Ministry of Finance
of the Czech Republic

Macroeconomic Forecast

of the Czech Republic

August 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:

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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:

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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 logical reasons.

Cut-off Date for Data Sources

The Macroeconomic Forecast is based on data known as of 10 August 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 (April 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.

Introduction and Summary

Global economic growth is slowing. While supply chains now function without any major problems, inflation remains high in many countries despite a gradual decline and continues to significantly reduce household purchasing power. Previous monetary tightening by central banks has also dampened economic activity.

According to the flash estimate of the Czech Statistical Office, **real gross domestic product** of the Czech Republic, adjusted for seasonal and calendar effects, increased by 0.1% QoQ and declined by 0.6% YoY in Q2 2023. In Q1 2023, for which detailed data on the structure of growth are available, GDP fell by 0.2% YoY (unadjusted).

Household consumption fell by 5.8% YoY in Q1. Consumer spending was negatively affected not only by the fall in real disposable income, caused by very high inflation, but also by the rise in the savings rate. **General government consumption** rose by 2.8% due to an increase in public sector employment and purchases of goods and services.

The decline in **gross fixed capital formation** deepened to 2.3%. Investment activity was boosted by investment in machinery and equipment, but other categories showed a decline, most notably investment in dwellings. From a sectoral perspective, the decline in investment by households and firms was cushioned by higher investment spending by the general government sector.

The **change in inventories** and valuables subtracted 0.5 pp from economic growth. Although firms continued to increase their inventories of production inputs sharply to avoid losses resulting from high inflation and possible shortfalls in component supplies, inventory accumulation declined year on year.

The **foreign trade** balance supported economic growth to the extent of 3.0 pp. While exports of goods and services increased by 7.6%, imports rose by only 3.9%. Improvements in supply chains enabled firms to complete work-in-progress production, which was subsequently exported. Imports were also dampened by weak domestic demand.

For **2023** as a whole, GDP could **fall by 0.2%** (after adjusting for calendar effects, it should be flat). Households continue to face the impact of high inflation this year, and their real consumption should fall further. Government consumption and gross fixed capital formation will be pro-growth, but weaker year-on-year inventory accumulation will slow the economy noticeably. The impact of generally weak domestic demand will be largely offset by the external trade balance. In **2024**, the economic output could **increase by 2.3%**, mainly on the back of renewed growth in household consumption. However, economic activity will be slightly dampened by the effects of the consolidation package, which will at the same time moderate inflationary pressures.

High **inflation** slows economic growth and lowers living standards. Not only food, electricity and natural gas, but also other categories of goods and services are contributing significantly to the exceptionally strong rise in consumer prices. Strong domestic demand pressures are already being dampened by higher monetary policy rates. The appreciation of the koruna is also having an anti-inflationary effect. Annual inflation declined at a fast pace during the first half of this year and should remain in the high single-digit levels in the second half of the year. At the end of the year, the energy tariff will have a year-on-year base effect. The average inflation rate could thus reach 10.9% this year. Throughout 2024, annual consumer price inflation could already remain within the tolerance band of the Czech National Bank's inflation target. In annual terms, we expect a decline of average inflation rate to 2.8%.

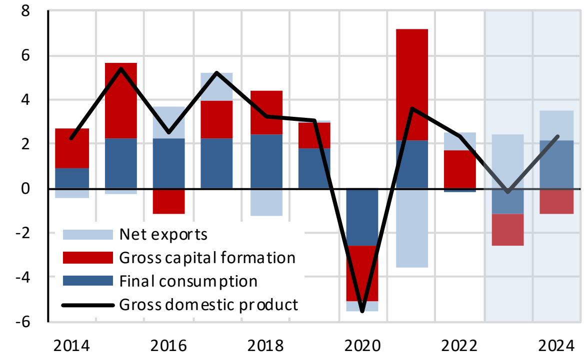
Labour market imbalances related to labour shortages continue to manifest themselves. As a result, despite the weak economic momentum, the unemployment rate should not increase much in 2023. From an average of 2.3% in 2022, it could rise to 2.8% this year and fall to an average of 2.7% next year. The persistent tightness in the labour market will push up wage growth, which will continue to lag behind inflation also this year, though. Average real wage growth should therefore not resume until 2024.

The **current account of the balance of payments** showed a deficit of 5.1% of GDP in Q1 2023, mainly reflecting a deterioration in the balance of primary income due to higher outflows of investment income (mainly in the form of dividends). The current account development was also negatively affected by a decline in the services surplus due to higher costs in the transport sector. Conversely, the unwinding of price pressures in industry and energy and the improvement in conditions in the export-oriented automotive industry led to a quarter-on-quarter improvement in the trade balance. Meanwhile, these factors should continue to be crucial. The current account deficit should thus gradually narrow to 1.7% of GDP this year and to 0.6% of GDP next year.

The estimate of the **general government** 2023 budget balance of −3.6% of GDP reflects extraordinary revenues and expenditures related to the energy crisis, rising mandatory social spending and continued assistance to Ukrainian refugees. The fiscal policy stance is expected to lead to a structural balance of −2.3% of GDP and a rise in debt to 44.7% of GDP.

The economy should contract marginally in 2023

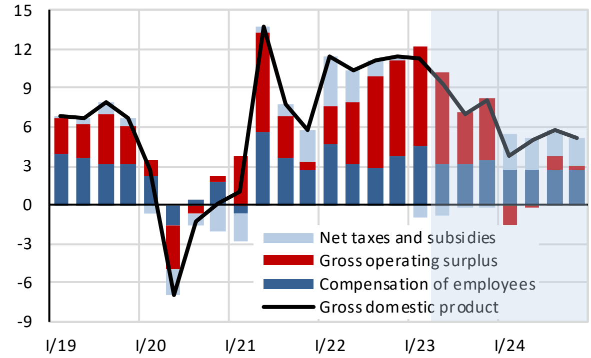
growth rate of real GDP in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

Firms' profits will increase substantially this year

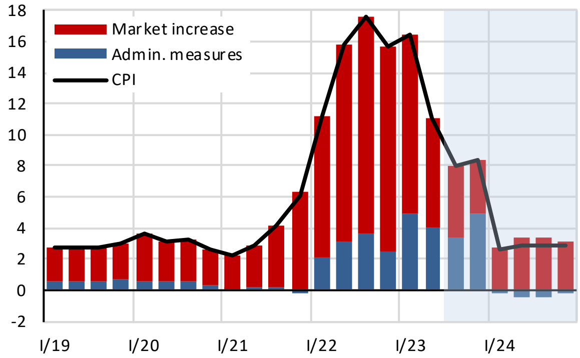
YoY growth of nominal GDP in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

Inflation will return to the vicinity of the CNB's target

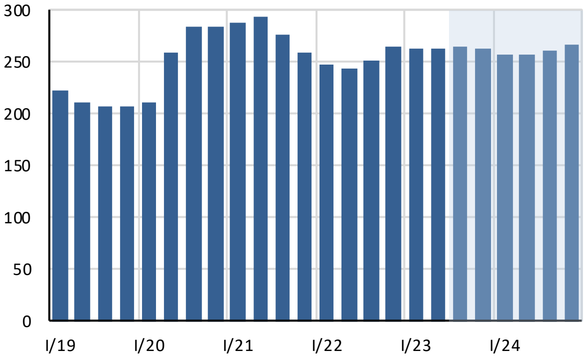
YoY growth rate of CPI in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

Unemployment should almost stagnate

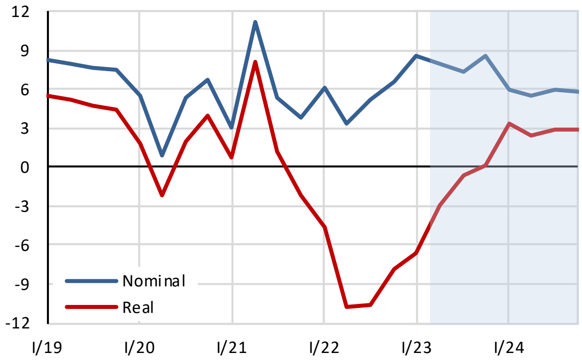
registered unemployment, in thous. of persons, seasonally adjusted



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

Wage growth should lag behind inflation

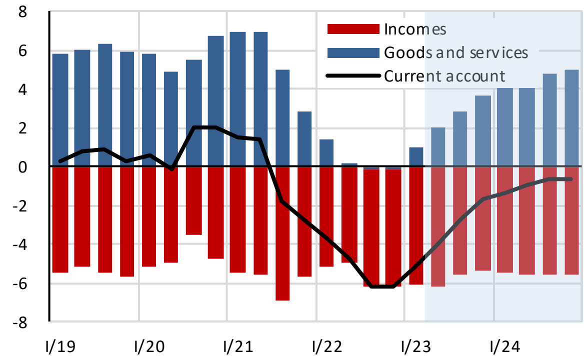
average gross monthly wage, YoY growth rate, in %



Source: CZSO. Calculations and forecast of the MoF.

Current account deficit should narrow

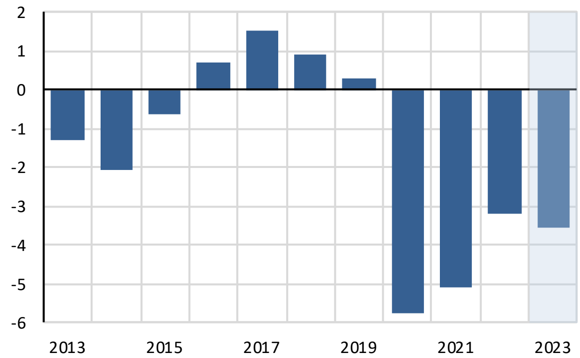
in % of GDP, yearly moving sums



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

Public finance deficit should remain above 3% of GDP

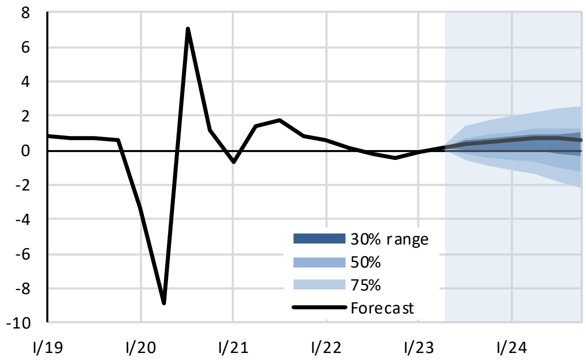
general government net lending/borrowing, in % of GDP



Source: 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 forecast		*Previous forecast*	
Nominal GDP	*bill. CZK*	**5 411**	**5 791**	**5 709**	**6 109**	**6 786**	**7 384**	**7 751**	7 475	7 989
	nominal growth in %	5.9	7.0	-1.4	7.0	11.1	8.8	5.0	10.0	6.9
Gross domestic product	*real growth in %*	**3.2**	**3.0**	**-5.5**	**3.6**	**2.4**	**-0.2**	**2.3**	0.1	3.0
Consumption of households	*real growth in %*	3.5	2.7	-7.2	4.1	-0.7	-3.4	3.9	-2.7	3.9
Consumption of government	*real growth in %*	3.9	2.5	4.2	1.4	0.6	2.4	1.8	1.6	1.3
Gross fixed capital formation	*real growth in %*	10.0	5.9	-6.0	0.8	3.0	0.8	0.7	2.8	0.5
Contribution of net exports	*pp*	-1.2	0.0	-0.4	-3.6	0.9	2.4	1.3	0.8	1.4
Contrib. of change in inventories	*pp*	-0.5	-0.3	-0.9	4.8	0.9	-1.7	-1.3	-0.5	-0.7
GDP deflator	*growth in %*	**2.6**	**3.9**	**4.3**	**3.3**	**8.5**	**9.0**	**2.6**	9.9	3.8
Average inflation rate	*%*	**2.1**	**2.8**	**3.2**	**3.8**	**15.1**	**10.9**	**2.8**	10.9	2.4
Employment *(LFS)*	*growth in %*	**1.4**	**0.2**	**-1.3**	**-0.4**	**-0.8**	**1.0**	**0.7**	-0.2	0.6
Unemployment rate *(LFS)*	*average in %*	**2.2**	**2.0**	**2.6**	**2.8**	**2.3**	**2.8**	**2.7**	3.0	2.8
Wage bill *(domestic concept)*	*growth in %*	**9.6**	**7.8**	**0.1**	**5.9**	**9.3**	**8.4**	**6.1**	7.5	5.8
Current account balance	*% of GDP*	**0.4**	**0.3**	**2.0**	**-2.8**	**-6.1**	**-1.7**	**-0.6**	-3.5	-1.9
General government balance	*% of GDP*	**0.9**	**0.3**	**-5.8**	**-5.1**	**-3.2**	**-3.6**	**.**	-3.5	-2.9
General government debt	*% of GDP*	**32.1**	**30.0**	**37.7**	**42.0**	**44.2**	**44.7**	**.**	43.5	44.0
Assumptions:										
Exchange rate CZK/EUR		**25.6**	**25.7**	**26.4**	**25.6**	**24.6**	**23.8**	**23.9**	23.8	23.8
Long-term interest rates	*% p.a.*	**2.0**	**1.5**	**1.1**	**1.9**	**4.3**	**4.3**	**3.9**	4.5	4.0
Crude oil Brent	*USD/barrel*	**71**	**64**	**42**	**71**	**101**	**80**	**77**	77	73
GDP in the euro area	*real growth in %*	**1.8**	**1.6**	**-6.2**	**5.4**	**3.4**	**0.7**	**1.2**	0.7	1.3

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

Forecast Risks and Uncertainty

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

Natural gas supplies from Russia to the European Union are severely restricted and we do not expect them to resume. We anticipate that this shortfall will be replaced by increased gas imports from other countries (including liquefied natural gas). At the same time, demand for natural gas 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, especially in the medium term, as the main downside risk to the forecast.

In the forecast, we also work under the assumption that the next likely waves of the **COVID-19** pandemic can be managed without the need to adopt macroeconomically significant restrictions. However, the emergence and spread of new variants of the coronavirus against which available vaccines or experienced disease would provide little protection, is a risk. The potential for **renewed problems in supply chains** poses a significant risk.

Despite the relatively rapid decline in inflation in recent months, the further development of consumer prices and **inflation expectations** remains a considerable risk to the Czech economy. It is crucial that inflation expectations return to close to the Czech National Bank's inflation target. Otherwise, a return of inflation to 2% would require even tighter monetary policy, which would entail additional economic costs. Similarly, in the case of **fiscal policy**, different intensity and structure of consolidation efforts would affect economic dynamics in the short to medium term, while unaddressed structural imbalances would very likely affect dynamics in the longer term.

