Ministry of Finance

of the Czech Republic

Macroeconomic Forecast of the Czech Republic

November 2023

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The Macroeconomic Forecast is prepared by the Economic Policy Department of the Czech Ministry of Finance. It contains forecast for the years 2023 and 2024, and for certain indicators an outlook for the 2 following years (i.e. until 2026). It is published on a quarterly basis (in January, April, August and November) and is also available on the website of the Ministry of Finance at:

www.mfcr.cz/macroforecast

Any comments or suggestions that would help us improve the quality of our publication and closer satisfy the needs of its users are welcome. Please send any comments to the following email address:

macroeconomic.forecast@mfcr.cz

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List of Abbreviations

BoP	. balance of payments
const. pr	. constant prices
CNB	. Czech National Bank
CPI	. consumer price index
CR	. Czech Republic
curr. pr	. current prices
CZSO	. Czech Statistical Office
EA20	euro zone consisting of 20 countries
EC	. European Commission
ECB	. European Central Bank
EU27	. European Union consisting of 27 countries
Fed	. Federal Reserve System
GDP	. gross domestic product
GFCF	gross fixed capital formation
GVA	. gross value added
IMF	. International Monetary Fund
LFS	. Labour Force Survey
MoF	. Ministry of Finance
MoLSA	. Ministry of Labour and Social Affairs
NPISHs	. non-profit institutions serving households
OECD	. Organisation for Economic Co-operation and Development
pp	. percentage points
TFP	. total factor productivity
VAT	. value-added tax

Symbols Used in Tables

- A dash in place of a number indicates that the phenomenon did not occur.

A dot in place of a number indicates that we do not forecast that variable, or

the figure is unavailable or unreliable.

x, (space) A cross or space in place of a number indicates that no entry is possible for logi-

cal reasons.

Cut-off Date for Data Sources

The Macroeconomic Forecast is based on data known as of 31 October 2023.

Notes

All data in the Macroeconomic Forecast are unadjusted for seasonal and calendar effects, unless stated otherwise. Published aggregate data may not match sums of individual items to the last decimal place due to rounding.

Data from the previous forecast (August 2023) are indicated by italics. Data relating to the years 2025 and 2026 are an extrapolation scenario that indicates only the direction of possible developments, and as such are not commented upon in the following text.

Summary of the Forecast

The Czech economy is teetering on the edge of recession this year. Gross domestic product is likely to fall by 0.5% in 2023 but is forecast to grow by 1.9% in 2024. Next year, inflation will be significantly lower than this year, but for most of the year it will remain above 3%. The impact of weak economic dynamics on the labour market should not be significant given the persistent imbalances. The risks to the forecast are skewed to the downside.

Real gross domestic product of the Czech Republic, adjusted for seasonal and calendar effects, more or less stagnated in the first half of this year, but according to the preliminary estimate of the Czech Statistical Office, it fell by 0.3% QoQ in Q3 2023. Economic output has thus still not surpassed the pre-pandemic level.

For the full year 2023, GDP could fall by 0.5%. Households continue to feel the impact of high inflation this year and their real consumption is expected to fall further. Investment activity is affected by economic problems in euro area countries and restrictive monetary conditions, but government spending co-financed by EU funds from the previous financial perspective is having a positive impact. Weaker year-on-year inventory accumulation should slow down the economy noticeably, especially in connection with the completion of work in progress. This factor, together with the unwinding of problems in supply chains, will boost exports, but imports will remain subdued in view of generally weak domestic demand. The contribution of the external trade balance to GDP growth should thus be significantly positive.

In 2024, the economy's output could increase by 1.9%, mainly thanks to renewed growth in household consumption. Private investment and growth in export markets will also support economic activity. However, the impact of the consolidation package will dampen it slightly, but this will also help to reduce inflationary pressures.

High **inflation** continues to slow economic growth this year and reduce living standards. Not only food, electricity and natural gas, but also other categories of goods and services are contributing significantly to the exceptionally sharp rise in consumer prices. Strong domestic demand pressures are already being dampened by higher monetary policy rates. Annual inflation has been declining at a fast pace over the course of this year, but it will increase in Q4 due to the base effect of the energy tariff. The average inflation rate could reach 10.8% this year. Over most of 2024, annual consumer price inflation could already be between 3% and 4%. In full-year terms, we expect a decline to 3.3%.

Labour market imbalances related to labour shortages continue to manifest themselves. As a result, the unemployment rate should not increase much in 2023, despite the weak economic momentum. From an average of 2.2% in 2022, it could rise to 2.7% this year and further to 2.8% in 2024. Persistent labour market tightness will

put upward pressure on wage growth, which will, however, continue to lag behind inflation this year. Thus, average real wage growth is not expected to resume until 2024.

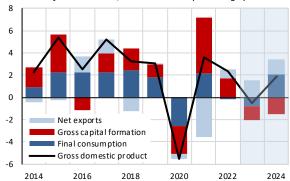
The current account of the balance of payments was in a deficit of 4.3% of GDP in Q2 2023, mainly reflecting a deterioration in the balance of primary income due to higher outflows of investment income (mainly in the form of dividends). Conversely, the unwinding of price pressures in the industrial and energy sectors and the improvement in conditions in the export-oriented automotive industry have led to a return of the trade balance to surplus. At the same time, these factors should continue to be a guiding factor. The current account deficit should thus gradually narrow to 2.4% of GDP this year and to 1.2% of GDP next year.

The general government sector's budget performance in 2023 reflects extraordinary revenues and expenditures related to the energy crisis, rising mandatory social spending and continued assistance to Ukrainian refugees. Thus, the general government deficit is likely to reach 3.6% of GDP this year, before narrowing to 2.2% of GDP next year, also as a result of the consolidation package. The fiscal policy stance will lead to a rise in debt to an estimated 44.7% of GDP in 2023, followed by 45.9% of GDP in 2024.

The macroeconomic forecast is subject to a number of risks that, in aggregate, we consider to be skewed to the downside. The main downside risk relates to the ability to compensate for the shortfall in natural gas and oil supplies from Russia to the European Union with increased imports from other suppliers and demand-side measures. The possibility of renewed problems in supply chains is also a significant risk, especially for certain sectors of the economy (automotive). In addition to the negative impact on economic performance, supply-side frictions would create additional inflationary pressures. These could also be triggered by a rise in energy commodity prices in the event of an escalation of tensions in the Middle East. The evolution of inflation and inflation expectations is also a risk, as is the overvaluation of residential property prices. On the positive side, however, the extraordinary increase in household savings in recent years could help cushion the impact of higher consumer prices on consumption. Economic growth could also be supported by successful integration of refugees from Ukraine and a full use of their human capital.

The economy should contract slightly in 2023

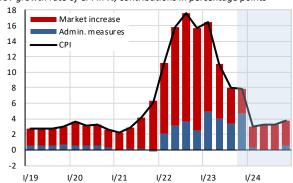
growth rate of real GDP in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

Inflation will fall next year, but stay above the target

YoY growth rate of CPI in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

Real wages should rise in 2024

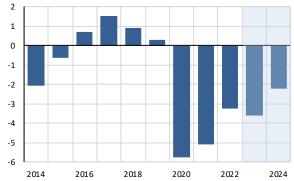
average gross monthly wage, YoY growth rate, in %



Source: CZSO. Calculations and forecast of the MoF.

Public finance deficit should drop below 3% of GDP

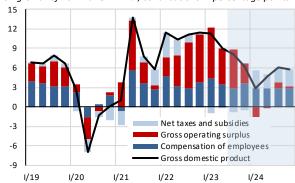
general government net lending/borrowing, in % of GDP



Source: CZSO. Calculations and forecast of the MoF.

Firms' profits will increase substantially this year

YoY growth of nominal GDP in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

Unemployment should almost stagnate

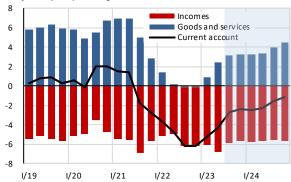
registered unemployment, in thous. of persons, seasonally adjusted



Source: MoLSA. Calc. and forecast of the MoF.

Current account deficit should narrow

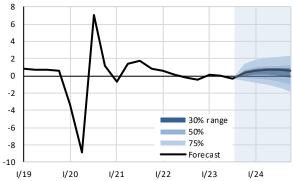
in % of GDP, yearly moving sums



Source: CNB, CZSO. Calculations and forecast of the MoF.

Forecast risks are skewed to the downside

QoQ growth of real GDP in %



Source: CZSO. Calculations and forecast of the MoF.

Table: Main Macroeconomic Indicators

		2018	2019	2020	2021	2022	2023	2024	2023	2024
							Current f	orecast	Previous forecast	
Nominal GDP	bill. CZK	5 411	5 791	5 709	6 109	6 786	7 363	7 726	7 384	7 751
	nominal growth in %	5.9	7.0	-1.4	7.0	11.1	8.5	4.9	8.8	5.0
Gross domestic product	real growth in %	3.2	3.0	-5.5	3.6	2.4	-0.5	1.9	-0.2	2.3
Consumption of households	real growth in %	3.5	2.7	-7.2	4.1	-0.7	-2.7	3.9	-3.4	3.9
Consumption of government	real growth in %	3.9	2.5	4.2	1.4	0.6	2.4	1.6	2.4	1.8
Gross fixed capital formation	real growth in %	10.0	5.9	-6.0	0.8	3.0	2.2	1.7	0.8	0.7
Contribution of net exports	рр	-1.2	0.0	-0.4	-3.6	0.9	1.5	1.3	2.4	1.3
Contrib. of change in inventories	рр	-0.5	-0.3	-0.9	4.8	0.9	-1.8	-1.9	-1.7	-1.3
GDP deflator	growth in %	2.6	3.9	4.3	3.3	8.5	9.0	3.0	9.0	2.6
Average inflation rate	%	2.1	2.8	3.2	3.8	15.1	10.8	3.3	10.9	2.8
Employment (national accounts)	growth in %	1.3	0.2	-1.7	0.4	1.5	0.9	0.5	1.1	0.7
Unemployment rate (LFS)	average in %	2.2	2.0	2.6	2.8	2.2	2.7	2.8	2.8	2.7
Wage bill (domestic concept)	growth in %	9.6	7.8	0.1	5.9	9.3	8.4	6.5	8.4	6.1
Current account balance	% of GDP	0.4	0.3	2.0	-2.8	-6.1	-2.4	-1.2	-1.7	-0.6
General government balance	% of GDP	0.9	0.3	-5.8	-5.1	-3.2	-3.6	-2.2	-3.6	-2.2
General government debt	% of GDP	32.1	30.0	37.7	42.0	44.2	44.7	45.9	44.7	45.4
Assumptions:										
Exchange rate CZK/EUR		25.6	25.7	26.4	25.6	24.6	24.0	24.4	23.8	23.9
Long-term interest rates	% p.a.	2.0	1.5	1.1	1.9	4.3	4.4	3.6	4.3	3.9
Crude oil Brent	USD/barrel	71	64	42	71	101	83	84	80	77
GDP in the euro area	real growth in %	1.8	1.6	-6.2	5.9	3.4	0.5	1.0	0.7	1.2

Note: Employment is newly reported in the national accounts methodology. Data from the previous forecast are also reported in this methodology. Source: CNB, CZSO, Eurostat, U. S. Energy Information Administration. Calculations and forecast of the MoF.

Risks to the Forecast

The macroeconomic forecast is subject to a number of **risks** that, in aggregate, we consider to be **skewed to the downside**.

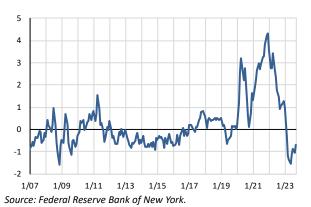
The supply of natural gas and oil from Russia to the European Union has been severely restricted and we do not expect it to resume. We anticipate that the shortfall will be replaced by increased imports of these raw materials from other countries. At the same time, demand is expected to decline as a result of continued high prices, additional energy savings and a shift to alternative technologies. We see the failure to meet these assumptions as the main downside risk to the forecast.

The possibility of **renewed problems in supply chains** is also a significant risk, especially for certain sectors of the economy (automotive industry). In addition to the negative impact on economic performance, supply-side frictions would create additional inflationary pressures. These could also be triggered by a rise in energy commodity prices in the event of **an escalation of tensions in the Middle East**.

Despite the relatively rapid decline in inflation in recent months, future development of consumer prices and **inflation expectations** remains a significant risk to the Czech economy. It is crucial that inflation expectations return to the vicinity of the Czech National Bank's inflation target. Otherwise, a return of inflation to 2% would require even tighter monetary policy stance, which would entail additional economic costs. Similarly, for **fiscal policy**, a different intensity and structure of consolidation efforts over the forecast horizon would affect economic dynamics.

Global Supply Chain Pressure Index

number of standard deviations from the average



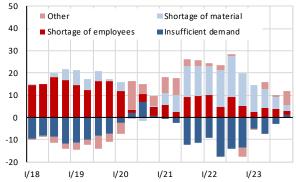
The shortage of employees, evident in almost all sectors of the economy, is a significant barrier to output growth, especially in the construction sector. However, the influx of refugees from Ukraine, in addition to the weak economic dynamics, is contributing to the easing of the mismatch between demand and supply in the labour market and the associated upward pressure on wages. It turns out that thanks to the still high demand for labour by companies and the nature of most vacancies (jobs with low qualification requirements), Ukrainian refugees do not have any significant problems with finding employment on the Czech labour market, even though their qualification structure may not match demand. Easier employment of foreigners is also facilitated by legislative changes reducing administrative barriers in this area. Successful integration of refugees from Ukraine and a full use of their human capital can significantly boost economic growth in the coming years.

Household gross savings rate, as well as the level of net lending/borrowing, has remained elevated since the pandemic. These extra savings could be used by households to cushion the impact of high consumer price inflation on real consumption.

A rise in interest rates and a substantial increase in prices could cause some households and firms to run into repayment problems, leading to a deterioration in the quality of banks' loan portfolios. For the time being, however, the share of non-performing loans in total loans to households remains at very low levels or continues to decline slowly for loans to non-financial corporations. **Overvaluation of residential property prices** also remains a risk.

Barriers to Production Growth

composite indicator of barriers to production growth in industry, construction and services, deviation from the 2005–2019 average



Source: CZSO. Calculations of the MoF.

1 Forecast Assumptions

1.1 External Environment

Global economic growth is slowing in response to monetary policy tightening, the effects of ongoing war conflicts and a slower recovery in the Chinese economy. On the other hand, high inflation rates are gradually declining in major economies, although labour markets (with the exception of China) are experiencing labour shortages. Investment activity is dampened by heightened uncertainty and energy prices remain a major risk. **World economic growth** could slow to 2.8% (*vs. 2.4%*) in 2023 and further to 2.6% (*vs. 2.5%*) next year, mainly due to the effects of restrictive monetary policy.

The quarter-on-quarter growth of the **US** economy accelerated markedly to 1.2% (vs. 0.0%) in Q3 2023, according to the preliminary estimate, driven by higher household consumption and inventory accumulation.

The inflation rate stagnated at 3.7% in September, while core inflation (4.1%) fell to its lowest level in two years. The shortage of workers is reflected in the persistently low unemployment rate, which remained at 3.8% in September. Following the interest rate hike in July, the Fed considered monetary conditions tight enough, thus keeping the key interest rate in the target range of 5.25%–5.50% at the September meeting. The volume of assets on the Fed's balance sheet has continued to decline.

According to the October Purchasing Managers' Index, activity in services increased, but the number of new orders fell for the third month in a row. Nevertheless, firms expect the situation to improve over the next year and are hiring new workers. Retail sales rose 0.7% MoM in September. The Purchasing Managers' Index for manufacturing signalled stagnation in October, with the volume of finished products and intermediate goods falling. Industrial production increased by 0.3% in September. Despite the recovery due to weakening supply chain issues, the economy will be negatively impacted by tighter monetary policy and the unwinding of the pandemic-era fiscal stimulus. We expect the US economy to grow by 2.4% (vs. 1.8%) this year and to slow to 1.6% (vs. 0.8%) in 2024.

China's quarter-on-quarter GDP growth accelerated to 1.3% in Q3 this year. However, the pace of the recovery lags well behind the period after the end of pandemic restrictions and fiscal and/or monetary policy easing is likely if the weak economic momentum continues. According to September data, industrial production and retail sales increased slightly. The October manufacturing Purchasing Managers' Index signalled a slight decline in output and a reduction in employment. The September services Purchasing Managers' Index points to

a stagnation in activity, albeit with an increase in employment. Continued difficulties and uncertainty related to the real estate market and second-round effects are dampening growth prospects, as is the high youth unemployment rate. China's economic growth could reach 5.6% (vs. 5.3%) this year and slow to 4.6% (vs. 4.7%) in 2024.

In Q3 2023, the **European Union's** gross domestic product grew by 0.1% QoQ (*vs. 0.3%*), while the **euro area** economy contracted by 0.1% (*vs. 0.1% growth*).

Annual inflation in the euro area decreased to 2.9% in October and core inflation also fell sharply. Expecting inflation to remain above the 2% target for an extended period, the European Central Bank further raised the key interest rate by 0.25 bps to 4.75% in September, where it was kept at the October meeting. The European Central Bank's monetary tightening is believed to have reached its final stage.

In terms of the stimulus to the economy, fiscal policy should start being restrictive in the course of 2024, following the expiry of the general escape clause and unwinding of energy support measures.

The unemployment rate in the euro area remained at 6.4% in August. At the same time, conditions in manufacturing sector continued to deteriorate in both September and October, with subdued demand and the resulting decline in orders and production to blame. Business sentiment was virtually flat in October, while it continued to decline among consumers.

We expect GDP growth in both the EU and the euro area to slow to 0.5% (vs. 0.7%) this year. Next year, economic growth could accelerate to 1.3% (vs. 1.4%) in the EU and 1.0% (vs. 1.2%) in the euro area due to a recovery in household consumption and investment activity.

