shows that keeping interest rates unchanged until the end of this year only partly offsets the upward effects of elevated inflation expectations on consumer price inflation. The 2% inflation target is therefore not reached until beyond the monetary policy horizon (at the start of 2025).

Scenario of elevated inflation expectations with rates kept unchanged for longer

The risk of a slower decline in inflation expectations

As in the spring forecast, this approach to modelling inflation expectations uses the Common Inflation Expectations (CIE) index. The index aggregates data on expected inflation one year ahead taken from surveys of inflation expectations of the financial market (the FMIE survey), businesses (the survey conducted by the Confederation of Industry and the CNB) and households (the EC survey).[19] The index thus provides a comprehensive overview of inflation expectations in the Czech economy. The evolution of the CIE index this year indicates quite a large decrease in inflation expectations from last year's unprecedentedly high levels, but in recent months shows inflation expectations still elevated well above the CNB's 2% target (see Chart IV.14).

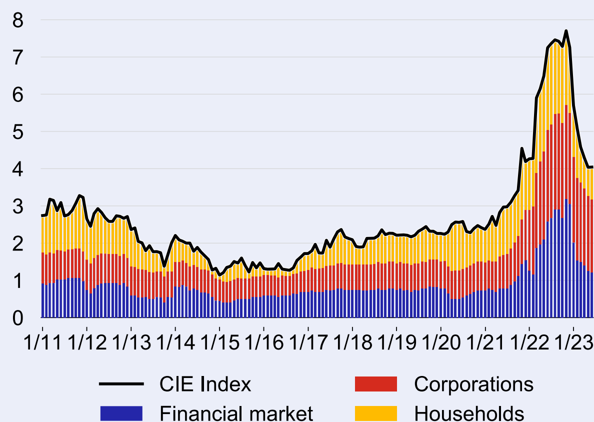
The values of the index are used as a source of information for making adjustments to inflation expectations in the extended g3+ model, which contains a process of endogenous de-anchoring of inflation expectations from the target, including additional depreciation pressure on the koruna.[20] The calibration of the adjusted model was chosen so that inflation expectations in the model approximate the course of the CIE index in recent quarters and especially in 2023 Q2. The model-based inflation expectations at the one-year horizon for 2023 Q2 are therefore around 1.5 pp higher than in the baseline scenario.

Chart IV.14

Modelling elevated inflation expectations using the CIE index

Common Inflation Expectations (CIE) index

expected y-o-y changes in CPI one year ahead in %



19 The calculation of the index is inspired by a paper written by Fed economists.

20 The simulation assumes that the de-anchoring of inflation expectations from the 2% target is reflected in a deterioration in sentiment, which increases the risk premium and exerts additional depreciation pressure on the koruna.

Simulation using the adjusted g3+ model

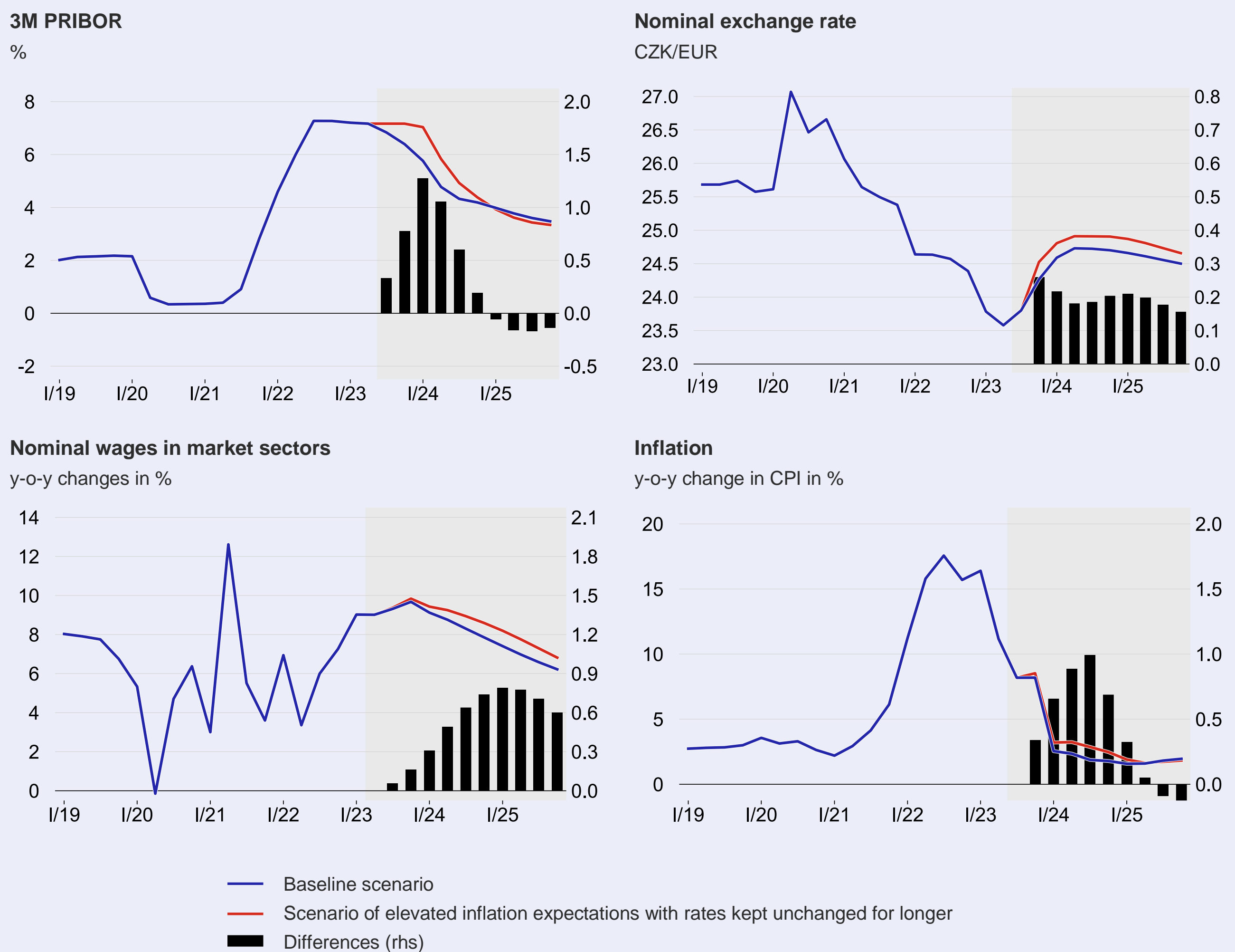
In addition to elevated inflation expectations, the scenario assumes that 3M PRIBOR market interest rates stay at 7.2% until the end of this year. The simulation thus shows the cost of keeping interest rates unchanged in the event of inflation tending to decline more gradually than considered in the baseline scenario due to elevated inflation expectations.

The elevated inflation expectations fundamentally affect economic agents' decisions, generating additional inflation pressures in the economy (see Chart IV.15). The CNB responds partially to them by leaving interest rates higher than in the baseline scenario. However, this response is not sufficient to offset the effect of the elevated inflation expectations. This in turn manifests itself mainly in higher inflation and nominal wage growth than in the baseline scenario. Additional depreciation pressure due to an increase in the risk premium leads to weaker levels of the koruna over the forecast horizon.

Chart IV.15

Elevated inflation expectations with interest rates kept unchanged lead to higher inflation

comparison of baseline scenario with scenario of elevated inflation expectations with rates kept unchanged for longer



A stronger-than-expected recovery in domestic demand is another inflationary risk to the forecast

The analysis in Box 1 in section II (*Reasons for households' current increased propensity to save*) shows that households' concerns of further growth in the cost of living in an environment of elevated interest rates fostered an increase in the saving rate in the second half of last year. However, this trend will eventually reverse and an improvement in consumer sentiment will – in the baseline scenario of the forecast – lead the saving rate to decline from its current above-average level. In reality, however, the saving rate may return to its steady-state level even faster, leading to a stronger recovery in household consumption and a faster resurgence of demand-pull inflationary pressures.