Available data suggest that the imbalances that characterised the **labour market** before the pandemic are still present. Staff shortages, evident in almost all sectors of the economy, are a significant barrier to output growth, particularly in the construction sector. However, in addition to the weak economic dynamics, the influx of refugees from Ukraine is also 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 in the Czech labour market, even though their qualification structure may not match demand. Employment of foreigners is also facilitated by legislative changes reducing administrative barriers in this area.

In the medium and long term, taking into account demographic developments, it will be crucial to make the **integration of refugees** from Ukraine as successful as possible and to increase **labour productivity**, for example by investing in automation, robotization and digital technologies. Given the high involvement of Czech firms in global supply chains, a strong impetus for productivity growth would also be their shift to higher value-added positions (either towards the initial R&D phase or towards the phase of selling the final product).

The gross household savings rate, as well as the level of net lending/borrowing, has remained elevated since the pandemic. These "extra savings" could now be used by some households to **cushion the impact of high consumer price increases 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 in the case of loans to non-financial corporations. **Overvaluation of residential property prices** also remains a risk. The issue of affordability of owner-occupied housing is discussed in more detail in Chapter 5.

Given the importance of **the automotive industry** for the Czech economy, the strong pro-cyclicality of this sector, its export orientation and dependence on supply chains is a risk. The risks in the automotive industry are further exacerbated by structural changes due to the transition to electromobility and gradual tightening of emission standards. This will require huge investments in the development of technology, machinery and equipment or infrastructure. An impact on employment or supplier-customer relations can also be expected.

1 Forecast Assumptions

1.1 External Environment

Although supply chains have recovered and the coronavirus pandemic is no longer considered a threat, global activity is dampened by the impact of the ongoing war in Ukraine, high inflation and tightening monetary policy in a number of countries. A slower recovery in the Chinese economy, as well as rising geopolitical tensions or extreme weather events, also pose risks to the global economy. We estimate that **global economic growth** could reach 2.4% in 2023 (*vs. 2.0%*) and accelerate slightly to 2.5% in 2024 (*vs. 2.8%*) as inflationary pressures ease and household consumption recovers.

Gross domestic product of the **United States** grew by 0.5% QoQ (*vs. a 0.2% decline*) in Q1 2023, with growth accelerating to 0.6% in Q2 (*vs. a 0.1% decline),* according to the preliminary estimate, driven mainly by household consumption and gross fixed capital formation.

The labour market remains tight. It is characterised by strong job growth and low unemployment rate, which reached 3.5% in July. Year-over-year inflation rose slightly in July for the first time in 12 months, to 3.2% from 3.0% in June. At its July meeting, the Fed decided to raise the federal funds rate for the fourth time this year, to a range of 5.25%–5.50%, and will continue to reduce the amount of assets on its balance sheet, all with the goal of returning inflation to its 2% target.

The July Purchasing Managers' Index indicated a further but milder decline in manufacturing output, caused mainly by a reduction in new orders due to muted domestic and foreign demand. High interest rates and, in particular, a reduction in client spending had caused a slowdown in the growth of activity in the services sector. In contrast, consumer sentiment is at its highest since October 2021, thanks to falling inflation and stability in the labour market. Retail sales rose slightly month-on-month in June, while industrial production fell for the second month. The lagged impact of monetary tightening and the unwinding of pandemic fiscal support will negatively affect economic growth. In addition, rising interest rates could lead to further problems in the financial sector. Given the aforementioned factors and stronger-than-expected economic growth in the first half of this year, we estimate the US economy to grow by 1.8% this year (*vs. 0.6%*) with growth slowing down to 0.8% next year (*vs. 1.1%*).

The quarter-on-quarter growth of the **Chinese economy** reached 2.2% in Q1 2023 on the back of the easing of stringent coronavirus measures and deferred household consumption. However, economic growth slowed to 0.8% in Q2 due to weaker domestic and external demand. According to the Purchasing Managers' Index, there was a slight fall in manufacturing output in July and a deterioration in production conditions, mainly due to subdued foreign demand. In contrast, activity in the services sector continued to rise, supported by growth in new business. Retail sales in June recorded only a slight month-on-month increase for the fourth month in a row. Industrial production also rose between May and June. Infrastructure investment should be the key driver of Chinese economic growth. However, the economic outlook is weighed down by persistent problems in the property market, high youth unemployment and continued monetary tightening in major world economies, which weakens external demand. We estimate that China's GDP will grow by 5.3% this year (*vs. 5.1%*), and we expect Chinese economic growth to slow to 4.7% next year (*vs. 4.4%*) due to projected weaker growth in advanced economies.

The **European Union's** gross domestic product grew by 0.2% QoQ (*vs. 0.0%*) in Q1 2023 and stagnated in Q2 (*vs. 0.2% growth*), according to the preliminary estimate. The euro area posted zero growth in Q1 2023 (*in line with the estimate*), while economic output increased by 0.3% (*vs. 0.2%*) in Q2.

Annual inflation in the euro area continued to fall to 5.3% in July on the back of a sharp decline in energy commodity prices. However, core inflation remained at 5.5%, driven by rising services prices. The European Central Bank raised its key interest rate to 4.25% in July in anticipation that inflation would remain above the 2% target for an extended period. We expect that the European Central Bank's monetary tightening has entered its final stage.

Fiscal policy would gradually move into a restrictive phase from the second half of this year, following the disinflationary process and the gradual withdrawal of energy support policies.

The unemployment rate in the euro area remained at 6.4% in June. In the context of falling inflation, consumer sentiment improved in July. At the same time, however, conditions in manufacturing deteriorated as a result of subdued demand and a sharp drop in new orders and production. The Purchasing Managers' Index in services also declined due to a fall in new orders.

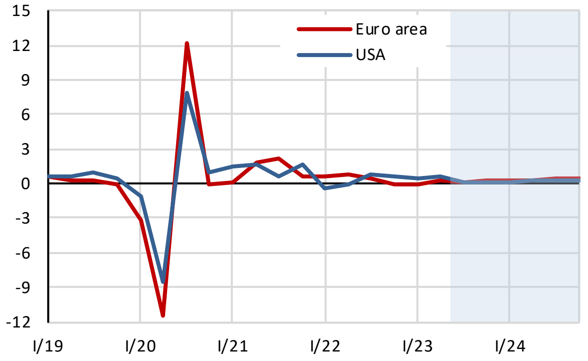
We expect GDP growth in the EU and the euro area to slow to 0.7% (*unchanged*) this year. Next year, economic growth is expected to accelerate to 1.4% (*vs. 1.5%*) in the EU *and* 1.2% (*vs. 1.3%*) in the euro area due to a recovery in household consumption and investment activity.

Germany's economy contracted by 0.1% QoQ (*in line with the estimate*) in Q1 2023 and stagnated in Q2 (*vs. growth of 0.2%),* according to the preliminary estimate. As a result of tighter monetary conditions, a sharp decline in new orders and a contraction in production, the manufacturing Purchasing Managers' Index fell deeper into contractionary territory in July. Activity in services slowed for the second month in a row in July due to subdued demand. Sentiment among consumers is improving only slowly. Annual inflation fell to 6.5% in July. The unemployment rate remained at 3.0% in June. As a result of the deteriorating situation in industry and services, high inflation, falling production and business confidence or rising interest rates, the German economy could contract by 0.2% (*vs. 0.2% growth*) in 2023. In 2024, economic growth, supported by household consumption and a recovery in export activity, could reach 1.1% (*vs. 1.5%*).

Slovakia's GDP grew by 0.3% QoQ (*vs. a decline of 0.1%*) in Q1 2023, mainly due to the foreign trade balance. In June, the unemployment rate remained at 6.0% and manufacturing output rose. Annual inflation fell to 10.2% in July. Consumer confidence reached its highest level in two years in July. Economic growth this year is expected to be supported mainly by a significant increase of EU funds absorption. We therefore expect GDP to grow by 1.3% (*vs. 0.6%*) in 2023. Improvements in supply chains, a recovery in exports and household consumption will contribute to GDP growth of 2.2% (*unchanged*) in 2024.

Graph 1.1.1: Real GDP in the euro area and USA

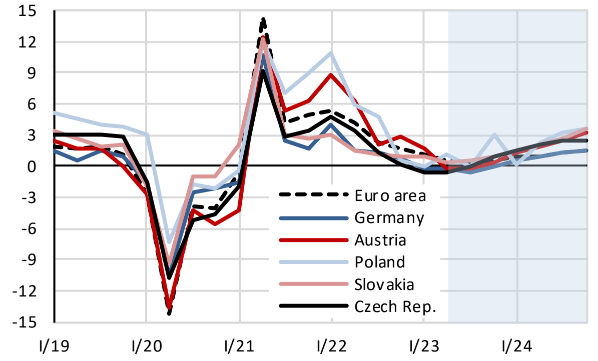
QoQ growth rate in%, seasonally adjusted



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

Graph 1.1.2: Real Gross Domestic Product

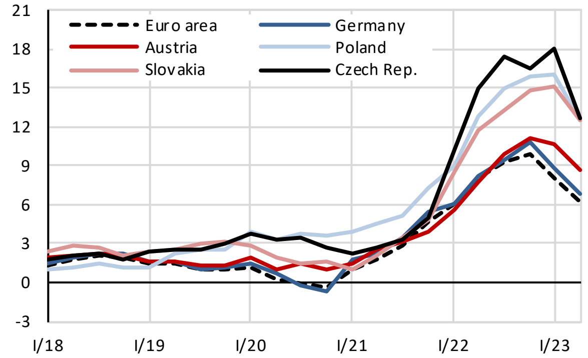
YoY growth in %, seasonally adjusted



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

Graph 1.1.3: HICP

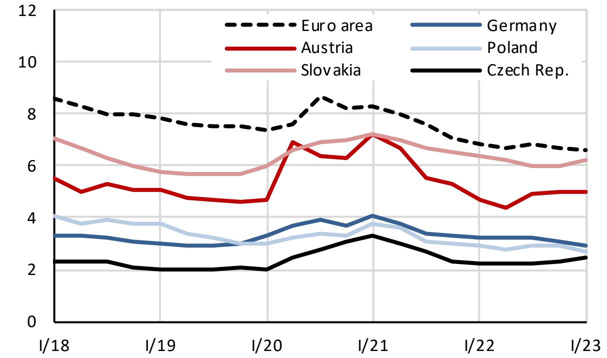
quarterly averages, YoY growth in %



Source: Eurostat. Calculations of the MoF.

Graph 1.1.4: Unemployment Rate

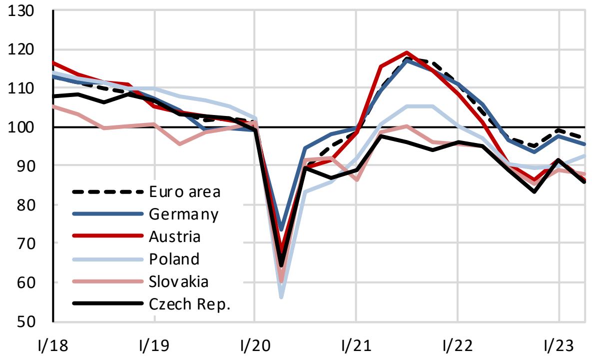
in %, LFS methodology, seasonally adjusted



Source: Eurostat.

Graph 1.1.5: Economic Sentiment Indicator

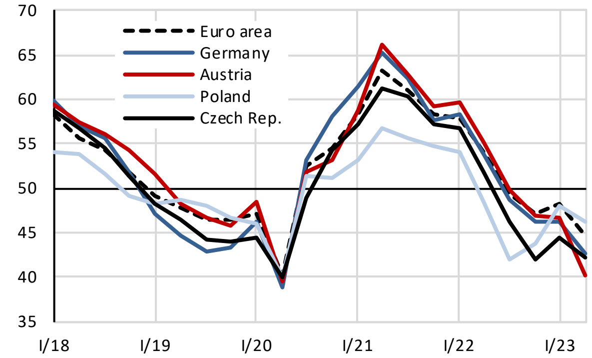
quarterly averages, long-run average = 100



Source: Eurostat. Calculations of the MoF.

Graph 1.1.6: Purchasing Managers' Index

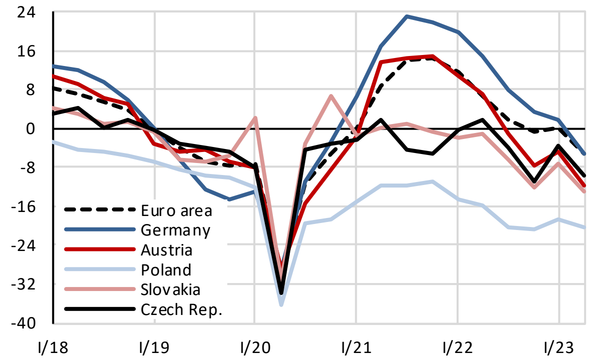
manufacturing, quarterly averages



Source: Markit. Calculations of the MoF.

Graph 1.1.7: Business Tendency

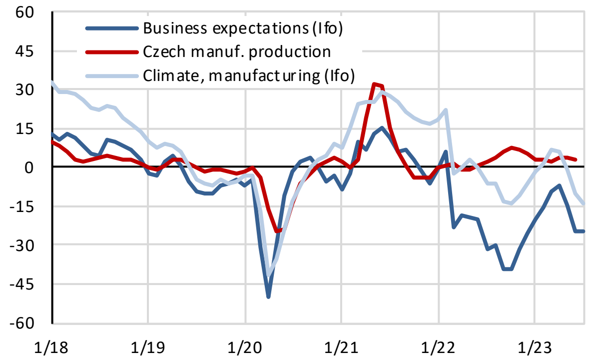
manufacturing, quarterly averages



Source: OECD. Calculations of the MoF.

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.)



Source: CESifo, CZSO. Calculations of the MoF.