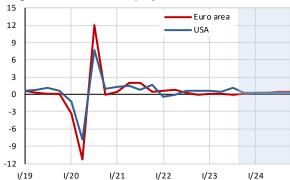
The **German** economy contracted by 0.1% QoQ (*in line with the forecast*) in Q3 2023. As a result of tighter monetary conditions, a significant reduction in production and a continued decline in new orders amid weakening demand, the manufacturing Purchasing Managers' Index continued to be in a contractionary zone in October despite some improvement. Activity in the service sector contracted again in October, with negative factors persisting and contributing to the decline in employment. Sentiment among consumers is on a deteriorating trajectory. Annual inflation fell to 3.0% in October. The unemployment rate remained at 3.0% in August. As a result of the deteriorating situation in industry and services, higher inflation and restrictive monetary policy, falling production and business confidence and worsening con-

sumer sentiment, the German economy could contract by 0.1% (vs. 0.2%) in 2023. In 2024, economic growth, supported by household consumption and a recovery in export activity, could reach 1.0% (vs. 1.1%).

Slovakia's GDP grew by 0.5% QoQ (vs. 0.3%) in Q2 2023, mainly due to the foreign trade balance. The unemployment rate remained at 5.8% in August, while manufacturing output rose. Year-on-year inflation declined to

Graph 1.1.1: Real GDP in the euro area and USA

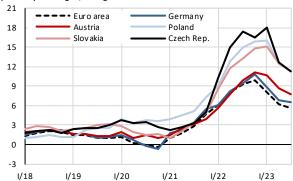
QoQ growth rate in%, seasonally adjusted



Source: Eurostat, OECD. Calculations and forecast of the MoF.

Graph 1.1.3: HICP

quarterly averages, YoY growth in %



Source: Eurostat. Calculations of the MoF.

quarterly averages, long-run average = 100

Graph 1.1.5: Economic Sentiment Indicator

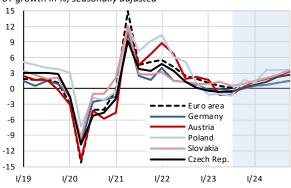
130 120 110 100 90 Euro area 80 Germany Austria 70 Poland Slovakia 60 Czech Rep 50 I/19 1/23

Source: Eurostat. Calculations of the MoF.

7.8% in October. Consumer confidence reached its highest level since mid-2021 in October. Economic growth should be supported this year mainly by a high level of investment co-financed by EU funds. We therefore expect GDP to grow by 1.3% (unchanged). Improvements in supply chains and a recovery in exports and household consumption will contribute to GDP growth of 2.2% (unchanged) in 2024.

Graph 1.1.2: Real Gross Domestic Product

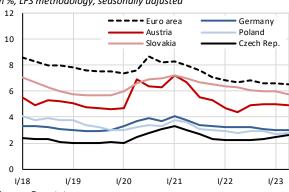
YoY growth in %, seasonally adjusted



Source: CZSO, Eurostat. Calculations and forecast of the MoF.

Graph 1.1.4: Unemployment Rate

in %, LFS methodology, seasonally adjusted



Source: Eurostat.

Graph 1.1.6: Purchasing Managers' Index

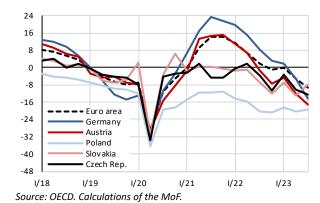
manufacturing, quarterly averages



Source: Markit. Calculations of the MoF.

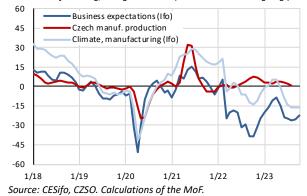
Graph 1.1.7: Business Tendency

manufacturing, quarterly averages



Graph 1.1.8: Ifo and Czech manufacturing production

balances (Ifo, manufacturing); seas. adjusted industrial production in Czech manufacturing, YoY growth in% (three-month moving avg.)



• •

Table 1.1.1: Gross Domestic Product – yearly

growth rate of real GDP in %

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
										Forecast	Forecast
World	seasonally adjusted	3.4	3.2	3.8	3.6	2.8	-2.8	6.3	3.5	2.8	2.6
USA	seasonally adjusted	2.9	1.8	2.5	3.0	2.5	-2.2	5.8	1.9	2.4	1.6
China	seasonally adjusted	7.2	6.9	6.9	6.7	6.0	1.7	8.8	3.0	5.6	4.6
United Kingdom	seasonally adjusted	2.2	1.9	2.7	1.4	1.6	-10.4	8.7	4.3	0.6	0.8
European Union	seasonally adjusted	2.1	2.0	3.0	2.0	1.8	-5.8	5.9	3.5	0.5	1.3
Euro area	seasonally adjusted	1.9	1.9	2.8	1.8	1.6	-6.2	5.9	3.4	0.5	1.0
Germany	seasonally adjusted	1.2	2.1	3.0	1.0	1.1	-4.2	3.1	1.9	-0.1	1.0
	unadjusted	1.5	2.2	2.7	1.0	1.1	-3.8	3.2	1.8	-0.4	0.9
France	seasonally adjusted	1.0	1.0	2.5	1.8	1.9	-7.7	6.4	2.5	0.9	1.1
	unadjusted	1.1	1.1	2.3	1.9	1.8	-7.5	6.4	2.5	0.8	1.2
Italy	seasonally adjusted	0.6	1.4	1.7	0.8	0.5	-9.0	8.3	3.9	0.7	0.8
	unadjusted	0.8	1.3	1.7	0.9	0.5	-9.0	8.3	3.7	0.7	0.9
Austria	seasonally adjusted	1.0	2.0	2.3	2.4	1.5	-6.7	4.4	4.8	-0.4	0.7
	unadjusted	1.0	2.0	2.3	2.4	1.5	-6.6	4.2	4.8	-0.7	0.8
Hungary	seasonally adjusted	3.7	2.2	4.4	5.4	4.9	-4.7	7.0	4.6	-0.8	2.9
	unadjusted	3.7	2.2	4.3	5.4	4.9	-4.5	7.1	4.6	-0.9	2.9
Poland	seasonally adjusted	4.3	3.1	5.2	5.9	4.4	-2.0	6.8	5.6	-0.5	3.0
	unadjusted	4.4	3.0	5.1	5.9	4.4	-2.0	6.9	5.3	-0.5	3.0
Slovakia	seasonally adjusted	5.2	1.9	2.9	4.0	2.5	-3.3	4.8	1.8	1.3	2.2
Czech Republic	seasonally adjusted	5.5	2.5	5.3	3.2	3.0	-5.5	3.5	2.4	-0.4	1.8
	unadjusted	5.4	2.5	5.2	3.2	3.0	-5.5	3.6	2.4	-0.5	1.9

Source: CZSO, Eurostat, IMF, OECD, Office for National Statistics. Calculations of the MoF.

Table 1.1.2: Gross Domestic Product – quarterly

growth rate of real GDP in %, data adjusted for seasonal and calendar effects

			2022	2			202	23	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	Forecast
USA	QoQ	-0.5	-0.1	0.7	0.6	0.6	0.5	1.2	0.2
	YoY	3.6	1.9	1.7	0.7	1.7	2.4	2.9	2.5
United Kingdom	QoQ	0.5	0.1	-0.1	0.1	0.3	0.2	0.1	0.1
	YoY	11.4	3.9	2.1	0.7	0.5	0.6	0.8	0.7
European Union	QoQ	0.7	0.7	0.4	-0.1	0.1	0.0	0.1	0.3
	YoY	5.6	4.2	2.5	1.7	1.1	0.4	0.1	0.5
Euro area	QoQ	0.7	0.8	0.3	0.0	0.0	0.2	-0.1	0.1
	YoY	5.5	4.1	2.4	1.8	1.2	0.5	0.1	0.2
Germany	Qo Q	1.0	-0.1	0.4	-0.4	0.0	0.1	-0.1	0.0
	YoY	4.0	1.6	1.2	0.8	-0.2	0.1	-0.4	0.0
France	Qo Q	-0.1	0.4	0.5	0.0	0.1	0.6	0.1	0.2
	YoY	4.3	3.9	1.3	0.8	1.0	1.1	0.7	1.0
Italy	Qo Q	0.1	1.4	0.3	-0.2	0.6	-0.4	0.0	0.3
	YoY	6.3	5.1	2.6	1.6	2.1	0.3	0.0	0.5
Austria	QoQ	0.7	2.0	-0.4	0.0	0.1	-0.8	-0.6	0.2
	YoY	8.9	6.7	2.0	2.2	1.6	-1.1	-1.2	0.4
Hungary	QoQ	1.4	1.0	-0.9	-0.9	-0.3	-0.2	0.6	0.8
	YoY	7.7	6.4	4.0	0.5	-1.2	-2.3	-0.8	1.0
Poland	QoQ	3.6	-1.5	1.2	-2.1	1.3	-1.4	0.9	0.8
	YoY	10.3	6.1	5.1	1.0	-1.2	-1.1	-1.3	1.6
Slovakia	Qo Q	0.3	0.1	0.3	0.2	0.2	0.5	0.5	0.5
	YoY	3.2	1.6	1.3	1.0	0.9	1.2	0.5	0.9
Czech Republic	QoQ	0.6	0.2	-0.2	-0.4	0.1	0.0	-0.3	0.4
	YoY	4.7	3.4	1.4	0.1	-0.4	-0.6	-0.6	0.2

Source: CZSO, Eurostat, OECD, Office for National Statistics. Calculations and forecast of the MoF.

1.2 Commodity Prices

The **price** of a barrel **of Brent crude oil** averaged USD 87 (vs. USD 80) in Q3 2023, down 14% YoY, or 22% when measured in CZK.

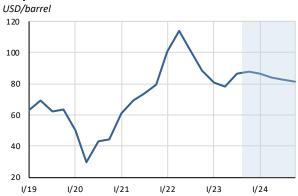
Over the upcoming quarters, only a very gradual increase in oil demand is expected, considering the slow growth of the global economy. Many countries outside the Organisation of the Petroleum Exporting Countries, which has expressed its commitment to limiting oil exports to ensure oil price stability, are likely to increase their production, particularly the United States, Canada and Brazil. The current elevated oil prices in the spot market in part reflect voluntarily extended production cuts by Saudi Arabia, low oil inventories in the US or high level of uncertainty and the resulting price volatility, particularly in the context of an escalation of geopolitical tensions in the Middle East in early October this year.

Oil prices in the futures market are lower for later delivery than earlier delivery. The forecast Brent crude oil price reflects this downward sloping curve. This year, the average price of Brent crude oil is expected to decrease by 18% YoY to USD 83 (vs. USD 80) per barrel, with

a 21% decrease when measured in CZK due to the koruna's appreciation against the US dollar. For 2024, we assume an average price of USD 84 (vs. USD 77) per barrel of Brent crude oil.

Prices and volatility on commodity markets remain elevated, largely due to the severe reduction in the supply of oil, oil products and natural gas from the Russian Federation to the EU. The threat of gas shortages during the last heating season did not materialise thanks to favourable weather, savings and successful securing of alternative supply. This contributed to a very significant decline in wholesale spot and forward prices of gas and electricity during Q4 2022 and early 2023, with prices holding at these lower levels throughout the year to date. However, the securing of energy supply, as well as the frontloading of other raw materials at high prices in previous quarters has slowed down the decrease in prices of these commodities for consumers and many firms. Formerly high prices thus continue to be reflected in firms' costs and consumer prices to a large extent (see Chapter 3.2).

Graph 1.2.1: Dollar Price of Brent Crude Oil



Source: U. S. EIA. Calculations and forecast of the MoF.

Graph 1.2.2: Koruna Price of Brent Crude Oil

YoY change of the CZK price of Brent crude oil in %, contributions in pp



Source: CNB, U. S. EIA. Calculations and forecast of the MoF.

Table 1.2.1: Prices of Selected Commodities – yearly

spot prices

spot prices		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
										Forecast	Forecast
Crude oil Brent	USD/barrel	52.4	43.6	54.2	71.3	64.3	41.8	70.8	101.0	83	84
	growth in %	-47.1	-16.9	24.3	31.7	-9.8	-35.0	69.3	42.7	-17.5	0.4
Crude oil Brent index (in CZK)	2010=100	84.9	70.1	83.1	102.1	97.1	63.6	101.1	155.3	123	125
	growth in %	-36.9	-17.4	18.5	22.9	-4.9	-34.6	59.1	53.5	-21.1	2.4
Natural gas (Europe)	USD/MMBtu	6.8	4.6	5.7	7.7	4.8	3.2	16.1	40.3		•
	growth in %	-32.1	-33.1	25.3	34.4	-37.5	-32.5	397.1	150.3		
Natural gas (Europe) index (in CZK)	2010=100	106.2	70.7	84.2	106.0	69.6	47.1	222.9	601.4		
	growth in %	-19.4	-33.4	19.2	25.8	-34.3	-32.4	373.7	169.7		

Source: CNB, U. S. Energy Information Administration, World Bank. Calculations and forecast of the MoF.

Table 1.2.2: Prices of Selected Commodities – quarterly

spot prices

			202	2			202	3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
									Forecast
Crude oil Brent	USD/barrel	100.9	113.8	100.7	88.7	81.1	78.0	86.7	88
	growth in %	65.3	65.0	37.0	11.4	-19.6	-31.5	-14.0	-1.2
Crude oil Brent index (in CZK)	2010=100	146.0	173.6	161.8	139.8	118.3	111.3	126.5	134
	growth in %	67.9	79.7	54.6	20.1	-19.0	-35.9	-21.8	-4.2
Natural gas (Europe)	USD/MMBtu	32.6	31.6	60.2	36.9	16.8	11.3	10.8	•
	growth in %	400.6	260.2	255.4	14.6	-48.4	-64.2	-82.1	
Natural gas (Europe) index (in CZK)	2010=100	454.0	463.7	928.9	559.0	236.3	155.3	151.0	
	growth in %	408.6	292.2	301.0	23.5	-48.0	-66.5	-83.7	

Source: CNB, U. S. Energy Information Administration, World Bank. Calculations and forecast of the MoF.

1.3 Fiscal Policy

In 2023, the public finances are expected to run a deficit of 3.6% of GDP (unchanged). After adjusting for the effect of the business cycle and one-off operations, which in this year mainly cushion the negative impact of high energy prices on economic agents and, on the other hand, provide an additional source of financing for them, the deficit should be 2.5% of GDP (vs. 2.3% of GDP). The deficit will be mainly attributable to the state budget, while health insurance companies are also likely to run a slight deficit. In contrast, local governments are expected to show a positive balance again.

We expect general government revenue to increase by 11.7% and tax revenue, including social security contributions, to grow by 9.3%. Value-added tax should increase by 6.4%, with autonomous growth hampered by a revenue shortfall due to the shift in the tax registration threshold to CZK 2 million with an impact of CZK 3 billion. Excise growth is driven by mineral oil tax revenue, which positively reflects the earlier abolition of the reduced rate on diesel. The impact of the rate increase on tobacco products is likely to be offset by lower sales and a continued shift towards less taxed alternatives. Taxes on production and imports will be boosted by an estimated CZK 17.3 billion this year by a levy on excess revenues from electricity producers. In contrast, the waiving of the renewable energy levy on households and companies, effective until the end of 2023, will represent an additional revenue shortfall of CZK 13.8 billion.

In addition to wage and salary growth in the economy, the dynamics of income taxes are significantly affected by the introduction of the windfall profits tax. **Personal income tax** is expected to grow by 13.5%, where we expect capital tax to rise by approx. 25% in addition to the 13% estimated growth in the tax linked to wage bill development. The estimated 8.5% growth in **social security contributions** is related to earnings developments. In addition, we expect a higher payment for the state insured persons of around CZK 11 billion. The almost 20% growth in **corporate income tax** is influenced by higher profits, which are taxed at an extraordinary rate of 60% in selected industries and companies from the stated threshold and are paid as a windfall profits tax with an estimated revenue of CZK 40 billion this year.

In terms of **property income**, the forecast assumes exceptionally high dividend income, especially CZK 54 billion from the energy company ČEZ.

General government expenditure is expected to grow by 12.3%. We estimate that **final consumption** will accelerate to 9.6% YoY, mainly due to the still high pace of purchases (11.8%). Compensation of employees should show a dynamic 8.6%. The 10.3% growth in social transfers in kind reflects expenditure on health and social services, also financed by higher payments for the state insured persons, as well as higher expenditure related to

the payment of the housing allowance and the housing supplement.

In the area of **cash social benefits**, we are counting mainly on an increase in pension benefits (16.8%), which are determined both by the normal January indexation plus the so-called allowance for each child raised and by an extraordinary indexation due to the high inflation rate from June this year. The cost of last year's exceptional indexations for the corresponding parts of the year also have an additional impact. This, together with the increase in other benefits (e.g. child benefit) and the continued payment of the humanitarian benefit for Ukrainian refugees (including countable housing costs), should lead to an 11.9% increase in cash social benefit expenditure.

This year's exceptionally high dynamics of **subsidies** is mainly due to assistance to households, companies, public and other institutions in the form of energy price caps in an estimated amount exceeding CZK 46 billion. Furthermore, in order to prevent the full impact of high electricity and gas prices on consumers, the government approved a subsidy to the transmission system operator of the Czech Republic in the amount of CZK 22.7 billion or compensation to electricity and gas distributors in the total amount of CZK 15.4 billion.

Fixed asset investments with an estimated growth of more than 16% should be significantly supported by the EU budget not only due to the end of the 2014–2020 programming period, but also already due to using funds from the current 2021–2027 programming period, as well as funds from the Next Generation EU.

The expected one-tenth increase in **general government debt**, combined with an estimated 8.5% nominal GDP growth rate, should lead to a 0.6 pp increase in the debt quota to 44.7% of GDP (*unchanged*). Higher debt and interest rate developments result in an increase in **interest costs**, which are likely to reach 1.3% of GDP.

We expect the general government balance to reach - 2.2% of GDP in 2024. Total general government revenue is forecast to grow by 3.5%, with tax revenue including social security contributions growing by 7.1%.

The relatively lower inflation rate should encourage household consumption and positively affect **value added tax** growth estimated at 6%. In contrast, tax revenue will be negatively affected by the consolidation package, which reduces the number of tax rates to two (21% and 12%) while shifting some goods and services to a different rate. On the other hand, it should bring higher value added tax revenue due to the increase in excises.