A faster decline in households' saving rate would lead to slightly higher inflation than in the baseline scenario, despite tighter monetary policy

A scenario of a faster decline in the saving rate (see below) is used to illustrate the risk of a stronger recovery in domestic consumer demand. In this simulation, markedly stronger demand pressures stemming from faster growth in consumption necessitate tighter monetary policy than in the baseline scenario or a postponement of the fall in interest rates. Despite this, inflation remains slightly higher over the entire forecast horizon.

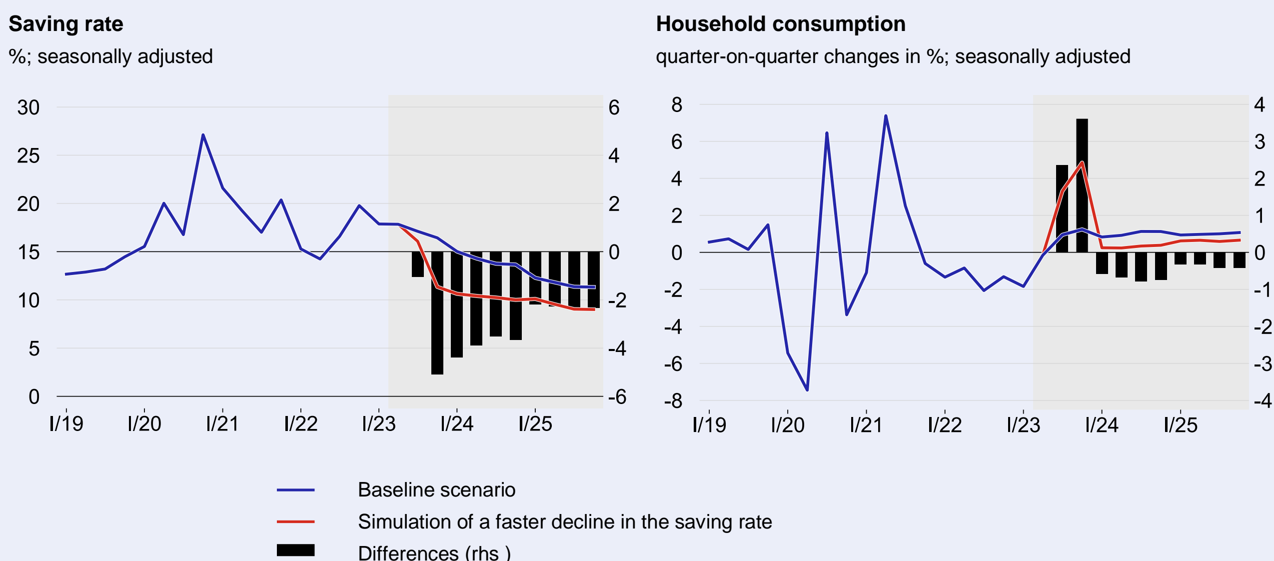
Scenario of a faster decline in the saving rate

The saving rate of households has been well above its long-term pre-crisis average of around 12% in recent years (see Chart IV.16, left-hand side). This year, the elevated saving rate is due mainly to rapid price growth and worse sentiment caused by the energy crisis, with households setting aside sufficient financial reserves for precautionary reasons. The following scenario captures the potential impacts of a faster decline in the saving rate to its long-term average than assumed in the baseline scenario. Like the baseline, this scenario is based on the assumption that inflation expectations stay anchored to the 2% target.

The scenario of a faster decline in the saving rate assumes that the saving rate decreases from its current level of around 18% to 12% by the end of this year and subsequently declines steadily further over the next two years to close to 10%. The saving rate is thus appreciably lower over the entire forecast horizon than in the baseline scenario.[21] The saving rate path considered implies significantly faster quarter-on-quarter growth in household consumption in the second half of 2023 than in the baseline scenario (see Chart IV.16, right-hand side). From 2024, quarter-on-quarter growth in household consumption will moderate due to the saturation of consumer demand and will be slightly below that in the baseline scenario. In whole-year terms, growth in household consumption is much faster compared to the baseline scenario this year and in 2024 and conversely somewhat slower in 2025.

Chart IV.16

Saving rate and implied related household consumption growth



The CNB responds to the stronger demand-driven inflation pressures stemming from the faster growth in household consumption in the scenario with a distinctly higher interest rate path relative to the baseline scenario (see Chart IV.17). The koruna is initially stronger than in the baseline scenario, owing to a larger interest spread vis-à-vis the rest of the world. Over the course of 2024 and 2025, however, the interest rate differential will narrow more quickly and the trade balance will be worse than in the baseline scenario of the forecast, due to higher import volumes induced by higher levels of domestic consumption. The koruna will thus gradually weaken to above the level in the baseline scenario. Despite the appropriate monetary policy response, inflation will reach slightly higher levels at the monetary policy horizon than in the baseline scenario. Household consumption will be reflected in visibly faster annual GDP growth this year and most of next year. GDP will then rise at a somewhat slower pace than in the baseline scenario.

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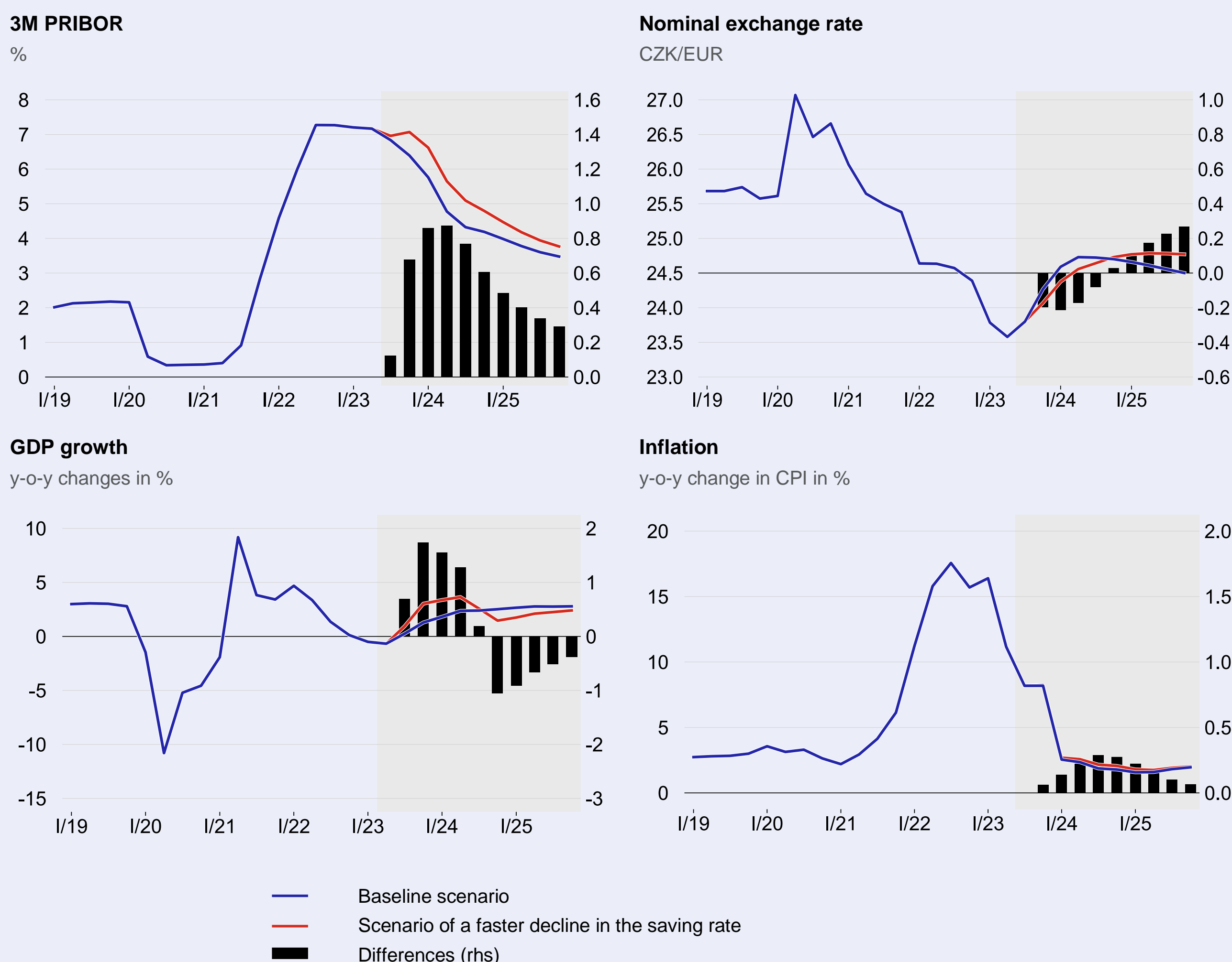
21 The chosen path is not aimed at estimating the second most probable course of the saving rate after the baseline scenario. It is just one of the possible courses along which the saving rate decreases noticeably faster than in the baseline scenario.