Table 1.1.1: Gross Domestic Product – yearly

growth rate of real GDP in %

		2015	2016	2017	2018	2019	2020	2021	2022	2023 *Forecast*	2024 *Forecast*
World	*seasonally adjusted*	**3.4**	**3.3**	**3.8**	**3.6**	**2.8**	**-2.8**	**6.3**	**3.5**	**2.4**	**2.5**
USA	*seasonally adjusted*	**2.7**	**1.7**	**2.2**	**2.9**	**2.3**	**-2.8**	**5.9**	**2.1**	**1.8**	**0.8**
China	*seasonally adjusted*	**7.2**	**6.9**	**6.8**	**6.7**	**6.1**	**1.7**	**8.7**	**3.2**	**5.3**	**4.7**
United Kingdom	*seasonally adjusted*	**2.4**	**2.2**	**2.4**	**1.7**	**1.6**	**-11.0**	**7.6**	**4.1**	**0.2**	**0.7**
European Union	*seasonally adjusted*	**2.1**	**2.0**	**3.0**	**2.0**	**1.8**	**-5.8**	**5.5**	**3.5**	**0.7**	**1.4**
Euro area	*seasonally adjusted*	**1.9**	**1.8**	**2.8**	**1.8**	**1.6**	**-6.2**	**5.4**	**3.4**	**0.7**	**1.2**
Germany	*seasonally adjusted*	**1.2**	**2.1**	**3.0**	**1.0**	**1.1**	**-4.2**	**3.1**	**1.9**	**-0.2**	**1.1**
	unadjusted	1.5	2.2	2.7	1.0	1.1	-3.8	3.2	1.8	-0.6	1.0
France	*seasonally adjusted*	**1.0**	**1.0**	**2.5**	**1.8**	**1.9**	**-7.7**	**6.4**	**2.5**	**0.9**	**1.2**
	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**	**7.0**	**3.8**	**1.0**	**1.0**
	unadjusted	0.8	1.3	1.7	0.9	0.5	-9.0	7.0	3.7	0.9	1.1
Austria	*seasonally adjusted*	**1.0**	**2.0**	**2.3**	**2.4**	**1.5**	**-6.5**	**4.7**	**4.9**	**0.3**	**1.1**
	unadjusted	1.0	2.0	2.3	2.4	1.5	-6.5	4.6	4.9	0.1	1.3
Hungary	*seasonally adjusted*	**3.7**	**2.2**	**4.4**	**5.4**	**4.9**	**-4.7**	**7.2**	**4.6**	**-0.1**	**2.7**
	unadjusted	3.7	2.2	4.3	5.4	4.9	-4.5	7.2	4.6	-0.2	2.7
Poland	*seasonally adjusted*	**4.3**	**3.1**	**5.2**	**5.9**	**4.4**	**-2.0**	**6.8**	**5.4**	**1.0**	**2.3**
	unadjusted	4.4	3.0	5.1	5.9	4.4	-2.0	6.9	5.1	1.0	2.4
Slovakia	*seasonally adjusted*	**5.2**	**1.9**	**2.9**	**4.0**	**2.5**	**-3.3**	**4.9**	**1.7**	**1.3**	**2.2**
Czech Republic	*seasonally adjusted*	**5.5**	**2.5**	**5.3**	**3.2**	**3.0**	**-5.5**	**3.5**	**2.4**	**0.0**	**2.2**
	unadjusted	5.4	2.5	5.2	3.2	3.0	-5.5	3.6	2.4	-0.2	2.3

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				2023			
		Q1	Q2	Q3	Q4	Q1	Q2 *Estimate*	Q3 *Forecast*	Q4 *Forecast*
USA	*QoQ*	**-0.4**	**-0.1**	**0.8**	**0.6**	**0.5**	**0.6**	**0.0**	**0.1**
	YoY	3.7	1.8	1.9	0.9	1.8	2.6	1.8	1.2
United Kingdom	*QoQ*	**0.5**	**0.1**	**-0.1**	**0.1**	**0.1**	**-0.1**	**0.0**	**0.1**
	YoY	10.6	3.8	2.0	0.6	0.2	0.1	0.2	0.2
European Union	*QoQ*	**0.7**	**0.6**	**0.4**	**-0.1**	**0.2**	**0.0**	**0.3**	**0.3**
	YoY	5.6	4.3	2.5	1.6	1.1	0.5	0.4	0.8
Euro area	*QoQ*	**0.6**	**0.8**	**0.4**	**-0.1**	**0.0**	**0.3**	**0.1**	**0.2**
	YoY	5.4	4.2	2.4	1.8	1.1	0.6	0.3	0.6
Germany	*QoQ*	**1.0**	**-0.1**	**0.4**	**-0.4**	**-0.1**	**0.0**	**-0.1**	**0.2**
	YoY	4.0	1.6	1.2	0.8	-0.3	-0.1	-0.6	0.0
France	*QoQ*	**-0.1**	**0.5**	**0.2**	**0.1**	**0.1**	**0.5**	**0.2**	**0.2**
	YoY	4.4	3.9	1.2	0.7	0.9	0.9	0.8	1.0
Italy	*QoQ*	**0.1**	**1.1**	**0.4**	**-0.1**	**0.6**	**-0.3**	**0.3**	**0.3**
	YoY	6.5	5.0	2.5	1.5	2.0	0.6	0.5	0.9
Austria	*QoQ*	**1.3**	**1.7**	**0.0**	**-0.1**	**0.1**	**-0.4**	**0.1**	**0.2**
	YoY	8.7	6.3	2.1	2.9	1.8	-0.3	-0.2	0.4
Hungary	*QoQ*	**1.5**	**0.6**	**-0.8**	**-0.6**	**-0.3**	**0.5**	**0.6**	**0.6**
	YoY	8.0	6.2	3.7	0.7	-1.1	-1.2	0.3	1.5
Poland	*QoQ*	**4.5**	**-2.5**	**1.0**	**-2.3**	**3.8**	**-1.4**	**0.0**	**0.7**
	YoY	10.9	5.9	4.7	0.6	0.0	1.1	0.1	3.1
Slovakia	*QoQ*	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**	**0.3**	**0.5**	**0.5**
	YoY	3.1	1.5	1.2	1.0	1.0	0.5	0.5	0.9
Czech Republic	*QoQ*	**0.6**	**0.2**	**-0.2**	**-0.4**	**0.0**	**0.1**	**0.4**	**0.5**
	YoY	4.7	3.4	1.4	0.1	-0.5	-0.6	0.1	1.0

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 78 (*vs. USD 76*) in Q2 2023, down 32% YoY, or 36% when measured in CZK.

Over the upcoming quarters, only a gradual increase in oil demand is expected, considering the slow growth of the global economy. Numerous countries outside the Organisation of the Petroleum Exporting Countries, which have expressed their commitment to limiting oil exports to ensure oil price stability, are likely to increase their production, particularly the United States, Norway, Canada, Brazil and Guyana. The current elevated oil prices in the spot market can be partially attributed to the high level of uncertainty and the resulting high price volatility.

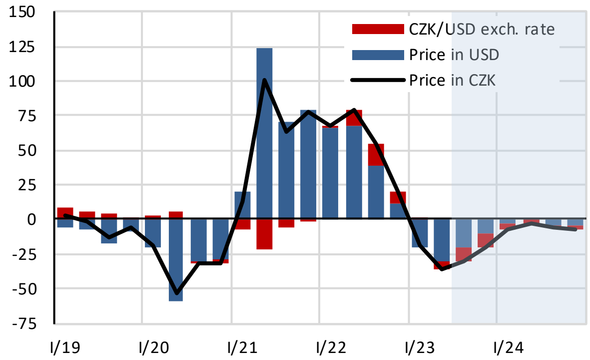
Oil prices in the futures market are lower for later delivery than earlier delivery. The forecast Brent crude oil price reflects this downward sloping curve. This year, the average price of Brent crude oil is expected to decrease by 21% YoY to USD 80 (*vs. USD 77*) per barrel, with a 27% decrease when measured in CZK due to the koruna's appreciation against the US dollar. For 2024, we assume an average price of USD 77 (*vs. USD 73*) 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 has contributed to a very significant decrease in wholesale spot and forward prices for natural gas and electricity during Q4 2022 and early 2023. However, the securing of energy supply, as well as the front-loading 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. To a large extent, high commodity prices thus continue to be reflected in firms' costs and consumer prices (see Chapter 3.2).

Graph 1.2.1: Dollar Price of Brent Crude Oil
USD/barrel

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

		2015	2016	2017	2018	2019	2020	2021	2022	2023 *Forecast*	2024 *Forecast*
Crude oil Brent	*USD/barrel*	**52.4**	**43.6**	**54.2**	**71.3**	**64.3**	**41.8**	**70.8**	**101.0**	**80**	**77**
	growth in %	-47.1	-16.9	24.3	31.7	-9.8	-35.0	69.3	42.7	-21.2	-3.2
Crude oil Brent index *(in CZK)*	*2010=100*	**84.9**	**70.1**	**83.1**	**102.1**	**97.1**	**63.6**	**101.1**	**155.3**	**114**	**107**
	growth in %	-36.9	-17.4	18.5	22.9	-4.9	-34.6	59.1	53.5	-26.9	-5.8
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

		2022				2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Forecast	*Forecast*
Crude oil Brent	*USD/barrel*	**100.9**	**113.8**	**100.7**	**88.7**	**81.1**	**78.0**	**80**	**80**
	growth in %	65.3	65.0	37.0	11.4	-19.6	-31.5	-20.8	-10.3
Crude oil Brent index *(in CZK)*	*2010=100*	**146.0**	**173.6**	**161.8**	**139.8**	**118.3**	**111.3**	**113**	**112**
	growth in %	67.9	79.7	54.6	20.1	-19.0	-35.9	-30.4	-20.0
Natural gas (Europe)	*USD/MMBtu*	**32.6**	**31.6**	**60.2**	**36.9**	**16.8**	**11.3**	**.**	**.**
	growth in %	400.6	260.2	255.4	14.6	-48.4	-64.2	.	.
Natural gas (Europe) index *(in CZK)*	*2010=100*	**454.0**	**463.7**	**928.9**	**559.0**	**236.3**	**155.3**	**.**	**.**
	growth in %	408.6	292.2	301.0	23.5	-48.0	-66.5	.	.

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

1.3 Fiscal Policy

Energy market developments continue to influence the budget performance of public finances in **2023**. We expect the general government balance to reach −3.6% of GDP (*vs. −3.5% of GDP*). Adjusted for the impact of the business cycle and one-off measures, which mainly cushion the negative impact of high energy prices on economic agents this year and, on the other hand, provide an additional source of financing for them, the deficit is expected to be 2.3% of GDP (*vs. 1.6% of GDP*). The deficit will be mainly attributable to the state budget, with health insurance companies also likely to run a slight deficit. In contrast, local governments are expected to show a positive balance again. However, the newly introduced measures and their financial impact considerably heighten the risks to the forecast.

We expect **general government revenues** to increase by 11.9% and tax revenues, including social security contributions, to grow by 9.2%. **Value-added tax** is expected to go up by 6.4%, with autonomous growth being adjusted for 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 will be driven by mineral oil tax revenue, which will benefit from an 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 ongoing shift towards less taxed alternatives. Taxes on production and imports will be boosted by an estimated CZK 17.3 billion this year due to a levy on excess revenue of electricity producers. In contrast, the waiving of the renewable energy levy on households and companies, effective until the end of 2023, is likely to represent an additional revenue shortfall of CZK 13.8 billion.

In addition to wage and salary growth in the economy, income tax dynamics will be significantly affected by the introduction of the windfall profits tax. The **personal income tax** is expected to increase by 12.4%, where we expect a 25% surge in the tax on capital in addition to the almost 11% estimated growth in the tax on wages and salaries. The forecast growth in **social security contributions** of over 8% is primarily related to earnings developments. In addition, we expect payments for the state insured persons to go up by almost CZK 11 billion. The 22.2% rise in **corporate income tax** is driven by higher profits, which are subject to an extraordinary 60% windfall profit tax rate for selected industries and companies and imposed on profits above the given threshold, with an estimated revenue of CZK 46 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 12.6%. We estimate that **final consumption** will accelerate to 9.6% YoY, mainly due to the still high pace of purchases of goods and services (13.1%). Compensation of employees should show a dynamic 8.6%. As of January 2023, salary scales for soldiers and members of the security forces have increased, as have the salaries of the teaching staff. In addition, the year-on-year rise in compensation of employees is due to the increase in salary scales for several groups of civil servants since September last year. The 9.2% increase 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.

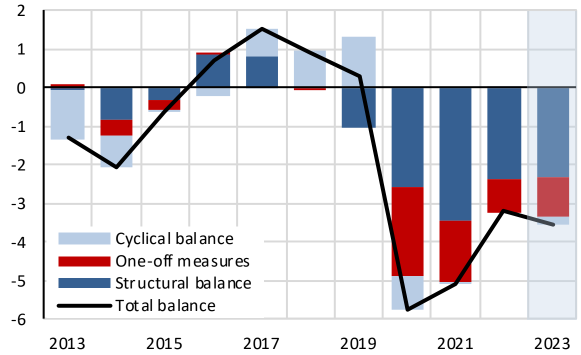
In the area of **cash social benefits**, we mainly expect an increase in pension benefits (16.8%), which are determined both by the standard January indexation plus the so-called allowance for each child raised, and by an extraordinary indexation from June this year due to the high inflation rate. The cost of last year's exceptional indexation for the corresponding part of the year also has an additional impact. This, together with the increase in other benefits (e.g. child benefit) and the year-on-year increase in the amount of funds paid for the humanitarian benefit to Ukrainian refugees (including countable housing costs), should lead to a 12.7% rise in cash social benefit expenditure.

In particular, assistance to households, firms, public and other institutions in the form of energy price caps in the estimated amount of over CZK 46 billion determines the 39.2% dynamics of **subsidies**. Furthermore, in order to prevent the full impact of high electricity and gas prices on consumers, the government approved subsidies 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. The almost 11% growth in total **transfers** should also reflect subsidies to non-government entities financed under the National Recovery Plan.

Investment in fixed assets with an estimated growth of almost 16% should be significantly supported by the EU budget not only due to the end of the possibility of using funds from the 2014–2020 programming period, but also already by using funds from the current 2021–2027 programming period, as well as funds from the Next Generation EU Instrument. Their share in total investment should increase by 9 pp YoY to 28%.

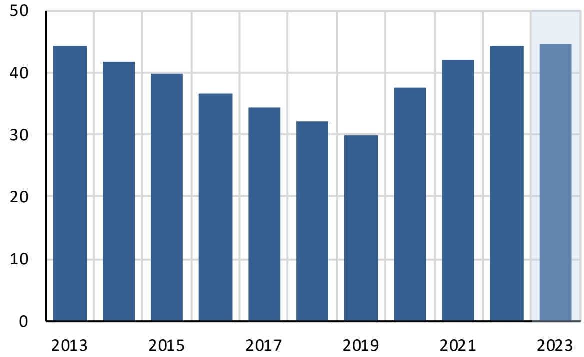
The expected one-tenth increase in **general government debt**, combined with an estimated 8.8% nominal GDP growth, should lead to a 0.5 pp increase in the debt-to-GDP ratio to 44.7% (*vs. 43.5%*). Higher debt and interest rate developments will result in an increase in **interest costs**, which are likely to reach 1.3% of GDP.

Graph 1.3.1: General Government Balance
in % of GDP



Source: CZSO. Calculations and forecast of the MoF.

Graph 1.3.2: General Government Debt
in % of GDP



Source: CZSO. Calculations and forecast of the MoF.