Excise tax dynamics will be positively affected by a decrease in the tax rate on diesel fuel in 2023 (CZK 5.6 billion) and an increase in tax rates on tobacco products and alcohol as part of the consolidation package

(CZK 4.9 billion). The increase in real estate tax is expected to bring CZK 10 billion to public budgets.

The 6.5% growth in wages and salaries determines the pace of personal income tax (7.5%) and social security contributions (8.4%), which also reflect an increase in payments for state insured persons. Both the income tax and social security contributions are positively affected by the discretionary measures in the consolidation package. In the case of personal income tax, these include, in particular, shift of the threshold for applying the 23% tax rate to 36 times the average wage (previously 48 times), limitation of the dependent spouse tax credit and abolition of the tax credit for placing a child in a pre-school institution (in total more than CZK 8 billion). In the area of social security contributions, the sickness insurance for employees is reintroduced and social security contributions for self-employed and workers with a performance agreement are increased. The total impact of the measures on social security contributions is around CZK 20 billion.

Corporate income tax is expected to show a slight decline, due to a CZK 26 billion year-on-year decrease in the windfall profits tax. On the contrary, a 2 pp increase in the tax rate will have a positive effect, with an estimated impact of CZK 22 billion.

Among other revenues, which will significantly affect the overall revenue dynamics, **transfers** (–17.5%) mainly reflect the end of the 2014–2020 financial perspective, partly offset by the start of projects co-financed by the EU budget from the 2021–2027 programming period and funds from the Next Generation EU. This should also be influenced by significantly lower YoY **dividend income** from state-owned companies.

Total expenditure is expected to remain broadly at the 2023 level. **Compensation of employees** in the general government sector is likely to rise less than this year, especially in view of the measures approved in the consolidation package. In contrast, we expect an increase in the health care sector and, as a result of the adopted proposal on the average teacher salary, in the education sector.

Social transfers in kind should slow down due to the base effect. For housing benefits, we expect the relatively higher level to be maintained, but the increase should then be driven mainly by health insurance spending, made possible by an increase in social security contributions and payments for state insured persons. **Intermediate consumption** growth of 4.8% is significantly lower compared to 2023, primarily due to lower expected inflation.

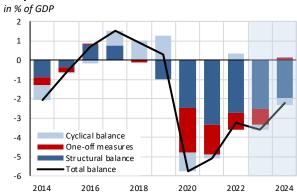
In the area of **cash social benefits**, we expect an increase in expenditure on pension benefits. These should be affected by both the standard indexation from January 2024 and the extraordinary indexation from June this year. In addition to pensions, humanitarian benefits paid to refugees from Ukraine will also affect the dynamics. The growth of total cash social benefits is expected to reach 4.2%. The development of these benefits is reflected in the national accounts methodology in the growth of the payment for the state insured persons by about CZK 11 billion.

Fixed asset investment will be affected by increased defence spending, where the 2% of GDP threshold should be reached as early as next year. In the case of EU cofinanced expenditure, the gradual build-up of funds under the Next Generation EU or the unfolding financial perspective 2021–2027 will play a role. The momentum of total investment could reach almost 2% in 2024, while growth will be significantly hampered by EU co-financed investments.

The measures of the consolidation package include savings in **subsidies**. Together with the end of one-offs in response to the energy crisis, we expect a decrease of more than 40%.

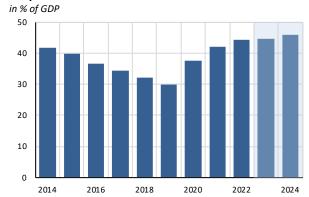
General government debt is expected to rise by 1.1 pp in relative terms to 45.9% of GDP in 2024. **Interest expenditure** is projected to increase by almost 13% due to the forecast general government balance and interest rates, and reach 1.4% of GDP in relative terms.

Graph 1.3.1: General Government Balance



Source: CZSO. Calculations and forecast of the MoF.

Graph 1.3.2: General Government Debt



Source: CZSO. Calculations and forecast of the MoF.

Table 1.3.1: Net Lending/Borrowing and Debt

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
General government balance	% GDP	1.5	0.9	0.3	-5.8	-5.1	-3.2	-3.6	-2.2	-1.7	-1.5
	bill. CZK	77	48	17	-329	-311	-218	-264	-169	-140	-130
Cyclical balance	% GDP	0.7	1.0	1.3	-1.0	-0.2	0.4	-0.2	-0.4	-0.1	0.1
Cyclically adjusted balance	% GDP	0.8	-0.1	-1.0	-4.8	-4.9	-3.6	-3.3	-1.8	-1.6	-1.7
One-off measures 1)	% GDP	0.0	-0.1	0.0	-2.3	-1.6	-0.9	-0.8	0.1	0.1	0.0
Structural balance	% GDP	0.8	0.0	-1.0	-2.5	-3.3	-2.7	-2.5	-2.0	-1.7	-1.7
Fiscal effort ²⁾	рр	0.0	-0.8	-1.0	-1.5	-0.8	0.6	0.2	0.6	0.2	0.1
Interest expenditure	% GDP	0.7	0.7	0.7	0.8	0.8	1.1	1.3	1.4	1.4	1.5
Primary balance	% GDP	2.2	1.6	1.0	-5.0	-4.3	-2.1	-2.3	-0.8	-0.3	-0.1
Cyclically adjusted primary balance	% GDP	1.5	0.6	-0.3	-4.0	-4.1	-2.4	-2.0	-0.4	-0.2	-0.2
General government debt	% GDP	34.2	32.1	30.0	37.7	42.0	44.2	44.7	45.9	46.5	47.0
	bill. CZK	1 750	1 735	1 740	2 150	2 567	2 998	3 293	3 543	3 766	3 970
Change in debt-to-GDP ratio	рр	-2.3	-2.2	-2.0	7.6	4.4	2.2	0.6	1.1	0.7	0.5

¹⁾ One-off and temporary measures are such measures that have only a temporary impact on public budgets. Besides their temporary impact on overall balance, these measures are usually of non-recurring nature and very often result from the events that are beyond the direct power of the government.

Source: CZSO. Calculations and forecast of the MoF.

²⁾ Change in structural balance.

1.4 Monetary Policy, Financial Sector and Exchange Rates

In H1 2022, the Czech National Bank gradually raised the **two-week repo rate** by 325 basis points in total to 7.00%. Subsequently, the Bank Board decided to leave interest rates unchanged each time. In view of the predicted continued weakening of inflationary pressures, we expect the CNB to take the first cut in the two-week repo rate at the end of this year and to continue its gradual reduction in 2024.

The **three-month PRIBOR** rate fell to 7.1% (*in line with the forecast*) in Q3 2023 on the back of the stability of the CNB's primary interest rates and financial market expectations of a rate cut. In Q4 2023, it should fall to 6.9% (*vs. 7.0%*) due to the evolution of the primary interest rate. With the assumed monetary policy stance, the three-month PRIBOR could average 7.1% (*unchanged*) in 2023 and fall to 5.8% (*vs. 5.7%*) in 2024.

The **yield to maturity on 10year government bonds** fell to 4.3% (*vs. 4.2%*) on average in Q3 2023, and we expect a further decline to 4.1% (*unchanged*) in Q4. Given the assumed monetary policy stance of the CNB and the ECB as well as inflation developments, we believe that long-term interest rates should continue on a downward trajectory, averaging 4.4% (*vs. 4.3%*) in 2023 and 3.6% (*vs. 3.9%*) in 2024.

Annual growth in total **loans to households** slowed to 4.9% in Q3 2023, due to weaker growth in housing loans as a result of the transmission mechanism of tighter monetary policy. The average customer interest rate on total household loans increased to 3.9% in Q3. For net new mortgage loans, the average customer interest rate declined slowly during Q3 to 5.8% in September. Annual growth in **household deposits** accelerated to 6.5% thanks to stronger growth in koruna deposits.

Loans to non-financial corporations grew by 3.8% in Q3 2023. Significant declines in koruna loans were offset by continued strong increases in foreign currency loans, probably due to the positive interest rate spread vis-à-vis the euro area. As a result, the share of foreign currency loans continued to increase and reached 49.0%. The av-

erage client interest rate on total loans to non-financial corporations fell to 5.9%.

The **share of non-performing loans** in total loans to non-financial corporations continued to decline, reaching 2.9% in Q3 2023. However, the decline has already stopped for loans to households, with the share of non-performing loans increasing slightly since April 2023, reaching 1.3% on average in Q3. However, the shares of non-performing loans to households and non-financial corporations are still among the lowest in the available time series.

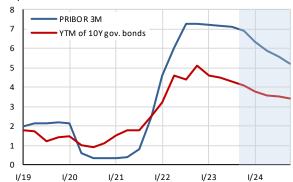
In Q3 2023, the exchange rate of the koruna against the euro averaged CZK 24.1/EUR (vs. CZK 24.0/EUR), which, despite a quarter-on-quarter weakening of 2.3%, meant a year-on-year appreciation of 1.8% (vs. 2.4%). The development was influenced by the interest rate differential between the Czech Republic and the euro area and a certain correction in the koruna exchange rate from the very strong levels achieved in the first half of this year.

In the context of the unfavourable global economic outlook, the expected narrowing of the positive interest rate differential vis-à-vis the euro area and increased geopolitical risks, the koruna could weaken by 0.7% YoY (vs. a 1.7% appreciation) in Q4 2023 to an average of CZK 24.6/EUR (vs. CZK 24.0/EUR). In 2023, the exchange rate would thus on average appreciate by 2.3% (vs. 3.1%) to CZK 24.0/EUR (vs. CZK 23.8/EUR). In light of the expected resumption of economic convergence, the koruna should appreciate slightly over the course of next year but given the strong exchange rate levels at the start of 2023, it should still depreciate by 1.5% (vs. 0.3%) to CZK 24.4/EUR (vs. CZK 23.9/EUR) on average over the whole year.

The forecast for the USD/EUR exchange rate is based on the development of forward contracts before the input data cut-off date. We estimate it at 1.08 this year (vs. 1.10) and 1.07 in 2024 (vs. 1.14). The USD/EUR exchange rate then implies the expected development of the koruna against the US dollar.

Graph 1.4.1: Interest Rates

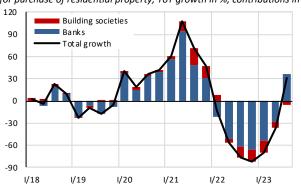




Source: CNB. Calculations and forecast of the MoF.

Graph 1.4.3: New Mortgage Loans

for purchase of residential property, YoY growth in %, contributions in pp



 ${\it Source: CNB. Calculations of the MoF.}$

Graph 1.4.5: Non-performing Loans

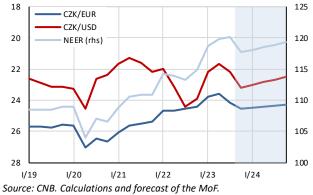
ratio of non-performing to total loans, in%



Source: CNB. Calculations of the MoF.

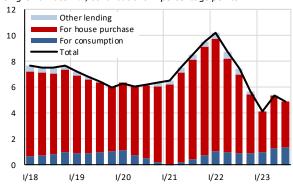
Graph 1.4.7: Nominal Exchange Rates

quarterly averages, average 2015=100 (rhs)



Graph 1.4.2: Loans to Households

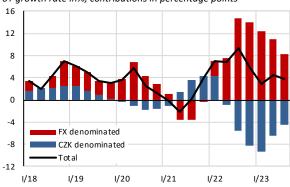
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

Graph 1.4.4: Loans to Non-financial Corporations

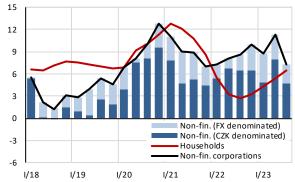
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

Graph 1.4.6: Deposits

YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

Graph 1.4.8: Real Exchange Rate to the Eurozone

deflated by GDP deflators, YoY growth rate in %, contributions in pp



Source: CNB, CZSO, Eurostat. Calculations and forecast of the MoF.

Table 1.4.1: Interest Rates - yearly

average of period, unless stated otherwise

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
										Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	0.05	0.05	0.50	1.75	2.00	0.25	3.75	7.00	•	•
Main refinancing rate ECB (end of period)	in % p.a.	0.05	0.00	0.00	0.00	0.00	0.00	0.00	2.50		
Federal funds rate (end of period)	in % p.a.	0.50	0.75	1.50	2.50	1.75	0.25	0.25	4.50	•	
PRIBOR 3 M	in % p.a.	0.31	0.29	0.41	1.23	2.12	0.86	1.00	6.29	7.1	5.8
YTM of 10Y government bonds	in % p.a.	0.57	0.43	0.98	1.98	1.55	1.13	1.90	4.33	4.4	3.6
Client interest rates											
Loans to households	in % p.a.	5.15	4.65	4.10	3.76	3.66	3.53	3.31	3.42		
Loans to non-financial corporations	in % p.a.	2.18	1.95	2.02	2.51	2.71	2.22	2.22	4.95		
Deposits of households	in % p.a.	0.65	0.47	0.36	0.33	0.39	0.35	0.26	1.13		
Deposits of non-financial corporations	in % p.a.	13.01	11.21	9.62	8.75	8.67	8.27	7.74	9.06		

Source: CNB, ECB, Fed. Calculations and forecast of the MoF.

Table 1.4.2: Interest Rates – quarterly

average of period, unless stated otherwise

			2022				2023	3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
									Forecast
Repo 2W rate CNB (end of period)	in % p.a.	4.50	7.00	7.00	7.00	7.00	7.00	7.00	
Main refinancing rate ECB (end of period)	in % p.a.	0.00	0.00	1.25	2.50	3.50	4.00	4.50	
Federal funds rate (end of period)	in % p.a.	0.50	1.75	3.25	4.50	5.00	5.25	5.50	
PRIBOR 3 M	in % p.a.	4.59	6.03	7.27	7.27	7.20	7.17	7.11	6.9
YTM of 10Y government bonds	in % p.a.	3.23	4.58	4.41	5.11	4.58	4.50	4.30	4.1
Client interest rates									
Loans to households	in % p.a.	3.29	3.36	3.46	3.56	3.66	3.77	3.90	
Loans to non-financial corporations	in % p.a.	3.62	4.57	5.61	6.01	6.01	5.97	5.89	
Deposits of households	in % p.a.	0.62	0.91	1.31	1.70	1.97	2.09	2.14	
Deposits of non-financial corporations	in % p.a.	8.03	8.56	9.69	9.99	9.88	9.68	9.76	

Source: CNB, ECB, Fed. Calculations and forecast of the MoF.

Table 1.4.3: Loans and Deposits – yearly averages

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Households											
Loans	growth in %	4.0	3.4	4.8	7.2	7.8	7.6	6.6	6.3	8.0	8.0
For consumption	growth in %	-0.1	-0.9	3.4	6.0	4.3	5.4	6.4	4.4	2.6	7.0
For house purchase	growth in %	5.5	4.5	5.6	8.1	9.0	8.5	7.4	7.3	9.5	8.5
Otherlending	growth in %	1.2	2.9	1.0	3.0	4.2	4.3	1.1	0.9	4.2	4.5
CZK denominated	growth in %	4.0	3.4	4.7	7.2	7.7	7.6	6.6	6.3	8.0	7.9
FX denominated	growth in %	-1.3	0.0	12.7	8.5	36.3	1.7	9.0	6.1	16.9	43.4
Deposits	growth in %	3.3	2.9	4.8	7.0	8.7	7.0	7.2	9.4	11.1	3.7
CZK denominated	growth in %	3.3	2.7	4.1	6.9	9.7	7.1	6.9	9.2	10.9	3.2
FX denominated	growth in %	2.3	8.5	22.5	7.3	-13.9	3.5	15.2	14.5	16.6	16.6
Non-performing loans (banking statistics)	share, in %	5.2	4.9	4.5	3.6	2.7	2.4	1.9	1.6	1.7	1.3
Loans to deposits ratio	in %	63	63	63	63	63	63	63	61	59	62
Non-financial corporations											
Loans	growth in %	1.3	1.9	6.5	6.6	5.0	4.2	4.3	3.2	0.5	7.2
CZK denominated	growth in %	0.3	-1.0	5.9	2.8	-1.4	3.0	1.9	-1.8	3.2	-4.0
FX denominated	growth in %	5.7	13.7	9.0	20.5	24.4	6.9	10.0	14.0	-4.6	29.6
Deposits	growth in %	4.9	7.6	10.3	4.6	7.8	3.0	4.2	9.5	9.0	8.5
CZK denominated	growth in %	4.2	5.6	6.7	4.5	13.9	2.1	1.9	9.4	7.1	8.3
FX denominated	growth in %	8.0	15.2	23.2	4.8	-11.1	6.6	13.0	9.9	15.3	9.2
Non-performing loans (banking statistics)	share, in %	7.4	7.0	6.0	5.2	4.7	3.7	3.4	3.3	4.2	3.5
Loans to deposits ratio	in %	116	110	106	108	105	106	106	100	92	91

Note: All indicators, except for the share of non-performing loans, are from the monetary statistics.

Source: CNB, ECB. Calculations of the MoF.

