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This Monetary Policy Report was approved by the CNB Bank Board on 8 August 2024 and (with some exceptions) contains the information available as of 26 July 2024. 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 <u>website</u>. 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.

Contents

GOVERNOR'S FOREWORD	5
THE DECISION, THE OUTLOOK AND ASSOCIATED RISKS	6
Steady-state values in the CNB forecast	8
I. ECONOMIC DEVELOPMENTS ABROAD	9
BOX 1 The position of Czech exporters on the German market by comparison with Poland	14
II. THE REAL ECONOMY AND THE LABOUR MARKET	17
III. INFLATION	26
IV. MONETARY POLICY	30
BOX 2 How do client rates on koruna loans change in response to changes in market rates?	40
APPENDIX The slowdown in the long-term potential growth of the Czech economy	43
ABBREVIATIONS	49
KEY MACROECONOMIC INDICATORS	50



- 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 continuously informed about the forecast under preparation, discusses the outline of the emerging baseline scenario and asks for potential additional forecasting 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 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 lowered the two-week repo rate by 0.25 percentage point to 4.5%. We also lowered the other key interest rates by the same amount. This was our sixth cautious easing of monetary policy.

Inflation has been close to the 2% target since the beginning of this year. It was even exactly 2% in February, March and June. Price stability was thus restored in the Czech Republic. However, the Bank Board still sees some inflationary pressures in the economy. A strengthening of those pressures would mean that inflation would diverge for longer from the target towards the upper boundary of the tolerance band in the quarters ahead. Therefore, we consider it necessary to persist with tight monetary policy and carefully consider any further rate cuts, approaching them with great caution.

According to our analyses, the economy is still below its potential and domestic and external demand remain weak. In particular, household consumption is rising moderately. Households' real income is increasing again due to elevated wage growth and the decline in inflation. However, a stronger recovery in demand is being counteracted mainly by subdued household and corporate confidence in the economy.

According to the Monetary Department's new forecast, inflation will remain close to the inflation target over the entire forecast horizon. However, services inflation – an important component of core inflation – remains elevated. Our tight monetary policy will contribute to a gradual stabilisation of this part of the consumer basket at levels consistent with the inflation target in the long run.

Although the CNB started lowering rates gradually in December 2023, the fight against inflation is not over. Monetary policy nonetheless remains tight. Real interest rates are positive and are dampening lending activity and hence the creation of money in the economy, and, in turn, inflation. The Bank Board confirms its determination to continue its tight monetary policy in order to stabilise inflation near the 2% target in the long term.

The Bank Board assures the public that the CNB's actions will be sufficient to maintain 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, the outlook and associated risks

At its August meeting, the Bank Board lowered the two-week repo rate by 0.25 pp to 4.5%. Inflation has stabilised close to the CNB's target, standing at 2% exactly in June. Elevated growth persists only in prices of market services within core inflation and in some items of administered prices. Prices in the rest of the consumer basket are rising modestly or falling. Economic growth continues to recover at a moderate pace. GDP growth this year will be supported mainly by accelerating household consumption. Next year, investment will also start growing again amid recovering external demand and falling domestic and foreign rates. The tightness in the domestic labour market is easing only gradually, while brisk nominal and real wage growth is fostering a recovery in employees' purchasing power, which was suppressed by the previous inflation. Consistent with the summer forecast is a modest decline in short-term market interest rates. It will ensure robust fulfilment of the inflation target over the entire outlook. The Bank Board assessed the risks and uncertainties of the forecast as broadly balanced overall.

Inflation has stabilised close to the CNB's 2% target. It became anchored exactly at the target in June and will stay very close to it over the next few months. Inflation will increase slightly at the end of the year as last year's exceptionally subdued price growth drops out of the year-on-year comparison. Headline inflation will stay near 2% over the next two years.

The near-target inflation reflects the fade-out of the previous strong supply shocks, which are now evident only in elevated growth in prices of market services. Domestic demand pressures remain subdued, thanks in part to tight monetary policy. In this environment, firms' profit margins, which until recently were fuelling inflation, are decreasing.

Food, beverage and tobacco prices are seeing a partial correction of their previous strong growth. They are falling slightly in year-on-year terms due to subdued growth in food commodity prices and weaker demand. However, they will start to go up again at the year-end. Fuel prices are rising only slightly and market outlooks for oil prices indicate a downward trend in the future. Cuts in energy prices for households by large suppliers are partially offsetting the growth in other administered prices. The situation will be similar next year.

Core inflation will be stable near 2%. Prices of most market services within core inflation continue to rise apace. This is an aftershock of the previous wave of inflation. By contrast, tradables prices are now falling. The gap between market services inflation and goods inflation will persist into the future. However, it will not pose an additional inflationary risk, as it is a result of renewed growth in labour productivity in the Czech economy and convergence towards more advanced countries (albeit at a slower pace than before). Faster growth in property prices linked with renewed demand on the property market and a recovery in mortgage lending may nevertheless become a risk. Its materialisation amid steady growth in prices of other market services could cause core inflation to accelerate again.

The Czech economy continues to recover at a moderate pace. GDP growth will reach 1.2% this year and rise to 2.8% next year. It will be driven by strengthening growth in household consumption linked to growth in real wages following a long period of decline. A further recovery in consumer demand will be supported by the falling interest rates and stable low-inflation environment.

Investment will also start to grow again next year. It will benefit from rising external demand, falling domestic and foreign interest rates and the start of implementation of projects financed from EU funds in the new programme period and under the National Recovery and Resilience Plan. Growth will thus be driven by both private and public investment. The contribution of additions to inventories will also turn positive again.

The slowly recovering external demand will support export growth. However, the strengthening domestic demand will – via its import intensity – result in net exports starting to slow GDP growth next year. Fiscal policy is dampening economic growth this year due to budget consolidation. Its effect will be broadly neutral in the years ahead.

Starting with this forecast, the estimate of the longterm potential output growth of the Czech economy is reduced by 0.5 pp to 2.5%. The main reason is the gradual exhaustion of its previous growth model and a related slowdown in labour productivity growth. The reasons for, and context of, this shift are analysed in more detail in the <u>Appendix</u>.

The tightness in the labour market is easing only slowly. The unemployment rate is gradually rising and will increase slightly further next year. It will thus

Inflation will be close to the CNB's 2% target over the entire outlook, including the monetary policy horizon

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



reflect the recent contraction of the Czech economy with a lag. Wage growth in market services will be brisk this year, exceeding 8%. However, this will merely imply a recovery in employees' purchasing power, which was suppressed by the previous wave of inflation.

Growth in the general government wage bill remains subdued but can be expected to accelerate in the future. However, the extent and timing of the acceleration are to some extent uncertain and will be the subject of further political negotiations. Fasterthan-expected growth in public sector pay and potential higher growth in other government expenditures next year (an election year) represent another risk of the forecast.

The koruna depreciated slightly above CZK 25 to the euro in the past few months. The depreciation was due to a revision of the expected pace of cuts in the CNB's key interest rates by market participants (in which the June inflation data played a role) and a rise in the outlook for ECB rates. However, recent developments and the ECB's communications do not rule out a drop in rates in September. The short-term exchange rate outlook is CZK 25.2 to the euro. The forecast expects the rate to stay close to this level for the rest of the year. The koruna will then start to appreciate slightly again.

The Czech economy will grow this year; GDP growth will accelerate to almost 3% next year

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

	2024	2025	2026
Headline inflation (%)	2.2	2.0	2.0
	(-0.1)	(0.0)	-
GDP	1.2	2.8	2.4
	(-0.2)	(0.1)	-
Average nominal wage	7.4	6.4	5.2
	(0.2)	(0.3)	-
3M PRIBOR (%)	5.1	3.8	3.3
	(0.1)	(0.3)	-
Exchange rate (CZK/EUR)	25.1	25.0	24.7
	(0.0)	(0.2)	-

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.

Consistent with the summer forecast is a modest decline in short-term market interest rates. Even so, monetary policy – given that inflation is at the target level and inflation expectations have stabilised – will be restrictive. This will ensure robust fulfilment of the inflation target over the entire outlook.

The Bank Board assessed the risks and uncertainties of the forecast as broadly balanced overall. Increased wage demands in the private and public sector are an inflationary risk. Potential excessive growth in total public sector spending would also lead to a risk of the state budget having an inflationary effect. Higherthan-expected inertia in services inflation and a halt in tradables disinflation, which has so far been due mainly to fading supply-side problems, are additional upside risks. An inflationary risk in the longer term is a potential acceleration of money creation in the economy stemming from a significant recovery in lending activity, especially on the property market. By contrast, a downturn in global economic activity and weaker German - and hence Czech - economic output are a significant downside risk to inflation. The future monetary policy stance abroad remains an uncertainty of the outlook.

Steady-state values in the CNB forecast

Starting with the Summer 2024 MPR, the values of long-term potential output growth and real equilibrium exchange rate appreciation of the koruna in the forecast are lower. The reasons for the changes are described in detail in the Appendix <u>The slowdown in the long-term potential growth of the Czech economy</u>. In this summer forecast, the changes are made by means of expert adjustments. By the Autumn 2024 MPR, the steady-state values themselves will have been recalibrated in the g3+ core forecasting model. The following table shows the steady-state year-on-year growth rates of the variables concerned compared to the previous assumptions.

	Earlier equilibrium	New equilibrium
GDP (including domestic components)	3.0%	2.5%
Productivity	3.0%	2.5%
Nominal wage growth	5.0%	4.5%
Appreciation of the CZK/EUR exchange rate	1.5%	1.0%

I. ECONOMIC DEVELOPMENTS ABROAD

Economic growth in the effective euro area will gradually gain momentum. Increasing real household income will gradually be reflected in strengthening household consumption. Services will benefit the most from the growth in effective euro area household consumption, but higher global demand should also support the expansion of industrial production from the second half of this year on. The favourable trend in demand for services coupled with robust wage growth is fostering persistent higher price growth in this sector. However, this will recede gradually and headline inflation will slow in parallel. The decline in inflation will be aided by falling prices of energy commodities and miscellaneous manufactured articles, reflecting still subdued growth in core industrial producer prices. Decreasing consumer price inflation will allow the ECB to continue easing monetary policy. Financial markets expect it to make two policy rate cuts by the end of this year.

The robust global economic growth is being driven mainly by Asian economies

Global economic growth remained robust in 2024 Q2, as evidenced by leading indicators. Growth continues to be driven mainly by the largest Asian countries (see Table I.1). Global manufacturing is recording a slight increase in the growth rate of input costs, which is passing through partially to output prices in this economic sector. Following a weaker 2023, growth in international goods trade is expected to pick up despite persisting geopolitical tensions. The EU has recently imposed tariffs on electric car imports from China. Container transport prices have been rising for several months due to a shortage of containers, bad weather and congestion in some ports. Replenishment of stocks and concerns about delayed supplies are visible on the part of euro area and US importers, leading them to stockpile before the peak of the selling season.

The US economy is slowing, although it is still expected to grow at a solid pace. The ratio of job vacancies to the number of unemployed persons has fallen to the pre-pandemic level, the unemployment rate is rising, as is non-repayment of consumer credit, and consumer confidence is decreasing. Federal Reserve representatives are waiting for more data, among other things on core inflation, to confirm the cooling of inflation pressures and the return to price stability. Markets expect the first rate cut in the USA to happen in September 2024.

Following strong growth at the start of the year, the Chinese economy slowed to 4.7% in Q2 amid very subdued inflation and low consumer confidence. The government introduced further measures to support the property market. These have the potential to improve household sentiment. The Chinese central bank lowered interest rates by 10 bp at its July meeting. It also lowered two other rates that regulate the supply of credit to households and firms. The growth outlook for the Chinese economy remains below the government's 5% target. Table I.1

Growth in the euro area will recover gradually, whereas the US economy will slow slightly

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

	2023	2023	2024	2024	2025	2026
		Q4	Q1			
Euro area	0.6	0.2	0.4	0.7	1.4	1.8
USA	2.5	3.1	2.9	2.3	1.7	2.1
United Kingdom	0.1	-0.2	0.3	0.8	1.1	1.9
China	5.2	5.2	5.3	4.9	4.4	3.9
India	7.7	8.6	7.8	6.9	6.7	6.5

Chart I.1

The contribution of the German economy to GDP growth in the effective euro area will not rise substantially until late 2024

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



GDP growth in the effective euro area will accelerate gradually as household consumption and global demand recover in an environment of decreasing interest rates

Economic activity in the effective euro area recovered slightly in early 2024¹ due to positive developments in services and relative stabilisation of the situation in European industry. However, differences are still visible across countries. Economic growth was also supported by exceptionally good weather, which allowed for unusually strong construction activity in Germany for the winter months and also benefited tourism in Spain, which saw record numbers of tourists. With the exception of Germany, household consumption became the main growth driver in the effective euro area. In Slovakia and Austria, it was supported by wage growth. However, the restrictive effect of tight ECB monetary policy weighed on corporate investment in many countries. Growth in the effective euro area should accelerate gradually as the German economy gathers strength (see Chart I.1).

The optimistic expectations regarding a fast recovery of the German economy cooled significantly during Q2. Developments in German industrial production were not encouraging in April and May,² nor are leading indicators pointing to a major turnaround in the summer months so far (see Chart I.2). The uncertainty is being exacerbated by new orders, which are still falling. German firms are also experiencing a marked cooling of demand from outside the EU, whereas global manufacturing is reporting continued expansion. firms' A rising number of insolvencies and announcements of planned restructuring are not pointing to a strong recovery in industry either.³ The German economy will emerge only gradually from its structural and cyclical problems. A further deterioration in German industry remains a risk in the external demand outlook.⁴ The moderate growth of the German economy will be driven in the quarters ahead by household consumption, supported by real wage growth. Services in particular will benefit from this. German industry will probably not record a major

3 However, the changes in German industry may generate new opportunities for Czech exporters, as shown in Box 1 at the end of this section.

Chart I.2

The survey of German corporations so far indicates no marked improvement in their situation and expectations

ifo Business Climate Index; index: 2015 = 100; seasonally adjusted; source: ifo Institute



The efforts of European institutions to increase the budgetary discipline of the EU Member States are taking a new shape. Under EU law, EU countries must keep their budget deficits within 3% of GDP and their public debt within 60% of GDP. However, a number of highly indebted EU countries have long failed to meet these conditions. The latest revision of the Stability and Growth Pact is therefore focused on the path to sustainable debt rather than the current debt level. The new framework is based on countryspecific debt sustainability analyses (DSAs). These are based on a single operational indicator - the net government expenditure path over a four-to-seven year period. The projected net government expenditure path must comply with a requirement to meet the budget deficit limits at least by the end of that period. However, the new framework also contains numerical safeguards to ensure a minimum pace of debt and deficit reduction. According to estimates by the Brussels-based Bruegel think tank, the average fiscal adjustment requirements will be particularly high in Italy, France and Spain. However, the change in the approach of EU institutions has opened the way to greater fiscal discipline in the years ahead than in the past.

¹ Effective euro area GDP rose by 0.3% quarter on quarter and 0.4% year on year in 2024 Q1.

² Besides fundamentals, the May outcome was probably affected by calendar effects not subject to standard data adjustment, namely four days of public holidays in Germany, France and Austria, some of which fell on a Thursday and thus probably resulted in people taking four days of leave in a row.

⁴ The rapid expansion of Chinese producers on international markets and the still elevated energy prices in Europe are jeopardising the competitiveness of German industry and hence also the outlook for a recovery in its production in the second half of this year. Demand for industrial goods in Germany itself is meanwhile being dampened by restrictive fiscal policy, greater orientation of household consumption on services and firms' current reluctance to invest heavily.

growth impulse until the second half of this year as global demand strengthens across the board.