Table 1.3.1: Net Lending/Borrowing and Debt

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 *Forecast*
General government balance	*% GDP*	-2.1	-0.6	0.7	1.5	0.9	0.3	-5.8	-5.1	-3.2	-3.6
	bill. CZK	-90	-30	34	77	48	17	-329	-311	-216	-263
Cyclical balance	*% GDP*	-0.8	-0.1	-0.2	0.7	1.0	1.3	-0.9	-0.1	0.1	-0.2
Cyclically adjusted balance	*% GDP*	-1.2	-0.6	0.9	0.8	-0.1	-1.0	-4.9	-5.0	-3.2	-3.4
One-off measures [1)]	*% GDP*	-0.4	-0.3	0.1	0.0	-0.1	0.0	-2.3	-1.6	-0.9	-1.1
Structural balance	*% GDP*	-0.8	-0.3	0.9	0.8	0.0	-1.0	-2.6	-3.5	-2.4	-2.3
Fiscal effort [2)]	*pp*	-0.7	0.5	1.2	0.0	-0.8	-1.0	-1.6	-0.9	1.1	0.1
Interest expenditure	*% GDP*	1.3	1.1	0.9	0.7	0.7	0.7	0.8	0.8	1.2	1.3
Primary balance	*% GDP*	-0.8	0.4	1.6	2.2	1.6	1.0	-5.0	-4.3	-2.0	-2.2
Cyclically adjusted primary balance	*% GDP*	0.1	0.5	1.8	1.6	0.7	-0.3	-4.1	-4.3	-2.1	-2.0
General government debt	*% GDP*	41.9	39.7	36.6	34.2	32.1	30.0	37.7	42.0	44.2	44.7
	bill. CZK	1 819	1 836	1 755	1 750	1 735	1 740	2 150	2 567	2 997	3 297
Change in debt-to-GDP ratio	*pp*	-2.6	-2.2	-3.1	-2.3	-2.2	-2.0	7.6	4.4	2.1	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.*
[2)] *Change in structural balance.*
Note: The general government balance for 2022 was revised up by CZK 31.2 billion compared to the CZSO's April 2023 notification due to known facts regarding corporate income tax revenue.
Source: CZSO. Calculations and forecast of the MoF.

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 aggregate to 7.00%. Subsequently, however, the Bank Board decided to leave interest rates unchanged each time. In view of the predicted weakening of inflationary pressures, we expect the two-week repo rate to remain at its current level until the end of 2023 and the CNB to start gradually reducing it from Q1 2024.

The **three-month PRIBOR rate** remained at 7.2% (*vs. 7.1%*) in Q2 2023, in the context of stability of the CNB's primary interest rates, and could average 7.1% (*unchanged*) in 2023. In 2024, with the assumed monetary policy stance, it should fall to 5.7% (*vs. 5.5%*).

The **yield to maturity on 10-year government bonds** fell to an average of 4.5% in Q2 2023 (*in line with the forecast*), and we expect a further decline to 4.2% in Q3 (*vs. 4.5%*). Given the assumed monetary policy stance of the CNB and the ECB and inflation developments, we believe that long-term interest rates should continue on a downward trajectory, averaging 4.3% in 2023 (*vs. 4.5%*) and 3.9% in 2024 (*vs. 4.0%*).

Annual growth in total **loans to households** accelerated to 5.3% in Q2 2023. This was primarily due to the re-inclusion of Sberbank CZ's former portfolio in the current statistics, after it was removed from them in April last year due to the withdrawal of the reporting banking entity's banking licence. In April 2023, the purchase of this portfolio by Česká spořitelna was implemented, which resulted in a significant increase in the aggregate volume of loans in the banking sector. This translated primarily into a contribution from housing loans, but also into an increase in the dynamics of consumer loans. Although the growth in housing loans accelerated again to 5.2% in Q2 2023, it did not reach the previous high levels due to the effect of the monetary policy transmission mechanism. The average customer interest rate on total household loans increased quarter-on-quarter to 3.8% in Q2 2023. For net new mortgage loans, the average client interest rate increased by 1.2 pp YoY to 6.0%. The year-on-year growth in **household deposits** accelerated to 5.4% compared to the previous quarters. The re-inclusion of the portfolio of the former Sberbank CZ in the banking statistics also had an impact here, though to a lesser extent.

Loans to non-financial corporations grew by 4.5% in Q2 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 in total loans increased again to 47.2%. The average client interest rate on total loans to non-financial corporations reached 6.0%.

The **share of non-performing loans in** total loans to households and non-financial corporations continued to decline during H1 2023. In Q2 2023, the shares were 1.2% for households and 3.1% for non-financial corporations, among the lowest values in the available time series (since 2002).

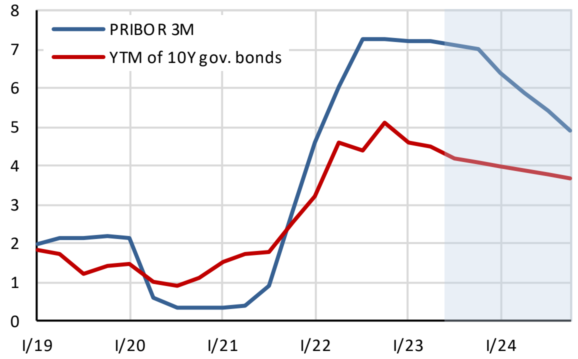
In Q2 2023, the **koruna's exchange rate against the euro** averaged CZK 23.6/EUR (*vs. CZK 23.8/EUR*), which meant an appreciation of 4.5% YoY (*vs. 3.6%*). The stronger koruna in the first half of the year was due to a calmer situation on world markets, among other things in connection with positive developments in natural gas stocks.

In the context of the worsening global economic outlook and the expected narrowing of the positive interest rate differential vis-à-vis the euro area, the koruna could weaken to an average of CZK 24.0/EUR in Q3 2023 and Q4 (*vs. CZK 23.8/EUR for both quarters*). The exchange rate would thus appreciate by 3.1% (*vs. 3.3%*) to CZK 23.8/EUR (*unchanged*) for the whole of 2023. In light of the expected resumption of economic convergence, the koruna should appreciate slightly over the next year, but given the strong exchange rate levels at the start of 2023, it should still depreciate by 0.3% on average for the full year (*vs. 0.1% appreciation*) to CZK 23.9/EUR (*vs. CZK 23.8/EUR*).

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 1.10 this year (*vs. 1.08*) and 1.14 in 2024 (*vs. 1.10*). The USD/EUR exchange rate then implies the expected development of the koruna against the US dollar.

Graph 1.4.1: Interest Rates

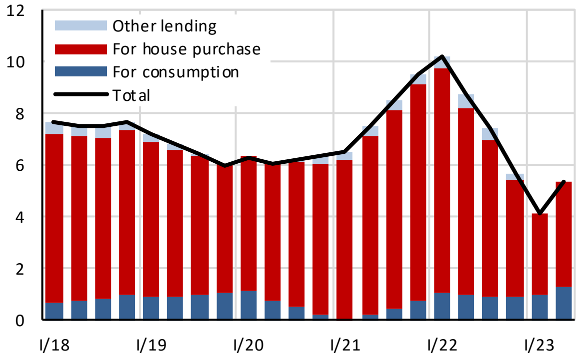
in % p.a.



Source: CNB. Calculations and forecast of the MoF.

Graph 1.4.2: Loans to Households

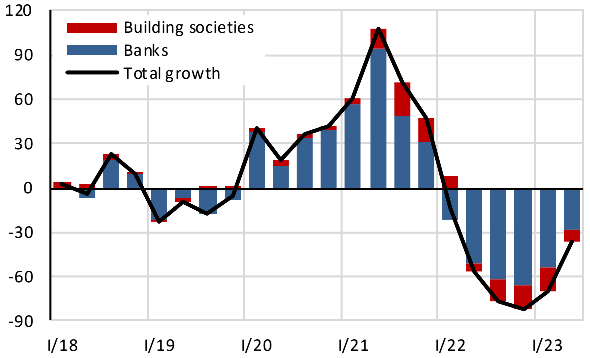
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

Graph 1.4.3: New Mortgage Loans

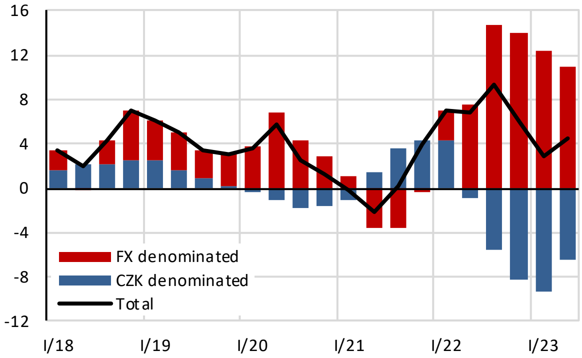
for purchase of residential property, YoY growth in %, contributions in pp



Source: CNB. Calculations of the MoF.

Graph 1.4.4: Loans to Non-financial Corporations

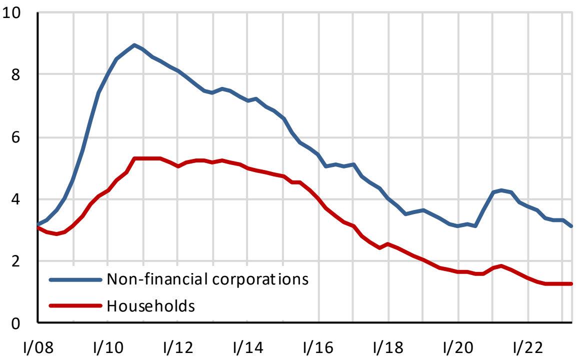
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

Graph 1.4.5: Non-performing Loans

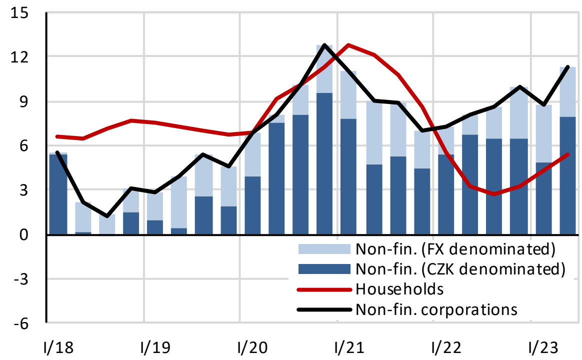
ratio of non-performing to total loans, in%



Source: CNB. Calculations of the MoF.

Graph 1.4.6: Deposits

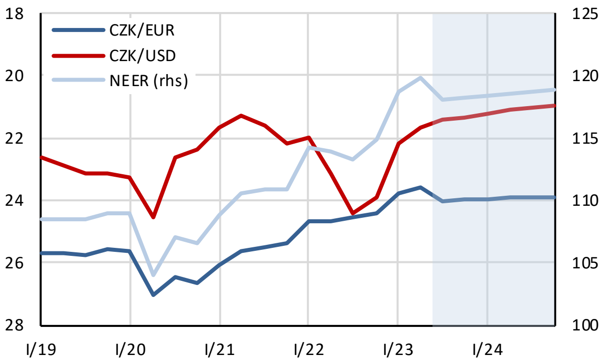
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

Graph 1.4.7: Nominal Exchange Rates

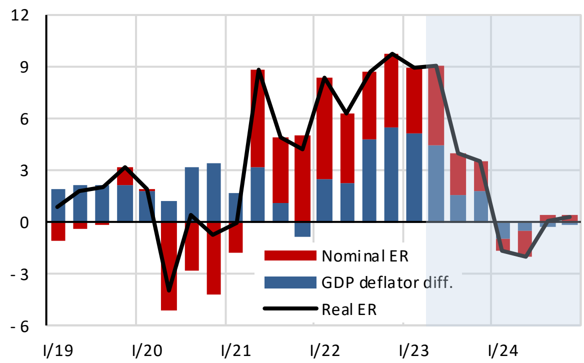
quarterly averages, average 2015=100 (rhs)



Source: CNB. Calculations and forecast 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 3M	*in % p.a.*	0.31	0.29	0.41	1.23	2.12	0.86	1.13	6.29	7.1	5.7
YTM of 10Y government bonds	*in % p.a.*	0.58	0.43	0.98	1.98	1.55	1.13	1.90	4.33	4.3	3.9
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			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Forecast	*Forecast*
Repo 2W rate CNB (*end of period*)	*in % p.a.*	4.50	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	.	.
Federal funds rate (*end of period*)	*in % p.a.*	0.50	1.75	3.25	4.50	5.00	5.25	.	.
PRIBOR 3M	*in % p.a.*	4.59	6.03	7.27	7.27	7.20	7.20	7.1	7.0
YTM of 10Y government bonds	*in % p.a.*	3.23	4.58	4.41	5.11	4.58	4.50	4.2	4.1
Client interest rates									
Loans to households	*in % p.a.*	3.29	3.36	3.46	3.56	3.66	3.77	.	.
Loans to non-financial corporations	*in % p.a.*	3.62	4.57	5.61	6.01	6.01	5.97	.	.
Deposits of households	*in % p.a.*	0.62	0.91	1.31	1.70	1.97	2.09	.	.
Deposits of non-financial corporations	*in % p.a.*	8.03	8.56	9.69	9.99	9.89	9.68	.	.