Table 1.4.4: Loans and Deposits – quarterly averages

		2021		2022				2023	
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Households									
Loans	growth in %	9.5	10.2	8.7	7.4	5.6	4.1	5.3	4.9
For consumption	growth in %	5.5	7.8	7.1	6.5	6.6	7.1	9.7	10.0
For house purchase	growth in %	10.8	11.2	9.4	7.9	5.8	4.1	5.2	4.5
Otherlending	growth in %	4.4	5.2	5.5	5.0	2.5	-0.6	-0.3	0.0
CZK denominated	growth in %	9.5	10.2	8.6	7.3	5.5	4.0	5.3	4.9
FX denominated	growth in %	18.3	22.8	43.1	50.6	55.1	46.5	32.7	16.3
Deposits	growth in %	8.6	5.6	3.2	2.8	3.3	4.3	5.4	6.5
CZK denominated	growth in %	8.4	5.3	2.8	2.2	2.6	3.4	4.6	5.9
FX denominated	growth in %	15.2	13.2	15.2	17.6	20.1	26.7	23.4	18.7
Non-performing loans (banking statistics)	share, in %	1.6	1.5	1.4	1.3	1.2	1.2	1.2	1.3
Loans to deposits ratio	in %	61	62	62	62	62	62	61	61
Non-financial corporations									
Loans	growth in %	3.9	7.1	6.7	9.3	5.9	2.9	4.5	3.8
CZK denominated	growth in %	6.6	6.6	-1.3	-8.1	-12.3	-14.4	-10.5	-7.7
FX denominated	growth in %	-0.9	8.0	22.8	46.5	41.7	35.2	28.7	19.2
Deposits	growth in %	7.0	7.2	8.1	8.6	10.0	8.7	11.4	7.3
CZK denominated	growth in %	5.8	7.1	9.0	8.6	8.6	6.5	10.3	6.3
FX denominated	growth in %	10.8	7.6	5.6	8.9	14.7	15.9	14.8	10.5
Non-performing loans (banking statistics)	share, in %	3.9	3.8	3.6	3.4	3.3	3.3	3.1	2.9
Loans to deposits ratio	in %	93	93	91	92	89	88	86	89

Note: All indicators, except for the share of non-performing loans, are from the monetary statistics.

Source: CNB, ECB. Calculations of the MoF.

Table 1.4.5: Exchange Rates - yearly

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Nominal exchange	e rates										
CZK / EUR	average	26.33	25.65	25.67	26.44	25.65	24.57	24.0	24.4	24.1	23.8
	appreciation in %	2.7	2.7	-0.1	-2.9	3.1	4.4	2.3	-1.5	1.2	1.2
CZK / USD	average	23.39	21.74	22.94	23.20	21.68	23.36	22.3	22.8	22.1	21.5
	appreciation in %	4.5	7.6	-5.2	-1.1	7.0	-7.2	4.7	-2.0	2.9	2.9
NEER	average of 2015=100	105.2	109.1	108.8	106.7	110.4	114.8	119	119	120	122
	appreciation in %	2.8	3.7	-0.3	-1.9	3.4	4.0	3.7	-0.3	1.4	1.3
Real exchange rate to EA19 1)	average of 2015=100	104.0	107.9	110.1	109.4	114.3	123.7	130	128	130	131
	appreciation in %	2.8	3.7	2.0	-0.6	4.4	8.3	5.5	-1.5	1.1	1.1
REER 2)	average of 2015=100	106.6	111.1	111.5	112.3	116.7	126.8				
	appreciation in %	3.9	4.3	0.3	0.8	3.9	8.7			•	

¹⁾ Deflated by GDP deflators.

Table 1.4.6: Exchange Rates - quarterly

			202	2			202	23	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
									Forecast
Nominal exchang	ge rates								
CZK / EUR	average	24.65	24.64	24.57	24.39	23.79	23.59	24.14	24.6
	appreciation in %	5.7	4.0	3.8	4.1	3.7	4.5	1.8	-0.7
CZK / USD	average	21.99	23.16	24.40	23.92	22.17	21.67	22.17	23.2
	appreciation in %	-1.6	-8.2	-11.4	-7.2	-0.8	6.8	10.1	3.1
NEER	average of 2015=100	114.3	113.9	113.2	114.9	118.7	119.8	120.1	118
	appreciation in %	5.0	3.0	2.2	3.6	3.9	5.2	6.1	2.4
Real exchange rate to EA19 1)	average of 2015=100	120.9	122.1	125.8	126.0	131.3	132.4	132.4	126
	appreciation in %	8.3	6.3	8.6	9.8	8.6	8.4	5.2	0.1
REER 2)	average of 2015=100	125.9	126.4	127.5	127.5	141.2	142.2		
	appreciation in %	9.2	8.3	8.6	8.8	12.2	12.4		

¹⁾ Deflated by GDP deflators.

1.5 Demographic Trends

In H1 2023, the population of the Czech Republic grew by 46.0 thousand to 10.874 million. The population increase was due to a positive balance of foreign migration (57.5 thousand), while the balance of natural change was negative (–11.5 thousand).

From January to June of this year, 45.2 thousand children were born alive, a year-on-year decrease of 5.7 thousand, or 11.3%. A lower figure for the first half of the year has not been recorded since 1992.

The number of deaths, which reached 56.7 thousand in H1 2023, was last lower in 2016. Compared to the same period of the previous year, this is a decrease of 3.4 thousand (5.7%). The number of deaths in the first half of the year was also slightly lower than the average for the first half of 2015–2019. According to the data of the Ministry of Health, the number of deaths related to

the COVID-19 disease decreased from 4.0 thousand in H1 2022 to 0.6 thousand in H1 2023.

The positive balance of foreign migration from January to June this year decreased significantly year-on-year by 194.5 thousand, or 77.2%. The decrease is due to the base effect, given the large number of refugees from Ukraine that arrived in the Czech Republic in H1 2022. A total of 79.8 thousand people immigrated to the Czech Republic during H1 2023, a year-on-year decrease of 181.1 thousand or 69.4%. However, the number of immigrants remained higher compared to previous years. In contrast, the number of emigrants more than doubled year-on-year by 13.3 thousand to 22.3 thousand persons. Both directions of foreign migration were dominated by citizens of Ukraine.

Migration flows this year are still affected by the war in Ukraine. We assume that in 2023 the positive migration

²⁾ Eurostat calculations, deflated by CPI, versus 42 countries. Source: CNB, Eurostat. Calculations and forecast of the MoF.

²⁾ Eurostat calculations, deflated by CPI, versus 42 countries. Source: CNB, Eurostat. Calculations and forecast of the MoF.

balance will be 49 thousand persons higher than in the medium variant of the CZSO's demographic projection, i.e. it will reach 75 thousand persons. For the following years, we assume that some refugees will return to Ukraine, but at the same time immigration from this country will remain elevated (but not nearly as much as it was just after the outbreak of the war). Therefore, we assume the same migration balance as the Czech Statistical Office in its demographic projection.

Graph 1.5.1: Age Groups

as of 1 January of the given year, shares in total population, in %67 29 64 26 61 23 58 20 55 Youth (0-19) Seniors (65+) 17 Productive age (20-64) (rhs) 14 49 1988 1992 1996 2000 2004 2008 2012 2016 2020 2024 Source: CZSO. Calculations of the MoF.

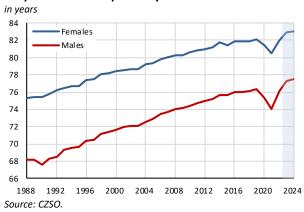
Graph 1.5.3: Old-Age Pensioners

absolute increase over a year in thousands of persons 30 20 10 0 -10 -20 -30 Early-retirement pens. -40 Full pensions Old-age pensions total -50 1/18 1/19 1/20 1/21 1/22 1/23

Source: Czech Social Security Administration. Calculations of the MoF.

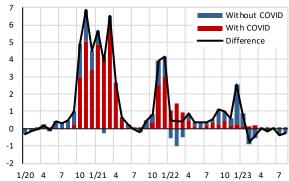
At the end of June 2023, the Czech Social Security Administration registered 2.358 million **old-age pensioners**, corresponding to 21.8% of the Czech population. The extension of the statutory retirement age led to a year-on-year decrease in the number of old-age pensioners by 5 thousand, i.e. by 0.2% (see Graph 1.5.3). However, this decrease was cushioned by early retirements due to exceptional indexation, as the number of early retirement pensions increased by 23.8 thousand, or 3.5% YoY.

Graph 1.5.2: Life Expectancy at Birth



Graph 1.5.4: Number of Deaths

difference from the 2015–2019 average, in thousands



Source: CZSO, Ministry of Health. Calculations of the MoF.

Table 1.5.1: Demographics

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
					_			Forecast	Forecast	Outlook	Outlook
Population (as of 1 January)	thous. persons	10 579	10 610	10 650	10 694	10 495	10 517	10 828	10 891	10 903	10 913
	growth in %	0.2	0.3	0.4	0.4	-1.9	0.2	3.0	0.6	0.1	0.1
0–19 years	thous. persons	2 106	2 133	2 160	2 188	2 171	2 197	2 307	2 332	2 3 3 9	2 338
	growth in %	1.2	1.3	1.3	1.3	-0.8	1.2	5.0	1.1	0.3	0.0
20–64 years	thous. persons	6 484	6 437	6 403	6 374	6 172	6 151	6 3 1 2	6 324	6 3 1 6	6 311
	growth in %	-0.9	-0.7	-0.5	-0.4	-3.2	-0.3	2.6	0.2	-0.1	-0.1
65 and more years	thous. persons	1 989	2 040	2 087	2 132	2 152	2 169	2 208	2 235	2 249	2 264
	growth in %	2.9	2.6	2.3	2.2	0.9	0.8	1.8	1.2	0.7	0.7
Old-age pensioners (as of 1 January) 1)	thous. persons	2 395	2 404	2 410	2 415	2 400	2 378	2 367	2 464	2 454	2 446
	growth in %	0.8	0.4	0.3	0.2	-0.6	-0.9	-0.4	4.1	-0.4	-0.3
Old-age dependency ratios (as of 1 Jan	uary)										
Demographic 2)	%	30.7	31.7	32.6	33.4	34.9	35.3	35.0	35.3	35.6	35.9
Under current legislation 3)	%	40.1	40.4	40.4	40.5	41.2	40.6	39.3	38.8	38.5	38.3
Effective ⁴⁾	%	46.2	45.7	45.2	45.5	46.0	45.2	47.3	48.8	48.5	48.2
Fertility rate	children	1.687	1.708	1.709	1.707	1.827	1.618	1.70	1.70	1.71	1.71
Population increase	thous. persons	31	40	44	8	22	311	64	12	9	7
Natural increase	thous. persons	3	1	0	-19	-28	-19	-11	-14	-17	-19
Live births	thous. persons	114	114	112	110	112	101	103	101	99	98
Deaths	thous. persons	111	113	112	129	140	120	114	115	116	117
Net migration	thous. persons	28	39	44	27	50	330	75	26	26	26
Immigration	thous. persons	46	58	66	56	69	350				
Emigration	thous. persons	18	20	21	29	19	20	•	•	•	•
Census difference	thous. persons	х	х	х	х	-207	х	х	х	х	х

Note: Between 2020 and 2021, there is a break in the population time series resulting from the 2021 Census.

Source: Czech Social Security Administration, CZSO. Calculations and forecast of the MoF.

1.6 Other Assumptions

In addition to the factors mentioned in the previous chapters, the forecast is based on the following assumptions:

- the shortfall in natural gas and oil supplies from Russia to the EU will be replaced by a combination of increased imports from other countries (including liquefied natural gas), savings and a switch to alternative technologies,
- neither the ongoing war in Ukraine nor the tensions in the Middle East will lead to a sustained rise in commodity prices on world markets,
- except for the changes included in the consolidation package, the rates and bases of other major

- taxes and compulsory levies will remain unchanged,
- over the forecast horizon, supply chains will work without significant problems and, as a result, upward pressures on the price level will also ease,
- thanks to vaccination, high number of people who have contracted COVID-19 and wider treatment options, it will not be necessary to adopt macroeconomically significant restrictions should the epidemic situation worsen in the future,
- the minimum wage and the lowest levels of the guaranteed wage will be increased in the coming years in line with the forecast growth of the average nominal wage.

¹⁾ In 2010 disability pensions of pensioners over 64 were transferred into old-age pensions.

²⁾ Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (20–64).

³⁾ Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.

⁴⁾ Effective dependency: ratio of old-age pensioners to working people (LFS methodology).

Economic Cycle 2

2.1 Position within the Economic Cycle

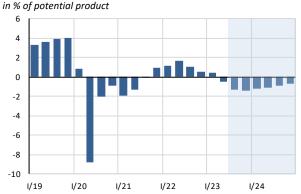
The output gap entered the negative territory in Q2 this year and is expected to widen until Q4 2023 (see Graph 2.1.1). The economy should remain below its potential level throughout next year. However, given the extreme uncertainty and volatility of economic developments, the results should be treated with caution.

Potential output growth has slowed significantly since 2020 as a result of the economic recession. We estimate that potential growth will accelerate to 2.2% (vs. 2.1%) in 2023 and could remain around 2% in the following years.

The trend component of total factor productivity is the long-term driver of potential growth. Its contribution has been around 1 pp in recent years and should remain close to this value over the forecast horizon. It would thus continue to lag well behind the level it reached during the pre-pandemic boom.

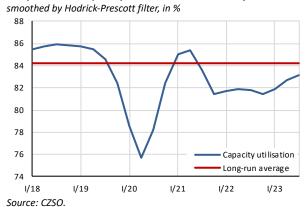
The fall in investment activity in 2020 and only a slight recovery in 2021 resulted in a slower increase in the cap-

Graph 2.1.1: Output Gap



Source: CZSO. Calculations and forecast of the MoF.

Graph 2.1.3: Capacity Utilisation in Industry

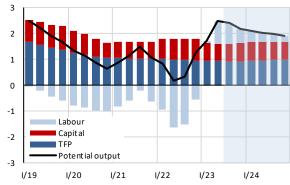


ital stock. At the expected pace of gross fixed capital formation and depreciation, this factor could raise potential growth by 0.7 pp (unchanged) in 2023.

The gradual ageing of the population, which is reflected in the declining number of people aged 20-64, is having a negative impact on labour supply. However, the economic upturn, accompanied by a strong increase in the participation rate, has more than compensated for the negative effects until 2018. By contrast, the average number of hours usually worked has shown a long-term downward trend. While in 2017-2020 this number ranged between 39.9 and 40.2 hours, values between 39.3 and 39.5 hours have been published for 2021. This has created a significant break in the time series (see Graph 2.1.4), which has no economic justification and results from methodological changes in the LFS. In aggregate, the production factor of labour could support potential growth in the range of 0.6 pp (vs. 0.8 pp) this year and 0.3 pp (unchanged) next year.

Graph 2.1.2: Potential Output

YoY growth rate in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

Graph 2.1.4: Hours Usually Worked

number of hours usually worked per week



Source: Eurostat.

Table 2.1.1: Output Gap and Potential Product

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Output gap	%	2.1	2.9	3.7	-2.7	-0.6	1.1	-0.7	-1.0	-0.3	0.3
Potential product	growth in %	2.7	2.6	2.1	1.0	1.1	0.7	2.2	2.0	1.8	1.8
Contributions											
Trend total factor productivity	рр	2.2	2.0	1.5	1.2	1.0	1.0	0.9	1.0	1.1	1.1
Fixed assets	рр	0.5	0.6	0.9	0.7	0.6	0.8	0.7	0.7	0.6	0.6
Population 20–64 years	рр	-0.6	-0.5	-0.4	-0.4	-0.4	-1.7	0.0	0.1	-0.1	0.0
Participation rate	рр	0.7	0.7	0.2	-0.2	0.2	0.6	0.7	0.3	0.1	0.1
Usually worked hours	рр	-0.2	-0.1	-0.1	-0.3	-0.4	-0.1	-0.1	0.0	0.0	0.0

Source: CZSO. Calculations and forecast of the MoF.

2.2 Business Cycle Indicators

The development of confidence indicators in Q3 2023 points to a quarter-on-quarter decline in gross value added in industry and in trade and services. Also in the construction sector, the confidence indicator signals a year-on-year decline in gross value added. However, the correlation between the evolution of confidence and gross value added in the construction sector is very low.

A composite indicator of exports of goods, compiled by the Ministry of Finance from sub-questions of the CZSO's business cycle survey and business confidence in Germany, indicates a stagnation of exports of goods at roughly the level of previous quarters.

The CZSO's consumer confidence indicator increased slightly quarter-on-quarter in Q3 2023. Its development for the second half of 2023 (the confidence indicator shows a 1–2 quarter lead) signals a reduction in the negative year-on-year dynamics of household final con-

sumption expenditure. The consumer confidence indicator, compiled by the Ministry of Finance from subquestions of the European Commission's consumer survey, also increased in Q3 2023 compared to the previous period. Consumers' pessimism, stemming from a significantly negative assessment of the economic situation, has declined slightly, while negative assessment of households' financial situation has also decreased compared to the previous quarter, and their ability to save is also higher.

As a result, the composite confidence indicator signals a quarter-on-quarter decline of gross value added in Q3 2023.

According to the composite leading indicator, the negative output gap is expected to widen in H2 2023. This is in line with the current assessment of the economy's position in the business cycle (see Chapter 2.1).

Graph 2.2.1: Confidence and GVA in Industry

2005=100 (lhs), YoY growth in % (rhs)



Graph 2.2.3: Confidence and GVA in Trade and Services

2005=100 (lhs), YoY growth in % (rhs)



Graph 2.2.5: Consumer Confidence and Consumption

2005=100 (lhs), YoY growth in % (rhs)



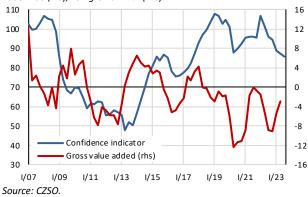
Graph 2.2.7: Composite Confidence Indicator and GVA

2005=100 (lhs), YoY growth in % (rhs)



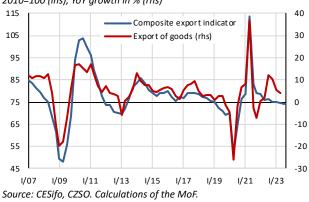
Graph 2.2.2: Confidence and GVA in Construction

2005=100 (lhs), YoY growth in % (rhs)



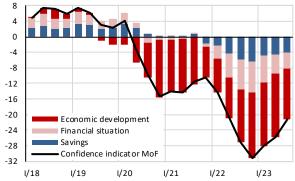
Graph 2.2.4: Composite Export Indicator

2010=100 (lhs), YoY growth in % (rhs)



Graph 2.2.6: Decomposition of Consumer Sentiment

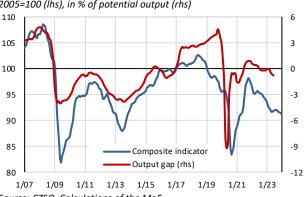
consumer confidence indicator of the MoF, balance, contributions



Source: European Commission. Calculations of the MoF.