Chart IV.17

A faster decline in the saving rate leads to a need for a higher interest rate path than in the baseline scenario

comparison of baseline scenario with scenario of faster decline in saving rate



The effect of fiscal policy this year and the next is an uncertainty stemming from the domestic economy

A significant domestic uncertainty relates to the government consolidation package[22] – in terms of both the actual implementation of the measures it contains and their impact on inflation.

In addition, given the unfavourable performance of the state budget to date, the finance minister has announced a commitment to cut spending by around CZK 20 billion in the second half of this year in order to meet the approved budget deficit. Moreover, a document submitted by the Ministry of Finance on the preparation of the state budget for 2024 envisages

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22 The CNB forecast takes into account the version of the fiscal consolidation package that passed its first reading in the Chamber of Deputies on 14 July 2023.

further austerity measures on the expenditure side of the budget going beyond the consolidation package. The newly proposed measures have yet to be approved by the government and are thus not part of the new forecast.

Other significant uncertainties connected with the implementation of fiscal policy persist this year. The greatest uncertainty surrounds the impacts of the compensation paid as a result of the caps on energy prices and the collection of windfall tax and extraordinary levies approved to finance this compensation. The possibility of the Constitutional Court annulling the reduction of the extraordinary June increase in pensions is another uncertainty.

There is also uncertainty about the pass-through of deflation in the energy component of foreign producer prices to domestic price categories

According to the assumptions of the summer forecast, foreign producer prices will switch to a year-on-year decline in the second half of this year. This will be driven mainly by a fall in the energy component. There is also uncertainty over the timing and intensity of the pass-through of this decline to energy import prices, i.e. to domestic firms' costs and, in turn, to prices for end customers. This depends on the duration of the contracts between domestic producers and energy suppliers and the timing of their repricing and subsequent pass-through to final prices, including the possible effect of competition.

The effect of monetary policy tightening abroad on the foreign and domestic economies is also a source of uncertainty

Uncertainty from abroad stems mainly from the potential impacts of the tightening of Fed and ECB monetary policy. The financial markets already expect a recession to occur in the USA in late 2023 and early 2024, whereas the euro area is expected to gradually emerge from the energy crisis. However, this outlook is surrounded by considerable uncertainty, as the ECB's tight monetary policy could even push the euro area into recession. Conversely, there is still a significant risk that the current tightening of monetary policy will not unequivocally ensure the successful continuation of the disinflation process in the euro area (especially in terms of core prices of services).

BOX 2 Refixation and refinancing of mortgages and their effects on household expenditure

A substantial part of monetary policy transmission in the household segment takes place via the effect of interest rates on the volume of genuinely new loans for house purchase. However, as the period since the CNB's policy rates (and subsequently also client rates) went up increases in length, another channel is gaining in importance – the impact of the increased rates on current loan instalments, which are refinanced[1] over time. This box uses individual data on mortgages to quantify this impact in the segment of mortgage loans to households, which makes up the largest part of households' debt burden.

The main data source used in this analysis is the *Survey of new loans secured by residential property* (the "Survey"), which is conducted every six months by the CNB's Financial Stability Department. It includes information on all new bank loan agreements leading to a change in the volume of loans in the economy, i.e. new loans including loan increases and loans refinanced with different institutions.[2]

However, the Survey does not contain data on loans for which the rate was refixed with the original bank without any increase in loan size.[3] In commercial banks' statistics, these refixed loans fall into the "other new mortgage agreements" category and have long accounted for around 30% of all new loans. Since the start of 2022, however, their share has increased to 60% owing to a substantial decrease in genuinely new loans. The total volume of new mortgage agreements used to calculate the volume of loan instalments and to create possible scenarios is shown in Chart 1. It contains both data from the Survey and other new mortgage agreements.[4]

According to the data from the Survey, the most popular fixed-rate period is five years. It was agreed for 53% of total mortgage loans in the whole period under review (see Chart 2). However, the volume of loans with longer fixed-rate periods rose significantly in 2019 – the share of ten-year fixes reached 28% and that of seven-year fixes 31%. This led to an increase in the average fixed-rate period to 7.6 years. This can be explained by a decrease in banks' cost of funds at the time (see the 5Y IRS rate in Chart 3) and an easing of banks' credit standards applied to loans for house purchase compared to 2017 and 2018.[5]

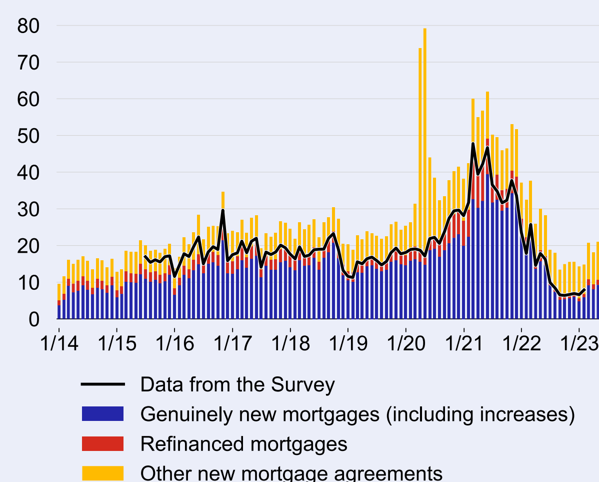
Conversely, after monetary policy rates were raised in early 2021 and client interest rates subsequently rose sharply for all fixed-rate periods (see Chart 3), the average fixed-rate period fell to 5.1 years, with clients not wanting to commit to high rates for a long time.

Chart 4 shows the estimated time of future refinancing broken down by year of loan origination.[6] Loans totalling around CZK 420 billion, provided mainly in 2018 and 2019 at an average current interest rate of 2.7%, are expected to be refinanced over the next two years. The expected change in instalments was quantified using two versions of the possible path of interest rates. The first assumes that the average rate upon refinancing stays the same during 2023 and 2024 as it was in 2023 Q1. The second version ties the predicted client interest rate on refixed mortgages to the five-year IRS rate,[7] which represents the cost of funds for the most frequent fixed-rate period.