Germany's lacklustre performance contrasts with the solid growth of the Slovak economy, which has dealt well with the high inflation and the fight against it. Over the past year, demand in Slovakia has been supported by EU funds and easy fiscal policy, so Slovak consumers have upped their spending. In recent months, however, Slovak industry has recorded a decline, due mainly to weak external demand. Besides the Slovak economy, Spain is also contributing to GDP growth in the effective euro area, benefiting from strong activity in services, especially tourism. The French and Italian economies will also see a recovery, again due mainly to growing household consumption and investment. In addition to growing domestic and gradually global demand, all euro area countries will thus benefit from a gradual easing of ECB monetary policy. The future evolution of domestic fiscal policy, which will have to be adjusted in the light of stricter European fiscal sustainability rules, poses a risk for many countries, especially France, Spain and Italy. Agreement on the pace of fiscal adjustment will be sought during the autumn, but the expected fiscal restriction will gradually feed through to a slowdown of the French economy.

Overall, the effective euro area economy expanded modestly quarter on quarter in 2024 Q2.⁵ GDP will grow by 0.7% on average in 2024 as a whole and accelerate to around 1.5% in the following two years. This will foster a gradual narrowing of the negative output gap, which will close completely towards the end of the forecast horizon.

Industrial producer prices will continue to decline until the end of this year and start to rise again in 2025 as the anti-inflationary effect of the energy component fades out

The Brent crude oil price recorded sizeable swings in Q2 in response to OPEC+ policy and geopolitical developments in the Middle East and Ukraine. There is uncertainty regarding demand for oil, mainly because of the growth prospects of the Chinese economy and the still unclear direction of the Fed's monetary policy. The market outlook for the Brent price returns from its currently elevated level to USD 75 a barrel at the end of the forecast horizon (see Chart I.3). Overall, market contracts also indicate a decrease in petrol prices, with dynamically changing margins of refineries contributing to greater volatility on top of seasonal factors. Natural gas prices in Europe surged in the second half of May on the back of strong demand from Asia, but have since followed a modest downward trend. Gas stocks are at

The Brent crude oil price has risen since the start of this year, but its outlook remains falling

prices of selected commodities; index: February 2022 = 100; source: Bloomberg, CNB calculations



Wholesale petrol prices (and generally prices of refined products) are primarily derived from the market price of oil. However, the (gross) margins of refineries also play an important role. They often differ, even significantly, across the world's major trading hubs (ARA – Amsterdam, Rotterdam, Antwerp – for most of Europe, Singapore for South-East Asia, New York for the US East Coast) depending on local conditions. Previously, Europe was heavily dependent on fuel imports from Russia. However, they are now basically at zero, whereas imports from other regions have risen. The margins of European refineries have therefore been fluctuating strongly in response to global developments such as the sanctions on Russian refined products, the attacks on Russian refineries, the (later suspended) ban on Russian fuel exports and fluctuations in stocks and (expected) demand (especially in the USA and China).

Chart I.4

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





⁵ According to Eurostat's flash estimate, GDP in the effective euro area rose by 0.1% quarter on quarter and by 0.6% year on year in 2024 Q2. This figure was published on 30 July 2024, i.e. after the closing date of the forecast.

a seasonal high and gas supplies are stable. The food commodity price index dropped in the first half of July and its outlook is slightly falling. By contrast, the industrial metals price index returned to modest growth in late June and should continue to rise over the outlook horizon.

A continued year-on-year decrease in energy prices (especially exchange prices of petrol, but also natural gas and electricity in Europe) will keep driving down industrial producer prices in the effective euro area this year (see Chart I.4). Moreover, core producer prices also fell, reflecting, among other things, lower demand for products in Europe. However, core producer prices will start to rise in mid-2024, in parallel with a recovery in economic activity and an expected year-on-year increase in prices of industrial metals. Growth in core producer prices will strengthen next year. Overall, industrial producer prices will fall by 5.9% this year and rise by around 1% in 2025 and 2026. Slovakia will record the largest decrease this year, whereas Germany will see the smallest fall.

The decline in cost pressures and the delayed impact of past monetary policy tightening are gradually passing through to euro area consumer prices, helping to slow inflation. The contribution of industrial goods prices and food prices to headline inflation has fallen in particular, while growth in services prices remains stronger. Expected services price inflation is also elevated - in contrast to the survey of industrial producers (see Chart I.5). This is because services are usually labour-intensive and growth in nominal wages - the key cost factor in services - remains high due to labour market tightness. Demand for services is also robust according to many leading indicators. However, the disinflation process will continue this year. Inflation in the effective euro area will slow to 2.6% for this year as a whole and approach the ECB's 2% target on average next year. Austria will record the highest inflation this year, while Italy will record the lowest.

The ECB cut interest rates in June; the timing of further monetary policy easing is uncertain

As expected, the ECB cut interest rates by 0.25 pp at its June meeting. However, the accompanying comments clarified that this was a change in the degree of monetary policy restriction, not the start of an easing cycle. The ECB left rates unchanged in July. Financial markets are expecting rate cuts in September and December 2024 with a probability of more than 50% (see Chart I.6). Their approach reflects the ECB's communications. Its leading representatives are being cautious in their statements assessing price developments in an effort to moderate market expectations. The ECB's cautious approach is due to still brisk growth in core prices, especially services prices. The ECB is also carefully monitoring wage growth, wage bargaining and the overall labour market situation. The expected moderate pace of rate cuts is

Chart I.5

Unlike in industry, expected price growth in services in the euro area remains elevated

expectations regarding selling prices in euro area over next three months; balance of answers; source: European Commission



Chart I.6

According to financial markets, euro area interest rates will go down further this year; the decline in the shadow rate will be dampened by an expected decrease in the rate of reinvestment by the ECB

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



The calculation of the **implied 3M EURIBOR** (its market outlook) is derived from a number of market instruments (such as swap contracts) that make up the relevant yield curve. In response to the greater volatility of market outlooks in recent months, the ten-day averages of the underlying instruments are now taken into account. This approach will help suppress excessive volatility in market outlooks. Recently, the outlooks have tended to overshoot and then quickly reverse their initial response, for example following the publication of new data from the economy. As for the effect on the Czech economy, this will reduce the marked volatility stemming from the monetary stance in the euro area expected by the markets. also reflected in longer maturity bond yields, which remain elevated.

The euro will gradually appreciate against the dollar until the end of the forecast horizon, reaching USD 1.13. The main reasons for the dollar staying stronger currently include the tighter monetary policy of the Fed than of the ECB and the still solid condition of the US economy. By contrast, the gradual increase in the growth rate of the euro area economy compared with the USA speaks in favour of the euro appreciating over the outlook horizon.

COMPARISON WITH THE PREVIOUS FORECAST: Economic developments abroad

		2024	2025	2026	
GDP (in the effective EA)	y-o-y changes in % pp	0.7 (0.2)	1.4 (-0.1)	1.6 -	The growth outlook for the effective euro area in 2024 has improved slightly due to better-than-expected outcomes in Q1; the acceleration of growth in 2025 will be slightly lower.
Consumer prices (in the effective EA)	y-o-y changes in % pp	2.6 (0.0)	2.2 (0.0)	2.1	The projection of decreasing consumer price inflation is unchanged.
Producer prices (in the effective EA)	y-o-y changes in % pp	-5.9 (-0.5)	0.8 (0.0)	1.2 -	The downward shift of the forecast for industrial producer prices this year primarily reflects a deeper fall in the energy component.
Brent crude oil price	USD/barrel	83.9 (-0.4)	80.1 (1.0)	76.2 -	The Brent price outlook is little changed and remains falling.
3M EURIBOR	% pp	3.7 (0.1)	3.1 (0.1)	2.8	Market interest rates are slightly higher than in the spring forecast, as the ECB is cautious about cutting interest rates given the still elevated core inflation.
Exchange rate	USD/EUR	1.08 (-0.01)	1.09 (-0.03)	1.12 -	The expected slight appreciation of the euro against the dollar is almost unchanged compared with the previous forecast.

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)

BOX 1 The position of Czech exporters on the German market by comparison with Poland

The German economy has been in the doldrums recently. In addition to cyclical factors, it is being held back by structural problems and the search for a new growth model. This box aims to describe the position of Czech exporters in Germany amid the ongoing changes. It attempts to show to what extent they have been successful on the German market over the last two decades, especially by comparison with Polish exporters, which areas they excel in and how they have been hit by the slowdown of the German economy over the last year. The position of exporters is measured by their market share, expressed as the share of imports from individual countries in Germany's total imports.

In 2023, the Czech Republic ranked seventh among exporters to Germany, accounting for 4.5% of its imports (see Chart 1).¹ As a large yet highly open economy, Germany does not have a single predominant trading partner and the territorial structure of its foreign trade is relatively fragmented. No country except China has a share of more than 10%. The territorial structure of imports has changed over the last two decades, with Germany shifting from traditional trading partners (suppliers) in the EU (France, Italy, the UK) to new suppliers from China and Central Europe. This trend was strong until 2017, when the German engine started to slow. As shown in Chart 1, large changes in the market shares of individual countries were particularly visible in the first ten years following the EU enlargement of 2004. Between 2016 and 2022, the importance of China increased and Poland also became one of the leaders in the ranking of Germany's main trading partners.

The market share of Czech exporters on the German market declined in 2016-2021, unlike that of Polish firms (see Chart 2). The 2022 energy crisis, the rise in prices of imported commodities, the disruptions to production chains and the related problems of the German economy brought about a short-term drop in the market shares of both countries.² In 2023, Czech and especially Polish exporters increased their share of the German market again. The share of Polish exporters more than doubled compared with the start of the millennium. Besides factors such as a better supply chain situation, part of their success can be put down to the energy crisis in Germany. According to media reports, many firms with energy-intensive production restricted their activities or moved them abroad (e.g. BASF, ThyssenKrupp), while some even stopped producing (e.g. Vallourec). They thus made room on the market for foreign suppliers, such as Polish and Czech firms. This is confirmed by a rising number of insolvency petitions in manufacturing since the start of 2023.3

However, Germany is also having to adapt to the unstable global geopolitical situation. It is therefore

Chart 1

Germany's traditional partners, including the Czech Republic, have lost share in total imports and have been overtaken by China and Poland

share of imports from country in Germany's total imports in selected years in %; countries ranked by import volume in 2023; arrow shows change between 2002 and 2023; source: Destatis, calculation: CNB



Chart 2

The Czech Republic's share of the German market was falling from 2016 until recently, while Polish exporters gained market share (except in 2022)

share of Czech Republic and Poland in Germany's total imports in %; source: Destatis, calculation: CNB



Chart 3

Germany is heavily reliant on imports from China

share of goods categories of potentially significant imports in total number of categories of German imports in 2023 in %; source: Destatis, calculation: CNB



increasing its trade with the USA and trying to move away from trading with China and make itself less reliant on imports of crucial intermediate goods from China.⁴ Dependence on imports from a country can be identified as potentially significant if its share in imports to the destination country exceeds 50% in some goods categories. In 2023, almost 5% of the goods categories of German imports from China met this definition (see Chart 3).⁵ Even if the threshold for German dependence on imports from China is moved to 75%, the resulting more than 1% of goods categories in which imports from China predominate is still telling. These include, for example, some chemicals and electronic components. From this point of view, only a small proportion of imports from the Czech Republic and Poland are similarly important for Germany. In the case of Czech Republic, they include some types of meat and fodder, chemicals, and components for the textile industry. By contrast, many items exported to Germany are highly specific from the Czech perspective.6

The current positions of Czech and Polish exporters differ. Czech exports are still concentrated in sectors where they gained their position at the start of the millennium. These include electrical and mechanical machinery and parts thereof, motor vehicles and parts thereof, and metal products (see Chart 4). Czech producers are succeeding in maintaining their market share in most of these sectors. Moreover, the weight of these three key sectors has risen significantly over recent decades, fostering even narrower specialisation of Czech exports to Germany. Exports of electrical and mechanical machinery and equipment and products of the automotive industry together accounted for almost 60% of Czech exports to Germany in 2023, as against almost 10 pp less at the start of the millennium. The diversity of the products/goods categories exported has therefore declined. The story with Polish exports to Germany is the opposite. They were dominated by furniture at the start of the millennium. Over the last ten years, however, Polish exporters have been successful across a whole range of products, including the sectors predominant in Czech exports. Polish exports to Germany have thus diversified. In some segments, such as parts for the automotive industry and metal products, the shares of the two countries on the German market are now similar. Polish exports are thus strong competition for Czech exporters.⁷

The activity of Polish exporters is illustrated by the fact that they have gained market share in one of the fastest growing items to do with sustainability. They now hold a market share of over 25% in the "electric accumulators" subcategory. Hungarian firms have been similarly active. In the past, battery trade was dominated by Chinese imports. In the case of the Czech Republic, the rise in market share, if any, has been evenly concentrated in traditional sectors.

15

Chart 4

Imports from the Czech Republic to Germany are concentrated in traditional sectors; German imports from Poland are conversely increasing in diversity

market shares in % by sector in German imports in given segment; weighted by sector's share in exports from Czech Republic and Poland to Germany; source: Eurostat, calculation: CNB



 2005
 2008
 2011
 2014
 2017
 2020

 Electrical machinery and equipment

 Vehicles other than railway

 Machinery and mechanical appliances

 Furniture

Articles of iron or steel Plastics and articles thereof

Other

The German economy has been experiencing many problems for several years in a row. The search for a new growth model will be difficult for Germany and its main trading partners. The growth engine of the Czech economy – exports of traditional products to Germany – is thus at risk. So far, Czech exporters have maintained a solid position amid Germany's switch to a new growth strategy, as documented above. However, their links with traditional German industry, our common focus on energy-intensive sectors and the limited ability of our firms to react to new demand segments may keep Czech producers and suppliers at the low stages of the European and German value chains.

- 3 Unfortunately there is no up-to-date sectoral breakdown available for insolvencies in Germany, but companies in energy-intensive sectors such as manufacture of metals have historically accounted for a large proportion of insolvencies in Germany.
- 4 See, for example, the German government's 2023 <u>Strategy on China</u>, the Bundesbank's September 2023 <u>Germany as a business</u> <u>location: Selected aspects of current dependencies and medium-term challenges</u> and IW's April 2024 <u>Import side; De-risking China in</u> <u>2023: An anatomy of high German import dependencies on China</u>.
- 5 The German Institut der deutschen Wirtschaft (IW) regularly comments on potentially critical dependence on imports from China. The analyses suggest that there is only limited room for replacing imports from China with supplies from European countries.
- 6 The box The dependence of Czech exports on Germany in the Autumn 2023 MPR discusses Czech exports to Germany in more detail.
- 7 On the other hand, the Czech Republic is also benefiting from Poland's expansion, as the share of Czech exports to our Northern neighbour in our total exports rose from 6% at the start of 2020 to 8% in January 2024.

¹ Exports from the Czech Republic to Germany make up almost one-third of total Czech exports. The same is approximately true for Poland. The shares of Slovakia and Hungary are somewhat lower but still exceed 20%.

² Adjusted for the sharp increase in prices of imported energy commodities, the drop in the Czech and Polish shares would be less pronounced. Nevertheless, the stagnation of the German economy, including supply chain disruptions, was reflected in Germany's trade with the Czech Republic and Poland. In addition, German exporters have been hit by a loss of market share in Russia and Ukraine.