Graph 2.2.8: Composite Leading Indicator

2005=100 (lhs), in % of potential output (rhs)



Source: CZSO. Calculations of the MoF.

3 Forecast of Macroeconomic Developments in the CR

3.1 Economic Output

The Czech economy contracted by 1.1% YoY (*in line with the estimate*) in **Q2 2023**, with seasonally adjusted **GDP** unchanged from the previous quarter. Economic activity was boosted most by manufacturing, while a decline in value added in industry other than manufacturing and in trade, transportation, accommodation and food services dampened it most significantly. The year-on-year decrease in real GDP in Q1 2023 was revised down by 0.1 pp to 0.1%.

Household consumption fell by 4.8% YoY (*vs.* 5.5%) in Q2, due to both a fall in real disposable income and a rise in the savings rate. Households cut spending on intermediate consumption goods the most, but purchases of other goods and spending on services also fell.

Government consumption increased by 2.8% YoY (*in line with the estimate*), driven by growth in public sector employment and purchases of goods and services. Purchases of goods and services (intermediate consumption) grew fastest in the local government subsector, followed closely by the central government. Within individual general government entities, Správa železnic (national railway infrastructure manager) recorded the most dynamic development with growth exceeding 35%.

Gross fixed capital formation rose by 1.3% (*vs. a decline of 0.7%*). Investment activity was boosted by investment in machinery and equipment, but other major categories declined, most notably investment in dwellings. From a sectoral perspective, the increase in investment by the government sector and firms was dampened by lower investment spending by households. Private and, to a lesser extent, government investment was supported by projects co-financed by EU funds.

The **change in inventories** and valuables subtracted 2.9 pp (vs. 1.0 pp) from the growth of the economy, and gross capital formation thus fell by 7.7% (vs. 3.8%). Although firms continued to increase their inventories of production inputs in order to avoid losses resulting from high inflation and possible shortfalls in component supplies, inventory accumulation fell year-on-year.

The **foreign trade balance** supported economic growth to the extent of 3.1 pp (vs. 2.1 pp). While exports of goods and services grew by 3.0% YoY (vs. 4.3%), imports fell by 1.1% (vs. growth of 1.5%). Exports were supported by improvements in supply chains, which enabled firms to complete work-in-progress production and subsequently export it. Imports, on the other hand, were dampened by weak domestic demand.

According to the flash estimate, seasonally adjusted GDP contracted by 0.3% QoQ in Q3 2023 (vs. growth of 0.4%).

Economic activity should start to pick up towards the end of the year, but growth will be hampered by economic problems in the main export markets. As a result, GDP is expected to contract by 0.5% in 2023 (vs. 0.2%). Foreign trade will drive the economy (due to highly positive contributions in the first half of the year), but government consumption and gross fixed capital formation will also be pro-growth. Economic growth will be held back by a continued weakness in household consumption as well as lower inventory accumulation. In 2024, real GDP could grow by 1.9% (vs. 2.3%) with a positive contribution from external as well as domestic demand. We expect the impact of the government's consolidation package on growth dynamics to be slightly negative (-0.3 pp).

Household final consumption expenditure is affected by a continued decline in real disposable income and restrictive monetary policy stance. By contrast, consumer spending by refugees from Ukraine, who are already classified as residents as of Q4 2022, will have a positive impact on full-year consumption growth. The savings rate should increase further given the persistently negative household sentiment. Its reduction, and the resulting stimulus effect on household consumption, is expected only next year. Nevertheless, the savings rate should remain above its long-run average over the forecast horizon. Taking these factors into account, real household consumption could fall by 2.7% (vs. 3.4%) this year. Thanks to the reduction in inflation, the aforementioned decline in the savings rate should be complemented by a renewed increase in real household income in 2024. Thus, despite a number of discretionary changes, household consumption expenditure could increase by 3.9% (unchanged).

General government consumption could grow by 2.4% in 2023 (unchanged). The migration wave from Ukraine has led to an increase in staff capacity, especially in education, which is reflected in employment growth. Purchases of goods and services are supported by current subsidies from EU funds in this year as the end of the 2014-2020 financial perspective approaches. In 2024, growth in general government consumption could slow to 1.6% (vs. 1.8%). In addition to fiscal consolidation, the transition to the new financial perspective 2021–2027 will have an effect, but it will be somewhat offset by a pick-up in current spending from other EU instruments, notably the Recovery and Resilience Facility.

Gross fixed capital formation is expected to slow down in 2023 due to economic problems in euro area countries. Its dynamics will also be hampered by monetary conditions, which will become restrictive towards the

end of the year. In contrast, investment activity will be positively affected by government spending co-financed by EU funds from the previous financial perspective. For next year, thanks to the expected economic growth in the euro area, we expect a recovery in private investment, but this will be hampered by the impact of restrictive monetary and fiscal policy stance. The transition to the new financial perspective of EU funds will lead to a decline in investment by the general government sector. Thus, gross fixed capital formation may increase by 2.2% (vs. 0.8%) in 2023, with growth slowing to 1.7% (vs. 0.7%) in 2024.

We assume that the **change in inventories** will have a negative effect on GDP growth over the entire forecast horizon. Nevertheless, the extent of inventory accumulation will remain high to ensure continuity of the production process in enterprises in the event of recurrent disruptions in the supply of key components. As a result, gross capital formation may fall by 3.9% (vs. 4.6%) this year and by 5.1% (vs. 3.8%) next year.

We expect **exports of goods and services** to grow by 2.4% this year (*vs. 4.3%*). The impact of the slowdown in export markets will be largely cushioned this year by a pick-up in export performance driven by the unwinding of supply chain problems and the completion of work-inprogress inventories (see Section 3.4). The projected acceleration of export growth in 2024 to 4.2% (*vs. 4.6%*) reflects the recovery of the main export markets. The dynamism of exports and domestic demand, especially import-intensive investment, is then reflected in the pace of **imports of goods and services**, which could rise slightly by 0.3% (*vs. 1.2%*) in 2023. The acceleration to 2.6% (*vs. 2.9%*) in 2024 mainly reflects the recovery in household consumption.

Graph 3.1.1: Resources of Gross Domestic Product

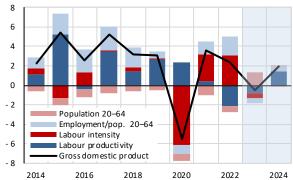
QoQ growth rate of real GDP in %, contrib. in pp, season. adjusted



Source: CZSO. Calculations of the MoF.

Graph 3.1.3: Real Gross Domestic Product

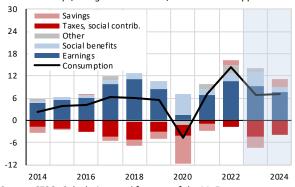
growth in %, contributions in percentage points



Note: Labour intensity gauges the number of hours worked per worker. Source: CZSO. Calculations and forecast of the MoF.

Graph 3.1.5: Nominal Consumption of Households

national concept, YoY growth rate in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.1.7: Investment by Sector

YoY growth rate of real GFCF in %, contributions in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.2: GDP by Type of Expenditure

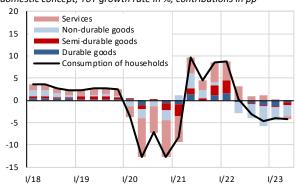
YoY growth rate of real GDP in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.1.4: Real Consumption of Households

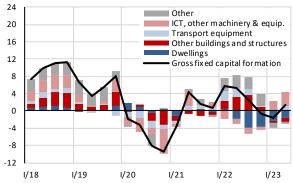
domestic concept, YoY growth rate in %, contributions in pp



Source: CZSO. Calculations of the MoF.

Graph 3.1.6: Investment by Type of Expenditure

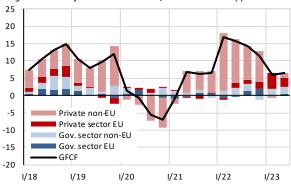
YoY growth rate of real GFCF in %, contributions in pp



Source: CZSO. Calculations of the MoF.

Graph 3.1.8: Sources of Investment Financing

YoY growth rate of nominal GFCF in %, contributions in pp



Source: CZSO. Calculations of the MoF.

Table 3.1.1: Real GDP by Type of Expenditure – yearly chained volumes, reference year 2015

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Gross domestic product	bill. CZK 2015	4 988	5 148	5 304	5 013	5 191	5 313	5 286	5 387	5 5 1 8	5 647
	growth in %	5.2	3.2	3.0	-5.5	3.6	2.4	-0.5	1.9	2.4	2.3
	growth in % $^{1)}$	5.3	3.2	3.0	-5.5	3.5	2.4	-0.4	1.8	2.5	2.4
Private consumption expenditure 2)	bill. CZK 2015	2 355	2 438	2 504	2 322	2 418	2 401	2 335	2 425	2 5 1 4	2 581
	growth in %	4.0	3.5	2.7	-7.2	4.1	-0.7	-2.7	3.9	3.7	2.7
Government consumption exp.	bill. CZK 2015	913	949	973	1014	1 027	1 033	1 058	1 075	1 097	1 118
	growth in %	1.8	3.9	2.5	4.2	1.4	0.6	2.4	1.6	2.0	2.0
Gross capital formation	bill. CZK 2015	1 323	1 425	1 489	1 351	1 609	1 699	1 633	1550	1 523	1 549
	growth in %	6.5	7.7	4.5	-9.3	19.1	5.6	-3.9	-5.1	-1.8	1.7
Gross fixed capital formation	bill. CZK 2015	1 248	1374	1 455	1 368	1 3 7 9	1 420	1 452	1 476	1 507	1541
	growth in %	4.9	10.0	5.9	-6.0	0.8	3.0	2.2	1.7	2.1	2.3
Change in stocks and valuables	bill. CZK 2015	75	51	34	-16	230	279	181	75	16	8
Exports of goods and services	bill. CZK 2015	4 168	4 322	4 386	4 034	4 3 1 2	4 623	4 732	4 933	5 102	5 232
	growth in %	7.2	3.7	1.5	-8.0	6.9	7.2	2.4	4.2	3.4	2.5
Imports of goods and services	bill. CZK 2015	3 771	3 989	4 051	3 719	4 2 1 4	4 479	4 494	4 609	4 725	4 840
	growth in %	6.3	5.8	1.5	-8.2	13.3	6.3	0.3	2.6	2.5	2.4
Gross domestic expenditure	bill. CZK 2015	4 592	4 811	4 964	4 693	5 053	5 131	5 025	5 056	5 144	5 259
	growth in %	4.3	4.8	3.2	-5.5	7.7	1.5	-2.1	0.6	1.7	2.2
Real gross domestic income	bill. CZK 2015	4 988	5 149	5 324	5 083	5 259	5 232	5 294	5 394	5 523	5 650
	growth in %	4.3	3.2	3.4	-4.5	3.4	-0.5	1.2	1.9	2.4	2.3
Contributions to GDP grow	/th										
Gross domestic expenditure	рр	3.9	4.4	3.0	-5.1	7.2	1.5	-2.0	0.6	1.6	2.1
Consumption	рр	2.3	2.4	1.8	-2.6	2.2	-0.2	-0.8	2.1	2.1	1.7
Household expenditure	рр	1.9	1.7	1.3	-3.4	1.9	-0.3	-1.3	1.8	1.7	1.3
Government expenditure	рр	0.3	0.7	0.5	0.8	0.3	0.1	0.5	0.3	0.4	0.4
Gross capital formation	рр	1.7	2.0	1.2	-2.6	5.0	1.7	-1.3	-1.5	-0.5	0.5
Gross fixed capital formation	рр	1.2	2.5	1.6	-1.6	0.2	0.8	0.6	0.4	0.6	0.6
Change in stocks	рр	0.5	-0.5	-0.3	-0.9	4.8	0.9	-1.8	-1.9	-1.0	-0.1
Foreign balance	рр	1.2	-1.2	0.0	-0.4	-3.6	0.9	1.5	1.3	0.8	0.2
External balance of goods	рр	0.9	-1.0	0.4	-0.3	-3.6	1.4	1.8	1.2	0.7	0.2
External balance of services	рр	0.3	-0.2	-0.4	-0.1	0.0	-0.5	-0.2	0.1	0.0	0.1
Gross value added	bill. CZK 2015	4 491	4 644	4 784	4 532	4 687	4 797	•	•	•	
	growth in %	5.2	3.4	3.0	-5.3	3.4	2.3				
Net taxes and subsidies on products	bill. CZK 2015	497	504	521	480	504	516				

¹⁾ From working day adjusted data.
2) Including consumption of non-profit institutions serving households (NPISH). Source: CZSO. Calculations and forecast of the MoF.

Table 3.1.2: Real GDP by Type of Expenditure – quarterly

chained volumes, reference year 2015

			202	2			20	23	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		***************************************	***************************************			***************************************		Estimate	Forecast
Gross domestic product	bill. CZK 2015	1 261	1 354	1 349	1 349	1 259	1 339	1 337	1 351
	growth in %	5.0	3.4	1.4	-0.1	-0.1	-1.1	-0.9	0.1
	growth in % ¹⁾	4.7	3.4	1.4	0.1	-0.4	-0.6	-0.6	0.2
***************************************	QoQ in % ¹⁾	0.6	0.2	-0.2	-0.4	0.1	0.0	-0.3	0.4
Private consumption expenditure 2)	bill. CZK 2015	589	612	603	597	558	583	593	601
	growth in %	8.3	-0.2	-4.3	-5.3	-5.3	-4.8	-1.7	0.8
Government consumption exp.	bill. CZK 2015	241	249	250	293	248	256	255	298
	growth in %	1.5	1.7	-1.9	0.9	2.9	2.8	2.0	1.9
Gross capital formation	bill. CZK 2015	371	448	458	422	358	413	451	410
	growth in %	11.0	11.6	1.6	-0.1	-3.4	-7.7	-1.5	-2.8
Gross fixed capital formation	bill. CZK 2015	313	363	362	383	308	367	375	402
	growth in %	5.7	5.2	2.4	-0.6	-1.6	1.3	3.7	4.8
Change in stocks and valuables	bill. CZK 2015	58	85	97	39	50	46	76	8
Exports of goods and services	bill. CZK 2015	1 122	1 166	1 119	1 215	1 200	1 202	1 110	1 220
	growth in %	2.8	3.2	13.1	10.4	7.0	3.0	-0.8	0.3
Imports of goods and services	bill. CZK 2015	1 069	1 129	1 088	1 192	1 106	1 117	1 082	1 188
	growth in %	5.9	3.8	8.0	7.5	3.4	-1.1	-0.5	-0.3
Gross domestic expenditure	bill. CZK 2015	1 201	1 307	1 309	1 314	1 165	1 252	1 297	1 3 1 0
	growth in %	7.5	3.9	-1.9	-2.2	-3.0	-4.2	-0.8	-0.3
Real gross domestic income	bill. CZK 2015	1 253	1 325	1 325	1 329	1 253	1 350	1 359	1 332
	growth in %	2.2	-0.6	-1.4	-1.9	0.0	1.9	2.5	0.3
Gross value added	bill. CZK 2015	1 145	1 222	1 214	1 217	1 160	1 220	•	•
	growth in %	4.4	3.3	1.4	0.5	1.4	-0.1		
	growth in % ¹⁾	4.0	3.2	1.4	0.8	1.0	0.4		
	QoQ in % ¹⁾	0.3	0.3	0.0	0.2	0.5	-0.3		
Net taxes and subsidies on products	bill. CZK 2015	116	132	136	132	98	118		

¹⁾ From seasonally and working day adjusted data 2) Including consumption of non-profit institutions serving households (NPISH). Source: CZSO. Calculations and forecast of the MoF.

Table 3.1.3: Nominal GDP by Type of Expenditure – yearly

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Gross domestic product	bill. CZK	5 111	5 411	5 791	5 709	6 109	6 786	7 363	7 726	8 096	8 448
	growth in %	6.5	5.9	7.0	-1.4	7.0	11.1	8.5	4.9	4.8	4.3
Private consumption expenditure 1)	bill. CZK	2 420	2 568	2 711	2 588	2 772	3 165	3 377	3 617	3 842	4 023
	growth in %	6.5	6.1	5.6	-4.5	7.1	14.2	6.7	7.1	6.2	4.7
Government consumption exp.	bill. CZK	959	1 050	1 134	1 243	1 3 1 0	1 374	1 506	1 577	1 650	1720
	growth in %	5.4	9.5	8.0	9.5	5.4	4.8	9.6	4.7	4.7	4.2
Gross capital formation	bill. CZK	1 348	1 472	1 599	1 493	1 846	2 182	2 196	2 138	2 142	2 217
	growth in %	8.0	9.2	8.7	-6.6	23.6	18.2	0.7	-2.7	0.2	3.5
Gross fixed capital formation	bill. CZK	1 273	1 423	1 568	1516	1 589	1817	1 952	2 041	2 128	2 2 1 5
	growth in %	6.4	11.7	10.2	-3.3	4.8	14.4	7.4	4.6	4.3	4.1
Change in stocks and valuables	bill. CZK	74	49	31	-22	257	364	244	96	13	1
External balance	bill. CZK	384	321	347	385	181	66	284	395	463	489
Exports of goods and services	bill. CZK	4 039	4 163	4 2 7 9	3 993	4 443	5 188	5 256	5 590	5 809	5 978
	growth in %	6.4	3.1	2.8	-6.7	11.3	16.8	1.3	6.3	3.9	2.9
Imports of goods and services	bill. CZK	3 654	3 842	3 932	3 608	4 262	5 122	4 972	5 194	5 346	5 489
	growth in %	6.6	5.1	2.3	-8.2	18.1	20.2	-2.9	4.5	2.9	2.7
Gross national income	bill. CZK	4 821	5 114	5 441	5 424	5 859	6 468	7 109	7 459	7 808	8 145
	growth in %	7.8	6.1	6.4	-0.3	8.0	10.4	9.9	4.9	4.7	4.3
Primary income balance	bill. CZK	-289	-297	-350	-285	-249	-318	-254	-268	-288	-303

¹⁾ Including consumption of non-profit institutions serving households (NPISH).

Source: CZSO. Calculations and forecast of the MoF.