Chart 1

The largest volume of genuinely new mortgage loans was agreed in 2021; other new mortgage agreements now have a significant share

total volume of new mortgage agreements in CZK billions

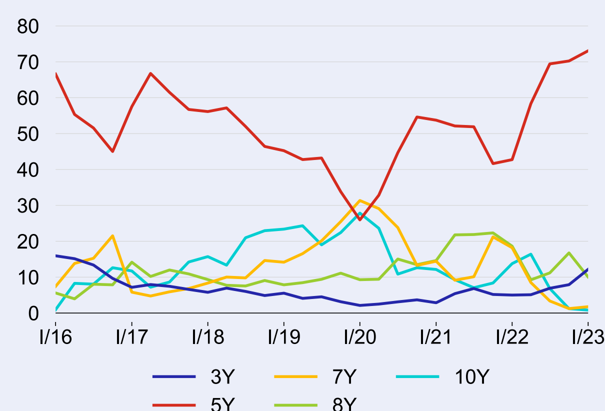


Note: In 2020, the moratorium – involving agreements to temporarily suspend repayments – was reflected in the volume of other new mortgage agreements.

Chart 2

Clients most frequently agreed a five-year fixed-rate period

share of loans by fixed-rate period; in %



Note: The chart shows the five fixed-rate periods with the largest mortgage volumes. The rest of the fixed-rate periods account for 3% of all mortgage agreements on average.

The overall macroeconomic impacts are limited. Assuming refinancing at current rates (version 1), the estimated total cumulative impact on household expenditure this year is around CZK 2.1 billion, with the volume of additional repayments gradually rising at the year-end. This amount represents the lower limit on the estimate due to the lack of information on part of the mortgages from the Survey. From the perspective of the costs of households with mortgages, this represents an almost 35% increase in instalments (CZK 3,200 on average), which may be a financial burden for them. The implications of version 2 are more moderate; the cumulative impact on expenditure this year is around CZK 1.3 billion, representing a rise in instalments of around 20% for households with mortgages (CZK 1,800 on average). In line with the CNB's current forecast, this version assumes a relatively sharp decrease in reference rates this year and the next.

Another output of this analysis is also important from the long-term perspective. Chart 4 shows that large volumes of loans provided between 2020 and 2022 (CZK 907 billion in total) are to be refinanced in 2025–2028. These loans were granted at interest rates of around 2%. The slope of the yield curve in this period will thus have a significantly greater potential effect on households' expenditure than in 2023–2024.

Chart 3

Interest rates on new mortgages rose sharply for all fixed-rate periods in 2022

interest rate on new mortgages and 5Y IRS rate in %; by fixed-rate period

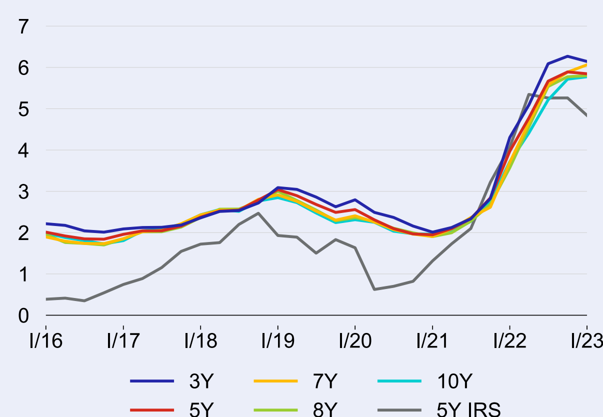
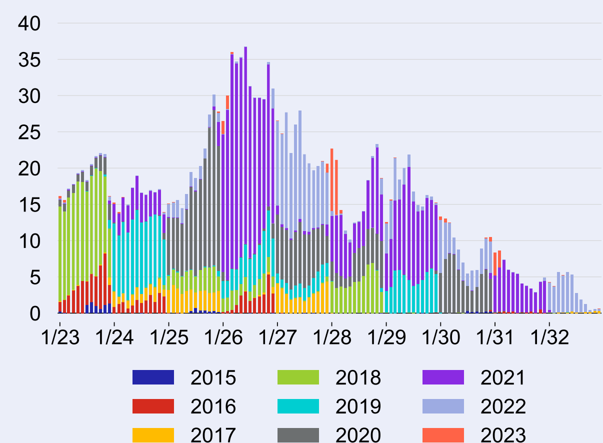


Chart 4

The volume of loans for refinancing will peak in 2026 and 2027

volume of loans for refinancing in CZK billions; by year of origination



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1 For the purposes of this box, refinancing means both a change in the interest rate at the original bank (refixation) and the refinancing of a loan at a different bank than the original one.

2 The survey covers around 936,000 loans provided between July 2015 and February 2023. Mortgages that were granted before 2015 and have not been refinanced to date (i.e. loans with rates fixed for more than eight years) were not included in the sample. In 2014, these loans accounted for only 2%–3% of all new loans, so their volume is currently negligible. The type of data also determined the analytical approach taken: as no information is available on the parameters of the current stock of loans, we have to track the flow of new mortgage agreements over time and estimate the moment at which they will be due for refinancing based on their fixed-rate period.

3 For the purposes of this analysis, we use information on the overall volume of, and average interest rates on, refixed loans from commercial banks' statistics. The fixation and maturity structures are approximated using individual data from the Survey for the category of loans refinanced with other banks.

4 The volume of mortgages used in the calculations was adjusted for a one-off administrative factor – the loan moratorium (involving agreements to temporarily suspend repayments in 2020). The calculations based on individual loans (such as the average repayment increase) are based exclusively on data from the Survey.

5 See the results of Bank Lending Survey I/2020.

6 The calculation assumes no early repayment or refinancing of the existing loan and full refinancing at the end of the fixed-rate period. Early repayment or a decrease in the loan volume at the end of the fixed-rate period through partial repayment would lead to a smaller volume of loans, so the estimated rise in loan instalments represents the upper limit on the impact on repayments of existing loans. On the other hand, the analysis abstracts from loans that will be provided in the years ahead and will thus increase the refinancing volume.

7 The second version implicitly assumes the same interest rate path as that in the baseline scenario of the CNB's summer forecast, namely a gradual decline in market interest rates over the entire outlook.

BOX 3 How client interest rates on loans and deposits have changed over the last two years

The first phase of monetary policy transmission via the interest rate channel is the pass-through of changes in monetary policy rates to client rates on loans and deposits. This box is a follow-up to an October 2022 blog article[1] and shows how loan and deposit rates changed for Czech firms and households between the end of June 2021 and the end of June 2023. In mid-2021, the CNB started to raise its 2W repo rate from 0.25%. In the space of about one year, the rate increased to 7%, where it has stayed ever since.[2]

The pass-through of monetary policy rates and market rates to client rates on koruna loans to non-financial corporations is very fast. Lending rates for firms are mostly linked to PRIBOR market rates, so changes in CNB monetary policy rates pass through almost immediately to client rates. Therefore, the prevailing client rate on corporate loans was already between 8% and 9% in June 2022 and has gone up only marginally since summer 2022 (see Chart 1).[3] At the end of June 2023, domestic banks were granting the largest volumes of koruna loans to companies at interest rates of 9%–10%. By contrast, the distribution of client rates on euro-denominated corporate loans only started to shift to significantly higher rates in autumn 2022, owing to the rise in ECB interest rates (see Chart 2). The euro financing of Czech companies by domestic banks is becoming more costly as ECB interest rates continue to rise, and the prevailing client interest rate on euro-denominated loans was in the range of 5%–6% at the end of June 2023. The narrowing interest rate differential is making euro financing less attractive to domestic firms. This is being reflected in subdued growth in the share of euro-denominated loans in their total credit debt, which reached 48% in June 2023.

Loans for house purchase are the most important loan product for households, accounting for almost 80% of their credit commitments. The vast majority of loans for house purchase are mortgages, and a large proportion of the mortgages held by Czech households have their rates fixed for five years or more. So far, therefore, only quite a small number of households have faced higher mortgage rates when refinancing and refixing their loans. This is reflected in very small shifts in the distribution of client interest rates on the total stock of loans to households for house purchase (see Chart 3). The largest proportion of Czech mortgages still have interest rates in the 2%–3% band. The effects on the budgets of mortgaged households thus remain limited and the bulk of the transmission is taking place via a sharp drop in demand for new loans.[4] As illustrated in Chart 4, the volume of new loans for house purchase has dropped sharply relative to mid-2021, while the rates on such loans have risen significantly. In June 2023, the largest volume of new loans for house purchase were provided at interest rates of 5%–6%.