The Czech economy has started to grow again. The recovery is being driven by increased household consumption, supported by renewed growth in real wages, stabilised sentiment and a declining saving rate as a result of falling interest rates. By contrast, the contribution of net exports to GDP growth will decrease on the back of recovering domestic demand. Gross fixed capital formation will decline slightly this year as a result of a drop in general government investment and subdued private investment due to slow absorption of EU funds. Firms will this year also release the inventories they accumulated in the previous three years. In whole-year terms, GDP will grow by 1.2% this year and the economy will still operate below its potential. Growth in economic activity will accelerate to almost 3% next year. This will be aided above all by strengthening growth in household consumption, supported by solid real wage growth and renewed investment growth. By contrast, net exports will dampen growth in economic activity despite continued growth in external demand. The labour market tightness will gradually ease further. Nominal wages in the market sector will continue to rise at a swift pace.

The economy will expand this year and GDP growth will pick up further next year

Growth in domestic demand will recover this year. It will be driven by renewed growth in household consumption,⁶ supported above all by a rapid increase in real income. Consumer appetite will also strengthen due to stabilising sentiment and falling interest rates. Export-oriented industrial firms increasingly perceive insufficient demand (especially from abroad) as the main factor limiting production (see Chart II.1). The contribution of net exports to GDP growth will thus decline but remain positive, contributing to GDP growth similarly as household consumption. Fixed investment will decline slightly this year. General government will invest less this year than it did last year, while the initially also subdued private investment will start to grow gradually as external demand picks up. However, private investment will be dampened by a slow start to the absorption of European funds in the new programme period. The problems in global value chains caused by the pandemic and the energy crisis have largely disappeared, as indicated by an absolute decline in inventories in late 2023 and early 2024. Inventories will also decline in the period ahead and their contribution will stabilise at pre-crisis levels during 2025. As a result, year-on-year growth in domestic economic activity will accelerate (see Chart II.2).7 In whole-year terms, GDP will grow by 1.2%. The growth will pick up to 2.8% in 2025 and stand at 2.4% in 2026. This is broadly in line with the new estimate of long-

Chart II.1

The share of firms reporting shortages of materials as a factor limiting production is falling, while the share of firms reporting a decline in demand is rising

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



⁶ Under CZSO methodology, household consumption means final consumption expenditure of households and non-profit institutions.

⁷ According to a preliminary CZSO estimate, Czech GDP increased by 0.3% quarter on quarter and by 0.4% year on year in 2024 Q2. This is almost in line with the CNB forecast. This figure was published on 30 July 2024, i.e. after the closing date of the forecast.

term growth in the potential output of the Czech economy of 2.5% in the medium term (see the <u>Appendix</u>).

Household consumption will recover on the back of swiftly rising real wages

Household consumption is gradually recovering from its previous protracted downturn. In late 2023, it saw renewed quarter-on-quarter growth, which continued into early 2024. Signals from the labour market indicate persisting buoyant wage growth. Coupled with a gradual decline in interest rates and stabilised consumer sentiment,⁸ they point to continued growth in household consumption in Q2. However, the retail and services leading indicators available so far suggest that growth in household consumption slowed slightly before the end of the first half of 2024. Brisk quarteron-quarter consumption growth will be restored in the second half of the year. Besides the factors mentioned above, this will be due to a gradually declining saving rate. As a result, household consumption will grow by around 2% in whole-year terms this year (see Chart II.3).

The growth in real household income will continue into next year and its year-on-year pace will rise slightly further due to an additional slight decrease in average whole-year inflation. Together with improving sentiment and a further decline in interest rates, this will result in a surge in growth in consumer demand. Household consumption will thus go up by more than 3% in 2025 and also 2026.

Year-on-year growth in households' nominal gross disposable income will slow this year compared to the elevated rates seen in previous years and will fluctuate around 3% until the end of the forecast horizon. It will be driven above all by the contribution of wages and salaries (see Chart II.4), which, however, will decrease slightly, reflecting a continued gradual cooling of the labour market. The lower growth in gross nominal disposable income this year will be due mainly to a negative contribution from income of entrepreneurs, who will reduce their profit margins. Property income will also decline this year owing to falling interest rates, while the negative contribution of taxes will be amplified by the consolidation package. The positive contributions of social benefits will weaken gradually.

The saving rate will decrease gradually over the next three years

The saving rate decreased to around 18% in 2024 Q1 (see Chart II.5). This was due to improved consumer confidence in an environment of restored price stability, the start of the domestic rate-cutting cycle and

Chart II.2

Growth in domestic economic activity will accelerate

y-o-y changes in %; prices of 2020 (chain-linked); seasonally adjusted; confidence interval



A planned extraordinary revision of the national accounts was made at the end of June. It applied to the entire time series for GDP and all its components. GDP growth over the last five years was revised up, and economic activity thus exceeded its pre-pandemic level already in 2022 Q2. As for the individual components, household consumption was revised up significantly, especially in 2022 and 2023. Even so, it remains 5.5% below the pre-pandemic level. Gross fixed capital formation also saw a very large revision. Its growth is higher especially in 2021 and 2022. This shift was only partly offset by a decrease in change in inventories. The growth rates of general government consumption, exports and imports were also revised, albeit to a lesser extent than household consumption and gross capital formation.

Chart II.3

Growth in household consumption resumed; general government consumption will grow at a subdued pace

household and general government consumption; y-o-y changes in %; prices of 2020 (chain-linked); seasonally adjusted



⁸ According to the July business cycle survey data, overall economic sentiment worsened slightly amid a decrease in both business and consumer confidence.

generally more favourable economic prospects. However, the saving rate remained above its usual level.⁹ Interest rates remain elevated despite having declined, so relatively attractive returns are motivating households to save. However, this effect, together with the precautionary motive, will weaken over the rest of the year as the saving rate continues to decline gradually, aided by an improvement in consumer sentiment. The saving rate will return close to its longterm average in 2026 and stay there for the rest of the forecast horizon.

Export growth will accelerate over the next two years as external demand recovers; imports will also increase significantly

The significant quarter-on-quarter growth in export activity, which began at the end of last year, continued at the start of this year. The Czech Republic's largest trading partner, Germany, is going through an economic downturn. The fall in exports to Germany was partly offset by exports to Poland, the United Kingdom and Italy. The strong export growth was also aided by exports of forced stocks of unfinished products, which were - as in late 2023 - accompanied by a fall in inventories in absolute terms. According to the forecast, quarter-on-quarter export growth slowed in Q2 due to still lacklustre performance of other economies (especially Germany). However, external demand growth will start to recover in the course of the year, fostering faster growth in Czech exports in yearon-year terms as well (see Chart II.6). Export growth will return to its long-term average in early 2025.

Imports also rose significantly in quarter-on-quarter terms in early 2024, although the growth was somewhat lower than that in exports. This was due to the use of built-up stocks (especially of materials and unfinished products), which thus did not have to be imported this time, and to a decline in import-intensive fixed investment. The forecast expects quarter-onquarter import growth to continue and outpace export growth in Q2 due to solid growth in domestic demand. Import growth will accelerate further over the rest of the year, including in year-on-year terms (see Chart II.6). In 2025, import growth will remain strong due to accelerating growth in household consumption and fixed investment. In 2026, it will slow. Net exports will continue to contribute significantly to GDP growth in the course of this year. Next year, by contrast, they will dampen economic growth slightly. In 2026, their effect will be broadly neutral.

9 Since the Winter 2024 MPR, the forecast has been assuming that the long-term usual saving rate is roughly 1.5 pp higher than the previously considered 12%, due, among other things, to the abolition of the super-gross wage and other changes in taxation.

Chart II.4

Growth in nominal disposable income will be subdued this year, due mainly to a drop in the contributions of wages and salaries, entrepreneurs' income and social benefits

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



Chart II.5

The saving rate will decline gradually from its current elevated level to close to its usual long-term level

households' saving rate in %; seasonally adjusted



Export and import growth will gradually accelerate this year as external and domestic demand slowly recovers

real exports and imports of goods and services; y-o-y changes in % for exports and imports and in CZK billions for net exports; seasonally adjusted



Fixed investment will decline slightly this year

Fixed investment decreased year on year at the start of this year. This was due mainly to a drop in general government investment caused by the consolidation package. However, private investment was also subdued. This may have been caused by firms and households waiting for lower interest rates, a moderate drop in firms' profitability or still poor business sentiment. Nevertheless, private investment will start to grow again in the course of the year, supported by slowly recovering external demand and falling domestic and foreign interest rates. In 2024 as a whole, however, private fixed investment will grow by just 1.5%, as it will be dampened by a slow start to the absorption of EU funds in the new programme period.¹⁰ General government investment will decline this year, following strong growth in 2023¹¹ (see Chart II.7). Besides base effects, this will be due to the government's consolidation efforts. Fixed investment will decrease slightly overall in 2024.

General government investment will start to grow again in 2025, aided by expected faster absorption of European funds and funds from the National Recovery and Resilience Plan. Private investment growth will also accelerate, due in part to an investment by chip manufacturer onsemi in Rožnov pod Radhoštěm. Overall, fixed investment will grow at a pace of around 3.5%. It will slow slightly in 2026.

Additions to inventories will be slightly negative for the rest of this year. Firms will release part of their inventories accumulated in the previous three years and will gradually go back to just-in-time planning, which implies a return to only low additions to inventories (see Chart II.8). Year-on-year growth in total gross capital formation will thus be adversely affected by the above trend in inventories for most of this year. Next year, by contrast, inventories will make a positive contribution to the growth (see Chart II.7). Expenditure on gross capital formation will thus fall by 4.5% overall this year. In 2025, total investment will grow by around 7.5%.

10 About two-thirds of European funds are drawn by general government and one-third by private firms. However, in the years when programme periods ended (2015 and 2023), private firms drew down the remaining funds in massive amounts, significantly boosting total fixed investment growth. EU funds financed private investment to the tune of around CZK 53 billion last year, while the forecast for this year expects such funding to amount to only around CZK 25 billion. General government drew around CZK 60 billion from EU funds last year. This year, the forecast expects it to draw CZK 58 billion, so its transition into the new programme period will be smoother.

Chart II.7

Growth in total gross capital formation will be volatile due to inventories, while growth in private fixed investment will accelerate gradually following an initial downturn

investment activity; y-o-y changes in %; contributions in pp; prices of 2020 (chain-linked); seasonally adjusted



Chart II.8

Change in inventories will be negative in the course of this year; inventories will return to low positive growth next year

change in inventories in CZK billions; prices of 2020 (chain-linked); seasonally adjusted



¹¹ General government expenditure increased last year due to a one-off purchase of military helicopters for CZK 14 billion.

Fiscal policy is significantly dampening GDP growth this year and will have a neutral effect next year

Real government consumption growth will slow this year and the next (see Chart II.3). This will be due mainly to a reduction in operating expenditure under the consolidation package and the partial fade-out of last year's effect of increased expenditure linked with the arrival of Ukrainian war refugees. Growth in nominal general government consumption will slow despite expected renewed brisk growth in public sector pay this year and the next.

Fiscal policy is significantly dampening GDP growth this year (see Chart II.9), owing to the consolidation package,¹² the definitive termination of energy support measures and a decrease in pension expenditure stemming from the fading effect of the reduction of the extraordinary increase in pensions last year. In 2025, the overall effect of fiscal policy will be broadly neutral, as the additional (residual) slightly dampening effect of the consolidation package will be offset by expected faster absorption of EU funds. We assume that fiscal policy will have a slightly expansionary effect in 2026.

The negative output gap of the Czech economy will close next year

The output gap has turned negative in recent years due to the economic downturn. It started closing at the end of last year and will continue to do so as growth in domestic and external demand recovers gradually. The fiscal consolidation package and the previous tight monetary policy are slowing the pace of closure of the output gap this year. The output gap will close next year as these effects drop out (see Chart II.10). Growth in potential output itself will pick up slightly towards its medium-term rate (2.5%) due to gradually recovering growth in labour productivity.

12 The overall fiscal effect of the consolidation package is equal to -1.2% of GDP in 2024 (including further measures not included in the package, the impulse fiscal is approximately -0.9 pp to GDP growth this year). In 2025, the fiscal effect of the package will be an additional -0.3% of GDP (although increased government investment will have the opposite effect on the fiscal impulse). On the revenue side, the consolidation package includes the following measures: 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 for employees, and contributions arising from agreements to complete a job. On the expenditure side, it includes cuts in subsidies for entrepreneurs, a temporary reduction in the volume of public sector pay and cuts in

Chart II.9

Fiscal policy will significantly dampen GDP growth this year, due mainly to the consolidation package

fiscal impulse; contributions to GDP growth in pp



Chart II.10



output gap in % of potential output



operating and other expenditure.

		2024	2025	2026	
GDP	y-o-y changes in % pp	1.2 (-0.2)	2.8 (0.1)	2.4 -	The GDP outlook for this year is slightly lower than in the previous forecast due to weaker domestic demand; GDP growth is almost the same next year.
Household consumption	y-o-y changes in % pp	2.0 (-0.5)	3.5 (-0.5)	3.1 -	The household consumption forecast for this year and the next is slightly lower due to weaker consumption growth in the first half of the year and a revision of its long-term growth rate.
Government consumption	y-o-y changes in % pp	2.6 (0.4)	0.7 (-0.4)	0.7 -	Government consumption is slightly higher this year than in the previous forecast due to higher non-wage expenditure at the start of 2024; the growth is lower next year.
Gross fixed capital formation	y-o-y changes in % pp	-0.7 (-4.5)	3.7 (0.5)	3.0 -	Fixed investment will grow at a slower rate this year in both its private and public components compared to the spring forecast; investment growth is higher next year due to base effects.
Net exports	contr. to GDP growth pp	1.1 (0.8)	-0.9 (-0.8)	-0.1 -	The contribution of net exports is higher this year due to stronger external demand and observations at the start of the year; next year, by contrast, its contribution is slightly lower.
Employment	y-o-y changes in % pp	3.2 (2.9)	0.4 (0.2)	0.4 -	The faster employment growth mainly reflects statistical effects observed in 2024 Q1; the employment outlook for 2025 is almost unchanged from the previous forecast.
Unemployment (ILO)	% pp	2.7 (-0.2)	2.8 (-0.3)	3.0 -	The outlook for the general unemployment rate is slightly lower than in the previous forecast due to lower levels observed in the first half of this year.
Average monthly nominal wage	y-o-y changes in % pp	7.4 (0.2)	6.4 (0.3)	5.2 -	The higher expected wage growth reflects the initially observed wage growth in market sectors at the start of 2024 and faster wage growth especially in non-market sectors next year.

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

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

The labour market will continue to cool gradually

From the perspective of the LUCI, the gradual cooling of the labour market - linked with the economic downturn last year - is continuing (see Chart II.11). Employment continues to contribute significantly to labour market tightness, due in part to a rising number of participants of pre-retirement age. However, its contribution will decrease in the future, mainly because of a gradual draining of the labour pool, which has also been supported in the recent past by migration. More cautious corporate recruitment due to the still uncertain situation in industry will also correspond with this. It will be reflected in a shrinking contribution of demand for labour. The contribution of unemployment is also gradually decreasing as indicators of this variable continue to rise. This reflects the usual delay in the response of the labour market to the previous economic contraction. By contrast, wages and costs will increasingly foster labour market tightness over the forecast horizon, reflecting elevated growth in both nominal and real labour costs over the entire horizon.

Chart II.11

From the perspective of the LUCI, the tightness in the labour market will gradually decrease further

LUCI; vertical axis shows standard deviations



Real wages started to grow again in year-onyear terms at the start of this year

The real wage has started to grow again in year-onyear terms after more than two years of decline and will continue to rise for the rest of this year. This is due partly to still elevated nominal wage growth, but also to inflation stabilising close to the 2% target.