Table 3.1.4: Nominal GDP by Type of Expenditure – quarterly

			202	2			202	23	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
				***************************************				Estimate	Forecast
Gross domestic product	bill. CZK	1 542	1 696	1 753	1 795	1 715	1 849	1 894	1 905
	growth in %	11.4	10.4	11.2	11.4	11.2	9.0	8.0	6.2
Private consumption expenditure ¹	bill. CZK	735	800	813	816	795	840	858	883
	growth in %	20.4	14.8	11.8	10.8	8.1	5.0	5.6	8.2
Government consumption exp.	bill. CZK	304	326	330	414	340	359	359	448
	growth in %	6.7	3.4	1.5	7.5	12.1	10.1	8.7	8.2
Gross capital formation	bill. CZK	452	564	604	562	479	540	615	562
	growth in %	20.8	24.7	14.6	14.0	6.0	-4.2	1.9	0.0
Gross fixed capital formation	bill. CZK	388	451	469	509	411	480	508	553
	growth in %	16.9	15.7	14.3	11.4	5.9	6.4	8.3	8.6
Change in stocks and valuables	bill. CZK	63	113	135	54	67	60	107	10
External balance	bill. CZK	51	7	6	2	100	111	61	12
Exports of goods and services	bill. CZK	1 209	1312	1 296	1370	1 340	1 324	1 231	1 361
	growth in %	10.3	13.9	25.2	18.2	10.8	0.9	-5.0	-0.7
Imports of goods and services	bill. CZK	1 159	1 306	1 290	1 368	1 240	1 213	1 171	1 349
	growth in %	18.0	20.9	24.4	17.6	7.0	-7.1	-9.3	-1.4

¹⁾ Including consumption of non-profit institutions serving households (NPISH). Source: CZSO. Calculations and forecast of the MoF.

Table 3.1.5: GDP by Type of Income – yearly

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
GDP	bill. CZK	5 111	5 411	5 791	5 709	6 109	6 786	7 363	7 726	8 096	8 448
	growth in %	6.5	5.9	7.0	-1.4	7.0	11.1	8.5	4.9	4.8	4.3
Balance of taxes and subsidies	bill. CZK	493	504	534	449	477	590	552	734	796	832
	% of GDP	9.7	9.3	9.2	7.9	7.8	8.7	7.5	9.5	9.8	9.8
	growth in %	8.6	2.2	6.0	-16.0	6.3	23.8	-6.6	33.1	8.4	4.5
Taxes on production and imports	bill. CZK	635	656	696	660	715	783				
	growth in %	6.6	3.3	6.2	-5.3	8.3	9.6				
Subsidies on production	bill. CZK	142	152	162	211	238	193				
	growth in %	0.4	7.2	6.7	30.3	12.6	-19.0				
Compensation of employees	bill. CZK	2 185	2 399	2 586	2 625	2 787	3 006	3 249	3 460	3 619	3 779
(domestic concept)	% of GDP	42.8	44.3	44.6	46.0	45.6	44.3	44.1	44.8	44.7	44.7
	growth in %	9.1	9.8	7.8	1.5	6.1	7.9	8.1	6.5	4.6	4.4
Wages and salaries	bill. CZK	1 680	1842	1 986	1 989	2 106	2 301	2 494	2 656	2 778	2 901
	growth in %	9.2	9.6	7.8	0.1	5.9	9.3	8.4	6.5	4.6	4.4
Social security contributions	bill. CZK	505	557	599	636	681	705	755	804	841	878
	growth in %	8.7	10.3	7.6	6.2	7.0	3.5	7.1	6.5	4.6	4.4
Gross operating surplus	bill. CZK	2 432	2 507	2 671	2 635	2 845	3 189	3 563	3 532	3 682	3 838
and mixed income	% of GDP	47.6	46.3	46.1	46.2	46.6	47.0	48.4	45.7	45.5	45.4
	growth in %	4.0	3.1	6.5	-1.4	8.0	12.1	11.7	-0.9	4.2	4.2
Consumption of capital	bill. CZK	1 022	1074	1 153	1 229	1 302	1 434	1 544	1 634	1 750	1869
	growth in %	3.5	5.0	7.4	6.5	6.0	10.1	7.7	5.8	7.1	6.8
Net operating surplus	bill. CZK	1 4 1 0	1 434	1518	1 406	1543	1 755	2 019	1 898	1932	1 968
	growth in %	4.3	1.7	5.9	-7.4	9.7	13.8	15.0	-6.0	1.8	1.9

Source: CZSO. Calculations and forecast of the MoF.

Table 3.1.6: GDP by Type of Income – quarterly

			202	2			20:	23	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
			•••••			•••••		Estimate	Forecast
GDP	bill. CZK	1 542	1 696	1 753	1 795	1 715	1 849	1 894	1 905
	growth in %	11.4	10.4	11.2	11.4	11.2	9.0	8.0	6.2
Balance of taxes and subsidies	bill. CZK	124	155	166	145	110	155	152	135
	growth in %	73.4	33.2	13.0	2.0	-11.4	-0.4	-8.4	-6.9
Compensation of employees	bill. CZK	705	747	743	811	774	806	794	875
(domestic concept)	growth in %	10.2	6.9	6.6	8.0	9.8	7.9	6.8	7.9
Wages and salaries	bill. CZK	538	571	570	622	593	619	610	672
	growth in %	12.0	8.5	7.7	9.2	10.2	8.3	7.0	8.1
Social security contributions	bill. CZK	167	176	173	189	181	187	184	202
	growth in %	4.9	1.9	3.1	4.2	8.3	6.6	6.2	7.4
Gross operating surplus	bill. CZK	712	794	844	839	831	889	947	896
and mixed income	growth in %	6.0	10.1	15.2	16.8	16.7	12.0	12.3	6.7

 ${\it Source: CZSO. \ Calculations \ and \ forecast \ of \ the \ MoF.}$

3.2 Prices

The annual **consumer price** inflation slowed to 6.9% (vs. 7.1%) in September 2023. The stronger decline in food prices was partly offset by higher fuel prices and a weaker koruna. In terms of consumer basket divisions, the main driver of September annual inflation was the housing division (2.6 pp contribution), mainly due to price increases of 16.5% for electricity, 12.5% for natural gas and 36.2% for heat and hot water. In addition, the food and non-alcoholic beverages division contributed 1.1 pp, across all sub-sections except for oils and fats. However, food prices have been declining for several months now. Administrative measures added 2.8 pp to inflation, of which regulated prices (especially energy prices) added 2.6 pp and tax changes almost 0.2 pp.

Higher annual inflation rate in September as measured by the HICP (8.3%) compared to inflation according to the national CPI was due to a significant slowdown in imputed rents, which are not included in the HICP. Imputed rents are largely determined by market prices of new flats and houses. Their very high prices (Graph 3.2.8), as well as more expensive and regulatory restricted mortgage lending, are leading to a significant slowdown in imputed rents dynamics through the lower availability of owner-occupied housing.

A period of markedly elevated inflation has continued this year, but annual price growth has been declining at a rapid pace over the course of the year. In addition to the earlier waiver of the renewable energy charge, gas and electricity prices have been capped from January 2023, adding to a decline in their contributions to annual inflation. Moreover, the successful filling of European gas reservoirs before the start of the last heating season, the warm winter, savings by household and businesses and the securing of new gas suppliers have contributed to a significant drop in wholesale energy prices, which has started to be gradually reflected in consumer prices.

The contribution of regulated prices to the average inflation rate should be highly positive, mainly due to energy prices. Changes in indirect taxes will include not only an increase in excise duties on tobacco products but also changes in excise duties on fuel. Overall, administrative measures could contribute 4.3 pp (unchanged) to the average inflation rate in 2023.

The oil price should be anti-inflationary in 2023 in full-year terms, as should the exchange rate of the koruna against major world currencies, despite unfavourable developments of both factors towards the end of the

year. Supply chains should already be functioning without major problems over the forecast horizon, so inflationary pressures stemming from supply-side frictions should not be significant. Due to the reduction in private consumption as a result of a significant decrease in real incomes and the reduced willingness of households to spend, the impact of the economy's position in the business cycle should be anti-inflationary. However, the tight labour market is increasing pressures on nominal wage growth and thus has an inflationary effect. This year, inflation has already been more strongly dampened by the transmission mechanism of higher monetary policy rates.

In 2024, inflationary pressures will be driven predominantly by market factors. The contribution of regulated prices to the average inflation rate should be slightly positive. While non-regulated part of both electricity and gas should become significantly cheaper, the very strong increase in the regulated components of overall electricity and gas prices will have an opposite effect. Other regulated prices will reflect especially an increase in the price of annual voucher for the motorway vignette. The fiscal consolidation package will further have an effect on indirect taxes. Increases in excise duties on alcohol and tobacco products will increase inflation next year, while the contribution of changes in value added tax rates reported in price statistics should be negative¹. Thus, the first-round effects of changes in indirect taxes could increase inflation by almost 0.1 pp.

A restrictive effect of monetary policy will be supported by a negative income effect of the fiscal consolidation package, and together they will significantly moderate inflationary pressures. Inflationary factors could include not only relatively high nominal wage growth, but also the oil price or the depreciation of the koruna against major world currencies.

In line with the above, we expect the **average inflation rate** to reach 10.8% (*vs.* 10.9%) in 2023 and to fall significantly to 3.3% (*vs.* 2.8%) in 2024. Annual inflation should be between 7% and 8% at the end of this year, but could be close to the upper bound of the tolerance band around the CNB's target next year.

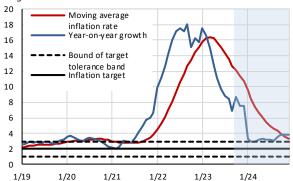
¹ The primary impact of the VAT change is fully captured by the CZSO in the administrative component, while the secondary impact of the expected incomplete pass-through to consumer prices is recorded in the market component of inflation.

In Q2 2023, the GDP deflator increased by 10.2% (vs. 10.5%) with a 7.4% (vs. 8.1%) increase in the gross domestic expenditure deflator and an improvement of 4.3% (vs. 3.6%) in the terms of trade. The evolution of the gross domestic expenditure deflator mainly reflected consumer price inflation. The significantly better performance of the terms of trade was mainly driven by lower import prices, particularly of mineral fuels and chemicals.

The GDP deflator could increase by 9.0% (unchanged) in 2023. The continued strong growth of the gross domestic expenditure deflator, especially of household con-

Graph 3.2.1: Consumer Prices

YoY growth rate in %



Source: CNB, CZSO. Calculations and forecast of the MoF.

Graph 3.2.3: Core Inflation and Unit Labour Costs

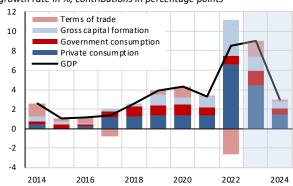
YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.2.5: Gross Domestic Product Deflator

growth rate in %, contributions in percentage points



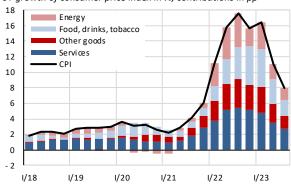
Source: CZSO. Calculations and forecast of the MoF.

sumption, will be amplified by an improvement in the terms of trade this year (see Graph 3.2.5). In 2024, the GDP deflator growth could slow down to 3.0% (vs. 2.6%), due to lower price dynamics across all components of domestic demand.

A decline in the prices of many production inputs, in annual terms especially of oil and gas, will have a positive impact on the terms of trade in 2023. Foreign trade prices should more or less stabilise next year. As a result, the terms of trade could improve by 2.3% (vs. 1.9%) this year and by 0.1% (vs. 0.2%) in 2024.

Graph 3.2.2: Consumer Prices in Main Divisions

YoY growth of consumer price index in %, contributions in pp



Source: CZSO. Calculations of the MoF.

Graph 3.2.4: CZK/EUR and Koruna Price of Oil

CZK/EUR appreciation, YoY change in CZK price of oil, in %



Source: CNB, U.S. EIA. Calculations and forecast of the MoF.

Graph 3.2.6: Terms of Trade

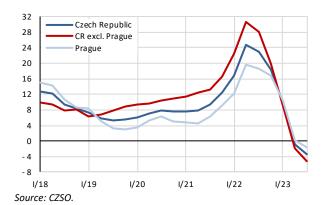
YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

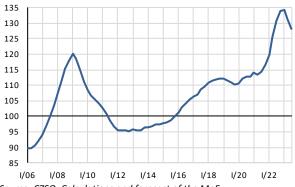
Graph 3.2.7: Offering Prices of Flats

YoY growth rate in %



Graph 3.2.8: Prices of Flats Relative to Average Wage

ratio of index of offering prices of flats to index of average wage, annual moving totals, 2015=100



Source: CZSO. Calculations and forecast of the MoF.

Table 3.2.1: Prices – yearly

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Consumer Price In	dex										
Level	average 2015=100	103.1	105.3	108.3	111.8	116.1	133.6	147.9	152.9	156.8	160.0
Average inflation rate	%	2.5	2.1	2.8	3.2	3.8	15.1	10.8	3.3	2.6	2.0
Administrative measures 1)	percentage points	-0.1	0.3	0.6	0.5	0.0	2.8	4.3	0.3	0.5	0.3
Market increase	percentage points	2.6	1.8	2.2	2.7	3.8	12.3	6.5	3.0	2.1	1.7
Harmonized index of cons	umer prices										
Level	average 2015=100	103.1	105.1	107.8	111.4	115.1	132.1	148.1	153.4	157.3	160.5
Average inflation rate	growth in %	2.4	2.0	2.6	3.3	3.3	14.8	12.1	3.5	2.6	2.0
Deflators											
GDP	average 2015=100	102.5	105.1	109.2	113.9	117.7	127.7	139.3	143.4	146.7	149.6
	growth in %	1.3	2.6	3.9	4.3	3.3	8.5	9.0	3.0	2.3	2.0
Gross domestic expenditure	average 2015=100	102.9	105.8	109.7	113.4	117.3	131.0	140.9	145.0	148.4	151.4
	growth in %	2.3	2.8	3.7	3.4	3.4	11.6	7.6	2.9	2.4	2.0
Consumption of households	average 2015=100	102.7	105.3	108.3	111.4	114.6	131.8	144.6	149.1	152.8	155.9
	growth in %	2.3	2.5	2.8	2.9	2.9	15.0	9.7	3.1	2.5	2.0
Consumption of government	average 2015=100	105.0	110.6	116.6	122.6	127.5	133.0	142.4	146.7	150.5	153.8
	growth in %	3.5	5.4	5.4	5.2	4.0	4.3	7.1	3.0	2.6	2.2
Fixed capital formation	average 2015=100	102.0	103.6	107.7	110.8	115.2	128.0	134.5	138.4	141.2	143.7
	growth in %	1.5	1.6	4.0	2.9	3.9	11.1	5.1	2.9	2.1	1.8
Exports of goods and services	average 2015=100	96.9	96.3	97.5	99.0	103.0	112.2	111.1	113.3	113.9	114.3
	growth in %	-0.7	-0.6	1.3	1.5	4.1	8.9	-1.0	2.0	0.5	0.4
Imports of goods and services	average 2015=100	96.9	96.3	97.1	97.0	101.1	114.4	110.6	112.7	113.2	113.4
	growth in %	0.3	-0.6	0.8	0.0	4.2	13.1	-3.2	1.9	0.4	0.2
Terms of trade	average 2015=100	100.0	100.0	100.5	102.0	101.9	98.1	100.4	100.5	100.6	100.7
	growth in %	-1.0	0.0	0.5	1.5	-0.1	-3.7	2.3	0.1	0.1	0.1

¹⁾ The contribution of change in regulated prices and indirect taxes to the average inflation rate. Source: CZSO, Eurostat. Calculations and forecast of the MoF.

Table 3.2.2: Prices – quarterly

			202	2			20	23	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	Forecast
Consumer Price Index	average 2015=100	126.4	132.8	137.6	137.6	147.1	147.6	148.6	148.4
	growth in %	11.2	15.8	17.6	15.7	16.4	11.1	8.0	7.9
Administrative measures 1)	percentage points	2.2	3.1	3.6	2.5	4.9	4.0	3.4	4.6
Market increase	percentage points	9.0	12.7	14.0	13.2	11.5	7.1	4.6	3.3
Harmonized index of consumer	average 2015=100	124.7	131.4	135.9	136.5	147.1	147.9	148.8	148.7
prices	growth in %	10.2	15.0	17.4	16.5	18.0	12.6	9.5	8.9
Deflators									
GDP	average 2015=100	122.3	125.3	130.0	133.0	136.2	138.1	141.7	141.0
	growth in %	6.2	6.7	9.6	11.5	11.4	10.2	9.0	6.0
Gross domestic expenditure	average 2015=100	124.1	129.2	133.6	136.4	138.6	138.8	141.3	144.5
	growth in %	9.2	11.1	12.7	13.5	11.6	7.4	5.8	5.9
Consumption of households	average 2015=100	124.8	130.8	135.0	136.7	142.4	144.1	144.9	146.8
	growth in %	11.1	15.0	16.9	17.0	14.2	10.2	7.3	7.4
Consumption of government	average 2015=100	125.8	130.6	132.3	141.4	137.1	139.8	141.0	150.2
	growth in %	5.1	1.6	3.4	6.5	9.0	7.1	6.6	6.2
Fixed capital formation	average 2015=100	124.2	124.4	129.8	132.8	133.7	130.7	135.5	137.6
	growth in %	10.6	10.0	11.6	12.1	7.6	5.1	4.4	3.6
Exports of goods and services	average 2015=100	107.8	112.5	115.8	112.7	111.6	110.2	110.9	111.6
	growth in %	7.3	10.3	10.8	7.0	3.6	-2.1	-4.2	-1.0
Imports of goods and services	average 2015=100	108.4	115.6	118.6	114.7	112.1	108.5	108.1	113.5
	growth in %	11.4	16.4	15.2	9.4	3.4	-6.1	-8.8	-1.0
Terms of trade	average 2015=100	99.5	97.3	97.6	98.3	99.6	101.5	102.5	98.3
	growth in %	-3.6	-5.3	-3.8	-2.2	0.1	4.3	5.0	0.0

¹⁾ The contribution of change in regulated prices and indirect taxes. Source: CZSO, Eurostat. Calculations and forecast of the MoF.