Chart 1

Interest rates on koruna-denominated loans to non-financial corporations respond almost immediately to monetary policy rates

x-axis: interest rate band in %; y-axis: volumes in CZK billions; stocks of koruna-denominated loans

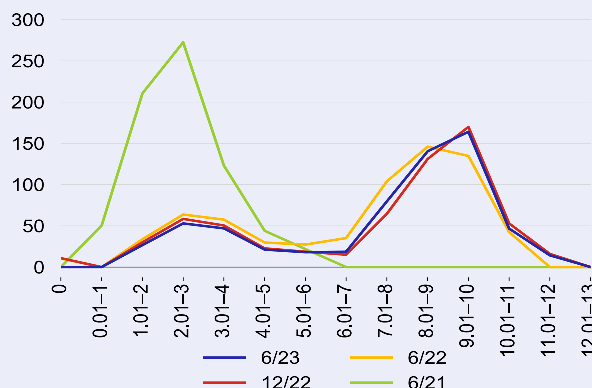


Chart 2

The pass-through to interest rates on euro-denominated loans is also fast, but the ECB raised its monetary policy rates later

x-axis: interest rate band in %; y-axis: volumes in CZK billions; stocks of euro-denominated loans

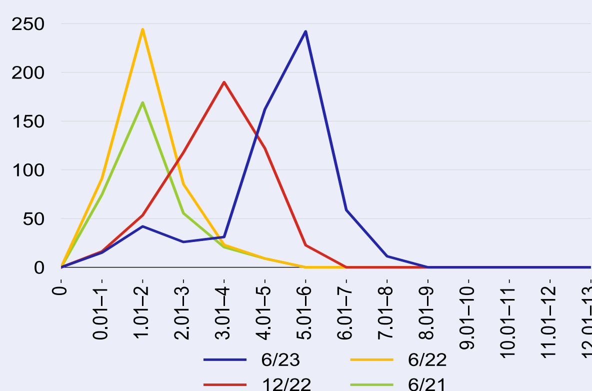
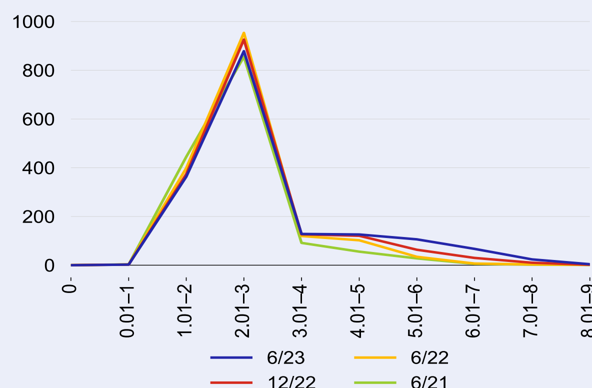


Chart 3

Only a small proportion of housing loans have so far been refinanced at higher interest rates

x-axis: interest rate band in %; y-axis: volumes in CZK billions; stocks of loans



The distributions of client rates on corporate and household deposits have two peaks. In the case of firms, the first peak – with the largest deposit volume – occurs at client rates of zero. As Chart 5 shows, firms are reducing the volume of zero-interest deposits. It has gone down by around CZK 200 billion in two years. The second peak in the distribution of client deposit rates for companies occurs at 6%–7%. The volume of high-interest corporate deposits continues to rise, with almost half of corporate deposits remunerated at rates of higher than 5% in June 2023.

The first peak in the client interest rate distribution is even bigger for households than for firms. The volume of zero-interest household deposits is falling but is still above CZK 1 billion. However, households seeking higher returns and actively transferring their deposits to products with higher interest rates are capable of obtaining relatively high rates. The second peak in the distribution of client deposit rates for households thus occurs in the 5%–6% range, where approximately CZK 550 billion was deposited at the end of June (see Chart 6). In June 2023, about one quarter of household deposits were remunerated at rates of higher than 5%.

Chart 4

Interest rates on new loans for house purchase are distinctly higher than in the past; volumes have fallen sharply

x-axis: interest rate band in %; y-axis: volumes in CZK billions; new loans

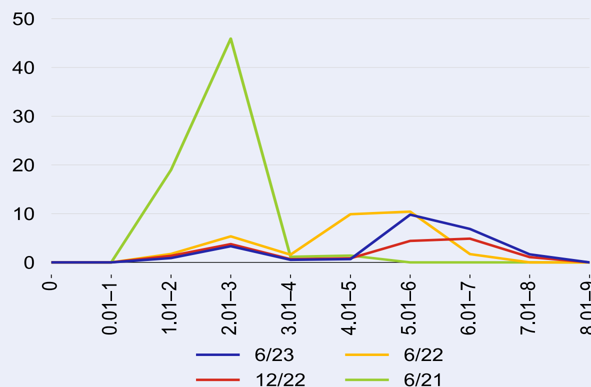


Chart 5

Firms are capable of attaining deposit rates close to the repo rate

x-axis: interest rate band in %; y-axis: volumes in CZK billions; stocks of deposits

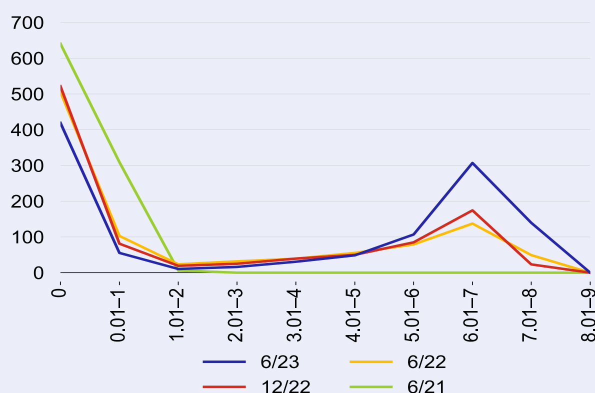
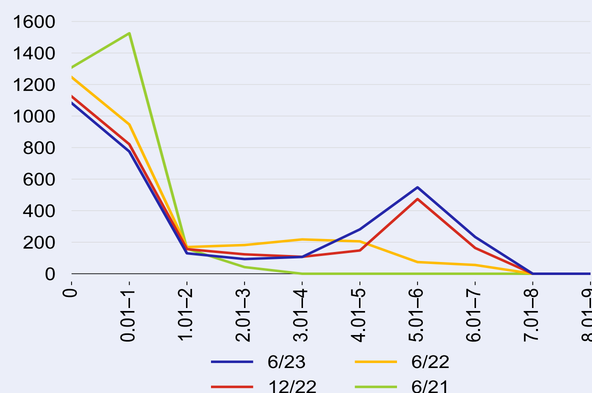


Chart 6

By actively seeking out higher interest rates, a large proportion of household deposits have been able to move to bands with a rate of over 5%

x-axis: interest rate band in %; y-axis: volumes in CZK billions; stocks of deposits



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1 See the blog article: Klientské úrokové sazby z úvěrů a vkladů v kontextu zvyšování měnověpolitických sazeb (*Client loan and deposit rates in the context of increasing monetary policy rates*; available in Czech only).

2 The 2W repo rate was 0.5% as of 30 June 2021 and 7% as of the other dates used in the charts (30 June 2022, 31 December 2022 and 30 June 2023). The Bank Board last raised its 2W repo rate at its meeting on 23 June 2022.

3 To keep the individual data confidential, values lower than CZK 10 billion are replaced by 0 in Chart 1, values lower than CZK 7 billion are replaced by 0 in Chart 2, values lower than CZK 0.5 billion are replaced by 0 in Charts 4 and 5, and values lower than CZK 30 billion are replaced by 0 in Chart 6.