Year-on-year growth in the average nominal wage will remain high from a historical perspective for the rest of this year (see Chart II.12). It is still being affected by the past elevated inflation. In 2024 Q1, wage growth accelerated significantly in quarter-on-quarter terms due to a slightly above-average increase in basic pay scales in firms based on the results of collective bargaining. Buoyant wage growth was also fostered by an increase in the minimum wage and guaranteed wages in some categories and a rise in doctors' pay. Wage growth will accelerate in year-on-year terms until the end of 2024 due to a strong first quarter and a gradual recovery in economic activity. It will then gradually start to return to its long-term average. The forecast assumes an increase in the minimum wage to 47% of the average wage over the next five years in accordance with the recently approved government regulation.¹³ Over the next two years, wage growth will slow and gradually approach its newly estimated longterm normal (4.5%).

The forecast assumes a 7% pay increase (currently under negotiation) for selected professions¹⁴ in nonmarket sectors in September 2024. A potential more significant increase in pay from September and also higher growth in 2025 (an election year) are an inflationary risk to the forecast. Despite this, the growth in non-market sectors will be more modest than that in the market sector.

Growth in the nominal wage bill this year and in the years ahead is affected predominantly by average wage growth. In real terms, the wage bill returned to year-on-year growth at the start of this year (see Chart II.13), amid inflation falling to the CNB's 2% target. Growth in the real wage bill will pick up slightly further over the rest of 2024. By contrast, it will start to slow slightly at the end of this year, due to slowing growth in the nominal wage bill. However, it will remain elevated until the end of the forecast horizon.

Chart II.12

Nominal wage growth will remain elevated from the long-term perspective and slow only gradually

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



Chart II.13

Growth in the real wage bill has turned positive again and is thus leading to a renewed positive growth in household consumption

wage bill; y-o-y changes in %



¹³ The minimum wage for 2025 and the structure of the cascade of guaranteed pay will be officially announced in the Collection of Laws by 30 September 2024. This will replace the cascade of guaranteed pay and will only be binding for the public sector. Around 110,000 employees are in receipt of the minimum wage in the Czech economy.

¹⁴ Officials, workers in culture, technical workers in social services and healthcare, non-teaching staff in education and civil servants.

The number of full-time equivalent employees will continue to rise for the rest of this year; unemployment will grow only very slightly

Employment rose at the start of 2024, mainly as a result of the statistical effect of a change in demographic weights. The effect of the first quarter will keep year-on-year employment growth elevated for the rest of this year. In quarter-on-quarter terms, however, employment growth will almost halt for the rest of 2024, owing to the previous economic downturn, and the number of persons employed will increase only moderately in the coming years. Following year-onyear declines in 2023, the number of full-time equivalent employees started to grow again in 2024 Q1. It is expected to continue rising for the rest of this year. It will then increase only at a very moderate pace due to gradual exhaustion of the labour supply and employer caution in recruitment. The European Commission survey expects the number of employees to decline over the next three months. By contrast, the index of expected employment and some other highfrequency and leading indicators¹⁵ suggest continued corporate recruitment.

The general unemployment rate increased very slightly in 2023. This trend will continue this year and in the following period (see Chart II.14). However, it will stay very low by both historical and international standards. The forecast expects a similar trend in the share of unemployed persons.

Brisk wage growth in market sectors is behind this year's elevated domestic cost pressures

Growth in domestic costs eased slightly in 2024 Q2 but remained elevated (see Chart II.15). This was due predominantly to a slowdown in quarter-on-quarter wage growth in market sectors after a one-off acceleration at the start of this year.¹⁶ Domestic cost pressures will also remain elevated in the coming quarters, due to still solid, albeit slowing, quarter-onquarter wage growth.¹⁷ The repercussions of the previous high inflation will be reflected in a noticeable

15 For 2024 Q3, the <u>Manpower Group</u> index of expected employment is signalling a continuation of the rise in the number of employees observed in previous quarters. The Google Trends scores for "unemployment" and "unemployment benefit" have remained low in recent weeks. In 2024 Q2, the total number of vacancies was virtually unchanged compared to the previous quarter. As of July 2024, labour offices will remove vacancies from the register 6 months after the date of notification by the employer.

- 16 An agreement on higher pay for healthcare workers entered into force at the start of 2024 (healthcare as a whole is part of the market sector in the forecast). The minimum wage and the cascade of guaranteed wages linked to it was also increased. Both these legislative changes increased quarter-on-quarter average wage growth.
- 17 The slowdown in quarter-on-quarter wage growth in market sectors will halt temporarily at the start of 2025 and 2026 owing to an exceptionally large increase in the minimum wage, which will gradually go up (see above).

Chart II.14

Employment will surge this year due to a statistical effect at the start of the year; unemployment will increase only slowly

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



Chart II.15

The gradual slowdown in quarter-on-quarter wage growth will be reflected in a gradual decline in domestic cost pressures over the entire forecast horizon

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



contribution of wages. The positive contribution of the price of capital to growth in domestic costs over the entire outlook will reflect increasing output of the domestic economy. This will occur amid an only marginal quarter-on-quarter increase in employment, which will lead to continued growth in labour efficiency. This will partially offset the growth in domestic costs. The anti-inflationary effect of improving labour efficiency, along with a continued slowdown in quarteron-quarter wage growth, will lead to a gradual decline in growth in domestic cost pressures to the steadystate level in 2026.

III. INFLATION

Inflation accelerated in April, due mainly to a substantial increase in food price inflation. A correction occurred in May and inflation returned to the CNB's 2% target in June, with most components contributing. The long-running downward trend in core inflation continued, supported by tight CNB monetary policy. Headline inflation will remain at 2% on average in 2024 Q3, due mainly to slowing year-on-year growth in fuel prices. The contribution of administered prices will also fall slightly, although their growth will remain elevated from a historical perspective. The contributions of food prices and core inflation will remain broadly stable despite the weakening of the koruna over the past year, as it will be offset by still subdued cost pressures from abroad and a continued gradual correction of the previous increase in the profit margins of domestic producers, retailers and service providers. Headline and monetary policy-relevant inflation will stay close to the CNB's 2% target over the monetary policy horizon, amid a continuing decline in interest rates.

Inflation will be close to the inflation target for the rest of this year

The temporary upswing in inflation in April was due mainly to higher growth in food prices. Headline inflation then started to slow, reaching the CNB's 2% target in June, due to both a partial correction in food prices and a continued downward trend in core inflation. Inflation will fall slightly in Q3 and will be at the CNB's 2% inflation target on average (see Chart III.1). This will be due to lower fuel price growth and a further reduction in the contribution of core inflation and the almost zero contribution of food prices will remain roughly stable. A broadly similar situation is expected in 2024 Q4 (see Chart III.2).

Administered price inflation will be aboveaverage from a historical perspective this year

Annual administered price inflation remained close to 6% in Q2 (i.e. still elevated from a historical perspective), even though electricity and gas suppliers further reduced the commodity component of energy prices in the spring months (see Chart III.3). A rise in water supply and sewerage collection charges at the start of the year and a significant increase in the price of the road toll vignette in March are also contributing to annual administered price inflation. The commodity component of energy prices will continue to fall gradually in the months ahead due to favourable developments on wholesale markets. On average, however, year-on-year growth in administered prices will stay close to 5% this year and will not return to its long-term average until 2025, despite the planned increase in licence fees in January.¹⁸

18 The government approved an increase in the television licence fee from CZK 135 to CZK 150 and the radio licence fee from CZK 45 to CZK 55. These fees were last increased in 2008 and 2005 respectively.

Chart III.1

Inflation will be close to the 2% target for the rest of this year and stay there over the monetary policy horizon

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



Chart III.2

Core inflation will be the main contributor to the subdued consumer price inflation



Growth in market prices will fluctuate around 2% over the outlook horizon

The sharp rise in market prices in previous years was driven by both increased corporate costs and a significant surcharge of producers, retailers and providers of services to households. The resulting price growth thus outpaced growth in costs (see Chart III.4). However, the contribution of the surcharge on costs has been having an anti-inflationary effect since the start of this year. Customers' unwillingness to accept further big price hikes meant that companies only repriced to a limited extent relative to the still high growth in their costs, so their margins decreased. The contribution of the surcharge on costs will remain antiinflationary over the outlook horizon, as the gap in mark-ups will close due to the still tight monetary policy and will thus dampen inflation.

The elevated overall cost pressures will decline next year amid a gradual decline in the inflationary effect of the domestic economy and renewed gradual appreciation of the koruna

Growth in total costs slowed in 2024 Q2 due to a correction in energy prices19 supported by the previous slight appreciation of the koruna (see Chart III.5). Costs will continue to rise at an elevated pace in the coming quarters, as they will be affected by a weaker koruna and domestic cost pressures stemming from continued brisk nominal wage growth. In guarter-on-guarter terms, however, nominal wage growth will gradually slow and growth in total costs will thus start to decline steadily at the end of this year. In addition, the koruna will start to appreciate again at the start of next year. This will offset continued moderate quarter-on-quarter growth in core foreign industrial producer prices within the contribution of import prices. The cost pressures will be additionally mitigated by a slight decline in import prices of energy for most of 2025. Growth in total costs will thus approach its longterm steady-state level of 2% in the second half of next year and stay close to this level in 2026. Growth in costs will also reflect ongoing price convergence, which leads to traditionally higher services inflation than goods inflation in the Czech economy within core inflation.

Core inflation will be broadly stable in the second half of the year

Core inflation decreased further in 2024 Q2, thanks in part to the CNB's tight monetary policy. Growth in prices of both tradables and non-tradables meanwhile slowed. Core inflation will remain largely unchanged in

Chart III.3

Administered price inflation will stay aboveaverage from a historical perspective this year

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



Chart III.4

Persisting elevated growth in costs will foster further price growth, while a decreasing surcharge on costs will dampen it





Note: The contribution of the surcharge on costs contains the gap in mark-ups in the sectors of consumer and intermediate goods and services.

Chart III.5

The currently still slightly elevated overall cost pressures will ease over the next few years

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



¹⁹ In the first quarter of this year, the correction in prices of energy was temporarily suspended following the abolition of government electricity distribution subsidies from January 2024, which is taken into account in the forecast through energy import prices.

2024 Q3. Still subdued industrial producer price inflation abroad and its spillover to domestic price categories will have an anti-inflationary effect. Conversely, relatively brisk growth in wages and a weak koruna will have an inflationary effect. The contribution of imputed rent will gradually increase (see Chart III.6), while a greater pick-up in its growth due to a recovery in the property market represents one of the risks of the forecast. Despite the increasing contribution of imputed rent, core inflation will, however, remain close to 2% over the entire forecast horizon, due in part to the tight monetary policy to date.

Food prices will be flat in year-on-year terms in 2024 Q3

Growth in food, beverage and tobacco prices surged in April and corrected partially in the subsequent months. In year-on-year terms, prices in this category were broadly flat on average in Q2 (see Chart III.2). Food prices will also be stable year on year in Q3, due mainly to falling global agricultural commodity prices and domestic agricultural producer prices. Depreciation of the koruna will act in the opposite direction. Annual food price inflation will accelerate at the end of Q3 and then also at the end of Q4 due to base effects. Selected categories, such as confectionery, fruit and coffee, represent an uncertainty of the forecast due to adverse developments in the prices of some food commodities on wholesale markets as a result of poor harvests.

Fuel prices will start to fall year on year during the summer

Year-on-year growth in prices at filling stations climbed to almost 10% in May and then began to slow. Prices at filling stations will start to decline year on year during 2024 Q3, despite a depreciation of the koruna. This will be due mainly to high oil and fuel prices in the same period a year earlier. Fuel price inflation will remain negative in the following quarters, mainly because of a gradual correction of the currently elevated oil prices.

Headline inflation will be slightly above monetary policy-relevant inflation

At the start of 2024, the changes to indirect taxes in the consolidation package had a mixed effect on consumer prices and were slightly inflationary overall. The inflationary measures included a 10% increase in excise duty on tobacco and alcohol. Conversely, a reduction in the number of VAT rates and the transfer of selected groups of goods and services between these rates had an anti-inflationary effect. Overall, these changes had slightly positive first-round (accounting) effects (see Chart III.7). At the same time, the changes to VAT on some items did not pass fully through to prices. These immediate (second-round) effects ran in both directions and were negligible overall. Excise duty on tobacco and alcohol will be raised again at the start of next year, when it will go up by 5% and 10% respectively. Excise duty on tobacco

Core inflation will remain close to 2% amid a gradually increasing contribution of imputed rent

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



Chart III.7

The effects of changes to indirect taxes this year reflect the numerous changes to VAT and excise duties in the consolidation package and, in the next two years, an increase in excise duties on tobacco and alcohol

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



We distinguish 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) passthrough 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. 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 in its forecast sets interest rates with regard to the outlook for monetary policy-relevant inflation.

and alcohol will go up by a further 5% at the start of 2026. For the above reasons, headline inflation will be only slightly above monetary policy-relevant inflation over the entire outlook (see Chart III.8).

Like headline inflation, monetary policy-relevant inflation will be close to the central bank's 2% target over the monetary policy horizon, i.e. in the second half of 2025 (see Chart III.8) amid a continued decrease in interest rates.

Chart III.8

Headline and monetary policy-relevant inflation will both be close to the 2% target at the monetary policy horizon

headline and monetary policy-relevant inflation; %



COMPARISON WITH THE PREVIOUS FORECAST: Price developments

		2024	2025	2026	
Consumer prices	y-o-y changes in % pp	2.2 (-0.1)	2.0 (0.0)	2.0 -	The inflation forecast for this year has shifted down slightly owing to a lower outlook for fuel prices and slightly lower core inflation; it is unchanged for 2025.
Administered prices	y-o-y changes in % pp	5.8 (-0.2)	2.0 (0.0)	1.9 -	The slightly lower outlook for administered prices for this year is due to an expected larger reduction in the commodity component of energy prices.
Core inflation	% pp	2.5 (-0.2)	2.3 (0.0)	2.2	The slight downward revision of the core inflation forecast is due to a lower observed outcome and lower growth in industrial prices, which will outweigh a weaker koruna.
Food prices (incl. alc. bev. and tobacco)	y-o-y changes in % pp	0.1 (1.0)	1.4 (0.4)	1.8 -	Food price inflation will be slightly higher this year and the next due to the observed outcomes and poor harvests of some food commodities.
Fuel prices	y-o-y changes in % pp	0.6 (-3.7)	-4.8 (-3.5)	-2.6	The fuel price forecast for this year and the next has shifted downwards due to the observations in Q2 and a lower outlook for wholesale petrol prices.

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 Bank Board lowered the two-week repo rate by 0.25 pp to 4.50%, the discount rate by the same amount to 3.50% and the Lombard rate to 5.50%. The Bank Board assessed the risks and uncertainties of the forecast as broadly balanced overall. Increased wage demands in the private and public sector are an inflationary risk. Potential excessive growth in total public sector spending would also lead to a risk of the state budget having an inflationary effect. Higher-than-expected inertia in services inflation and a halt in tradables disinflation, which has so far been due mainly to fading supply-side problems, are additional upside risks. An inflationary risk in the longer term is a potential acceleration of money creation in the economy stemming from a significant recovery in lending activity, especially on the property market. By contrast, a downturn in global economic activity and weaker German – and hence Czech – economic output are a significant downside risk to inflation. The future monetary policy stance abroad remains an uncertainty of the outlook. Consistent with the summer forecast is a modest decline in short-term market interest rates amid initial stability of the koruna exchange rate followed by slight appreciation. This is in line with the expected persistence of inflation close to the 2% target over the entire outlook.

Consistent with the forecast is a modest decline in short-term market interest rates

The summer forecast implies a gradual decline in short-term market interest rates over the entire outlook (see Chart IV.1). At the end of 2026, interest rates will thus approach the monetary policy-neutral level. Although growth in costs will still be slightly elevated this year due to the repercussions of the previous extraordinary inflation pressures, this will not reverse the need to ease monetary policy further. The inflationary effect of the growth in costs will be offset by a decline in firms' profit margins, which dampens growth in prices. Inflation will thus stay close to the 2% target over the entire outlook.