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
Other lending	*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	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Households									
Loans	*growth in %*	**8.5**	**9.5**	**10.2**	**8.7**	**7.4**	**5.6**	**4.1**	**5.3**
For consumption	*growth in %*	3.3	5.5	7.8	7.1	6.5	6.6	7.1	9.7
For house purchase	*growth in %*	10.0	10.8	11.2	9.4	7.9	5.8	4.1	5.2
Other lending	*growth in %*	4.5	4.4	5.2	5.5	5.0	2.5	-0.6	-0.3
CZK denominated	*growth in %*	8.5	9.5	10.2	8.6	7.3	5.5	4.0	5.3
FX denominated	*growth in %*	21.6	18.3	22.8	43.1	50.6	55.1	46.5	32.7
Deposits	*growth in %*	**10.8**	**8.6**	**5.6**	**3.2**	**2.8**	**3.3**	**4.3**	**5.4**
CZK denominated	*growth in %*	10.5	8.4	5.3	2.8	2.2	2.6	3.4	4.6
FX denominated	*growth in %*	20.3	15.2	13.2	15.2	17.6	20.1	26.7	23.4
Non-performing loans *(banking statistics)*	*share, in %*	**1.7**	**1.6**	**1.5**	**1.4**	**1.3**	**1.2**	**1.2**	**1.2**
Loans to deposits ratio	*in %*	**59**	**61**	**62**	**62**	**62**	**62**	**62**	**61**
Non-financial corporations									
Loans	*growth in %*	**0.2**	**3.9**	**7.1**	**6.7**	**9.3**	**5.9**	**2.9**	**4.5**
CZK denominated	*growth in %*	5.7	6.6	6.6	-1.3	-8.1	-12.3	-14.4	-10.5
FX denominated	*growth in %*	-9.9	-0.9	8.0	22.8	46.5	41.7	35.2	28.7
Deposits	*growth in %*	**8.9**	**7.0**	**7.2**	**8.1**	**8.6**	**10.0**	**8.7**	**11.4**
CZK denominated	*growth in %*	6.7	5.8	7.1	9.0	8.6	8.6	6.5	10.3
FX denominated	*growth in %*	16.5	10.8	7.6	5.6	8.9	14.7	15.9	14.8
Non-performing loans *(banking statistics)*	*share, in %*	**4.2**	**3.9**	**3.8**	**3.6**	**3.4**	**3.3**	**3.3**	**3.1**
Loans to deposits ratio	*in %*	**92**	**93**	**93**	**91**	**92**	**89**	**88**	**86**

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	*Outlook*	*Outlook*	*Outlook*
Nominal exchange rates											
CZK / EUR	*average*	**26.33**	**25.65**	**25.67**	**26.44**	**25.65**	**24.57**	**23.8**	**23.9**	**23.8**	**23.7**
	appreciation in %	2.7	2.7	-0.1	-2.9	3.1	4.4	3.1	-0.3	0.4	0.4
CZK / USD	*average*	**23.39**	**21.74**	**22.94**	**23.20**	**21.68**	**23.36**	**21.6**	**21.1**	**20.8**	**20.5**
	appreciation in %	4.5	7.6	-5.2	-1.1	7.0	-7.2	7.9	2.8	1.5	1.3
NEER	*average of 2015=100*	**105.2**	**109.1**	**108.8**	**106.7**	**110.4**	**114.8**	**119**	**119**	**119**	**120**
	appreciation in %	2.8	3.7	-0.3	-1.9	3.4	4.0	3.4	-0.1	0.5	0.5
Real exchange rate to EA19 [1)]	*average of 2015=100*	**104.0**	**107.9**	**110.1**	**109.5**	**114.3**	**123.8**	**132**	**131**	**131**	**131**
	appreciation in %	2.8	3.7	2.0	-0.5	4.4	8.3	6.3	-0.8	0.1	0.1
REER [2)]	*average of 2015=100*	**106.6**	**111.1**	**111.5**	**112.4**	**116.7**	**126.9**	**.**	**.**	**.**	**.**
	appreciation in %	3.9	4.3	0.3	0.8	3.8	8.7	.	.	.	.

[1)] *Deflated by GDP deflators.*
[2)] *Eurostat calculations, deflated by CPI, versus 42 countries.*
Source: CNB, Eurostat. Calculations and forecast of the MoF.

Table 1.4.6: Exchange Rates – quarterly

		2022				2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Nominal exchange rates									
CZK / EUR	*average*	**24.65**	**24.64**	**24.57**	**24.39**	**23.79**	**23.59**	**24.0**	**24.0**
	appreciation in %	5.7	4.0	3.8	4.1	3.7	4.5	2.4	1.7
CZK / USD	*average*	**21.99**	**23.16**	**24.40**	**23.92**	**22.17**	**21.67**	**21.4**	**21.3**
	appreciation in %	-1.6	-8.2	-11.4	-7.2	-0.8	6.8	13.9	12.1
NEER	*average of 2015=100*	**114.3**	**113.9**	**113.2**	**114.9**	**118.7**	**119.8**	**118**	**118**
	appreciation in %	5.0	3.0	2.2	3.6	3.9	5.2	4.2	2.8
Real exchange rate to EA19 [1)]	*average of 2015=100*	**121.0**	**122.2**	**126.0**	**125.9**	**131.8**	**133**	**131**	**130**
	appreciation in %	8.3	6.3	8.7	9.7	8.9	9.1	4.0	3.5
REER [2)]	*average of 2015=100*	**125.9**	**126.5**	**127.5**	**127.6**	**141.3**	**.**	**.**	**.**
	appreciation in %	9.2	8.4	8.6	8.8	12.2	.	.	.

[1)] *Deflated by GDP deflators.*
[2)] *Eurostat calculations, deflated by CPI, versus 42 countries.*
Source: CNB, Eurostat. Calculations and forecast of the MoF.

1.5 Demographic Trends

In the middle of this year, the CZSO revised the data to include persons granted temporary protection in connection with the war in Ukraine in the demographic statistics. The data below now includes war refugees from Ukraine.

The population of the Czech Republic increased by 23.1 thousand to 10.85 million during Q1 2023. The increase was driven by positive balance of foreign migration (31.3 thousand), mostly still due to immigrants from Ukraine, while the balance of natural change was negative (−8.2 thousand).

Between January and March of this year, 22 thousand children were **born** live, which is a year-on-year decrease of 2.7 thousand. A lower number of births during the first quarter was last recorded in 1999.

The number of **deaths** in Q1 2023 reached 30.3 thousand. Compared to the same period of the previous year, this is a decrease of 1.9 thousand, or 5.8%. Compared to Q1 2019 and Q1 2020, however, the figure is comparable. Thus, after two years, the number of deaths in the first quarter did not exceed the 2015–2019 average. According to the data of the Ministry of Health, the number of deaths related to the COVID-19 disease fell from 3.4 thousand in Q1 2022 to 0.5 thousand in Q1 2023.

The positive **balance of foreign migration** decreased by 128.6 thousand YoY, or 19.6%, from January to March 2023. This result was mainly influenced by a one-quarter decline in the number of immigrants. A total of 41.3 thousand persons immigrated to the Czech Republic during the first quarter, down by 123.3 thousand YoY. Nevertheless, the number of immigrants was still high compared to previous years. Three quarters of the immigrants were Ukrainians, while the second largest group, Slovaks, accounted for only 4% of immigrants. In contrast, the number of emigrants more than doubled year-on-year, rising by 5.3 thousand to 10 thousand.

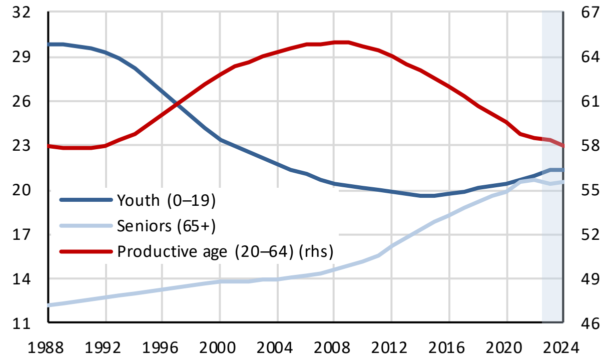
The intensity of future migration flows cannot be accurately estimated, but we assume that some refugees will return to Ukraine, while immigration from that country will remain elevated (but not nearly as much as it was after the outbreak of the war). Therefore, we keep the migration balance according to the demographic projection of the Czech Statistical Office.

The CZSO also published a detailed **age structure** of the population at the beginning of 2023. The population of the Czech Republic increased by 311 thousand people during 2022, mainly due to the exceptionally high immigration from Ukraine. We assume that the vast majority of the war refugees were of working age, 26% were children and young people under 19 and the remaining 4% were seniors. The number of children and young people under 19 years of age increased by 110.8 thousand, or 5.0%, last year. The working age population (20–64 years) increased by 2.6%, but the development within this group was far from even. In the 20–44 age group, there was a year-on-year increase of 68 thousand persons, i.e. 2.1%. The population in the 44–59 age category also increased in 2022, by 96.8 thousand, or 4.3%. The decline in the population aged 60–64 continued last year, although it slowed down considerably from 3.6% in 2021 to 0.6%. The number of people aged 65 and over was up by 39 thousand, or 1.8%. The increase was larger than in the previous two years, but not as significant as before the pandemic.

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 decline was cushioned by early retirements due to the exceptional pension indexation, as the number of early-retirement pensions increased by 23.8 thousand YoY, or 3.5%.

Graph 1.5.1: Age Groups

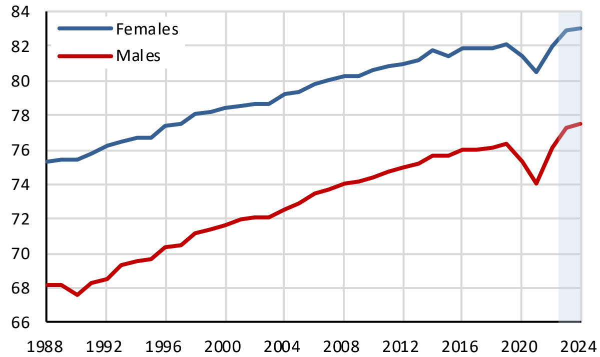
as of 1 January of the given year, shares in total population, in %



Source: CZSO. Calculations of the MoF.

Graph 1.5.2: Life Expectancy at Birth

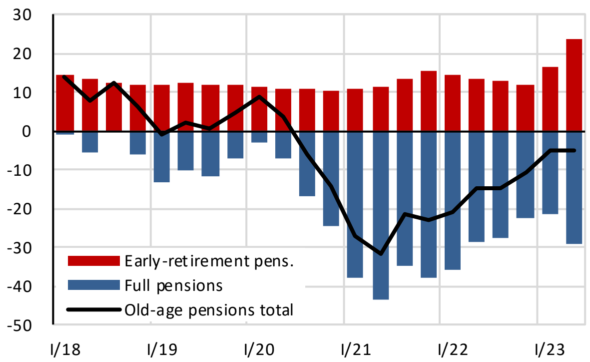
in years



Source: CZSO.

Graph 1.5.3: Old-Age Pensioners

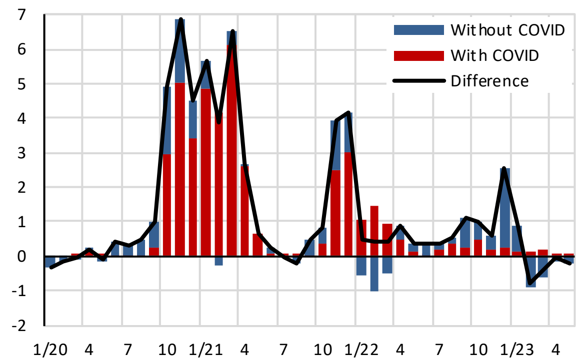
absolute increase over a year in thousands of persons



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

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**	**10 842**	**10 854**	**10 864**
	growth in %	0.2	0.3	0.4	0.4	-1.9	0.2	3.0	0.1	0.1	0.1
0–19 years	*thous. persons*	2 106	2 133	2 160	2 188	2 171	2 197	2 307	2 320	2 326	2 325
	growth in %	1.2	1.3	1.3	1.3	-0.8	1.2	5.0	0.5	0.3	0.0
20–64 years	*thous. persons*	6 484	6 437	6 403	6 374	6 172	6 151	6 312	6 290	6 282	6 277
	growth in %	-0.9	-0.7	-0.5	-0.4	-3.2	-0.3	2.6	-0.3	-0.1	-0.1
65 and more years	*thous. persons*	1 989	2 040	2 087	2 132	2 152	2 169	2 208	2 233	2 247	2 262
	growth in %	2.9	2.6	2.3	2.2	0.9	0.8	1.8	1.1	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 January)											
Demographic [2]	*%*	30.7	31.7	32.6	33.4	34.9	35.3	35.0	35.5	35.8	36.0
Under current legislation [3]	*%*	40.1	40.4	40.4	40.5	41.2	40.6	39.3	39.0	38.7	38.5
Effective [4]	*%*	46.2	45.7	45.2	45.5	46.0	45.2	45.6	46.9	46.5	46.3
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**	**15**	**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**	**26**	**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*	**x**	**x**	**x**	**x**	**-207**	**x**	**x**	**x**	**x**	**x**

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

[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).*

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

1.6 Other Assumptions

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

– the cut in gas supplies from Russia to the EU will be replaced by a combination of increased gas imports from other countries (including liquefied natural gas), savings and a switch to alternative technologies;

– the ongoing war in Ukraine will not lead to a renewed rise in commodity prices in world markets;

– the pubic finances consolidation package will be approved without major changes to the current draft;

– the rates and bases of other significant taxes and compulsory levies will otherwise remain unchanged;

– over the forecast horizon, supply chains will function without major problems and, as a result, upward pressures on the price level will also ease;

– thanks to the 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.

2 Economic Cycle

2.1 Position within the Economic Cycle

As a result of the pandemic and related measures, the Czech economy fell into the deepest negative **output gap** in history. Real gross value added fell short of its potential level by more than 8% in Q2 2020. However, the subsequent economic recovery has led to a moderation of the decline. For the full year 2020, the output gap was thus −2.5% (*vs. −2.4%*), less negative compared to the recessions of 2009 and 2013.

The output gap, which has been in a slightly negative range in recent quarters, is expected to widen until Q3 this year. In fact, potential output growth should temporarily accelerate thanks to the increase in the working-age population due to immigration from Ukraine. Given the gradual pace of economic recovery, the economy should remain below its potential level until around mid-2024. However, given the extreme uncertainty and volatility of economic developments, the results should be treated with caution.

Potential output growth, which had slowed considerably in 2020 and 2021 due to the recession, reached 2.0% in 2022 (*vs. 2.1%*). It could accelerate slightly to 2.1% this year (*vs. 2.5%*) and be below 2% in subsequent years.

The dominant factor in the development of potential output has long been the trend component of **total factor productivity**. Its contribution has been below 1 pp in recent years and could gradually increase over the forecast horizon, but should continue to lag well behind its long-term average.

A significant reduction in investment activity in 2020 and only a slight recovery in 2021 resulted in a slower increase in the **capital stock**. The subsequent acceleration in investment spending last year led to a stronger boost to potential output. At the expected pace of gross fixed capital formation, this factor could boost potential growth by 0.7 pp in 2023 (*unchanged*).

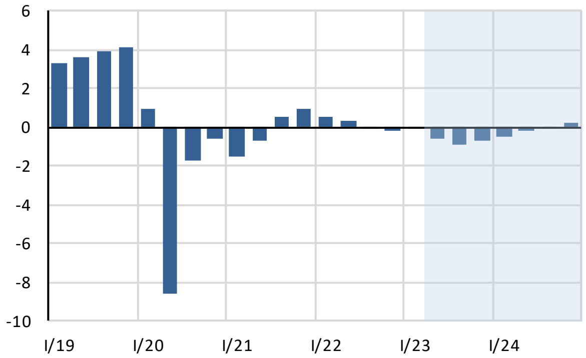
The ageing of the population, manifested over the long term by the declining number of people in the working age group (20–64 years), is having a negative impact on **labour supply**. Over the forecast horizon, the arrival of refugees from Ukraine should have the opposite effect. For the estimation of potential output, the time series of employed, unemployed and working-age population have been adjusted following the results of the 2021 Population and Housing Census. In 2023, demographic developments could support potential growth to the extent of 1.0 pp (*unchanged*).