4 The increasing length of time since the 2W repo rate was raised substantially is also gaining in importance. It will affect the size of the instalments on current mortgage loans which are being refinanced (or will be refinanced in the near future). This is discussed in Box 2 *Refixation and refinancing of mortgages and their effects on household expenditure* in this section.

Abbreviations

AEIS	Average Earnings Information System
BoE	Bank of England
BoJ	Bank of Japan
CF	Consensus Forecasts
CNB	Czech National Bank
CPI	consumer price index
CPIH	experimental consumer price index incorporating prices of older properties
CZK	Czech koruna
CZSO	Czech Statistical Office
DSTI	debt service-to-income
DTI	debt-to-income
ECB	European Central Bank
EEA	European Economic Area
EIA	US Energy Information Administration
EIA	Environmental Impact Assessment
EIU	Economist Intelligence Unit
ESA	European System of Accounts
ESCB	European System of Central Banks
ESI	Economic Sentiment Indicator
ESR	electronic sales registration
EU	European Union
EUR	euro
EURIBOR	Euro Interbank Offered Rate
FDI	foreign direct investment
FECF	Foreign Exchange Consensus Forecasts
Fed	US central bank
FMIE	Financial Market Inflation Expectations
FOMC	Federal Open Market Committee
FRA	forward rate agreement
GDP	gross domestic product
GNP	gross national product
GVA	gross value added
GVCs	global value chains
HP filter	Hodrick-Prescott filter
HPI	house price index
ICT	information and communications technology
IEA	International Energy Agency
Ifo	index of economic confidence in Germany
ILO	International Labour Organization
IMF	International Monetary Fund
IR	Inflation Report
IRI	Institute for Regional Information
IRS	interest rate swap
JPY	Japanese yen
LFS	Labour Force Survey
LIBOR	London Interbank Offered Rate
LTV	loan-to-value
LUCI	Labour Utilisation Composite Index
M1, M3	monetary aggregates
MFI	monetary financial institutions
MLSA	Ministry of Labour and Social Affairs
m-o-m	month-on-month
MPR	Monetary Policy Report
NAIRU	non-accelerating inflation rate of unemployment
NBS	National Bank of Slovakia
OECD	Organisation for Economic Co-operation and Development
OPEC+	The OPEC member countries and another ten oil-exporting countries (the most important being Russia, Mexico and Kazakhstan)
PMI	Purchasing Managers Index
pp	percentage points
PPI	producer price index
PRIBOR	Prague Interbank Offered Rate
q-o-q	quarter-on-quarter
repo rate	repurchase agreement rate
rhs	right-hand scale
USD	US dollar
VAT	value added tax
WTI	West Texas Intermediate
y-o-y	year-on-year

Key macroeconomic indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
DEMAND AND SUPPLY												
Gross domestic product												
GDP (CZK bn, constant p. of 2015, seas. adjusted)	4387.8	4627.4	4740.8	4994.2	5154.3	5307.2	5014.3	5189.6	5311.6	**5316.2**	**5436.9**	**5586.0**
GDP (CZK bn, current p., seas. adjusted)	4344.6	4627.4	4794.9	5116.9	5416.4	5793.9	5710.8	6107.0	6784.3	**7377.1**	**7685.8**	**8081.5**
GDP (%, y-o-y, real terms, seas. adjusted)	2.3	5.5	2.5	5.3	3.2	3.0	-5.5	3.5	2.4	**0.1**	**2.3**	**2.7**
GDP (%, q-o-q, real terms, seas. adjusted)												
Household consumption (%, y-o-y, real terms, seas. adjusted)	1.4	3.9	3.7	4.0	3.3	2.6	-7.4	4.1	-0.8	**-3.4**	**3.8**	**4.1**
Government consumption (%, y-o-y, real terms, seas. adjusted)	1.0	1.8	2.5	1.8	3.9	2.5	4.2	1.4	0.6	**2.3**	**1.1**	**1.1**
Gross capital formation (%, y-o-y, real terms, seas. adjusted)	7.1	13.1	-4.0	6.6	7.7	4.4	-9.2	19.0	5.6	**-6.2**	**-4.5**	**2.4**
Gross fixed capital formation (%, y-o-y, real terms, seas. adjusted)	3.3	9.8	-3.1	5.1	10.0	5.8	-6.0	0.7	3.0	**0.6**	**4.4**	**3.2**
Exports of goods and services (%, y-o-y, real terms, seas. adjusted)	8.7	6.2	4.1	7.6	3.7	1.4	-8.1	6.8	7.2	**7.3**	**6.4**	**4.5**
Imports of goods and services (%, y-o-y, real terms, seas. adjusted)	10.0	7.0	2.7	6.5	5.8	1.4	-8.2	13.2	6.3	**3.2**	**4.5**	**5.0**
Net exports (CZK bn, constant p. of 2015, seas. adjusted)	283.4	276.2	337.7	400.0	336.5	337.6	315.3	97.2	143.4	**340.4**	**449.3**	**445.2**
PRICES												
Main price indicators												
Consumer Price Index (%, y-o-y, average)	0.4	0.3	0.7	2.5	2.1	2.8	3.2	3.8	15.1	**11.0**	**2.1**	**1.7**
Administered prices (14.21%)* (%, y-o-y, average)	-3.0	0.0	0.2	0.0	1.8	4.4	3.1	-0.2	20.9	**28.0**	**1.2**	**1.4**