The koruna was highly volatile in Q2

The koruna recorded large exchange rate fluctuations during Q2 due to frequent reassessment of market expectations regarding the domestic and foreign monetary policy stance. The stagnation of the koruna at the end of Q1 was interrupted in early May, when the koruna appreciated in response to a higher outlook for domestic rates in the CNB forecast and higher-thanexpected inflation in April. During June and July, the koruna weakened in reaction to a greater slowdown of domestic inflation and a larger-than-expected CNB interest rate cut of 50 bp.

The lowering of the expected interest rate differential between the koruna and world currencies was reflected in a further outflow of foreign short-term debt capital from domestic banks. By contrast, the external surpluses of the Czech economy, visible on the current account, fostered a firmer koruna.

Chart IV.1



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 monetary policy horizon (normally 12–18 months ahead) is the future time period which the CNB focuses on when making its monetary policy decisions and which reflects the length of the transmission of monetary policy. By targeting 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.

The koruna will appreciate modestly over the outlook horizon

The baseline scenario of the summer forecast expects the koruna to average CZK 25.2 to the euro in 2024 Q3. After broadly stagnating at the end of this year, the koruna will start to appreciate slightly (see Chart IV.2), due mainly to favourable net exports of goods and services and continued growth in economic activity.²⁰ However, the appreciation of the koruna will be dampened by a gradually narrowing interest rate differential vis-à-vis the euro area (see Chart IV.3).²¹

The market interest rate outlook and analysts' exchange rate expectations are broadly in line with the CNB forecast

The market outlook for short-term FRA rates moved lower in early July in response to the unexpected June inflation figure. Expectations regarding the extent of cuts in CNB key interest rates thus strengthened. The market continues to expect the 3M PRIBOR to decline gradually at the one-year horizon (see Chart IV.4). This outlook is only slightly below the interest rate path in the baseline scenario of the CNB's summer forecast. Almost all the respondents in the FMIE survey were expecting the 2W repo rate to be reduced by 0.25 pp at the August monetary policy meeting. One respondent was expecting rates to be left unchanged. The analysts expect the CNB's key interest rate to be in the range of 2.5%–4% (median 3.5%) one year ahead.

On average, the analysts in the FMIE and FECF surveys expect the koruna to be slightly below CZK 25 to the euro one year ahead (see Table IV.1 below in the text). The exchange rate path they expect is at a similar level to the central bank's outlook. The difference between the minimum and maximum expected exchange rate one year ahead in the two surveys is more than CZK 2. According to the analysts, the koruna should appreciate on the back of a continued recovery of the Czech economy. The evolution of major world currencies - especially appreciation of the US dollar, which generally moves counter to emerging market currencies - could have the opposite effect, as it is highly likely that the monetary policies of the world's major central banks (above all the Fed) will be tighter for longer. A geopolitical deterioration is a factor that could temporarily increase the volatility of the koruna.

Chart IV.2

The koruna will return to gradual appreciation at the start of next year

CZK/EUR exchange rate; confidence interval



Chart IV.3

The interest rate differential is narrowing further vis-à-vis euro rates and is now negative vis-à-vis dollar rates

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



Chart IV.4

The market was expecting rates to be lowered at the August meeting; the market outlook is only slightly below the CNB forecast





Note: Market rates represent for 2024 Q2 the 3M PRIBOR and for 2024 Q3–2025 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 2024.

²⁰ The summer forecast assumes that the year-on-year steadystate rate of appreciation of the koruna is 1.0% instead of 1.5% as assumed previously. The <u>Appendix</u> discusses the change in the steady-state value in more detail.

²¹ This effect is partly reduced by expert adjustments this year and the next.

The communications of the majority of the Bank Board members before the August meeting signalled slower monetary policy easing

The Bank Board members see room for a further cautious reduction in interest rates. According to most of them, the cut at the August meeting was likely to be smaller than before, and some did not rule out leaving rates unchanged. One member said he was also considering a cut of as much as 50 bp. The Bank Board members said that inflation had been highly volatile this year. Its decline is based on very volatile items such as food prices, growth of which could pose an inflationary risk. Several members emphasised a need to monitor services prices and the persistence of their growth. According to one member, however, the elevated services price inflation is only temporary. The current property market recovery was also mentioned as an inflationary factor, as growth in property prices could be reflected in higher inflation through growth in both normal and imputed rent. The tight labour market was also cited as a reason for caution in lowering rates.

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 currently (before the CNB Bank Board's August monetary policy meeting) stood at -0.2 pp.

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

Chart IV.5

The interest rate path is slightly higher on average than in the spring forecast

decomposition of changes in 3M PRIBOR forecast in pp



Chart IV.6

The exchange rate forecast has shifted to slightly weaker levels

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



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

- The initial state fosters slightly lower rates. This is due to lower energy import prices and a stronger koruna observed in the previous quarter. A revision of the national accounts, in which (along with other changes) the historical data on gross fixed capital formation were revised up significantly, has the same effect.²²
- The positive contribution of the foreign environment mainly reflects a slightly increased market outlook for ECB interest rates compared with the assumptions of the spring forecast. A weaker outlook for the euro-dollar rate acts in the same direction, implicitly reflecting the Fed's monetary policy.
- The short-term exchange rate forecast for 2024 Q3 is set at a slightly stronger level than implied by the core prediction model's interpretation of macroeconomic developments and thus has a downward effect on rates.
- By contrast, the short-term inflation forecast fosters slightly higher interest rates.
- The impacts of the revised outlook for administered prices, general government

consumption and the fiscal impulse are negligible.

• **Expert adjustments** foster lower rates at first. They reflect the incorporation of the initial levels of domestic rates, which were 0.5 pp lower at the start of Q3 than the average for Q2. The subsequently slightly positive contributions mainly reflect adjustments fostering faster wage growth and lower productivity growth due to the incorporation of lower steady-state potential output growth.²³

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

- The short-term exchange rate forecast mainly reflects the **observed levels**, which shift it to a weaker initial level than in the previous forecast.
- The koruna will appreciate over the outlook horizon at a broadly similar pace as in the previous forecast.²⁴

²² The higher growth of gross fixed capital formation in previous years has an anti-inflationary effect in the long term due to higher productivity.

²³ By the autumn forecast, the revision of the steady-state values will have been incorporated into the actual structure of the g3+ core forecasting model through recalibration of the steady-state values.

²⁴ The slower equilibrium rate of appreciation of the koruna assumed does not manifest itself clearly in the forecast until 2026. However, the comparison with the previous forecast presented here ends in 2025, which was the forecast horizon.

Money market rates are declining, while rates with longer maturities have been fluctuating with a downward trend

PRIBOR interest rates are falling gradually in response to the lowering of the CNB's key interest rates. The slope of the money market yield curve is negative, due to expectations that monetary conditions will continue to ease in this way. Domestic rates with longer maturities (over 2Y) largely followed rates on foreign markets, rising until the end of April and then mostly declining (see Chart IV.7). Long-term foreign rates responded mainly to the communications of major central banks (the ECB and the Fed) regarding the reduction of policy rates. Overall, the changes to domestic IRS rates have ranged between -1.4 pp and 0.0 pp at individual maturities since the start of this year. Government bond yields have changed by roughly the same amount.²⁵ The slightly convex shape of the domestic IRS and government bond yield curves - with a minimum at around 5Y maturity - remained approximately unchanged (see Chart IV.8).

Client interest rates declined further in response to the reduction of the CNB's key interest rates

The transmission of monetary policy rate cuts is fastest in the segment of loans to non-financial corporations.²⁶ The rate on genuinely new koruna loans to nonfinancial corporations has dropped by 2 pp overall to 6.7% in June since the CNB's key rates were lowered last December. The difference compared to the rate on euro-denominated corporate loans has decreased from 2 pp in December 2023 to a current 1.5 pp. The rate on new loans for house purchase dropped by 0.5 pp from its peak in August 2023 to 5% in June 2024 (see Chart IV.9). This reflected the previous decline in market rates with longer maturities.

Interest rates on deposits are continuing to respond to the reduction of monetary policy rates – the rate on new deposits with agreed maturity has fallen by 1.7 pp since last December to 4.5%. Real interest rates remain positive due to lower inflation expected one year ahead.

Growth in loans to non-financial corporations slowed slightly, while growth in loans to households stabilised

Growth in corporate loans slowed slightly to 5.2% in 2024 Q2. Foreign currency loans continued to contribute to growth in corporate loans, amid a persisting slight decline in the stock of koruna loans.

Chart IV.7





Chart IV.8

The Czech government bond yield curve has shifted lower since May; its shape is slightly convex



Chart IV.9

Interest rates on loans to corporations and loans for house purchase decreased further



²⁵ The Ministry of Finance issued CZK 171 billion of government bonds on the primary market between the start of this year and the end of July. The Funding and Debt Management Strategy for 2024 as a whole assumes issues amounting to CZK 300– 400 billion.

²⁶ The transmission of monetary policy rate cuts to client interest rates is discussed in Box 2 at the end of this section.

However, genuinely new koruna loans have now started to rise. The share of foreign currency loans in total loans to corporations thus dropped slightly to 51.7% in June. This share is close to 50% for new loans. According to the Bank Lending Survey, corporations' total demand for loans fell slightly in 2024 Q2. This was due to still high interest rates. As a result, non-financial corporations are activating broader internal or bond financing options. Banks continued to perceive reduced demand for loans for fixed investment. According to the forecast, growth in loans to corporations will rise in response to a gradual decline in interest rates and renewed economic growth (see Chart IV.10).

Loans to households for house purchase grew by 3.4% in Q2. Genuinely new mortgages continue to recover strongly due to increased activity on the residential market accompanied by a rise in residential property prices and a gradual fall in interest rates. This is confirmed by banks themselves in the Bank Lending Survey. According to the forecast, growth in housing loans will rise slightly this year due to growing demand for new mortgage loans (see Chart IV.10).

Consumer credit rose by 8.5% in June. In the Bank Lending Survey, banks indicated an almost across-theboard increase in demand in this credit segment. According to the survey, the increased appetite for loans reflected improved consumer confidence, an increased need to finance households' consumption expenditure and continued encouragement by some banks for the sale of consumer credit in the form of bonuses for arranging loans. According to the forecast, growth in consumer credit will start to slow during 2025.

Growth in the quantity of money in the economy slowed

The annual growth rate of M3 slowed, reaching 5.3% in June (see Chart IV.11). This slowdown was due to a decrease in the positive contribution of general government financing, which was 1.1 pp after taking into account central government deposits. It also reflected a lower contribution of net foreign assets, whose growth slowed in the spring following an increase in Q1, mainly as a result of growth in the trade surplus. By contrast, the contribution of loans to the private sector to M3 growth started to rise slightly. The highly liquid money aggregate M1, consisting mainly of overnight deposits of households and firms, continued to grow amid declining interest rates.

Inflation expectations have declined but remain well above the 2% target in the case of firms

The available indicators are signalling that inflation expectations are falling gradually. However, they remain above the 2% target, especially in the case of firms. According to a joint survey conducted by the Confederation of Industry and the CNB, the inflation expectations of non-financial corporations one year

Chart IV.10

Growth in loans to households and corporations will start to rise moderately

annual rates of growth in %



Note: The annual rates of growth in loans to corporations and households until March 2024 were affected by the purchase of the loans of Sberbank CZ by Česká spořitelna in April 2023.

Chart IV.11

M3 growth decreased due to a drop in the positive contributions of general government financing and net foreign assets

annual rates of growth in %



ahead declined to 3.8% in June (see Table IV.1). Three years ahead, they are at almost the same level and thus remain above the CNB's 2% inflation target (see Chart IV.12). Firms are also asked about the prices of their main inputs (commodities, materials, energy, etc.) one year ahead. This forward-looking indicator decreased to 4.2% 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 remains low.

Concerns about growth in the price level among Czech households are also partly diminishing. The indicator of inflation perceived by households in the European Commission survey continued to fall gradually from an all-time high. The inflation rate expected one year ahead has remained low in the course of this year (see Chart IV.13). According to the CZSO's July business survey, though, consumers' concerns about rising prices have increased slightly. The outlook for their financial situation remains almost unchanged.

Inflation expected by financial market analysts is just above the CNB's 2% target at both the one-year and three-year horizons.

The risks of the forecast are broadly balanced overall

The inflationary risks of the forecast include increased wage demands in the private and public sector, possible faster growth in government expenditure next year (an election year), the evolution of services prices and potential faster-than-expected growth in property prices. By contrast, a downturn in global economic activity and persisting economic problems of the Czech Republic's main trading partner – Germany – are an anti-inflationary risk. The future monetary policy stance abroad remains an uncertainty of the outlook.

The inflationary risks are no longer as intense as in the past

The period of economic instability, which increased the significance and intensity of the inflationary risks, is now over. Thanks to the more stable economic environment, recent forecasts have been more accurate. The potential effects of the discussed risks on future inflation are thus perceived to be more moderate than in previous forecasts and therefore do not prevent a continuation of the gradual reduction of interest rates.

Possible faster growth in government expenditure next year is an inflationary risk of the forecast

Given the increasing budget demands of ministerial departments in advance of the preparation of the state budget for next year, there is a growing risk that the government coalition will relax its past consolidation efforts at the end of its term of office. Growth in

Table IV.1

Analysts' inflation expectations at the three-year horizon are just above the inflation target; those of firms dropped below 4%

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

	J/24	4/24	J/ 24	0/24	1/24
FMIE:					
CPI	2.1	2.2	2.2	2.2	2.1
CPI, 3Y horizon	2.2	2.2	2.2	2.2	2.1
Real GDP in 2024	1.1	1.2	1.4	1.3	1.3
Real GDP in 2025	2.6	2.6	2.7	2.7	2.6
Nominal wages in 2024	6.2	6.1	6.2	6.8	6.8
Nominal wages in 2025	5.1	5.1	5.2	5.4	5.4
CZK/EUR exchange rate (level)	24.7	24.7	24.7	24.6	24.7
2W repo rate (%)	3.5	3.5	3.7	3.5	3.4
1Y PRIBOR (%)	3.5	3.5	3.7	3.6	3.4
Corporations:					
CPI	4.1			3.8	
CPI, 3Y horizon	4.2			3.7	
CF:					
Real GDP in 2024	1.2	1.2	1.3	1.3	1.2
Real GDP in 2025	2.8	2.8	2.7	2.7	2.7
Nominal wages in 2024	6.0	5.7	5.7	6.2	6.6
Nominal wages in 2025	5.2	5.1	5.3	5.4	5.4
CZK/EUR exchange rate (level)	24.7	24.9	25.0	24.9	24.9
3M PRIBOR (%)	3.6	3.6	3.5	3.4	3.4

Chart IV.12

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

sample of approximately 18 analysts and 150 corporations; %



Chart IV.13

The inflation expectations of Czech and euro area households fell only marginally compared to the end of last year

households' inflation expectations in next 12 months according to European Commission Business and Consumer Survey; sample of approximately 1,000 households for the Czech Republic; %



government expenditure may thus be faster next year than expected in the summer forecast.

The relevance of this risk is also highlighted by the ongoing negotiations between the government and trade unions on pay rises in the general government sector. After their proposal for a 15% pay increase was rejected, the unions are now demanding a raise for all public sector workers of at least 10% from September, subject to a further increase early next year. The government has announced a 7-10% pay rise depending on the state budget for the first half of 2024. The forecast assumes that in September this year there will be a 7% salary increase for a selected group of employees on the first salary scale (around 50% of public sector employees). Possible higher and acrossthe-board earnings growth in the government sector would further increase the pace of nominal growth in general government consumption.