Until 2018, the economic growth, accompanied by rising labour demand, was reflected in a rapid increase in **participation rate**. As a result of the forecast decline in the participation rate this year (see Chapter 3.3), this factor could subtract 0.1 pp from potential growth this year (*vs. 0.5 pp*).

The average number of **hours usually worked** shows a long-term downward trend. While in 2017–2020 this number ranged from 39.9 to 40.2 hours, in 2021 values between 39.3 and 39.5 hours were published. This has created a significant break in the time series (see Graph 2.1.4), which has no economic justification and is most likely due to methodological changes in the LFS. Given that this factor has now subsided, the contribution of the number of hours usually worked could be −0.1 pp in 2023 (*vs. 0.0 pp*).

Graph 2.1.1: Output Gap

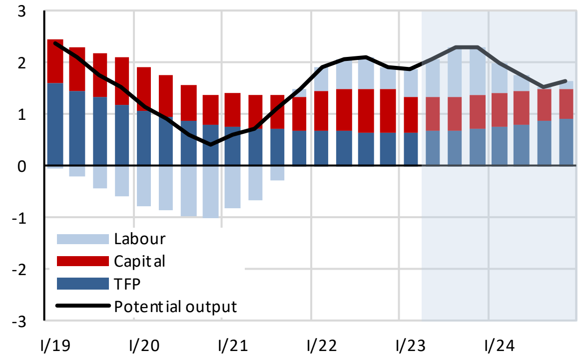
in % of potential product



Source: CZSO. Calculations and forecast of the MoF.

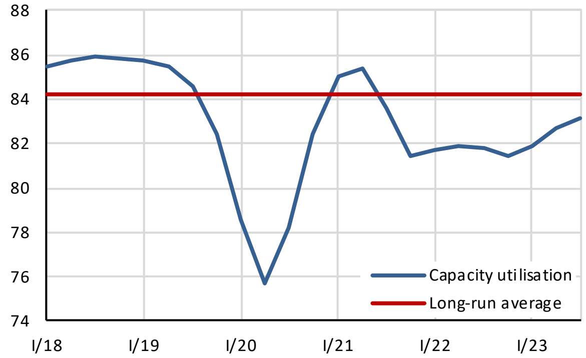
Graph 2.1.2: Potential Output

YoY growth rate in %, contributions in percentage points



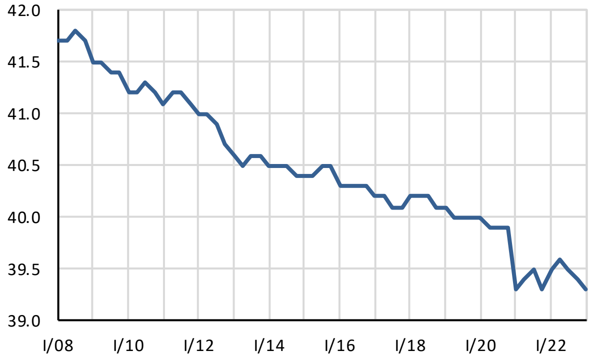
Source: CZSO. Calculations and forecast of the MoF.

Graph 2.1.3: Capacity Utilisation in Industry
smoothed by Hodrick-Prescott filter, in %



Source: CZSO.

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 *Forecast*	2024 *Forecast*	2025 *Outlook*	2026 *Outlook*
Output gap	*%*	**2.0**	**2.8**	**3.8**	**-2.5**	**-0.2**	**0.2**	**-0.6**	**-0.1**	**0.7**	**1.5**
Potential product	*growth in %*	**2.7**	**2.6**	**1.9**	**0.8**	**1.0**	**2.0**	**2.1**	**1.7**	**1.6**	**1.6**
Contributions											
Trend total factor productivity	*pp*	2.2	1.9	1.4	0.9	0.7	0.7	0.7	0.8	1.0	1.1
Fixed assets	*pp*	0.5	0.6	0.9	0.7	0.6	0.8	0.7	0.6	0.5	0.5
Population 20–64 years	*pp*	-0.6	-0.5	-0.4	-0.4	-0.2	-0.2	1.0	0.2	-0.1	0.0
Participation rate	*pp*	0.7	0.7	0.2	-0.2	0.2	0.8	-0.1	0.1	0.2	0.1
Usually worked hours	*pp*	-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 Q2 2023 points to quarter-on-quarter stagnation in gross value added in industry and a slight recovery in economic activity in trade and services. In construction, the confidence indicator signals a continued quarter-on-quarter 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 slight quarter-on-quarter decline in the pace of exports of goods.

The CZSO's consumer confidence indicator strengthened noticeably quarter-on-quarter in Q2 2023. Its development signals a reduction in the negative year-on-year dynamics of household final consumption expenditure in H2 2023 (the confidence indicator shows a lead of 1–2 quarters). Also, the consumer confidence indicator compiled by the Ministry of Finance from sub-questions of the European Commission consumer survey, increased in Q2 2023 compared to the previous period. Consumer pessimism stemming from a significantly negative assessment of the economic situation remained unchanged, but the negative assessment of households' financial situation decreased compared to the previous quarter and their ability to save was also higher.

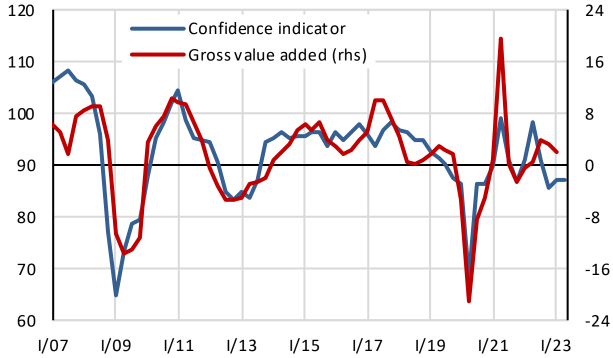
As a result, the composite confidence indicator signals an increase in the quarter-on-quarter growth of gross value added in Q2 2023.

In July 2023, the composite indicator declined more significantly compared to the Q2 average level. This was driven by a decline in confidence in industry, trade and services and construction. In contrast, consumer sentiment improved markedly.

According to the composite leading indicator, the negative output gap should approximately stabilise by mid-2023. This is in line with our current estimate of the economy's position over the business cycle (see Chapter 2.1).

Graph 2.2.1: Confidence and GVA in Industry

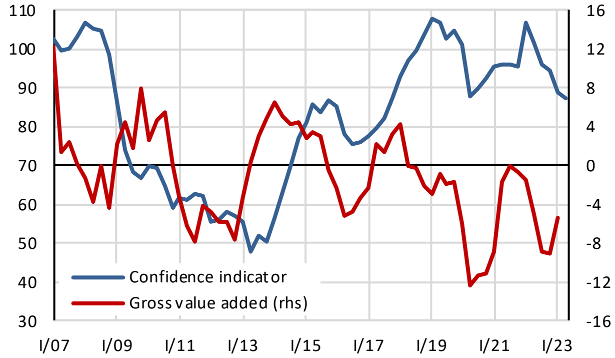
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.2: Confidence and GVA in Construction

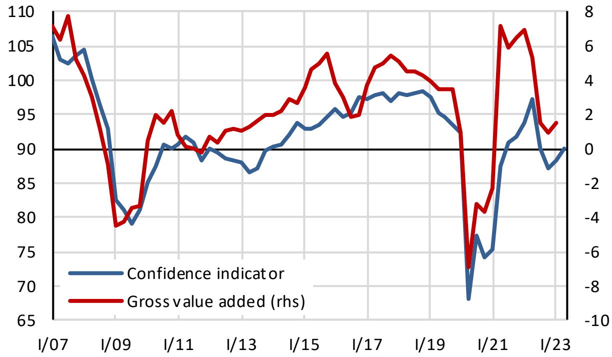
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.3: Confidence and GVA in Trade and Services

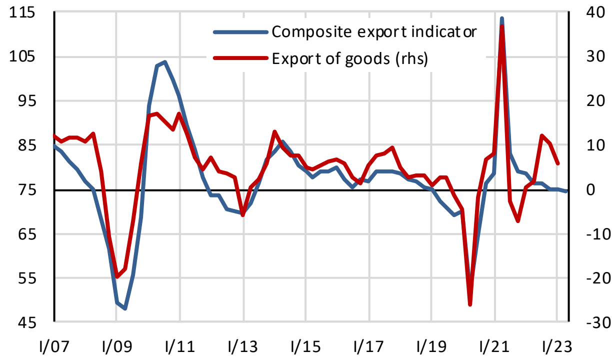
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO. Calculations of the MoF.

Graph 2.2.4: Composite Export Indicator

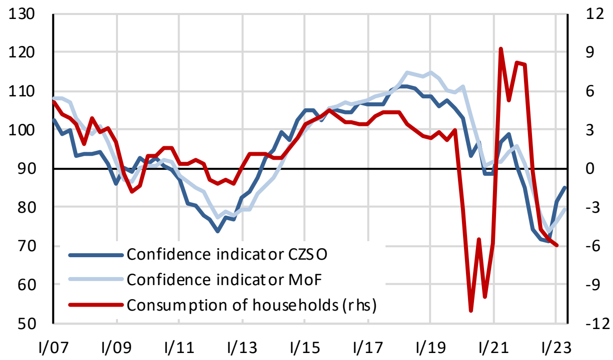
2010=100 (lhs), YoY growth in % (rhs)



Source: CESifo, CZSO. Calculations of the MoF.

Graph 2.2.5: Consumer Confidence and Consumption

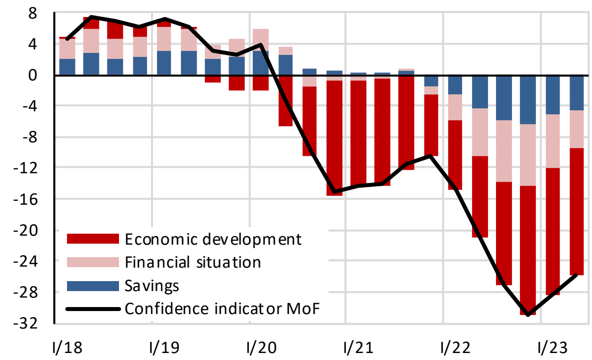
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO, European Commission. Calculations of the MoF.

Graph 2.2.6: Decomposition of Consumer Sentiment

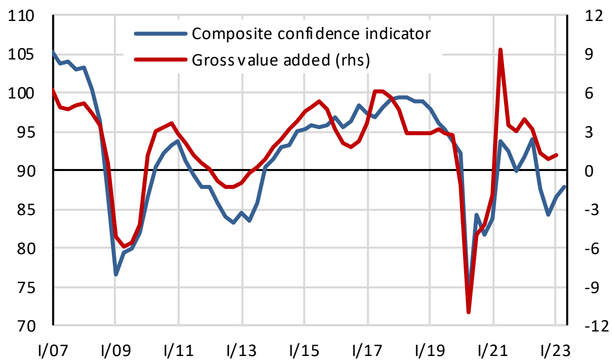
consumer confidence indicator of the MoF, balance, contributions



Source: European Commission. Calculations of the MoF.

Graph 2.2.7: Composite Confidence Indicator and GVA

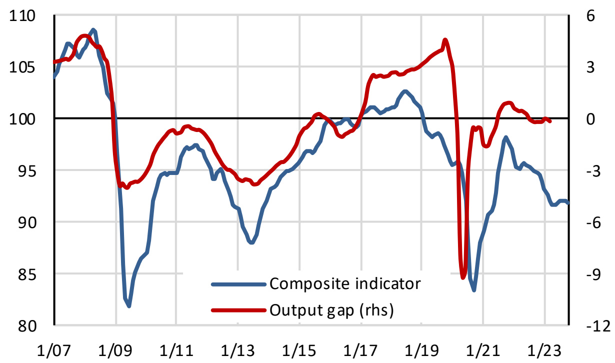
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

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 0.2% YoY (*vs. 0.3%*) in **Q1 2023**, with seasonally adjusted **GDP** unchanged from the previous quarter (*vs. a 0.2% decline*). Economic activity was supported by most industries, weighed down by only financial and insurance activities and manufacturing. Real GDP growth in 2022 was revised down by 0.1 pp to 2.4%. The largest adjustment in the expenditure structure of GDP was in gross fixed capital formation (growth reduced by 3.2 pp), while the contribution of the foreign trade balance was increased.

Household consumption fell by 5.8% YoY (*vs. 5.3%*), due to both a fall in real disposable income and a rise in the savings rate. Household spending on durable goods declined the most, but purchases of semi-durables and non-durable goods also fell strongly. Only expenditure on services increased slightly.

Government consumption increased by 2.8% YoY (*vs. 1.1%*) on the back of growth in public sector employment and purchases of goods and services.

Gross fixed capital formation fell by 2.3% (*vs. growth of 3.0%*). Although investment activity was boosted by investment in machinery and equipment, other categories showed a decline, most notably investment in dwellings. From a sectoral perspective, the decline in investment activity was driven by corporate investment, which was affected by the lagged effect of the shallow recession in the second half of the previous year. Household investment was also lower year-on-year. In contrast, investment by the general government sector increased thanks to projects financed from national and EU funds.

With a negative contribution of 0.5 pp of the **change in inventories** to GDP growth, gross capital formation fell by 3.4% (*vs. growth of 1.0%*). Although firms continued to increase their inventories of production inputs sharply to avoid losses resulting from high inflation and possible shortfalls in the supply of components, inventory accumulation fell year-on-year.

The **external trade balance** contributed significantly positively to GDP growth to the extent of 3.0 pp. The easing of supply chain disruptions has had a positive impact on exports of goods and services, which grew by 7.6% (*vs. 7.2%*) in Q1 2023, while imports of goods and services increased by only 3.9% (*vs. 5.1%*) due to weak domestic demand.

According to the preliminary estimate, seasonally adjusted GDP increased by 0.1% QoQ (*vs. 0.5%*) in Q2 2023 thanks to domestic demand. The Czech economy should continue to recover in H2 this year, but will be hampered by economic problems in the main export markets. The baseline scenario of the forecast assumes securing gas supplies from storage facilities and gradually also from new LNG terminals. As a result, economic activity could decline slightly by 0.2% **in 2023** (*vs. growth of 0.1%*). The economy should be driven mainly by foreign trade, but government consumption and gross fixed capital formation will also support growth. Continued deceleration in household consumption as well as lower inventory accumulation will hamper economic growth. **In 2024**, with a positive contribution from both external and domestic demand, real GDP could grow by 2.3% (*vs. 3.0%*). We expect the impact of the government's consolidation package on growth dynamics to be only slightly negative (−0.3 pp).