Food prices (incl. alcoholic beverages and tobacco) (26.50%)* (%, y-o-y, average)	1.8	0.1	0.2	3.6	1.6	2.6	4.2	2.1	12.9	**10.3**	**0.5**	**0.4**
Core inflation (56.14%)* (%, y-o-y, average)	0.5	1.2	1.2	2.4	2.1	2.7	3.4	4.8	13.2	**7.9**	**3.5**	**2.3**
Fuel prices (3.15%)* (%, y-o-y, average)	0.2	-13.5	-8.5	6.7	6.3	-0.4	-11.4	16.7	33.6	**-14.3**	**1.1**	**-0.3**
Monetary policy-relevant inflation (%, y-o-y, average)	0.2	0.2	0.5	2.5	2.1	2.9	3.2	3.9	14.6	**10.9**	**2.1**	**1.6**
Partial price indicators												
Industrial producer prices (%, y-o-y, average)	-0.8	-3.2	-3.3	1.8	2.0	2.6	0.1	7.1	24.3	**4.9**	**0.5**	**0.6**
Agricultural prices (%, y-o-y, average)	-3.7	-5.9	-5.8	7.4	-0.1	5.4	-3.8	7.4	31.8	**-3.7**	**-7.8**	**-4.6**
LABOUR MARKET												
Average monthly wage (%, y-o-y, nominal terms)	2.9	3.2	4.4	6.7	8.2	7.9	4.6	5.8	5.3	**8.7**	**7.8**	**6.3**
Average monthly wage in market sectors (%, y-o-y, nominal terms)	3.0	3.2	4.3	6.7	7.7	7.6	4.1	6.1	5.9	**9.2**	**8.5**	**6.8**
Average monthly wage (%, y-o-y, real terms)	2.6	2.8	3.7	4.1	5.9	4.9	1.4	2.0	-8.4	**-2.0**	**5.6**	**4.5**
Unit labour costs (%, y-o-y)	1.6	-0.4	3.1	3.9	6.2	4.7	5.9	2.2	6.8	**9.7**	**5.8**	**4.0**
Aggregate labour productivity (%, y-o-y)	1.7	3.9	0.9	3.6	1.9	2.8	-3.8	3.1	0.9	**-0.4**	**2.2**	**2.7**
ILO general unemployment rate (%, average, age 15–64, seas. adjusted)	6.2	5.1	4.0	2.9	2.3	2.0	2.6	2.9	2.4	**2.7**	**2.8**	**3.0**
Share of unemployed persons (MLSA) (%, average, seas. adjusted)	7.7	6.5	5.5	4.2	3.2	2.8	3.6	3.8	3.4	**3.6**	**3.9**	**4.0**
Employment (ILO) (%, y-o-y)	0.7	1.3	1.8	1.5	1.2	-0.1	-1.6	-1.5	1.7	**1.0**	**0.1**	**0.0**
Full-time employment (%, y-o-y)	1.1	2.1	1.8	2.2	1.5	-0.3	-1.7	0.2	0.5	**0.8**	**0.4**	**0.6**
PUBLIC FINANCE												
Government budget balance (ESA2010) (CZK bn, current prices)	-90.2	-29.8	34.1	76.7	48.3	16.7	-329.2	-310.6	-247.5	**-280.3**	**-122.5**	**-58.7**
Government budget balance/GDP** (%, nominal terms)	-2.1	-0.6	0.7	1.5	0.9	0.3	-5.8	-5.1	-3.6	**-3.8**	**-1.6**	**-0.7**
Government debt (ESA2010) (CZK bn, current prices)	1818.9	1836.0	1754.7	1749.7	1734.6	1740.3	2149.8	2566.7	2997.1	**3254.5**	**3384.6**	**3454.7**
Government debt/GDP** (%, nominal terms)	41.9	39.7	36.6	34.2	32.1	30.0	37.7	42.0	44.2	**44.1**	**44.0**	**42.7**
EXTERNAL RELATIONS												
Current account												
Trade balance (CZK bn, current prices)	220.0	187.7	258.5	259.3	200.9	239.8	280.3	69.0	-99.3	**259.7**	**278.3**	**307.4**
Trade balance/GDP (%, nominal terms)	5.1	4.1	5.4	5.1	3.7	4.1	4.9	1.1	-1.5	**3.5**	**3.6**	**3.8**
Balance of services (CZK bn, current prices)	55.7	86.6	106.6	124.6	120.0	106.0	103.5	105.0	89.9	**122.9**	**142.1**	**148.0**
Current account (CZK bn, current prices)	7.9	20.7	85.2	79.1	24.1	19.2	113.7	-168.0	-415.3	**57.4**	**67.8**	**58.0**
Current account/GDP (%, nominal terms)	0.2	0.4	1.8	1.5	0.4	0.3	2.0	-2.8	-6.1	**0.8**	**0.9**	**0.7**
Foreign direct investment												
Direct investment (CZK bn, current prices)	-80.4	49.7	-186.5	-45.9	-51.0	-137.1	-149.1	-28.5	-172.4	**-140.0**	**-140.0**	**-140.0**
Exchange rates												
CZK/USD (average)	20.8	24.6	24.4	23.4	21.7	22.9	23.2	21.7	23.4	**22.0**	**22.1**	**21.5**
CZK/EUR (average)	27.5	27.3	27.0	26.3	25.6	25.7	26.5	25.6	24.6	**23.9**	**24.7**	**24.6**
MONEY AND INTEREST RATES												
M3 (%, y-o-y, average)	5.1	7.3	9.1	11.7	6.6	6.3	9.0	9.6	6.4	**9.9**	**11.7**	**9.4**
2W repo rate (%, average)	0.1	0.1	0.1	0.2	1.1	1.9	0.8	0.9	5.9	**6.7**	**4.6**	**3.5**
3M PRIBOR (%, average)	0.4	0.3	0.3	0.4	1.3	2.1	0.9	1.1	6.3	**6.9**	**4.8**	**3.7**
EXTERNAL ASSUMPTIONS												
Foreign GDP (%, y-o-y, seas. adjusted, effective)	1.9	2.0	2.0	2.8	1.8	1.5	-5.0	4.2	2.7	**0.3**	**1.3**	**1.7**
Foreign GDP (%, q-o-q, seas. adjusted, effective)												
Foreign HICP (%, y-o-y, seas. adjusted, effective)	0.6	0.4	0.3	1.6	2.0	1.5	0.6	2.9	9.2	**6.5**	**2.9**	**1.9**
Foreign PPI (%, y-o-y, seas. adjusted, effective)	-1.6	-2.5	-2.3	2.7	3.3	1.1	-1.6	10.9	34.9	**0.6**	**-0.4**	**0.6**
Brent crude oil (in USD/barrel) (average)	99.5	53.6	45.0	54.8	71.5	64.2	43.2	70.8	98.9	**77.5**	**72.7**	**70.4**
3M EURIBOR (%, average)	0.2	0.0	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5	0.3	**3.5**	**3.9**	**3.4**
USD/EUR (average)	1.3	1.1	1.1	1.1	1.2	1.1	1.1	1.2	1.1	**1.1**	**1.1**	**1.1**