The evolution of services prices is another upside risk

The recovering domestic demand and buoyant wage growth are being reflected in services prices, which are showing somewhat higher growth than goods prices. Year-on-year growth in services prices slowed sharply in June, but this was due to surprisingly low month-on-month growth in package holiday prices.²⁷ A partial upward correction can therefore be expected in the coming months, due also in part to the depreciation of the koruna in July. The future evolution of services prices is uncertain.

Potential faster growth in property prices in the longer term is another inflationary risk of the forecast

An even stronger-than-expected increase in property prices is a risk, owing to a recovery in the property market, which, according to the forecast, will gain momentum. Quarter-on-quarter growth in the asking prices of apartments has been rising since the start of 2024, reaching more than 9% in annualised terms in Q2 (see Chart IV.14). If this pace were to persist, it could lead to renewed highly positive contributions of imputed rent to core inflation²⁸ and have a lagged inflationary effect on other categories of the consumer basket.



apartment asking prices; q-o-q changes in %; contributions in pp; annualised



Note: Prague accounts for roughly 55% and the rest of country for around 45% of the number of apartments on offer in the Czech Republic.

²⁷ Year-on-year growth in services prices within core inflation fell from 4.3% in May to 3.8% in June. Adjusted for package holiday prices, its growth would have remained broadly flat at the May level of 4.3%. The short-term forecast meanwhile assumes a minor upward correction of package holiday prices during the summer months.

²⁸ Imputed rent has been reducing year-on-year growth in services prices within core inflation since the end of 2022. If services prices were adjusted for imputed rent, their current growth would be roughly 2 pp higher at around 6% year on year.

By contrast, a downturn in the economic output of the Czech Republic's main trading partner – Germany – is a significant anti-inflationary risk

German household sentiment is improving slightly, but recent industry reports point to a renewed drop in activity. Business sentiment in Germany is being dampened by weaker demand, political uncertainty in France and Germany, and the potential consequences of the upcoming US presidential election for Europe. In this vein, another decline in orders, especially from outside the euro area, is sending warning signals. The prospects of a robust recovery in industry after a positive first guarter in 2024 are declining again. The German economy may thus stagnate for considerably longer than assumed in the baseline scenario. Weaker performance of German industry would in turn be reflected in a fall in core producer prices and a faster drop in foreign interest rates than assumed in the forecast. Overall, this could lead to lower inflation and interest rates in the Czech economy, too.

The future monetary policy stance abroad remains an uncertainty of the forecast

The forecast uses the market outlook for ECB interest rates, which expects two interest rate cuts to happen by the end of this year. However, the foreign interest rate outlook has been revised very often in recent times, mainly in response to central bank communications and new data. There is therefore still uncertainty regarding future foreign interest rates and their potential impact on the exchange rate of the koruna.

The Inflation and Monetary Policy Risks Scoreboard is indicating subsiding inflationary risks

The Scoreboard indicates a gradual easing of inflationary risks in the area of the general government deficit for this year. The risk of long-term inflation and inflation expectations becoming de-anchored is also weakening.

By contrast, the slope of the yield curve, which has been negative in recent years, continues to indicate a potential anti-inflationary risk. However, the current level of long-term interest rates suggests an expected return of interest rates to their neutral level rather than a future recession.²⁹ Some other indicators of external imbalance in the euro area – especially the financial

²⁹ A negative yield curve slope cannot be regarded solely as antiinflationary. An inverted yield curve can signal a coming recession and related anti-inflationary pressures. On the other hand, lower long-term rates deliver less restrictive monetary policy, which is conversely inflationary. The current yield curve inversion should thus be interpreted more as market expectations of interest rates being reduced towards their neutral level.

conditions index and the subdued pace of money growth – also point to lower inflation.

The central bank may continue to lower interest rates, this time more slowly

Consistent with the baseline scenario of the summer forecast is a modest decline in 3M PRIBOR market interest rates from their average level of 5.2% in 2024 Q2 (4.7% at the end of the quarter) to an average of 4.6% in Q3.

The baseline scenario thus points to a need to ease the interest rate component of the monetary conditions slightly. The risks of the forecast are assessed as broadly balanced overall. However, the intensity of the risks is decreasing over time. The central bank is therefore continuing to lower interest rates, though only by 0.25 pp.

If the inflationary risks increase in intensity in the future, the central bank may keep monetary policy more restrictive than in the baseline scenario.

The real monetary conditions are signalling continued restrictive monetary policy

The deviations of ex ante³⁰ real interest rates and the real exchange rate from their equilibrium levels enter the real monetary conditions index (RMCI).

The restrictiveness of the interest rate component of the monetary conditions is expected to ease gradually in the second half of this year as a result of the forecasted gradual decline in interest rates. The exchange rate component of the real monetary conditions will be slightly expansionary in the coming quarters, thus reducing the overall tightness of monetary policy (see Chart IV.15).

Overall, the real monetary conditions are signalling continued restrictive monetary policy. The restrictiveness gradually diminishes due to declining interest rates. Monetary policy is expected to become broadly neutral in late 2025 and early 2026.

Chart IV.15

Monetary conditions remain restrictive due to the interest rate component

real monetary conditions index (RMCI); positive (negative) values correspond to easy (tight) monetary conditions



³⁰ From this Monetary Policy Report onwards, the equilibrium real rate in the interest rate component of the RMCI is set at 1%. The modification was made in order to align this empirical model with approaches related to the g3+ core forecasting model and the theoretical foundations set out in Hlédik, T., VIček J. (2018): <u>Quantifying the natural rate of interest in a small open economy – The Czech case</u>. In the original RMCI calculation, the long-term average real rate of around -0.1% was used. The exchange rate component of the RMCI is obtained as the average of two estimates of the real equilibrium CZK/EUR exchange rate (using the BEER and FEER methods).

BOX 2 How do client rates on koruna loans change in response to changes in market rates?

The Czech economy saw a rapid rise in the CNB's key monetary policy interest rates in 2021–2022. This was followed by flat interest rates for roughly a year and a half and then a phase of rate cuts from the end of 2023 to the present. The current and expected future repo rate affects market rates, which in turn pass through to client lending and deposit rates. This box describes the changes in the completeness and speed of a part of the monetary transmission mechanism, specifically the pass-through of market rates to client rates on koruna-denominated loans. The results indicate that in recent years, the pass-through has been complete, taking place entirely within one month, in the case of firms and almost complete, but with a time lag, in the case of mortgages.

The analysis in this box¹ assumes that the client lending rate is composed of the cost of funding (approximated with a market rate of comparable maturity) plus a mark-up affected by, among other things, the risk premium. The choice of specific market rate relevant to a given type of loan (the reference rate) is based on information about bank pricing policy and the results of an analysis of the correlation of selected market rates with client rates on individual types of loans. As the reference rate, we used the 3M PRIBOR for loans to non-financial corporations and the 5-year interest rate swap (5Y IRS) rate² for housing loans to households. The aggregate risk mark-up is time-variable. Its fundamental value was approximated using the output gap for loans to non-financial corporations and the unemployment rate for housing loans.

The importance of compensating for credit risk can be illustrated during periods of negative economic shocks and expected weaker economic activity using the spread between the client rate and the reference rate. The spread between the 3M PRIBOR and the rate on koruna-denominated loans to non-financial corporations (see Chart 1) more than doubled after the outbreak of the Global Financial Crisis (GFC) in 2009 (from 1 pp to almost 2.5 pp). In subsequent years, it stabilised between 1.5 pp and 1.8 pp. In 2020, the shock related to the Covid pandemic caused the spread to increase again to slightly above 2 pp. This time, however, the high uncertainty did not affect the spread so dramatically, as unprecedented government help mitigated the risks either directly through credit guarantees or indirectly through broad financial assistance for firms. Currently, the spread is around 1.5 pp and client rates on koruna-denominated corporate loans are following the gradual decline in the 3M PRIBOR.³

A slightly different pattern can be observed for rates on housing loans (see Chart 2). The spread between the client rate and the reference rate in this market increased after the beginning of the GFC and remained elevated for years, despite a sizeable decline in both the reference rate and the client rate. A substantial increase in the IRS rate observed between 2016 and 2018 led to an increase in the client rate. However, strong competition and lagged transmission of the IRS rate to client rates resulted in the client rate persisting at lower levels than implied by the increase in the IRS rate, and the spread narrowed substantially. After the outbreak of the Covid pandemic, the spread widened again, partly because of increased uncertainty, but also due to an abrupt and substantial decline in the reference rate. The spread was negative for a time in 2022, as the IRS rate rose more quickly and more than the housing loan rate. The spread is currently close to 1 pp.

Chart 1

Client rates on koruna-denominated loans to nonfinancial corporations follow the 3M PRIBOR with no time lag; the spread between the rates is wider at times of negative economic shocks



Chart 2



%; spread in pp



Econometric analysis - loans to non-financial corporations with the 3M PRIBOR as reference rate

The coefficient of immediate pass-through of the 3M PRIBOR to client rates on koruna-denominated loans to nonfinancial corporations is statistically significant for almost the whole estimation period (see Chart 3). This means that changes in the reference rate are transmitted to the client rate in the same month. Until approximately 2015, the immediate pass-through of the 3M PRIBOR to the client rate hovered around one, but this fast part of the transmission subsequently weakened somewhat and the estimates that take the latest developments into account imply approximately 60% pass-through of a change in the 3M PRIBOR to client rates within one month. According to our estimates, the long-run pass-through of the 3M PRIBOR to client interest rates (see Chart 4) was complete until 2017, after which the coefficient dropped slightly to around 0.8. In the estimates covering the last two years, it has returned to around 1, i.e. full transmission.

Chart 3

Almost 60% of the pass-through of changes in the 3M PRIBOR to rates on new loans to non-financial corporations takes place within one month

(within one month); confidence interval

Chart 4



From the long-term perspective, the transmission



Note: The red areas denote periods in which the cointegration between the variables is not statistically significant, computed based on the Fstatistics and t-statistics of the whole cointegration relationship. If both statistics are significant at least at the 10% level of significance, the longterm equilibrium is statistically significant. The grey band denotes a confidence interval of two standard deviations on either side of the solid line.

Econometric analysis - housing loans with the 5Y IRS rate as reference rate

The persistence of client rates on housing loans is substantial and determined mainly by standard commercial practices. Our estimates indicate that the typical lag between a change in the reference rate and the maximum impact on the client rate is 4 months. The estimated coefficient of immediate pass-through from the 5Y IRS rate to the housing loan rate is therefore around zero in the long run. Only recently has it moved to a statistically significant positive - though still low - level (see Chart 5). The key (for transmission) long-run pass-through of a change in the 5Y IRS rate (see Chart 6) is in the range of 0.6–1 throughout the estimation period. It was almost complete in the 8year rolling windows ending in the period of 2015-2017 and also in 2023-2024. In the case of housing loans, the transmission can thus be considered complete at present.

Chart 5

In the case of housing loans, the response of client rates to a change in the 5Y IRS rate is spread over time; this is reflected in a statistically insignificant, or very small, immediate (short-term) pass-through coefficient

coefficient of short-term pass-through of 5Y IRS rate to client rate (within one month); confidence interval



Chart 6

The transmission in the housing loans segment can also be considered complete from the long-term perspective

coefficient of long-term pass-through of 5Y IRS rate to client rate; confidence interval



Note: The red areas denote periods in which the cointegration between the variables is not statistically significant, computed based on the Fstatistics and t-statistics of the whole cointegration relationship. If both statistics are significant at least at the 10% level of significance, the longterm equilibrium is statistically significant. The grey band denotes a confidence interval of two standard deviations on either side of the solid line.

The above implies that the pass-through of changes in market rates to client rates is currently complete and, taking into account the specifics of each segment, fast as well. From the monetary policy perspective, we can thus say that the interest rate channel of transmission is working as normal and as expected.

1 The analysis employs monthly data on market and client interest rates covering the period from January 2004 to April 2024. The econometric estimate was performed using an autoregressive distributed lag (ARDL) model, which, in its error-correction representation, distinguishes both the existence of a long-run relationship between the variables considered and the gradual return to the estimated equilibrium via the short-term dynamics of the dependent variable. In contrast to the standard approaches, which measure transmission using the entire available time period, the coefficients for both the long-run relationships and the short-term dynamics are estimated for rolling time windows of a constant length (6 years for non-financial corporations and 8 years for housing loans to households). This allows us to identify potential changes in the strength and speed of the pass-through. Detailed information on the data, the methodology and the interpretation of the results can be found in Eva Hromádková, Ivana Kubicová and Branislav Saxa (2023): How does interest rate pass-through change over time? Rolling windows and the role of the credit risk premium in the pricing of Czech loans.

² The average fixed interest rate period for mortgages (which make up the bulk of housing loans) increased until around 2020, peaking above 7 years. It then mostly decreased, falling below 5 years in 2023, partly because banks became concerned about offering long fixed-rate periods due to potential losses on early repayment.

³ Koruna-denominated loans currently make up around 50% of loans to corporations. How euro-denominated loans to Czech corporations respond to changes in ECB rates is shown, for example, in the box <u>How client interest rates on loans and deposits have changed over the last two years</u> in the Summer 2023 MPR.

APPENDIX The slowdown in the long-term potential growth of the Czech economy

The Czech economy has experienced some major shocks in recent years. These have deflected it from its steady state, to which it is now gradually returning. But is it returning to the medium-term growth path that was previously assumed in the CNB's modelling system, namely long-term potential output growth of 3% a year? The following analysis gives several reasons why the growth has been rather slower in recent years.

Developments over the last 25 years

The Czech economy has undergone many structural changes over the past 25 years, often in response to sizeable economic shocks such as the 2008 Global Financial Crisis (GFC) and the Covid pandemic. To be able to identify precisely all the structural breaks in the Czech economy, we analysed a set of almost 30 time series covering the real economy and the labour market.¹ Chart 1 presents the frequency of these structural economic changes each year. It shows they are concentrated in some years more than others. We identified at least four periods of "large" structural breaks since 2003. Most of them coincide with major political and economic events.

The first break in the time series appears shortly before the Czech Republic's accession to the EU in 2004. This period was characterised by brisk economic growth due primarily to high trade surpluses, reflecting a boom in the free movement of people, goods, services and capital. The second break identified falls in the period around the outbreak of the GFC in 2008, when the world's economies (including the Czech one) faced sharp declines in GDP

and growth subsequently remained subdued. The next structural break is identified in 2016. It does not have direct economic or political causes. However, it turns out to be crucial for the conclusions of the analysis presented below. The last large break identified occurred in early 2020 in the wake of the outbreak of the Covid pandemic. It was followed by further major shocks, such as the energy crisis, Russia's invasion of Ukraine and the ensuing episode of high inflation. Not enough time has passed for us to explore in detail the post-2020 period and any structural breaks in longterm trends that may have occurred in recent years. To better understand the current macroeconomic situation, it is nonetheless useful to know where the steady state of the Czech economy was before the pandemic, that is, in the period beginning with the changes identified around 2016.

Changes in trends around 2016

The first interesting angle of view on the changes around 2016 is the sectoral situation. After 2016, there is a de facto stagnation of production in industry, which until then had been the backbone of the Czech economy (see Chart 2). Growth in industrial production is driven almost solely by the broadly defined automotive industry. Even car production itself hit the output ceiling around 2016. Since then, only the manufacture of auto parts, components and spare parts for export has been growing in the Czech Republic. The stagnation of domestic industrial production has been reflected (unlike in Poland) in a halt in the growth of Czech exporters' market share in Germany, the Czech Republic's biggest trading partner. The German economy is, moreover, a key market for the Czech automotive industry.²

Chart 1

The Czech economy has undergone at least four periods of fundamental structural breaks

frequency of structural breaks; calculation: CNB



Chart 2

Growth in Czech industrial production is driven solely by the automotive industry

index (February 2022 = 100); constant prices; seasonally adjusted; source: CZSO, calculation: CNB



Growth in production in industry is reflected in growth in the sector's gross value added (GVA).³ GVA growth is gradually slowing, though the changes in trend in the GVA share of industry in total GVA are more marked. This share rose steadily from 16% at the end of the 1990s to around 27% in 2016 and has since been broadly flat (see Chart 3). The opposite trend is apparent in services. Growth in its value added has been rising sharply since 2016 and its share in total GVA is heading upwards after having stagnated for around 20 years. The annual number of hours worked provides a similar picture (see Chart 4). In industry, the absolute number of hours worked and their share in the total have both long been falling moderately, while in services, their absolute number is rising moderately but their share in the total is flat.