3.3 Labour Market

The LFS has undergone a significant methodological change this year. The survey results are no longer recalculated for the total population, but only for the population living in so-called private households. Thus, for the construction of the weights assigned to individual survey respondents, estimates of the number of persons living in, for example, correctional facilities, social care institutions, retirement homes, etc., as well as estimates of the number of prisoners and immigrant foreigners not living in dwellings (i.e. living, for example, in a hostel) are now subtracted from the demographic statistics. At the same time, war refugees from Ukraine were taken into account in the new weights from 2023. The basic indicators of the LFS from 2018 onwards have been back-calculated according to this methodology, with detailed breakdowns available in the new methodology from 2022 onwards. Given these breaks in the LFS time series, employment will now be published exclusively in the national accounts methodology in the Macroeconomic Forecast. Only the forecast of selected ratio indicators that are not significantly affected by the above adjustments will be published from the LFS.

Employment (national accounts) increased by 0.9% YoY (vs. 0.7%) in Q2 2023. Growth was driven by sectors in non-market and market services and dampened by developments in manufacturing. According to the flash estimate, employment rose by 0.5% YoY in Q3 and, thanks to continued strong labour demand, is expected to increase on a year-on-year basis over the forecast horizon. Thus, it could grow by 0.9% (vs. 1.1%) on average in 2023 and by 0.5% (vs. 0.7%) in 2024. The slight downward revision in both years is affected by the deterioration in the GDP estimate, but the dynamics will be positively influenced by growth in employment of foreigners, supported by government measures aimed at facilitating and accelerating hiring of skilled labour from abroad.

According to the MoLSA data on job vacancies, the shortage of workers was also evident in Q3. At the end of September, the number of vacancies exceeded the number of registered unemployed in 5 regions or 34 districts. However, far from all vacancies registered by labour offices can be considered active. Of the job vacancies advertised on the website of labour offices, approx. 41% were active at the forecast cut-off date (vacancies with the last change after 1 May 2023 and a start date on or after 1 August 2023). According to the CZSO's business cycle survey, the shortage of employees remains a major barrier to output growth in the construction sector and is also not insignificant in industry. However, this problem is mitigated by refugees from Ukraine.

Despite a slowdown in the growth of demand for foreign workers, the level of demand remains strong. According to the MoLSA data, the number of foreign employees increased by 34,000 YoY to 807,000 in Q3 2023. Workers from Ukraine and Slovakia have long dominated, with

the number of Ukrainian employees rising by 23,000 YoY to 276,000 in Q3 this year.

Unemployment rate fell to 2.5% (*vs. 2.8%*) in Q2 2023. The seasonally adjusted jobless rate (15–64 years) fell to 2.6% in August. Due to more favourable labour market developments compared to the August forecast, we expect the unemployment rate to be 2.7% (*vs. 2.8%*) for the full year. Due to weaker economic momentum in H2 this year, which will have a lagged impact on the labour market in early 2024, we estimate a slight increase in the unemployment rate to 2.8% (*vs. 2.7%*) next year.

The share of unemployed persons (MoLSA) in the labour office registers has been increasing year-on-year since last October. For 2023 it could be 3.6% (*unchanged*), rising slightly to 3.7% (*vs. 3.5%*) in 2024.

The **participation rate** (20–64 years) rose by 1.4 pp YoY to 83.9% (vs. 81.8%) in Q2 2023. The sharp increase was driven by strong labour force growth outpacing population growth. For this year as a whole, the economic activity rate could reach 83.7% (vs. 82.8%). Given the above factors, labour force growth should remain relatively dynamic in 2024, but the working-age population should grow much more slowly. As a result, the participation rate should increase further to 84.4% (vs. 83.2%).

The **volume of wages and salaries** increased by 8.3% (vs. 7.8%) in Q2 2023, driven mostly by a 7.4% increase of wages in manufacturing (with a 0.9% decrease in the number of employees).

The labour market tightness, manifested by labour shortages in many occupations, is boosting the dynamics of nominal wages and salaries. Rising prices and a growing number of employees are acting in the same direction. In addition, the minimum wage has been increased by 6.8% since 1 January 2023. The guaranteed wage has increased at the same rate only in the highest job group (but this is probably only received by a marginal number of people), while the other grades have remained unchanged. Automatic indexation of teachers' salaries will support earnings growth next year, but there will still be a significant year-on-year reduction in the contribution of the public sector. Earnings dynamics will thus be driven by the private sector over the entire forecast horizon. As a result of the higher expected inflation rate, we forecast a stronger increase in nominal wages in 2024. Wages and salaries could increase by 8.4% (unchanged) this year and by 6.5% (vs. 6.1%) in 2024.

The average wage (full-time equivalent) rose by 7.7% (vs. 7.9%) in Q2 2023, with manufacturing contributing 1.9 pp. The average nominal wage increased most in the electricity, gas, steam and air conditioning supply (by 13.7%) and least in other service activities (by 2.9%). Taking into account the above factors, the average wage could increase by 8.0% (vs. 8.1%) this year, while its growth could slow down to 6.3% (vs. 5.8%) in 2024.

Graph 3.3.1: Employment

YoY growth rate in%, contributions in pp, national accounts



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.3.3: Indicators of Unemployment

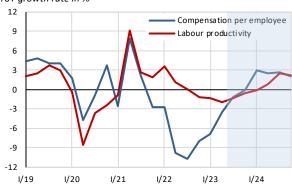
seasonally adjusted data, in%



Source: CZSO, MoLSA. Calculations and forecast of the MoF.

Graph 3.3.5: Compens. per Employee and Productivity

YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.3.7: Nominal Wage Bill

YoY growth rate in %, domestic concept of the wage bill



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.3.2: Number of Foreign Employees in the CR

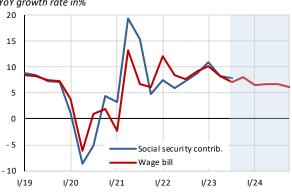
YoY change in thousands of persons



Source: MoLSA. Calculations of the MoF.

Graph 3.3.4: Social Security Contributions and Earnings

YoY growth rate in%



Source: CZSO, MoF. Calculations and forecast of the MoF.

Graph 3.3.6: Nominal Monthly Wages

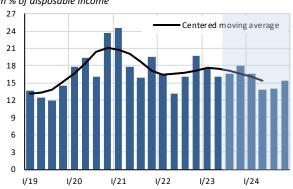
YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.3.8: Gross Savings Rate of Households

in % of disposable income



Source: CZSO. Calculations and forecast of the MoF.

Table 3.3.1: Labour Market - yearly

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
National accou	ınts										
Employment	av. in thous. persons	5 346	5 417	5 430	5 337	5 358	5 438	5 484	5 5 1 4	5 527	5 535
	growth in %	1.5	1.3	0.2	-1.7	0.4	1.5	0.9	0.5	0.2	0.1
Employees	av. in thous. persons	4 581	4 653	4 678	4 605	4 654	4 738	4 762	4 784	4 794	4 799
	growth in %	1.8	1.6	0.5	-1.6	1.1	1.8	0.5	0.5	0.2	0.1
Self-employed persons	av. in thous. persons	764	764	752	732	703	700	723	730	733	735
	growth in %	-0.1	-0.1	-1.5	-2.7	-3.9	-0.5	3.2	1.0	0.4	0.3
Wage bill	growth in %	9.2	9.6	7.8	0.1	5.9	9.3	8.4	6.5	4.6	4.4
Labour productivity	growth in %	3.6	1.9	2.8	-3.9	3.2	0.8	-1.3	1.3	2.2	2.2
Unit labour costs	growth in %	3.5	6.1	4.3	7.3	1.8	5.1	9.0	4.6	2.1	2.1
Compensation of employees	% of GDP	42.8	44.3	44.6	46.0	45.6	44.3	44.1	44.8	44.7	44.7
Labour Force Su	ırvey										
Unemployment rate	average in %	2.9	2.2	2.0	2.6	2.8	2.2	2.7	2.8	2.7	2.6
Employment rate 20–64	average in %	78.9	80.3	80.7	80.0	80.3	81.4	81.9	82.5	82.8	83.0
Participation rate 20–64	average in %	80.8	81.7	81.9	81.8	82.2	82.7	83.7	84.4	84.7	84.8
Registered unemp	loyment										
Unemployment	av. in thous. persons	318	242	212	259	280	252	265	265	251	247
Share of unemployed 1)	average in %	4.3	3.2	2.8	3.5	3.8	3.4	3.6	3.7	3.5	3.4
Job vacancies	av. in thousands	178	285	340	332	346	326				
Business statis	tics										
Average monthly wage											
Nominal	CZK monthly	29 638	32 051	34 578	36 176	38 277	40 317	43 536	46 265	48 398	50 475
	growth in %	6.7	8.1	7.9	4.6	5.8	5.3	8.0	6.3	4.6	4.3
Real	CZK 2015	28 747	30 438	31 928	32 358	32 969	30 177	29 429	30 259	30 866	31 551
	growth in %	4.3	5.9	4.9	1.3	1.9	-8.5	-2.5	2.8	2.0	2.2
Median monthly wage	CZK monthly	25 398	27 561	29 439	31 049	32 795	34 598				
	growth in %	7.2	8.5	6.8	5.5	5.6	5.5				

Note: Following the 2021 Census, new demographic weights have been applied in the LFS since Q1 2022; a new weighting methodology (weighting to the population in private households) is also applied in the data from 2022 onwards. There is therefore a break in the time series between 2021 and 2022.

 ${\it Source: CZSO, MoLSA. Calculations and forecast of the MoF.}$

 $^{^{1)}\,}$ Share of available job seekers aged 15 to 64 years in the population of the same age.

Table 3.3.2: Labour Market – quarterly

Table 3.3.2: Labour Mark	- qualitarity		202	2					
		Q1	Q2	.2 Q3	Q4	Q1	20: Q2	23 Q3	Q4
		Qı	Ų2	Ųs	Ų4	Ųı	QZ	7	•
Ni-kil			***************************************	***************************************				Estimate	Forecast
National acc									
Employment	av. in thous. persons	5 375	5 438	5 477	5 461	5 445	5 486	5 504	5 502
	YoY growth in %	1.3	2.2	1.4	1.1	1.3	0.9	0.5	0.8
	QoQ growth in %	0.1	1.5	-0.3	-0.1	0.2	1.0	-0.7	0.3
Wages and salaries	growth in %	12.0	8.5	7.7	9.2	10.2	8.3	7.0	8.1
Labour Force	Survey								
Unemployment rate	average in %	2.2	2.1	2.1	2.2	2.6	2.5	2.9	2.8
Employment rate 20-64	average in %	80.5	80.8	81.2	81.7	81.5	82.2	81.8	82.2
	increase over a year					1.0	1.4	0.6	0.5
Participation rate 20–64	average in %	82.6	82.5	82.9	83.1	83.2	83.9	83.8	84.0
	increase over a year					0.6	1.4	0.8	1.0
Registered unem	ployment								
Unemployment	av. in thous. persons	262	240	245	259	279	259	259	263
Share of unemployed 1)	average in %	3.5	3.3	3.3	3.5	3.8	3.5	3.5	3.6
Job vacancies	av. in thousands	356	340	313	296	284	285	284	
Business sta	tistics								
Average monthly wage									
Nominal	CZK monthly	37 999	40 093	39 848	43 279	41 299	43 193	42 677	46 974
	growth in %	6.1	3.4	5.2	6.6	8.7	7.7	7.1	8.5
Real	CZK 2015	30 063	30 191	28 959	31 453	28 075	29 264	28 720	31 645
	growth in %	-4.6	-10.7	-10.6	-7.9	-6.6	-3.1	-0.8	0.6
Median monthly wage	CZK monthly	31 904	34 154	34 984	37 349	34 770	36 816		
	growth in %	5.0	4.1	5.4	7.4	9.0	7.8		

Note: Following the 2021 Census, new demographic weights have been applied in the LFS since Q1 2022; a new weighting methodology (weighting to the population in private households) is also applied in the data from 2022 onwards. There is therefore a break in the time series between 2021 and 2022.

¹⁾ Share of available job seekers aged 15 to 64 years in the population of the same age. Source: CZSO, MoLSA. Calculations and forecast of the MoF.

Table 3.3.3: Income and Expenditures of Households – yearly

Table 5.5.5. Income and Expendi		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
										Forecast	Forecast
Current income											
Compensation of employees	bill.CZK	1 923	2 038	2 223	2 430	2 599	2 650	2 800	3 015	3 264	3 477
	growth in %	5.4	6.0	9.1	9.3	7.0	1.9	5.7	7.7	8.2	6.5
Gross operating surplus	bill.CZK	691	703	740	801	845	833	856	927	964	1001
and mixed income	growth in %	2.4	1.7	5.2	8.3	5.5	-1.4	2.7	8.3	4.1	3.8
Property income received	bill.CZK	127	133	162	162	163	129	171	234	282	290
	growth in %	-4.3	4.1	21.9	0.2	0.5	-20.9	32.5	37.0	20.5	2.8
Social benefits not-in-kind	bill.CZK	613	630	650	685	738	885	923	985	1 106	1 152
	growth in %	2.8	2.8	3.2	5.4	7.7	19.9	4.3	6.6	12.3	4.2
Other current transfers received	bill.CZK	181	217	244	281	338	363	471	571	607	634
	growth in %	13.3	19.4	12.8	15.1	20.4	7.3	29.8	21.2	6.2	4.4
Current expenditure											
Property income paid	bill.CZK	14	14	13	19	28	27	26	50	70	73
	growth in %	-10.7	0.2	-7.4	43.2	44.8	-2.7	-2.3	89.5	39.6	3.9
Curr. taxes on income and property	bill.CZK	205	227	264	309	316	342	266	265	305	328
	growth in %	3.9	10.8	16.3	16.9	2.3	8.3	-22.3	-0.5	15.4	7.5
Social contributions	bill.CZK	732	775	836	911	976	1028	1129	1181	1 282	1 389
	growth in %	5.3	5.8	7.9	9.0	7.1	5.3	9.8	4.6	8.5	8.4
Other current transfers paid	bill.CZK	169	207	238	278	335	358	469	549	583	611
	growth in %	12.5	22.4	15.3	16.5	20.6	6.7	31.1	17.1	6.2	4.8
Gross disposable income	bill.CZK	2 414	2 497	2 666	2 842	3 029	3 106	3 331	3 687	3 982	4 152
	growth in %	3.7	3.4	6.8	6.6	6.6	2.5	7.3	10.7	8.0	4.3
Final consumption	bill.CZK	2 152	2 241	2 383	2 524	2 663	2 536	2 716	3 104	3 312	3 548
	growth in %	3.9	4.1	6.4	5.9	5.5	-4.8	7.1	14.3	6.7	7.1
Change in share in pension funds	bill.CZK	33	31	32	33	37	38	38	28	14	18
Gross savings	bill.CZK	295	286	315	350	404	607	653	611	683	623
Capital transfers											
(income (-) / expenditure (+))	bill.CZK	-12	-14	-11	-12	-13	-41	-35	-25	-29	-26
Gross capital formation	bill.CZK	220	237	216	261	297	300	314	310	320	332
	growth in %	2.9	7.9	-9.2	21.2	13.7	0.9	4.9	-1.3	3.1	3.6
Change in financial assets and liab.	bill.CZK	85	61	110	101	116	348	375	327	393	319
Real disposable income	growth in %	3.7	3.0	4.4	4.0	3.7	-0.4	4.3	-3.8	-1.5	1.1
Gross savings rate	%	12.1	11.3	11.7	12.2	13.2	19.3	19.4	16.4	17.1	14.9

Source: CZSO. Calculations of the MoF.

3.4 External Relations

Export markets fell by 5.0% YoY (vs. 3.2%) in Q2 2023. The worse-than-estimated development was largely due to a decline in the import intensity of most of the Czech Republic's main trading partners (by 1.5 pp). The decrease in imports reflected lower volumes of imported mineral fuels due to the easing of the threat of energy commodity shortages and a decline in imports for intermediate consumption due to worsening conditions in industry. High accumulation of inventories last year due to concerns about high inflation and component supply shortfalls probably also played a role. Given the expected development of economic activity abroad (see Chapter 1.1) and the fall in import intensity, we expect export markets to decline by 3.9% (vs. 2.5%) this year. In 2024, export markets could grow by 2.5% (vs. 2.7%) thanks to the recovery of the main trading partners' economies.

Export performance rose by 9.7% (vs. 8.5%) in Q2 2023 due to a stronger recovery in automotive production as problems in global supply chains fade. The expected 6.4% (vs. 7.0%) performance increase this year should be supported by the unwinding of supply-side frictions and inventory drawdowns, but it will be negatively affected by the expected lower volume of industrial orders from abroad and the year-on-year appreciation of the koruna against the euro, particularly in the first half of the year (see Chapter 1.4). For 2024, we estimate export performance to grow by 1.6% (vs. 1.7%) in the context of a further easing of price pressures for imported raw materials.

The current account of the balance of payments reached a deficit of 4.3% of GDP (vs. 4.1% of GDP) in Q2 2023². The 0.4% of GDP year-on-year improvement was mainly due to the return of the balance of foreign trade in goods to surplus, but the widening of the primary income deficit had the opposite effect.

The **balance of goods** improved by 2.8% of GDP year-onyear in Q2 2023, reaching a surplus of 1.3% of GDP (vs. 0.8% of GDP). The positive trade balance reflects cheaper imported energy commodities and improved conditions in the export-oriented automotive industry.

Mineral fuel prices continue to be an important factor influencing the **terms of trade**. The deficit on the fuel part of the balance was 3.6% of GDP (*vs. 4.2% of GDP*) in Q2 2023. Given the evolution of oil prices (see Chapter 1.2) and other energy commodities (especially natural gas), we expect the deficit to narrow to 3.3% of GDP (*vs. 3.7% of GDP*) this year. In 2024, the deficit could narrow further to 3.2% of GDP (*vs. 3.4% of GDP*).