Households' final consumption expenditure will be negatively affected this year by the continued decline in real disposable income and the restrictive monetary policy stance. The 2022 growth profile will also substantially weigh on the full-year dynamics of consumption. On the contrary, consumer spending by refugees from Ukraine, who have been classified as residents since Q4 2022, will have a positive impact. The savings rate is expected to 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-term average over the forecast horizon. In view of these strongly negative factors, real household consumption is expected to fall by 3.4% (*vs. 2.7%*) this year. Thanks to the fall in inflation, the above-mentioned drawdown of savings should be complemented by a renewed increase in real household income in 2024. Despite a number of discretionary changes, we expect household consumption expenditure to recover by 3.9% (*unchanged*) as a result.

Government consumption could grow by 2.4% (*vs. 1.6%*) in 2023. The migration wave from Ukraine has led to an increase in staff capacity, especially in education, which will be reflected in employment growth. Purchases of goods and services will be supported this year by current subsidies from EU funds as the end of the 2014–2020 financial perspective approaches. In 2024, growth in general government consumption could slow to 1.8% (*vs. 1.3%*). In addition to fiscal consolidation, the transition to the new 2021–2027 financial perspective will be reflected, but will be somewhat offset by the ramp-up of current projects from other EU instruments, notably the Recovery and Resilience Facility.

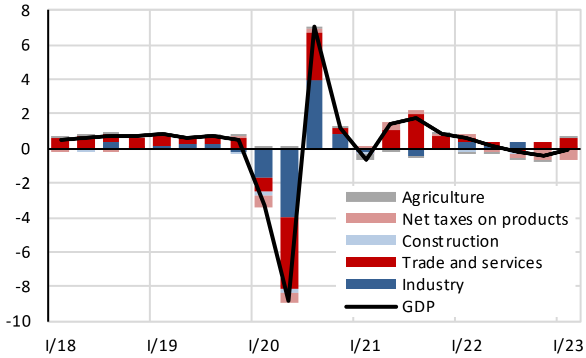
Gross fixed capital formation is expected to slow down in 2023 due to economic problems in euro area countries and rising capital goods prices. Monetary conditions, which will become restrictive towards the end of the year, will also take a toll on its dynamism. In contrast, investment activity will be positively affected by government spending co-financed by EU funds from the previous financial perspective. Thanks to the euro area's economic growth, we expect a recovery in private investment next year, 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 be reflected in a decline in investment by the general government sector. Thus, gross fixed capital formation may increase by 0.8% (*vs. 2.8%*) in 2023, with its growth slowing slightly to 0.7% (*vs. 0.5%*) 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 4.6% (*vs. growth of 0.9%*) this year and by 3.8% (*vs. 1.6%*) next year.

Exports of goods and services are expected to grow by 4.3% (*vs. 4.1%*) this year. 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-in-progress inventories (see Chapter 3.4). The projected acceleration of export growth in 2024 to 4.6% (*vs. 4.7%*) reflects the recovery of major 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 by 1.2% (*vs. 3.0%*) in 2023. The acceleration of growth to 2.9% (*vs. 2.8%*) in 2024 mainly reflects a recovery in household consumption.

Graph 3.1.1: Resources of Gross Domestic Product

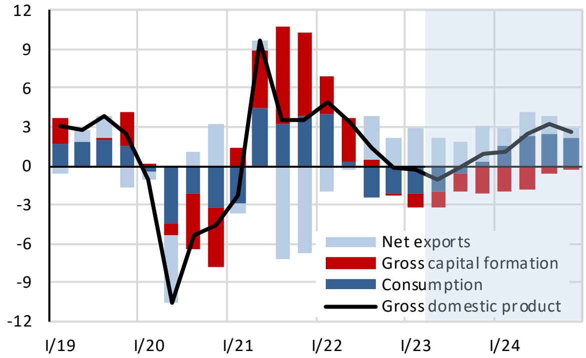
QoQ growth rate of real GDP in %, contrib. in pp, season. adjusted



Source: CZSO. Calculations of the MoF.

Graph 3.1.2: GDP by Type of Expenditure

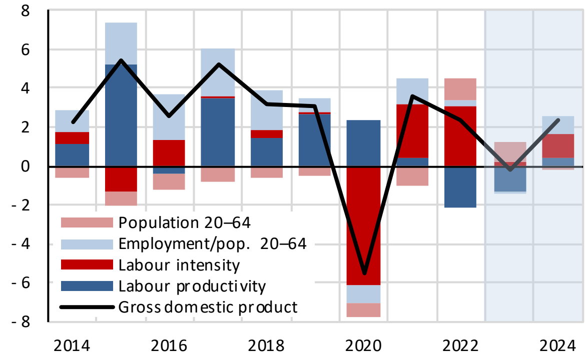
YoY growth rate of real GDP in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.1.3: Real Gross Domestic Product

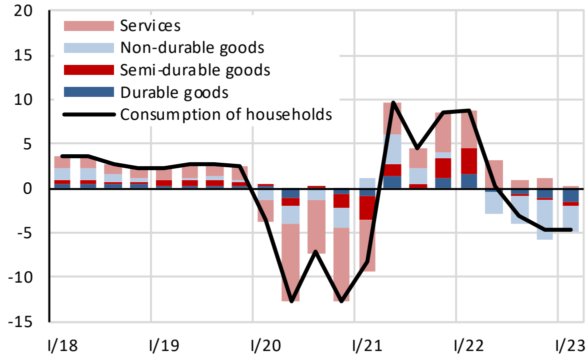
growth in %, contributions in percentage points



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

Graph 3.1.4: Real Consumption of Households

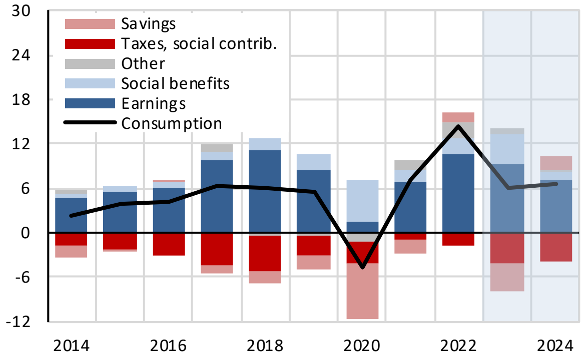
domestic concept, YoY growth rate in %, contributions in pp



Source: CZSO. Calculations of the MoF.

Graph 3.1.5: Nominal Consumption of Households

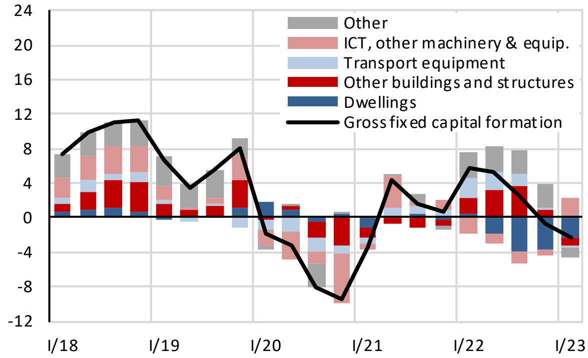
national concept, YoY growth rate in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.1.6: Investment by Type of Expenditure

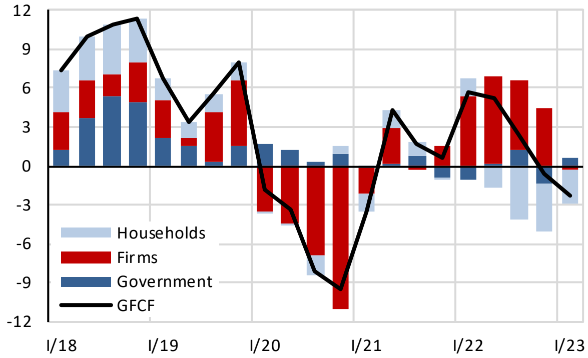
YoY growth rate of real GFCF in %, contributions in pp



Source: CZSO. Calculations of the MoF.

Graph 3.1.7: Investment by Sector

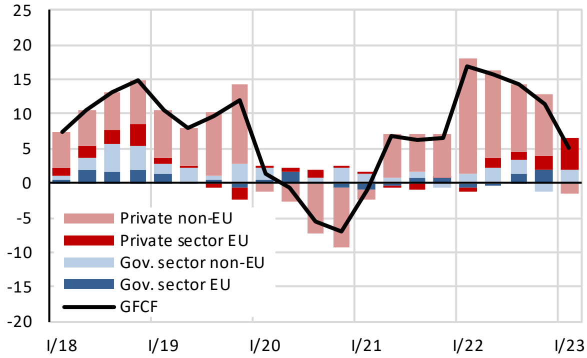
YoY growth rate of real GFCF in %, contributions in percentage points



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**	**5 305**	**5 428**	**5 560**	**5 688**
	growth in %	5.2	3.2	3.0	-5.5	3.6	2.4	-0.2	2.3	2.4	2.3
	growth in % [1]	5.3	3.2	3.0	-5.5	3.5	2.4	0.0	2.2	2.5	2.4
Private consumption expenditure [2]	*bill. CZK 2015*	**2 355**	**2 438**	**2 504**	**2 322**	**2 418**	**2 401**	**2 318**	**2 409**	**2 497**	**2 565**
	growth in %	4.0	3.5	2.7	-7.2	4.1	-0.7	-3.4	3.9	3.7	2.7
Government consumption exp.	*bill. CZK 2015*	**913**	**949**	**973**	**1 014**	**1 027**	**1 033**	**1 058**	**1 076**	**1 098**	**1 120**
	growth in %	1.8	3.9	2.5	4.2	1.4	0.6	2.4	1.8	2.0	2.0
Gross capital formation	*bill. CZK 2015*	**1 323**	**1 425**	**1 489**	**1 351**	**1 609**	**1 699**	**1 621**	**1 560**	**1 532**	**1 542**
	growth in %	6.5	7.7	4.5	-9.3	19.1	5.6	-4.6	-3.8	-1.8	0.7
Gross fixed capital formation	*bill. CZK 2015*	1 248	1 374	1 455	1 368	1 379	1 420	1 432	1 443	1 470	1 501
	growth in %	4.9	10.0	5.9	-6.0	0.8	3.0	0.8	0.7	1.9	2.1
Change in stocks and valuables	*bill. CZK 2015*	75	51	34	-16	230	279	189	117	62	41
Exports of goods and services	*bill. CZK 2015*	**4 168**	**4 322**	**4 386**	**4 034**	**4 312**	**4 623**	**4 823**	**5 045**	**5 250**	**5 414**
	growth in %	7.2	3.7	1.5	-8.0	6.9	7.2	4.3	4.6	4.1	3.1
Imports of goods and services	*bill. CZK 2015*	**3 771**	**3 989**	**4 051**	**3 719**	**4 214**	**4 479**	**4 531**	**4 664**	**4 811**	**4 943**
	growth in %	6.3	5.8	1.5	-8.2	13.3	6.3	1.2	2.9	3.2	2.7
Gross domestic expenditure	*bill. CZK 2015*	**4 592**	**4 811**	**4 964**	**4 693**	**5 053**	**5 131**	**4 997**	**5 049**	**5 134**	**5 235**
	growth in %	4.3	4.8	3.2	-5.5	7.7	1.5	-2.6	1.0	1.7	2.0
Methodological discrepancy [3]	*bill. CZK 2015*	-1	3	3	10	38	36	15	2	-5	-9
Real gross domestic income	*bill. CZK 2015*	**4 988**	**5 149**	**5 324**	**5 083**	**5 259**	**5 232**	**5 297**	**5 426**	**5 559**	**5 688**
	growth in %	4.3	3.2	3.4	-4.5	3.4	-0.5	1.2	2.4	2.4	2.3
Contributions to GDP growth [4]											
Gross domestic expenditure	*pp*	**3.9**	**4.4**	**3.0**	**-5.1**	**7.2**	**1.5**	**-2.6**	**1.0**	**1.6**	**1.8**
Consumption	*pp*	**2.3**	**2.4**	**1.8**	**-2.6**	**2.2**	**-0.2**	**-1.1**	**2.1**	**2.1**	**1.7**
Household expenditure	*pp*	1.9	1.7	1.3	-3.4	1.9	-0.3	-1.6	1.8	1.7	1.3
Government expenditure	*pp*	0.3	0.7	0.5	0.8	0.3	0.1	0.5	0.4	0.4	0.4
Gross capital formation	*pp*	**1.7**	**2.0**	**1.2**	**-2.6**	**5.0**	**1.7**	**-1.5**	**-1.1**	**-0.5**	**0.2**
Gross fixed capital formation	*pp*	1.2	2.5	1.6	-1.6	0.2	0.8	0.2	0.2	0.5	0.5
Change in stocks	*pp*	0.5	-0.5	-0.3	-0.9	4.8	0.9	-1.7	-1.3	-1.0	-0.4
Foreign balance	*pp*	**1.2**	**-1.2**	**0.0**	**-0.4**	**-3.6**	**0.9**	**2.4**	**1.3**	**0.8**	**0.5**
External balance of goods	*pp*	0.9	-1.0	0.4	-0.3	-3.6	1.4	2.4	1.2	0.8	0.4
External balance of services	*pp*	0.3	-0.2	-0.4	-0.1	0.0	-0.5	0.0	0.2	0.1	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).
3) Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.
4) Calculated on the basis of prices and structure of the previous year with perfectly additive contributions.
Source: CZSO. Calculations and forecast of the MoF.