* figures in brackets are constant weights in current consumer basket
** CNB calculation
- data not available/forecasted/released
data in bold = CNB forecast

	2023				2024				2025			
	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
DEMAND AND SUPPLY												
Gross domestic product												
GDP (CZK bn, constant p. of 2015, seas. adjusted)	1322.5	**1322.2**	**1331.5**	**1340.0**	**1346.4**	**1353.4**	**1363.3**	**1373.8**	**1382.1**	**1390.9**	**1401.0**	**1412.0**
GDP (CZK bn, current p., seas. adjusted)	1816.6	**1829.6**	**1855.4**	**1875.4**	**1894.3**	**1909.8**	**1927.7**	**1953.9**	**1978.6**	**2005.5**	**2034.2**	**2063.3**
GDP (%, y-o-y, real terms, seas. adjusted)	-0.5	**-0.7**	**0.3**	**1.3**	**1.8**	**2.4**	**2.4**	**2.5**	**2.7**	**2.8**	**2.8**	**2.8**
GDP (%, q-o-q, real terms, seas. adjusted)	0.0	**0.0**	**0.7**	**0.6**	**0.5**	**0.5**	**0.7**	**0.8**	**0.6**	**0.6**	**0.7**	**0.8**
Household consumption (%, y-o-y, real terms, seas. adjusted)	-5.9	**-5.3**	**-2.4**	**0.2**	**2.9**	**4.0**	**4.2**	**4.1**	**4.2**	**4.2**	**4.1**	**4.0**
Government consumption (%, y-o-y, real terms, seas. adjusted)	3.1	**2.8**	**2.2**	**1.0**	**0.9**	**1.1**	**1.1**	**1.2**	**1.1**	**1.1**	**1.0**	**1.0**
Gross capital formation (%, y-o-y, real terms, seas. adjusted)	-3.6	**-6.5**	**-6.5**	**-8.0**	**-7.9**	**-5.4**	**-3.5**	**-0.7**	**1.2**	**2.3**	**3.1**	**3.1**
Gross fixed capital formation (%, y-o-y, real terms, seas. adjusted)	-1.6	**-0.5**	**1.3**	**3.3**	**5.3**	**5.0**	**4.1**	**3.3**	**3.2**	**3.2**	**3.1**	**3.1**
Exports of goods and services (%, y-o-y, real terms, seas. adjusted)	7.0	**8.1**	**6.3**	**7.9**	**8.7**	**7.2**	**5.5**	**4.4**	**4.2**	**4.4**	**4.6**	**4.8**
Imports of goods and services (%, y-o-y, real terms, seas. adjusted)	3.4	**3.7**	**2.4**	**3.2**	**5.2**	**4.9**	**4.2**	**3.9**	**4.3**	**4.8**	**5.3**	**5.4**
Net exports (CZK bn, constant p. of 2015, seas. adjusted)	64.3	**79.6**	**93.2**	**103.3**	**109.3**	**112.1**	**114.4**	**113.5**	**112.2**	**111.5**	**110.9**	**110.8**
PRICES												
Main price indicators												
Consumer Price Index (%, y-o-y, average)	16.4	11.2	**8.2**	**8.2**	**2.5**	**2.3**	**1.9**	**1.8**	**1.6**	**1.6**	**1.8**	**2.0**
Administered prices (14.21%)* (%, y-o-y, average)	32.8	25.2	**19.5**	**34.2**	**1.4**	**0.7**	**1.1**	**1.4**	**1.4**	**1.3**	**1.4**	**1.4**
Food prices (incl. alcoholic beverages and tobacco) (26.50%)* (%, y-o-y, average)	18.2	11.8	**8.1**	**2.9**	**0.5**	**0.6**	**0.4**	**0.5**	**0.0**	**0.2**	**0.6**	**1.0**
Core inflation (56.14%)* (%, y-o-y, average)	11.9	8.7	**6.2**	**4.8**	**4.3**	**3.9**	**3.0**	**2.7**	**2.2**	**2.2**	**2.4**	**2.5**
Fuel prices (3.15%)* (%, y-o-y, average)	-3.7	-21.5	**-19.8**	**-12.1**	**-1.8**	**2.4**	**2.5**	**1.3**	**-0.2**	**-0.6**	**-0.3**	**-0.1**
Monetary policy-relevant inflation (%, y-o-y, average)	16.4	11.1	**8.0**	**8.1**	**2.5**	**2.3**	**1.8**	**1.7**	**1.4**	**1.5**	**1.7**	**1.8**
Partial price indicators												
Industrial producer prices (%, y-o-y, average)	15.0	3.9	**1.0**	**0.7**	**-1.8**	**0.8**	**1.4**	**1.6**	**0.6**	**0.6**	**0.7**	**0.6**
Agricultural prices (%, y-o-y, average)	19.6	-8.2	**-10.6**	**-12.1**	**-15.0**	**-6.9**	**-3.5**	**-4.5**	**-5.3**	**-5.2**	**-4.9**	**-2.9**
LABOUR MARKET												
Average monthly wage (%, y-o-y, nominal terms)	8.6	**8.6**	**8.7**	**8.8**	**8.2**	**8.0**	**7.7**	**7.4**	**7.0**	**6.5**	**6.1**	**5.7**
Average monthly wage in market sectors (%, y-o-y, nominal terms)	8.8	**9.0**	**9.3**	**9.7**	**9.1**	**8.8**	**8.3**	**7.9**	**7.4**	**7.0**	**6.6**	**6.2**
Average monthly wage (%, y-o-y, real terms)	-6.7	**-2.3**	**0.5**	**0.6**	**5.6**	**5.6**	**5.8**	**5.5**	**5.3**	**4.8**	**4.2**	**3.7**
Unit labour costs (%, y-o-y)	10.5	**10.2**	**10.1**	**8.3**	**6.7**	**5.9**	**5.6**	**5.2**	**4.6**	**4.1**	**3.9**	**3.7**
Aggregate labour productivity (%, y-o-y)	-1.5	**-0.8**	**-0.2**	**0.7**	**1.5**	**2.3**	**2.4**	**2.5**	**2.6**	**2.8**	**2.7**	**2.7**
ILO general unemployment rate (%, average, age 15–64, seas. adjusted)	2.7	**2.7**	**2.7**	**2.7**	**2.8**	**2.8**	**2.8**	**2.8**	**2.9**	**2.9**	**3.0**	**3.0**
Share of unemployed persons (MLSA) (%, average, seas. adjusted)	3.6	**3.6**	**3.6**	**3.7**	**3.8**	**3.8**	**3.9**	**4.0**	**4.0**	**4.0**	**4.0**	**4.1**
Employment (ILO) (%, y-o-y)	1.1	**0.9**	**1.1**	**0.9**	**0.3**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**
Full-time employment (%, y-o-y)	1.1	**0.7**	**0.7**	**0.6**	**0.4**	**0.3**	**0.3**	**0.4**	**0.4**	**0.5**	**0.6**	**0.8**
PUBLIC FINANCE												
Government budget balance (ESA2010) (CZK bn, current prices)												
Government budget balance/GDP** (%, nominal terms)												
Government debt (ESA2010) (CZK bn, current prices)												
Government debt/GDP** (%, nominal terms)												
EXTERNAL RELATIONS												
Current account												
Trade balance (CZK bn, current prices)	85.8	**75.0**	**55.5**	**43.5**	**97.0**	**83.6**	**47.1**	**50.7**	**108.1**	**92.7**	**52.2**	**54.4**
Trade balance/GDP (%, nominal terms)	5.0	**4.0**	**2.9**	**2.3**	**5.4**	**4.3**	**2.4**	**2.5**	**5.8**	**4.6**	**2.5**	**2.6**
Balance of services (CZK bn, current prices)	21.5	**40.5**	**34.7**	**26.3**	**42.7**	**46.7**	**27.3**	**25.4**	**44.9**	**43.8**	**37.4**	**21.9**
Current account (CZK bn, current prices)	39.6	**28.8**	**-17.2**	**6.2**	**109.8**	**21.0**	**-53.9**	**-9.1**	**117.1**	**15.6**	**-53.1**	**-21.6**
Current account/GDP (%, nominal terms)	2.3	**1.6**	**-0.9**	**0.3**	**6.1**	**1.1**	**-2.8**	**-0.5**	**6.3**	**0.8**	**-2.6**	**-1.0**
Foreign direct investment												
Direct investment (CZK bn, current prices)	-40.6	**-35.0**	**-35.0**	**-35.0**	**-35.0**	**-35.0**	**-35.0**	**-35.0**	**-35.0**	**-35.0**	**-35.0**	**-35.0**
Exchange rates												
CZK/USD (average)	22.2	21.6	**22.0**	**22.2**	**22.3**	**22.3**	**22.1**	**21.9**	**21.7**	**21.6**	**21.4**	**21.3**
CZK/EUR (average)	23.8	23.6	**23.8**	**24.3**	**24.6**	**24.7**	**24.7**	**24.7**	**24.7**	**24.6**	**24.6**	**24.5**
MONEY AND INTEREST RATES												
M3 (%, y-o-y, average)	8.5	9.7	**10.5**	**10.8**	**11.4**	**11.4**	**12.0**	**12.0**	**11.1**	**10.0**	**8.6**	**7.8**
2W repo rate (%, average)	7.0	7.0	**6.6**	**6.2**	**5.6**	**4.6**	**4.1**	**4.0**	**3.8**	**3.6**	**3.4**	**3.3**
3M PRIBOR (%, average)	7.2	7.2	**6.8**	**6.4**	**5.8**	**4.8**	**4.3**	**4.2**	**4.0**	**3.8**	**3.6**	**3.5**
EXTERNAL ASSUMPTIONS												
Foreign GDP (%, y-o-y, seas. adjusted, effective)	0.5	**0.2**	**0.0**	**0.5**	**0.9**	**1.2**	**1.4**	**1.6**	**1.7**	**1.7**	**1.8**	**1.7**
Foreign GDP (%, q-o-q, seas. adjusted, effective)	-0.1	**0.1**	**0.2**	**0.3**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**
Foreign HICP (%, y-o-y, seas. adjusted, effective)	9.3	**7.4**	**5.6**	**3.7**	**3.3**	**2.9**	**2.8**	**2.5**	**2.1**	**2.0**	**1.9**	**1.8**
Foreign PPI (%, y-o-y, seas. adjusted, effective)	15.6	**3.2**	**-7.6**	**-6.3**	**-3.9**	**-0.1**	**1.3**	**1.3**	**1.0**	**0.6**	**0.5**	**0.4**
Brent crude oil (in USD/barrel) (average)	82.2	77.7	**75.1**	**74.5**	**73.8**	**73.1**	**72.4**	**71.7**	**71.1**	**70.6**	**70.1**	**69.6**
3M EURIBOR (%, average)	2.6	3.4	**3.9**	**4.0**	**4.0**	**4.0**	**3.9**	**3.7**	**3.6**	**3.4**	**3.3**	**3.2**
USD/EUR (average)	1.1	1.1	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**

* figures in brackets are constant weights in current consumer basket
** CNB calculation
\- data not available/forecasted/released
data in bold = CNB forecast

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