We expect the balance of goods to reach a surplus of 2.1% of GDP (vs. 2.4% of GDP) this year, and for 2024 we project a further increase to 3.2% of GDP (vs. 3.5% of GDP). The balance of goods will be positively affected by improving terms of trade and the unwinding of problems in supply chains, which allows firms to complete work-in-progress production and then export it. In 2024, the surplus in foreign trade with goods will also be supported by the economic recovery abroad. Stronger importintensive investment activity will act in the opposite direction.

The **balance of services** posted a surplus of 1.1% of GDP (vs. 1.2% of GDP) in Q2 2023. The 0.5% of GDP year-on-year decline in the surplus was driven by an increase in imports of telecommunications and insurance services. The tourism services balance also deteriorated, reflecting increased demand of Czech residents for foreign holidays. For this year, the services balance could end with a surplus of 1.1% of GDP (vs. 1.3% of GDP). Thanks to the economic recovery in the euro area (see Chapter 1.1), the surplus could increase to 1.3% of GDP (vs. 1.5% of GDP) next year.

The **primary income** deficit widened by 2.0% of GDP year-on-year to 6.3% of GDP (vs. 5.7% of GDP) in Q2 2023 due to higher outflows of direct investment income (mainly dividends). In absolute terms, the deficit rose to a record CZK 449 billion. The deficit was also driven by a record-high dividend payout in Q3 2022, boosted by the payment of retained profits of the domestic banking sector from 2019 and 2020. In the absence of this one-off factor, the deficit should narrow to 5.3% of GDP (vs. 5.0% of GDP) in 2023, while in 2024 it could decrease slightly to 5.2% of GDP (unchanged), given the expected evolution of corporate profits.

Against this background, we expect the **current account of the balance of payments** to be in deficit over the forecast horizon. The deficit could reach 2.4% of GDP (vs. 1.7% of GDP) this year and narrow to 1.2% of GDP (vs. 0.6% of GDP) in 2024.

The current external balance (national accounts methodology) reached a deficit of 2.2% of GDP in Q2 2023 (see Chart 3.4.8). While households' savings were 5.2% of GDP higher than their investment, in the general government and non-financial corporations sectors the relationship between savings and investment was the opposite, with gross capital formation higher than gross savings by 3.8% and 3.3% of GDP, respectively.

 $^{^{\}rm 2}$ All quarterly data relative to GDP are reported in annual moving totals.

Graph 3.4.1: GDP and Goods Imports of Partner Countries

YoY growth rate in %, seasonally adjusted



Graph 3.4.3: Deflator of Exports of Goods

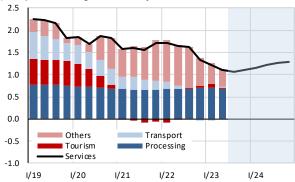
YoY growth in %, contributions in percentage points



Source: CNB, CZSO. Calculations and forecast of the MoF.

Graph 3.4.5: Balance of Services

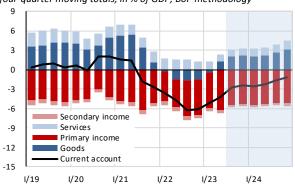
four-quarter moving totals, in % of GDP



Source: CNB, CZSO. Calculations and forecast of the MoF.

Graph 3.4.7: Current Account

four-quarter moving totals, in % of GDP, BoP methodology



Source: CNB, CZSO. Calculations and forecast of the MoF.

Graph 3.4.2: Real Exports of Goods

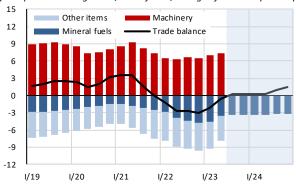
YoY growth in %, contributions in pp, seasonally adjusted



Source: CZSO, Eurostat. Calculations and forecast of the MoF.

Graph 3.4.4: Balance of Trade

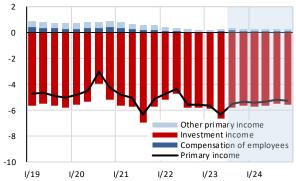
four-quarter moving totals, in % of GDP, change of ownership concept



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.4.6: Balance of Primary Income

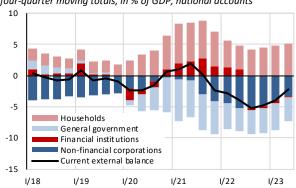
four-quarter moving totals, in % of GDP



Source: CNB, CZSO. Calculations and forecast of the MoF.

Graph 3.4.8: Current External Balance

four-quarter moving totals, in % of GDP, national accounts



Source: CZSO. Calculations of the MoF.

Table 3.4.1: Decomposition of Exports of Goods (National Accounts Methodology) – yearly

seasonally adjusted

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
										Forecast	Forecast
GDP 1)	average of 2010=100	109.2	111.5	114.9	117.4	119.6	113.7	119.4	122.8	123	125
	growth in %	2.2	2.1	3.1	2.2	1.9	-4.9	5.0	2.9	0.2	1.4
Import intensity 2)	average of 2010=100	110.0	112.5	115.2	117.9	118.2	116.9	122.3	124.2	119	120
	growth in %	3.2	2.3	2.5	2.3	0.3	-1.1	4.6	1.5	-4.0	1.0
Export markets 3)	average of 2010=100	120.1	125.3	132.4	138.4	141.4	133.0	146.0	152.5	147	150
	growth in %	5.5	4.4	5.6	4.5	2.2	-5.9	9.8	4.4	-3.9	2.5
Export performance	average of 2010=100	111.1	110.8	112.9	111.8	110.7	110.2	107.2	108.7	116	118
	growth in %	-0.1	-0.2	1.9	-1.0	-1.0	-0.4	-2.8	1.4	6.4	1.6
Real exports	average of 2010=100	133.4	138.9	149.5	154.7	156.6	146.6	156.5	165.8	170	177
•	growth in %	5.4	4.2	7.6	3.5	1.2	-6.4	6.7	5.9	2.3	4.1
1 / NEER	average of 2010=100	109.2	106.9	103.9	100.2	100.5	102.4	99.1	95.7	92	92
	growth in %	0.7	-2.1	-2.8	-3.6	0.3	1.9	-3.3	-3.3	-4.2	0.3
Prices on foreign markets	average of 2010=100	98.9	98.2	100.2	103.2	103.8	103.0	111.5	126.1	129	132
J	growth in %	-2.1	-0.7	2.1	3.0	0.7	-0.8	8.3	13.0	2.6	1.7
Exports deflator	average of 2010=100	108.0	104.9	104.1	103.4	104.4	105.5	110.5	120.7	119	121
h	growth in %	-1.4	-2.8	-0.7	-0.7	1.0	1.1	4.7	9.2	-1.7	2.0
Nominal exports	average of 2010=100	144.0	145.7	155.6	159.9	163.5	154.6	172.9	200.1	201	214
	growth in %	3.9	1.2	6.8	2.8	2.2	-5.4	11.8	15.8	0.5	6.2

Weighted average of GDP of eight most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France, Italy and Hungary.

Source: CNB, CZSO, Eurostat. Calculations and forecast of the MoF.

Table 3.4.2: Decomposition of Exports of Goods (National Accounts Methodology) – quarterly

seasonally adjusted

		2022					20	23	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	Forecast
GDP 1)	average of 2010=100	122.7	122.8	123.2	122.7	122.9	122.9	123	123
	growth in %	5.6	3.1	2.0	1.0	0.2	0.1	-0.1	0.6
Import intensity 2)	average of 2010=100	123.5	124.7	124.9	123.5	119.8	118.4	119	119
	growth in %	-0.6	2.0	3.5	1.2	-3.0	-5.0	-4.8	-3.4
Export markets 3)	average of 2010=100	151.5	153.1	153.8	151.5	147.3	145.5	146	147
	growth in %	5.0	5.2	5.5	2.2	-2.8	-5.0	-4.9	-2.9
Export performance	average of 2010=100	106.3	106.3	110.2	111.9	115.2	116.6	115	116
	growth in %	-4.4	-3.4	6.2	7.8	8.3	9.7	4.5	3.4
Real exports	average of 2010=100	161.1	162.7	169.6	169.6	169.6	169.6	169	170
	growth in %	0.3	1.6	12.1	10.2	5.3	4.2	-0.6	0.4
1 / NEER	average of 2010=100	95.6	95.9	96.4	95.0	92.0	91.2	91	93
	growth in %	-4.8	-2.9	-2.1	-3.5	-3.7	-4.9	-5.7	-2.4
Prices on foreign markets	average of 2010=100	121.6	126.6	128.2	127.7	131.0	129.2	128	129
	growth in %	12.9	14.4	13.3	11.4	7.7	2.1	0.2	0.7
Exports deflator	average of 2010=100	116.3	121.4	123.7	121.4	120.5	117.8	117	119
	growth in %	7.5	11.1	10.9	7.5	3.6	-3.0	-5.5	-1.7
Nominal exports	average of 2010=100	187.3	197.6	209.8	205.9	204.4	199.9	197	203
	growth in %	7.9	12.8	24.3	18.4	9.1	1.1	-6.1	-1.3

Weighted average of GDP of eight most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France, Italy and Hungary.

Source: CNB, CZSO, Eurostat. Calculations and forecast of the MoF.

²⁾ Index of ratio of real imports of goods to real GDP.

Weighted average of imports of goods of main partners.

²⁾ Index of ratio of real imports of goods to real GDP.

³⁾ Weighted average of imports of goods of main partners.

Table 3.4.3: Balance of Payments – yearly *international investment position and gross external debt – end of period*

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
										Forecast	Forecast
Goods and services	bill.CZK	274	365	384	321	346	384	174	-9	239	346
	% GDP	5.9	7.6	7.5	5.9	6.0	6.7	2.8	-0.1	3.2	4.5
Goods	bill.CZK	188	259	259	201	240	280	69	-99	157	247
	% GDP	4.1	5.4	5.1	3.7	4.1	4.9	1.1	-1.5	2.1	3.2
Services	bill.CZK	87	107	125	120	106	104	105	90	82	99
	% GDP	1.9	2.2	2.4	2.2	1.8	1.8	1.7	1.3	1.1	1.3
Primary income	bill.CZK	-255	-253	-255	-260	-292	-242	-312	-375	-391	-405
	% GDP	-5.5	-5.3	-5.0	-4.8	-5.0	-4.2	-5.1	-5.5	-5.3	-5.2
Secondary income	bill.CZK	1	-27	-50	-37	-34	-28	-33	-31	-23	-30
	% GDP	0.0	-0.6	-1.0	-0.7	-0.6	-0.5	-0.5	-0.5	-0.3	-0.4
Current account	bill.CZK	21	85	79	24	19	114	-168	-415	-176	-89
	% GDP	0.4	1.8	1.5	0.4	0.3	2.0	-2.8	-6.1	-2.4	-1.2
Capital account	bill.CZK	99	52	45	13	24	67	104	7	84	104
	% GDP	2.1	1.1	0.9	0.2	0.4	1.2	1.7	0.1	1.1	1.3
Net lending/borrowing	bill.CZK	120	137	124	37	44	180	-64	-408	-92	15
	% GDP	2.6	2.9	2.4	0.7	0.8	3.2	-1.1	-6.0	-1.2	0.2
Financial account	bill.CZK	173	122	116	61	8	163	-40	-415	•	•
Direct investments	bill.CZK	50	-187	-46	-51	-137	-149	-29	-172		
Portfolio investments	bill.CZK	-164	-170	-268	30	-105	-136	75	331		
Financial derivatives	bill.CZK	-5	11	-14	-15	1	11	-58	-38		
Other investments	bill.CZK	-59	-97	-802	47	139	389	-325	-229		
Reserve assets	bill.CZK	351	564	1 246	50	110	48	296	-307		
International investment position	bill.CZK	-1 523	-1 304	-1 273	-1 320	-1 147	-929	-883	-1 340	•	•
	% GDP	-32.9	-27.2	-24.9	-24.4	-19.8	-16.3	-14.5	-19.7		
Gross external debt	bill.CZK	3 119	3 499	4 370	4 413	4 384	4 321	4 5 1 9	4 454		
	% GDP	67.4	72.9	85.5	81.6	75.7	75.7	74.0	65.6		

Source: CNB, CZSO. Calculations and forecast of the MoF.

Table 3.4.4: Balance of Payments – quarterly

 $four-quarter\ moving\ totals, international\ investment\ position\ and\ gross\ external\ debt-end\ of\ period$

			202	2			20	23	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
			••••••					Estimate	Forecast
Goods and services	bill.CZK	92	13	-6	-9	60	172	229	239
	% GDP	1.5	0.2	-0.1	-0.1	0.9	2.4	3.2	3.2
Goods	bill.CZK	-15	-93	-112	-99	-25	93	152	157
	% GDP	-0.2	-1.5	-1.7	-1.5	-0.4	1.3	2.1	2.1
Services	bill.CZK	106	106	107	90	85	79	77	82
	% GDP	1.7	1.7	1.6	1.3	1.2	1.1	1.1	1.1
Primary income	bill.CZK	-293	-280	-366	-375	-390	-449	-395	-391
	% GDP	-4.7	-4.4	-5.5	-5.5	-5.6	-6.3	-5.4	-5.3
Secondary income	bill.CZK	-32	-38	-37	-31	-31	-30	-26	-23
	% GDP	-0.5	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3
Current account	bill.CZK	-230	-304	-409	-415	-362	-307	-192	-176
	% GDP	-3.7	-4.7	-6.2	-6.1	-5.2	-4.3	-2.6	-2.4
Capital account	bill.CZK	96	87	65	7	29	64	74	84
	% GDP	1.5	1.4	1.0	0.1	0.4	0.9	1.0	1.1
Net lending/borrowing	bill.CZK	-134	-217	-344	-408	-333	-243	-118	-92
	% GDP	-2.1	-3.4	-5.2	-6.0	-4.8	-3.4	-1.6	-1.2
Financial account	bill.CZK	-121	-267	-416	-415	-337	-208		
Direct investments	bill.CZK	-73	-67	-83	-172	-189	-182		
Portfolio investments	bill.CZK	137	337	265	331	239	-46		
Financial derivatives	bill.CZK	-65	-75	-68	-38	-8	15		
Otherinvestments	bill.CZK	-505	-745	-393	-229	144	431		
Reserve assets	bill.CZK	386	283	-137	-307	-523	-425		
International investment position	stock in bill.CZK	-951	-1 011	-1 333	-1 340	-1 284	-1 199	•	•
	% GDP	-15.2	-15.7	-20.2	-19.7	-18.4	-16.9		
Gross external debt	stock in bill.CZK	4 685	4 631	4 406	4 454	4 353	4 381		
	% GDP	74.8	72.1	66.7	65.6	62.6	61.6		

Source: CNB, CZSO. Calculations and forecast of the MoF.

4 Survey of Other Institutions' Forecasts

On average, the institutions surveyed expect the Czech economy to grow slightly by 0.1% in 2023 and to accelerate to 2.3% in 2024. They estimate that the average inflation rate will reach 11.1% this year, but it could fall to 3.0% in 2024. Average wage growth could be 8.3% this year and 6.9% next year. The current account of the balance of payments should reach a slight deficit of 0.8% and 0.1% of GDP in 2023 and 2024, respectively.

When assessing the differences between the current forecast of the MoF and the average of the estimates of individual institutions, it is necessary to take into account the date of preparation of individual forecasts and the information available to their authors.

Czech economic growth will continue to be affected by the impact of the Russian aggression against Ukraine, strong growth in the cost of living and increased mone-

Graph 4.1: Forecasts for Real GDP Growth in 2023 *in %; the month, in which the survey was made on the horizontal axis*

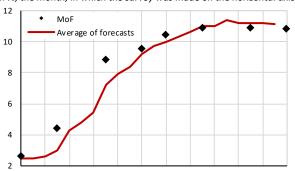


1/22 3/22 5/22 7/22 9/22 11/22 1/23 3/23 5/23 7/23 9/23 11/23 Source: Forecasts of individual institutions. Calculations of the MoF.

tary policy rates. The government's consolidation package will dampen economic activity slightly next year. The MoF expects the economy to contract by 0.5% this year compared to the surveyed institutions. The forecast for 2024 is more pessimistic than the average of the surveyed institutions' forecasts. While the MoF estimates a lower average inflation rate in 2023, the forecast for next year is, on the contrary, less optimistic than the average of the forecasts of the monitored institutions and assumes average consumer price growth of 3.3%. According to the MoF's forecast, average wages will grow more slowly than the forecasts of the monitored institutions in both years. In line with the average of the surveyed institutions' forecasts, the MoF expects a gradual narrowing of the deficit on the current account of the balance of payments, though it expects a deeper deficit in both years.

Graph 4.2: Forecasts for Average Inflation Rate in 2023

in %; the month, in which the survey was made on the horizontal axis



1/22 3/22 5/22 7/22 9/22 11/22 1/23 3/23 5/23 7/23 9/23 11/23 Source: Forecasts of individual institutions. Calculations of the MoF.

Table 4.1: Summary of the Surveyed Forecasts

				November 2023	
		min.	max.	average	MoF forecast
Gross domestic product (2023)	growth in %, const.pr.	-0.3	0.3	0.1	-0.5
Gross domestic product (2024)	growth in %, const.pr.	1.6	2.6	2.3	1.9
Average inflation rate (2023)	%	10.4	12.2	11.1	10.8
Average inflation rate (2024)	%	1.9	4.6	3.0	3.3
Average monthly wage (2023)	growth in %	7.7	8.8	8.3	8.0
Average monthly wage (2024)	growth in %	6.0	7.8	6.9	6.3
Current account / GDP (2023)	%	-2.9	0.8	-0.8	-2.4
Current account / GDP (2024)	%	-3.4	1.7	-0.1	-1.2

Note: The survey is based on publicly available forecasts of 11 institutions, of which 7 institutions are domestic (Czech Banking Association, CNB, Ministry of Labour and Social Affairs, domestic banks) and the remaining are foreign entities (European Commission, OECD, IMF, The Economist). In the case of GDP, no difference is being made between working-day adjusted and unadjusted forecasts.

Source: Forecasts of individual institutions. Calculations and forecast of the MoF.

of other institutions' forecasts, external environment, fiscal policy, monetary policy and the financial sector, exchange rates, structural policies, demographic trends, posit

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