In 2016, the growth model of the Czech economy based on high-performing industry, which until then had been a major driver of the convergence of the Czech economy - clearly started to run out of steam. All this was going on amid an overheated labour market and - by Czech standards - high nominal (and also real) wage growth. Increasing household purchasing power amplified the already robust growth in household consumption, which went hand in hand with a boom in services. This kept overall economic growth high despite the stagnant industrial sector. The expanding household consumption, arowina importance of services and exhausted labour market were observed against a background of convergence of the Czech economy towards advanced Western European economies. It is nonetheless clear from the data that the convergence has begun to slow in recent years, especially compared to Poland (see Chart 5). In the Czech economy, the expansionary phase of the business cycle, which was common to the majority of European countries, was thus not associated with an improving long-term trend. On the contrary, its growth slowed further (see Chart 6).

The nominal exchange rate of the koruna against the euro was strengthening rapidly before the GFC. However, the rate of appreciation then slowed sharply, partly because of the CNB's exchange rate commitment. The real exchange rate, which takes domestic and foreign consumer prices into account, showed a similar trend. Renewed real appreciation was evident only during the pandemic and subsequent years. However, this was probably due to higher inflation in the Czech Republic than in the rest of the world rather than reflecting the steady state. Further significant nominal appreciation of the koruna is unlikely given that the CNB and major foreign central banks have the same inflation targets and the real steady-state appreciation of the Czech currency is expected to slow. The slower convergence of the

Chart 3

The prevalence of services over industry has been increasing since 2016

shares in gross value added in %; prices of 2020 (chain-linked); seasonally adjusted; source: CZSO, calculation: CNB



Chart 4

The share of hours worked in the total is decreasing in industry and flat in services

shares in hours worked in %; seasonally adjusted; source: CZSO, calculation: CNB



Chart 5

The convergence of the Czech economy to the EU average slowed after 2016

% of real GDP per capita relative to EU average (100); seasonally adjusted; source: Eurostat, calculation: CNB



Czech economy will meanwhile be reflected in a lower rate of real exchange rate appreciation.

Long-declining growth potential and productivity

Looking at long-run growth through the lens of factors of production, it can be shown that until 2017 the effect of decreasing productivity growth was counterbalanced by labour market developments. This period saw a long, steady decline in both the unemployment rate and its trend (steady-state) component, the natural rate of unemployment.⁴ This implicitly increased the stock of labour available in the economy. However, this process probably halted sometime before 2018 and the labour market thus stopped supporting growth in the potential output of the Czech economy via this channel. The second factor of production possibly responsible for the Czech economy's weakening performance is the stock of capital. Investment is nonetheless traditionally strong in the Czech Republic. As a percentage of GDP it is one of the highest in Europe and has long been stable. The net capital stock, defined as gross fixed capital formed in previous years net of capital stock depreciation, is also highly stable. The final factor that might explain the slowing growth in the potential output of the Czech economy is multifactor productivity. As it is not directly observable, we instead use whole-economy labour productivity in our description.

Labour productivity⁵ has long been rising, but the rate of increase is slowing (see Chart 7). This is consistent with the situation of a converging, increasingly wealthy economy and with economic theory (betaconvergence). Productivity growth was above the trend on average during 2016–2019. However, the economy was simultaneously in the expansionary part of the cycle, so the positive deviation is due more to the cyclical position. It generally holds, though, that aggregate productivity growth in the Czech economy is slowing. This is undoubtedly having a negative effect on potential output growth.

From the sector perspective, it follows that industry was more productive than services most of the time after the GFC (see Chart 8), although the differences are not large. The ongoing migration of workers from industry to services was thus not a key driver of productivity or potential output in the Czech economy.

Institutions, innovation, infrastructure

The causes of the subdued productivity growth⁶ can also be sought among soft indicators such as quality of institutions, R&D intensity and infrastructure development. An indicator of Czech infrastructure that does not put the Czech Republic in a very flattering light is the length of new motorways in kilometres a year. The figure is gradually rising, but a pace mostly

Chart 6

The long-term trend has been slowing despite the expansionary phase of the business cycle

y-o-y changes in %; prices of 2020 (chain-linked); seasonally adjusted; source: CZSO, calculation: CNB



Chart 7

Productivity growth has long been slowing in the Czech economy

CZK/hour; prices of 2020 (chain-linked); seasonally adjusted; source: CZSO, calculation: CNB



Chart 8

Industry has been the driver of productivity since 2008

CZK/hour; prices of 2020 (chain-linked); seasonally adjusted; source: CZSO, calculation: CNB



not exceeding 20 km of new motorways a year leaves room for improvement. The poor situation in the Czech Republic is also evidenced by Eurostat data, as the country ranks 18th in the EU in terms of kilometres of motorways per 1,000 square kilometres of territory. The situation in the Czech Republic is also dire when it comes to modernising the railway network and building new high-speed lines.

Another indicator comes from the World Bank country ranking.⁷ The starting a business index describes the institutional environment and contains information on the time and cost of starting a company in a country. The more new businesses there are, the more likely it is a highly productive business or industry will emerge to drive the economy forward. The Czech economy ranked 81st among the almost 200 countries compared in the period under review and has been slowly slipping down the ranking since 2017 (see Chart 9). This is again fostering a gradual slowdown in productivity growth.

The situation in the field of innovation as a driver of progress in the Czech economy is none too rosy either. R&D expenditure is still on an upward trend, but as a percentage of GDP it halted below the 2% level in 2014 (see Chart 10). Moreover, private investment in basic and applied research in the Czech Republic also cooled significantly after 2016 (see Chart 11).

The number of patents granted with effects in the Czech Republic paints a similarly dismal picture (see Chart 12). Their total number rose in 2016-2019 and would probably have continued to do so had it not been for the Covid downturn, but the number of patents from Czech inventors has been falling since 2016 and has long accounted for less than 10% of total patents granted. The number of patent applications from applicants from the Czech Republic is also falling. Moreover, growth in the proportion of university graduates in the Czech Republic has been slowing since 2016. By contrast, the average level of this indicator in the EU as a whole has been rising at the same pace as in previous years. For the Czech economy, this implies a loss of competitiveness in terms of human capital. This is again contributing to the slowdown in productivity growth.

The slowdown in potential GDP growth from a modelling perspective

We incorporated the information described above into an analysis based on the World Bank's Solow-Swan Growth Model.⁸ As exogenous variables, we used the investment share of GDP, multi-factor productivity growth, human capital growth and demographic indicators (population growth, labour force growth and growth in the participation rate). The output is a forecast for growth in GDP per capita. The decrease in potential output growth was quantified using the

Chart 9

The conditions for starting a business in the Czech Republic worsened in the pre-pandemic period

score; Czech Republic's *Doing Business* ranking shown above columns; source: World Bank



Chart 10

The flat R&D spending as a percentage of GDP is not favourable either

CZK billions; constant prices; source: CZSO



Chart 11

Private investment in basic and applied research also cooled significantly

CZK billions; constant prices; source: OECD



observed slowdown in trend productivity growth after 2016. *Ceteris paribus*, the potential growth of the Czech economy slowed to around 2.5% between 2016 and 2023 (see Chart 13). If productivity growth were to continue decreasing at a similar pace in the future, potential output growth would slow further to 2% despite any temporarily favourable demographic factors.

Up to now, the CNB has assumed long-run steadystate GDP growth of 3% in its quarterly macroeconomic forecasts.⁹ However, our data analyses and model computations lead us to conclude that steady-state GDP growth has decreased by 0.5 pp to 2.5% over the past few years. Its rate of growth has been decreasing gradually since 2016, where a major structural break has been identified. The slowdown in the potential growth of the economy reflects a decrease in multifactor productivity growth of the same magnitude. This is consistent with the decrease in the Czech Republic's rate of catch-up with advanced economies.

In the light of our analyses, the long-run steady-state growth of the Czech economy used in the CNB forecast has therefore been lowered by 0.5 pp to 2.5% starting with the Summer 2024 MPR. Although the real exchange rate of the koruna has strengthened by 1.5% on average over the last decade, a lower steady-state rate of real appreciation can be expected in the future, owing to slowing convergence of the Czech economy. Consistent with the revision of potential output growth, the steady-state rate of real (and hence also nominal) appreciation of the koruna-euro exchange rate has also been reduced by 0.5 pp to 1% starting with this forecast. In the summer forecast, the change is made by means of expert adjustments. By the autumn forecast, the steady-state values themselves will have been recalibrated in the g3+ core forecasting model.

The reduction in the rate of long-term potential growth is crucial for interpreting economic developments, and that in turn has direct consequences for monetary policymaking. The lower steady-state growth rate over 2016-2019 consistently estimates the domestic economy as having been more overheated in that period. It also better explains the accumulated demand pressures that significantly contributed to the surge in inflation above the tolerance band in 2020 and its high levels in subsequent years. The lower potential output growth, and hence more open output positive gap, also better corresponds to the highly overheated labour market identified at that time (as expressed by LUCI). It also at least partly explains the only slowly recovering growth of the Czech economy (below 3%) after the Covid pandemic.

Chart 12

A decline in patents granted with effects in the Czech Republic also points to slowing growth potential

number of patents granted, source: CZSO



Chart 13

The potential growth of the Czech economy has declined in recent years

y-o-y changes in %



Note: Replication of an analysis conducted using the World Bank's Solow-Swan Growth Model.

- 1 Breaks are identified using the Chow test on 27 selected time series (e.g. the level of GDP, the level of wages and the unemployment rate) in individual quarters. The test identified at least one structural change in most quarters, but a low number of breaks can only be described as noise in the data. However, a period with five or more data breaks indicates a probable structural change where the functioning of the economy changed compared to the past.
- 2 Box 1 in section I analyses the position of Czech exporters on the German market.
- 3 In this and the following charts, "industry" refers to manufacturing only. "Services" comprises wholesale and retail trade, transport, accommodation and food service activities, information and communication, financial and insurance activities, professional, scientific and technical activities and administrative activities.
- 4 Growth in the labour force will be affected by migration, which, together with a growing share of workers of pre-retirement and retirement age, will offset the demographic effect of a gradual decline in the number of people aged 15–64 years which will occur over the next 15 years according to the CZSO's demographic projection.
- 5 Productivity is computed as the ratio of GDP to hours worked or, in sectoral terms, as the ratio of gross value added to hours worked. Whole-economy labour productivity can also be expressed in relation to total employment, but the results differ little.
- 6 This section mentions possible factors that are holding back productivity growth in the Czech economy, so it may seem unbalanced or even alarmist. However, we should not forget that overall the Czech economy is one of the most advanced in the world. The list given here is therefore more a case of searching for a needle in a haystack that hides some of the facts.
- 7 Until 2019, the World Bank issued an annual *Doing Business* publication ranking countries according to how business-friendly they are. This analysis is based on data from the last available *Doing Business 2020*, published in October 2019.
- 8 More information about the model is available on the World Bank website.
- 9 In the 1990s, a steady-state rate of potential output growth of 5% was assumed for the Czech economy. The rate was subsequently reduced to 4% and cut further to 3% around 2011, partly as a consequence of the GFC.

Abbreviations

AEIS	Average Earnings Information System	LFS	Labour Force Survey
BoE	Bank of England	LIBOR	London Interbank Offered Rate
BoJ	Bank of Japan	LTV	loan-to-value
CF	Consensus Forecasts	LUCI	Labour Utilisation Composite Index
CNB	Czech National Bank	M1, M3	monetary aggregates
CPI	consumer price index	MFIs	monetary financial institutions
CPIH	experimental consumer price index	MLSA	Ministry of Labour and Social Affairs
	incorporating prices of older properties	m-o-m	month-on-month
CZK	Czech koruna	MPR	Monetary Policy Report
CZSO	Czech Statistical Office	NAIRU	non-accelerating inflation rate of
DSTI	debt service-to-income		unemployment
DTI	debt-to-income	NBS	National Bank of Slovakia
ECB	European Central Bank	OECD	Organisation for Economic Co-operation and
EEA	European Economic Area		Development
EIA	US Energy Information Administration	OPEC+	The OPEC member countries and another ten
EIA	Environmental Impact Assessment		being Russia, Mexico and Kazakhstan)
EIU	Economist Intelligence Unit	PMI	Purchasing Managers Index
ESA	European System of Accounts	QQ	percentage points
ESCB	European System of Central Banks	PPI	producer price index
ESI	Economic Sentiment Indicator	PRIBOR	Prague Interbank Offered Rate
ESR	electronic sales registration	a-o-a	guarter-on-guarter
EU	European Union	repo rate	repurchase agreement rate
EUR	euro	rhs	right-hand scale
EURIBOR	Euro Interbank Offered Rate	USD	US dollar
FDI	foreign direct investment	VAT	value added tax
FECF	Foreign Exchange Consensus Forecasts	WTI	West Texas Intermediate
Fed	US central bank	V-0-V	vear-on-vear
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		

IEA International Energy Agency

information and communications technology

Ifo index of economic confidence in Germany

ILO International Labour Organization

house price index

- IMF International Monetary Fund
- IR Inflation Report

HPI

ICT

- IRI Institute for Regional Information
- IRS interest rate swap
- JPY Japanese yen

Key macroeconomic indicators

	0045	0040	0047				0004			0004	0005	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Gross domestic product												
GDP (CZK bn current p. seas adjusted.)	4653.8	4841 1	5185.3	5481.3	5891.4	5830.0	6306.1	7048 5	7626.6	7957.6	8341.5	8723.6
GDP (%, v-o-v, real terms, seas, adjusted)	5.0	2.5	5.3	2.8	3.5	-5.3	4.0	2.9	0.0	1.2	2.8	2.4
GDP (%, q-o-q, real terms, seas. adjusted)	-			-	-	-	-	-	-	-	-	-
Household consumption (%, v-o-v, real terms, seas, adjusted)	3.7	3.5	4.5	3.4	3.0	-6.6	4.1	0.4	-2.9	2.0	3.5	3.1
Government consumption (%, v-o-v, real terms, seas, adjusted)	1.8	2.4	1.7	3.5	2.6	4.1	1.5	0.4	3.5	2.6	0.7	0.7
Gross capital formation (%, v-o-v, real terms, seas, adjusted)	11.7	-3.8	5.6	6.4	5.6	-9.2	18.4	10.2	-6.4	-4.5	7.3	3.0
Gross fixed capital formation (%, v-o-v, real terms, seas, adjusted)	8.9	-2.1	3.1	8.9	7.4	-4.8	6.7	6.3	2.7	-0.7	3.7	3.0
Exports of goods and services (%, y-o-y, real terms, seas, adjusted)	6.1	3.9	7.5	3.5	1.2	-8.6	8.0	5.2	3.0	2.5	4.3	4.8
Imports of goods and services (%, y-o-y, real terms, seas, adjusted)	6.7	2.4	6.3	5.5	1.2	-8.5	13.6	6.0	-0.6	1.1	6.2	5.4
Net exports (percentage points, contributions to GDP growth)	-0.1	1.4	1.4	-1.1	0.1	-0.6	-2.8	-0.3	2.7	1.1	-0.9	-0.1
PRICES											0.0	
Main price indicators												
Consumer Price Index (% v-o-v average)	0.3	07	25	21	28	32	3.8	15.1	10.7	2.2	2.0	2.0
Administered prices (% v-o-v average 15.01%*)	0.0	0.2	0.0	1.8	4.4	3.1	-0.2	20.9	27.8	5.8	2.0	19
Food prices (incl. electrolic beverages and tobacco %, y o y average 26 21%*)	0.0	0.2	2.7	1.6	2.6	4.2	2.1	12.0	10.0	0.0	1.0	1.0
Four prices (incl. alcoholic beverages and tobacco, 76 , y=0=y, average, 20.2 176)	1.2	1.2	3.7	2.1	2.0	4.2	2.1	12.9	7.6	2.5	2.4	1.0
Such arrives (9/, y o y, overage, 35.21/%)	12.5	1.2	2.4	2.1	2.1	11.4	4.0	22.6	12.1	2.5	2.3	2.2
Monotory policy relevant inflation (%, y o y overage)	-13.5	-0.5	0.7	0.3	-0.4	-11.4	2.0	14.6	-12.1	0.0	-4.0	-2.0
Portial price indicatore	0.2	0.5	2.5	2.1	2.9	3.2	3.9	14.0	10.0	2.2	1.0	1.9
			4.0	0.0	0.0	0.4	7.4	04.0	5.0	0.7	4.0	4.0
A priorite prices (%, y-o-y, average)	-3.2	-3.3	1.0	2.0	2.0	0.1	7.1	24.3	5.0	0.7	1.0	1.3
Agricultural prices (%, y-o-y, average)	-5.9	-5.8	7.4	-0.1	5.4	-3.8	7.4	31.8	-5.5	-8.4	-2.3	-0.8
	1.2	1.5	1.7	2.0	3.0	4.5	4.0	0.7	0.2	3. I	2.0	2.2
	2.0		0.7	0.0	7.0	4.0	5.0	4.0	0.0	7.4		
Average monthly wage (%, y-o-y, nominal terms)	3.2	4.4	6.7	8.2	7.9	4.6	5.8	4.3	8.0	7.4	6.4	5.2
Average monthly wage in market sectors (%, y-o-y, nominal terms)	3.2	4.3	6.7	1.1	7.6	4.1	6.1	4.7	8.4	8.3	6.6	5.4
Average monthly wage in non-market sectors (%, y-o-y, nominal terms)	3.3	4.8	7.1	10.2	9.2	6.9	4.4	2.6	6.0	3.5	5.7	4.2
Average monthly wage (%, y-o-y, real terms)	2.8	3.7	4.1	5.9	4.9	1.4	2.0	-9.3	-2.4	5.1	4.4	3.1
Unit labour costs (%, y-o-y)	0.1	3.0	3.8	6.5	4.2	5.9	3.1	6.1	7.8	5.9	3.8	3.1
Aggregate labour productivity (%, y-o-y)	3.5	1.5	3.8	1.7	3.7	-3.0	3.0	1.8	-1.1	1.1	2.3	1.9
ILO general unemployment rate (%, average, age 15–64, seas. adjusted)	5.1	4.0	2.9	2.2	2.0	2.6	2.8	2.2	2.6	2.7	2.8	3.0
Share of unemployed persons (MLSA, %, average, seas. adjusted)	6.5	5.5	4.2	3.2	2.8	3.6	3.8	3.4	3.6	3.8	3.9	4.0
Employment (ILO, %, y-o-y)	1.3	1.8	1.5	-1.4	0.1	-1.4	0.3	-1.6	1.5	3.2	0.4	0.4
Full-time employment (%, y-o-y)	2.1	1.8	2.2	1.5	-0.3	-1.7	0.2	0.7	-0.1	0.4	0.3	0.3
PUBLIC FINANCE												
Government budget balance (ESA2010, CZK bn, current prices)	-29.8	34.1	76.7	48.3	16.7	-329.2	-312.3	-215.4	-268.4	-164.0	-138.0	-139.0
Government budget balance/GDP** (%, nominal terms)	-0.6	0.7	1.5	0.9	0.3	-5.6	-5.0	-3.1	-3.5	-2.1	-1.7	-1.6
Structural balance/GDP (%, nominal terms)	-0.8	0.2	0.9	0.5	-0.5	-5.7	-5.3	-3.2	-3.1	-2.1	-1.9	-1.8
Government debt (ESA2010, CZK bn, current prices)	1836.0	1754.7	1749.7	1734.6	1740.3	2149.8	2566.7	2997.6	3228.4	3430.2	3599.2	3769.7
Government debt/GDP** (%, nominal terms)	39.5	36.2	33.8	31.7	29.6	36.9	40.7	42.5	42.4	43.2	43.2	43.3
EXTERNAL RELATIONS												
Current account												
Goods and services, net (CZK bn, current prices)	274.3	365.1	384.0	320.9	345.8	383.9	174.0	74.9	383.8	504.1	454.6	440.2
Current account (CZK bn, current prices)	20.7	85.2	79.1	24.1	19.2	113.7	-168.0	-332.8	29.2	54.0	8.9	9.7
Current account/GDP (%, nominal terms)	0.4	1.8	1.5	0.4	0.3	2.0	-2.7	-4.7	0.4	0.7	0.1	0.1
Foreign direct investment												
Direct investment (CZK bn, current prices)	49.7	-186.5	-45.9	-51.0	-137.1	-149.1	-28.5	-83.5	-16.3	-55.0	-60.0	-55.0
Exchange rates												
CZK/USD (average)	24.6	24.4	23.4	21.7	22.9	23.2	21.7	23.4	22.2	23.3	22.9	21.9
CZK/EUR (average)	27.3	27.0	26.3	25.6	25.7	26.5	25.6	24.6	24.0	25.1	25.0	24.7
MONEY AND INTEREST RATES												
M3 (%, y-o-y, average)	7.3	9.1	11.7	6.6	6.3	9.0	9.6	6.4	9.0	6.2	8.3	8.1
2W repo rate (%, average)	0.1	0.1	0.2	1.1	1.9	0.8	0.9	5.9	7.0	5.3	3.9	3.3
3M PRIBOR (%, average)	0.3	0.3	0.4	1.3	2.1	0.9	1.1	6.3	7.1	5.1	3.8	3.3
EXTERNAL ASSUMPTIONS												
Foreign GDP (%, y-o-y, seas. adjusted, effective EA)	1.9	2.0	2.8	1.6	1.4	-5.3	4.3	2.5	0.5	0.7	1.4	1.6
Foreign GDP (%, q-o-q, seas. adjusted, effective EA)	-	-	-	-	-	-	-	-	-	-	-	-
Foreign HICP (%, y-o-y, seas. adjusted, effective EA)	0.4	0.2	1.6	2.0	1.5	0.6	2.9	8.9	6.7	2.6	2.2	2.1
Foreign PPI (%, y-o-y, seas. adjusted, effective EA)	-2.3	-2.2	2.4	3.1	1.1	-1.3	9.6	32.8	2.8	-5.9	0.8	1.2
Brent crude oil (in USD/barrel, average)	53.6	45.0	54.8	71.5	64.2	43.2	70.8	98.9	82.2	83.9	80.1	76.2
3M EURIBOR (%, average)	0.0	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5	0.3	3.4	3.7	3.1	2.8
USD/EUR (average)	1,11	1.11	1,13	1,18	1.12	1.14	1.18	1.05	1.08	1.08	1.09	1,12

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

	2024		2025					20	26			
	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
DEMAND AND SUPPLY												
Gross domestic product												
GDP (CZK bn, current p., seas. adjusted)	1959.2	1971.2	1998.6	2028.6	2050.4	2074.8	2097.0	2119.2	2143.5	2168.1	2193.2	2218.8
GDP (%, y-o-y, real terms, seas. adjusted)	0.3	0.6	1.8	2.4	2.8	3.0	2.8	2.5	2.4	2.3	2.3	2.3
GDP (%, q-o-q, real terms, seas. adjusted)	0.2	0.4	0.8	0.9	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Household consumption (%, y-o-y, real terms, seas. adjusted)	1.5	1.1	2.6	2.9	3.2	3.7	3.7	3.5	3.5	3.3	3.0	2.8
Government consumption (%, y-o-y, real terms, seas. adjusted)	3.5	3.0	2.1	1.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.8
Gross capital formation (%, y-o-y, real terms, seas. adjusted)	-11.6	-6.8	-4.1	5.2	8.8	8.2	7.1	5.2	3.9	3.0	2.5	2.5
Gross fixed capital formation (%, y-o-y, real terms, seas. adjusted)	-0.7	-1.5	-0.8	0.2	3.1	3.6	4.2	3.9	3.5	3.3	2.7	2.6
Exports of goods and services (%, y-o-y, real terms, seas. adjusted)	1.2	1.3	3.8	3.8	3.5	4.5	4.7	4.7	4.8	4.8	4.8	4.9
Imports of goods and services (%, y-o-y, real terms, seas. adjusted)	-2.0	-0.7	2.0	5.1	5.5	6.5	6.6	6.3	5.9	5.5	5.2	5.0
Net exports (percentage points, contributions to GDP growth)	2.3	1.3	1.3	-0.6	-1.1	-1.0	-0.9	-0.7	-0.4	-0.2	0.1	0.2
PRICES												
Main price indicators												
Consumer Price Index (%, y-o-y, average)	2.1	2.5	2.0	2.3	2.2	1.7	1.9	2.0	1.9	2.0	2.1	2.2
Administered prices (%, y-o-y, average, 15.01%*)	6.2	5.9	5.1	5.9	1.8	1.3	2.2	2.8	1.9	1.9	1.9	1.9
Food prices (incl. alcoholic beverages and tobacco, %, y-o-y, average, 26.21%*)	-1.1	0.1	0.2	1.2	2.6	1.5	0.9	0.6	1.2	1.6	1.9	2.4
Core inflation (%, y-o-y, average, 55.27%*)	2.8	2.4	2.3	2.3	2.2	2.3	2.4	2.4	2.2	2.2	2.3	2.2
Fuel prices (%, y-o-y, average, 3.51%*)	0.4	7.4	-1.2	-4.1	-3.7	-7.3	-5.4	-2.7	-2.2	-2.6	-2.6	-3.1
Monetary policy-relevant inflation (%, y-o-y, average)	2.1	2.4	2.0	2.2	2.0	1.6	1.7	1.8	1.8	1.9	2.0	2.0
Partial price indicators												
Industrial producer prices (%, y-o-y, average)	-0.9	1.1	1.1	1.7	0.2	1.0	1.5	1.5	1.3	1.3	1.4	1.4
Agricultural prices (%, y-o-y, average)	-17.3	-10.4	-1.5	-2.3	-2.7	-1.9	-2.8	-1.9	-1.4	-0.7	-0.6	-0.6
GDP deflator (%, y-o-y, seas. adjusted)	4.0	2.7	2.6	2.8	1.8	2.2	2.1	2.0	2.1	2.1	2.2	2.3
LABOUR MARKET												
Average monthly wage (%, y-o-y, nominal terms)	7.0	7.2	7.6	7.7	7.0	6.5	6.3	5.9	5.6	5.3	5.0	4.8
Average monthly wage in market sectors (%, y-o-y, nominal terms)	8.0	8.2	8.5	8.4	7.2	6.6	6.4	6.2	5.8	5.5	5.2	4.9
Average monthly wage in non-market sectors (%, v-o-v, nominal terms)	2.2	2.7	3.6	5.0	6.3	6.3	5.7	4.6	4.3	4.2	4.2	4.2
Average monthly wage (%, v-o-v, real terms)	4.8	4.6	5.5	5.3	4.7	4.7	4.3	3.8	3.6	3.2	2.9	2.6
Unit labour costs (%, y-o-y)	6.6	6.2	5.9	5.1	4.4	3.7	3.6	3.6	3.3	3.2	2.9	2.7
Aggregate labour productivity (%, v-o-v)	-0.5	0.8	1.7	2.3	2.5	2.6	2.3	2.0	2.0	1.9	1.9	1.9
ILO general unemployment rate (%, average, age 15–64, seas, adjusted)	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.9	3.0	3.0	3.0	3.0
Share of unemployed persons (MI SA % average seas adjusted)	3.7	3.8	3.8	3.9	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.0
Employment (ILO, %, v-o-v)	3.8	2.7	3.2	3.1	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4
Full-time employment (%, v-o-v)	0.1	0.3	0.6	0.6	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3
PUBLIC FINANCE					-			-				
Government hudget balance (ESA2010, CZK bn. current prices)		-		-	-			_	-	-	-	-
Government budget balance/GDP** (% nominal terms)				-						-		
Structural balance/GDP (% nominal terms)				-	-			_	-	-	-	-
Government debt (ESA2010, CZK bn. current prices)			-	-	-	-	-		-	-	-	
Government debt/GDP** (% nominal terms)		-		-	-			-		-		-
				_	_							
Goods and services net (CZK bn. current prices)	160.2	121.6	112.4	109.9	146.2	133.7	87 5	87 1	140.8	130.2	84 3	84.8
Current account (CZK bn_current prices)	104.7	-23.4	-35.5	8.3	78.5	-3.1	-56.3	-10.2	78.5	-3.5	-56.9	-8.4
Current account/GDP (% nominal terms)	5.7	-12	-1.8	0.4	4 1	-0.1	-2.7	-0.5	3.9	-0.2	-2.6	-0.4
Foreign direct investment	0.7		1.0	0.4	4.1	0.1		0.0	0.5	0.2	2.0	0.4
Direct investment (CZK bn. current prices)	-30.7	-8.1	-8.1	-8.1	-15.0	-15.0	-15.0	-15.0	-13.8	-13.8	-13.8	-13.8
Evolution rates	00.7	0.1	0.1	0.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	22.1	22.2	22.5	22.5	22.2	22.1	22.0	22.5	22.2	22.1	21.0	21.6
CZK/EUR (average)	25.1	25.2	25.5	25.5	25.5	25.1	22.0	22.5	22.3	24.7	21.5	21.0
	20.1	20.0	10.1	20.2	20.1	20.0	14.5	24.0	24.1	24.1	24.0	24.0
	7.0	57	5.2	6.0	71	0.2	0.2		9 5	0.2	70	7.0
	1.5	5.7	3.3	0.0	1.1	0.2	3.2	0.0	0.5	0.2	2.3	7.5
2M PPIPOP (%, average)	6.2	5.4	4.7	4.5	4.3	4.0	3.7	3.0	3.5	3.4	3.2	3.1
	0.2	5.2	4.0	4.4	4.2	3.9	3.1	3.0	3.5	3.4	3.2	3.1
EATENNEL ASSUMIT HUNS	0.1	0.0	0.7	4.0								4.0
Excelor CDP (%, y-u-y, seas, adjusted, effective EA)	0.4	0.6	0.7	1.2	1.2	1.4	1.5	1.5	1.6	1.6	1.6	1.6
Foreign GDP (%, q-o-q, seas, adjusted, effective EA)	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Foreign FIGH (%, y-o-y, seas, adjusted, effective EA)	2.9	2.5	2.4	2.5	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1
Foreign FFT (%, y-o-y, seas. adjusted, effective EA)	-7.8	-6.2	-5.3	-4.2	0.2	1.1	0.9	0.8	0.9	1.1	1.4	1.4
Brent crude oli (in USU/barrei, average)	81.8	85.0	85.2	83.3	81.9	80.6	79.5	78.4	77.4	76.6	75.8	75.1
3M EURIBUR (%, average)	3.9	3.8	3.5	3.4	3.2	3.1	3.0	3.0	2.9	2.8	2.7	2.6
USD/EUR (average)	1.09	1.08	1.07	1.07	1.08	1.08	1.09	1.10	1.11	1.12	1.13	1.14

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

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