Table 3.1.2: Real GDP by Type of Expenditure – quarterly
chained volumes, reference year 2015

		2022				2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Gross domestic product	*bill. CZK 2015*	**1 261**	**1 354**	**1 349**	**1 349**	**1 258**	**1 339**	**1 346**	**1 362**
	growth in %	5.0	3.4	1.4	-0.1	-0.2	-1.1	-0.2	0.9
	growth in % [1]	4.7	3.4	1.4	0.1	-0.5	-0.6	0.1	1.0
	QoQ in % [1]	0.6	0.2	-0.2	-0.4	0.0	0.1	0.4	0.5
Private consumption expenditure [2]	*bill. CZK 2015*	**589**	**612**	**603**	**597**	**555**	**578**	**588**	**597**
	growth in %	8.3	-0.2	-4.3	-5.3	-5.8	-5.5	-2.5	0.1
Government consumption exp.	*bill. CZK 2015*	**241**	**249**	**250**	**293**	**248**	**256**	**256**	**298**
	growth in %	1.5	1.7	-1.9	0.9	2.8	2.8	2.4	1.7
Gross capital formation	*bill. CZK 2015*	**371**	**448**	**458**	**422**	**358**	**431**	**439**	**394**
	growth in %	11.0	11.6	1.6	-0.1	-3.4	-3.8	-4.3	-6.7
Gross fixed capital formation	*bill. CZK 2015*	313	363	362	383	306	360	367	400
	growth in %	5.7	5.2	2.4	-0.6	-2.3	-0.7	1.5	4.3
Change in stocks and valuables	*bill. CZK 2015*	58	85	97	39	53	71	72	-6
Exports of goods and services	*bill. CZK 2015*	**1 122**	**1 166**	**1 119**	**1 215**	**1 207**	**1 216**	**1 140**	**1 260**
	growth in %	2.8	3.2	13.1	10.4	7.6	4.3	1.9	3.6
Imports of goods and services	*bill. CZK 2015*	**1 069**	**1 129**	**1 088**	**1 192**	**1 111**	**1 147**	**1 083**	**1 191**
	growth in %	5.9	3.8	8.0	7.5	3.9	1.5	-0.5	-0.1
Gross domestic expenditure	*bill. CZK 2015*	**1 201**	**1 307**	**1 309**	**1 314**	**1 162**	**1 265**	**1 281**	**1 289**
	growth in %	7.5	3.9	-1.9	-2.2	-3.2	-3.3	-2.1	-1.9
Methodological discrepancy [3]	*bill. CZK 2015*	**6**	**7**	**7**	**15**	**0**	**4**	**7**	**5**
Real gross domestic income	*bill. CZK 2015*	**1 253**	**1 325**	**1 325**	**1 329**	**1 251**	**1 346**	**1 342**	**1 358**
	growth in %	2.2	-0.6	-1.4	-1.9	-0.1	1.6	1.3	2.2
Gross value added	*bill. CZK 2015*	**1 145**	**1 222**	**1 214**	**1 217**	**1 163**	**.**	**.**	**.**
	growth in %	4.4	3.3	1.4	0.5	1.6	.	.	.
	growth in % [1]	4.0	3.2	1.4	0.8	1.3	.	.	.
	QoQ in % [1]	0.3	0.3	0.0	0.2	0.7	.	.	.
Net taxes and subsidies on products	*bill. CZK 2015*	**116**	**132**	**136**	**132**	**94**	**.**	**.**	**.**

[1] *From seasonally and working day adjusted data*
[2] *Including consumption of non-profit institutions serving households (NPISH).*
[3] *Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.*
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**	**7 384**	**7 751**	**8 105**	**8 436**
	growth in %	6.5	5.9	7.0	-1.4	7.0	11.1	8.8	5.0	4.6	4.1
Private consumption expenditure [1)]	*bill. CZK*	**2 420**	**2 568**	**2 711**	**2 588**	**2 772**	**3 165**	**3 351**	**3 567**	**3 779**	**3 959**
	growth in %	6.5	6.1	5.6	-4.5	7.1	14.2	5.9	6.4	6.0	4.8
Government consumption exp.	*bill. CZK*	**959**	**1 050**	**1 134**	**1 243**	**1 310**	**1 374**	**1 505**	**1 573**	**1 647**	**1 716**
	growth in %	5.4	9.5	8.0	9.5	5.4	4.8	9.6	4.5	4.7	4.2
Gross capital formation	*bill. CZK*	**1 348**	**1 472**	**1 599**	**1 493**	**1 846**	**2 182**	**2 204**	**2 172**	**2 165**	**2 200**
	growth in %	8.0	9.2	8.7	-6.6	23.6	18.2	1.0	-1.5	-0.3	1.6
Gross fixed capital formation	*bill. CZK*	1 273	1 423	1 568	1 516	1 589	1 817	1 916	1 967	2 032	2 093
	growth in %	6.4	11.7	10.2	-3.3	4.8	14.4	5.4	2.7	3.3	3.0
Change in stocks and valuables	*bill. CZK*	74	49	31	-22	257	364	288	205	133	107
External balance	*bill. CZK*	**384**	**321**	**347**	**385**	**181**	**66**	**323**	**439**	**514**	**561**
Exports of goods and services	*bill. CZK*	4 039	4 163	4 279	3 993	4 443	5 188	5 351	5 681	5 959	6 183
	growth in %	6.4	3.1	2.8	-6.7	11.3	16.8	3.1	6.2	4.9	3.8
Imports of goods and services	*bill. CZK*	3 654	3 842	3 932	3 608	4 262	5 122	5 028	5 241	5 445	5 622
	growth in %	6.6	5.1	2.3	-8.2	18.1	20.2	-1.8	4.2	3.9	3.2
Gross national income	*bill. CZK*	**4 821**	**5 114**	**5 441**	**5 424**	**5 859**	**6 468**	**7 074**	**7 411**	**7 744**	**8 060**
	growth in %	7.8	6.1	6.4	-0.3	8.0	10.4	9.4	4.8	4.5	4.1
Primary income balance	*bill. CZK*	**-289**	**-297**	**-350**	**-285**	**-249**	**-318**	**-310**	**-340**	**-361**	**-376**

[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

		2022				2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Gross domestic product	*bill. CZK*	**1 542**	**1 696**	**1 753**	**1 795**	**1 716**	**1 853**	**1 874**	**1 940**
	growth in %	11.4	10.4	11.2	11.4	11.3	9.2	6.9	8.1
Private consumption expenditure [1]	*bill. CZK*	**735**	**800**	**813**	**816**	**794**	**830**	**849**	**879**
	growth in %	20.4	14.8	11.8	10.8	8.0	3.7	4.4	7.7
Government consumption exp.	*bill. CZK*	**304**	**326**	**330**	**414**	**340**	**360**	**358**	**447**
	growth in %	6.7	3.4	1.5	7.5	12.1	10.6	8.3	7.9
Gross capital formation	*bill. CZK*	**452**	**564**	**604**	**562**	**479**	**576**	**606**	**544**
	growth in %	20.8	24.7	14.6	14.0	6.0	2.2	0.3	-3.3
Gross fixed capital formation	*bill. CZK*	388	451	469	509	408	469	494	545
	growth in %	16.9	15.7	14.3	11.4	5.1	4.0	5.2	7.2
Change in stocks and valuables	*bill. CZK*	63	113	135	54	70	107	112	-2
External balance	*bill. CZK*	**51**	**7**	**6**	**2**	**103**	**87**	**62**	**71**
Exports of goods and services	*bill. CZK*	1 209	1 312	1 296	1 370	1 348	1 338	1 275	1 391
	growth in %	10.3	13.9	25.2	18.2	11.4	1.9	-1.6	1.5
Imports of goods and services	*bill. CZK*	1 159	1 306	1 290	1 368	1 245	1 250	1 214	1 320
	growth in %	18.0	20.9	24.4	17.6	7.4	-4.2	-5.9	-3.5

[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**	**7 384**	**7 751**	**8 105**	**8 436**
	growth in %	6.5	5.9	7.0	-1.4	7.0	11.1	8.8	5.0	4.6	4.1
Balance of taxes and subsidies	*bill. CZK*	**493**	**504**	**534**	**449**	**477**	**590**	**554**	**724**	**780**	**812**
	% of GDP	9.7	9.3	9.2	7.9	7.8	8.7	7.5	9.3	9.6	9.6
	growth in %	8.6	2.2	6.0	-16.0	6.3	23.8	-6.2	30.8	7.7	4.1
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**	**3 246**	**3 443**	**3 590**	**3 749**
(domestic concept)	*% of GDP*	42.8	44.3	44.6	46.0	45.6	44.3	44.0	44.4	44.3	44.4
	growth in %	9.1	9.8	7.8	1.5	6.1	7.9	8.0	6.1	4.3	4.4
Wages and salaries	*bill. CZK*	1 680	1 842	1 986	1 989	2 106	2 301	2 494	2 645	2 758	2 880
	growth in %	9.2	9.6	7.8	0.1	5.9	9.3	8.4	6.1	4.3	4.4
Social security contributions	*bill. CZK*	505	557	599	636	681	705	752	798	832	869
	growth in %	8.7	10.3	7.6	6.2	7.0	3.5	6.8	6.0	4.3	4.4
Gross operating surplus	*bill. CZK*	**2 432**	**2 507**	**2 671**	**2 635**	**2 845**	**3 189**	**3 584**	**3 584**	**3 734**	**3 875**
	% of GDP	47.6	46.3	46.1	46.2	46.6	47.0	48.5	46.2	46.1	45.9
	growth in %	4.0	3.1	6.5	-1.4	8.0	12.1	12.4	0.0	4.2	3.8
Consumption of capital	*bill. CZK*	1 022	1 074	1 153	1 229	1 302	1 434	1 546	1 629	1 728	1 825
	growth in %	3.5	5.0	7.4	6.5	6.0	10.1	7.8	5.3	6.1	5.6
Net operating surplus	*bill. CZK*	1 410	1 434	1 518	1 406	1 543	1 755	2 038	1 956	2 006	2 050
	growth in %	4.3	1.7	5.9	-7.4	9.7	13.8	16.1	-4.0	2.6	2.2

Source: CZSO. Calculations and forecast of the MoF.

Table 3.1.6: GDP by Type of Income – quarterly

		2022				2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
GDP	*bill. CZK*	**1 542**	**1 696**	**1 753**	**1 795**	**1 716**	**1 853**	**1 874**	**1 940**
	growth in %	11.4	10.4	11.2	11.4	11.3	9.2	6.9	8.1
Balance of taxes and subsidies	*bill. CZK*	**124**	**155**	**166**	**145**	**110**	**140**	**162**	**142**
	growth in %	73.4	33.2	13.0	2.0	-11.6	-9.9	-2.5	-2.0
Compensation of employees	*bill. CZK*	**705**	**747**	**743**	**811**	**774**	**801**	**797**	**874**
(domestic concept)	*growth in %*	10.2	6.9	6.6	8.0	9.8	7.2	7.3	7.8
Wages and salaries	*bill. CZK*	538	571	570	622	593	616	613	672
	growth in %	12.0	8.5	7.7	9.2	10.2	7.8	7.5	8.1
Social security contributions	*bill. CZK*	167	176	173	189	181	185	184	202
	growth in %	4.9	1.9	3.1	4.2	8.3	5.3	6.4	7.1
Gross operating surplus	*bill. CZK*	**712**	**794**	**844**	**839**	**832**	**912**	**915**	**924**
	growth in %	6.0	10.1	15.2	16.8	16.9	14.9	8.5	10.1

Source: CZSO. Calculations and forecast of the MoF.

3.2 Prices

The annual **consumer price** inflation slowed to 8.8% (*vs. 8.9%*) in July 2023. A stronger-than-expected decline in core inflation was offset by stronger growth of administered prices. In terms of consumer basket divisions, the main driver of July annual inflation was the housing division (3.7 pp), mainly due to price increases of 23.4% for electricity, 35.5% for natural gas and 38.9% for heat and hot water. In addition, the food and non-alcoholic beverages division contributed 1.7 pp, across all sub-divisions except for oils and fats. Administrative measures added 3.8 pp to inflation, of which regulated prices (esp. energy prices) added 3.6 pp and tax changes almost 0.2 pp.

Higher annual inflation rate in July as measured by the **HICP** (10.2% according to preliminary data) 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 (see 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 elevated inflation continues **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, a price cap on electricity and gas prices has been effective from January 2023. As a result, their contributions to annual inflation have been gradually decreasing. Moreover, the successful filling of European gas reservoirs before the start of the last heating season, the warm winter, savings by households and businesses and the securing of new gas suppliers have contributed to a significant drop in wholesale energy prices, which should be gradually reflected in consumer prices.

The contribution of regulated prices to the average inflation rate should be highly positive, mainly due to the January energy prices increase and their growth profile over the past year. 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 (*vs. 3.9 pp*) to the average inflation rate in 2023.

The price of oil should be anti-inflationary in 2023, as should the exchange rate of the koruna against major world currencies. 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 income and reduced willingness of households to spend, the impact of the economy's position in the business cycle should be anti-inflationary, especially in early 2023. 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 by market factors. The contribution of regulated prices to the average inflation rate should be negative due to the expected decrease in prices of electricity and gas, but the impact of lower energy prices will be dampened mainly by a more than 50% price increase of the annual motorway vignette from March 2024. The fiscal consolidation package will further have an effect on indirect taxes. Increases in excise duties on alcohol and tobacco products, as well as changes in value added tax rates, will statistically increase inflation next year. Overall, the administrative measures could thus take 0.3 pp off the average inflation rate in 2024.

The oil price and the appreciation of the koruna against the US dollar should continue to be anti-inflationary next year. A restrictive effect of monetary policy will be supported by a negative income effect of the fiscal consolidation package, and together they will moderate inflationary pressures. Relatively high nominal wage growth as well as the slight depreciation of the koruna against the euro could present inflationary factors.

In line with the above, we expect the **average inflation rate** to reach 10.9% (*unchanged*) in 2023 and to fall significantly to 2.8% (*vs. 2.4%*) in 2024. Annual inflation should be close to 8% at the end of this year, but could be within the tolerance band around the CNB's inflation target next year.

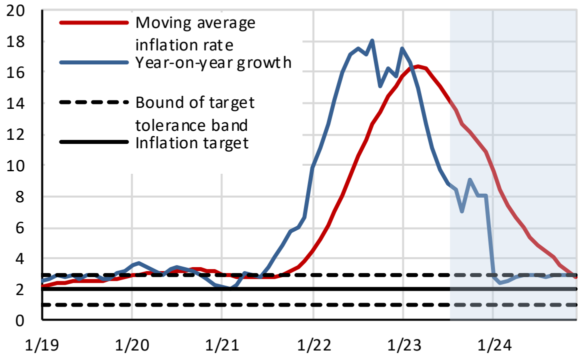
In Q1 2023, the **GDP deflator** increased by 11.6% (*vs. 12.8%*), with an 11.8% (*vs 13.3%*) increase in the gross domestic expenditure deflator and an improvement of 0.1% (*vs. a deterioration of 0.4%*) in the terms of trade. The evolution of the gross domestic expenditure deflator mainly reflected consumer price inflation. The slightly better performance of the terms of trade was mainly driven by mineral fuel prices.

The GDP deflator could increase by 9.0% (*vs. 9.9%*) in 2023. The continued strong growth of the gross domestic expenditure deflator, especially of household consumption, could 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 2.6% (*vs. 3.8%*) due to lower price dynamics across all components of domestic demand.

A decline in the prices of many production inputs, especially of oil and gas, could have a positive impact on the terms of trade in 2023. This trend could continue to a lesser extent next year as well. As a result, the terms of trade could improve by 1.9% (*vs. 0.7%*) this year and by 0.2% (*vs. 0.8%*) in 2024.

Graph 3.2.1: Consumer Prices

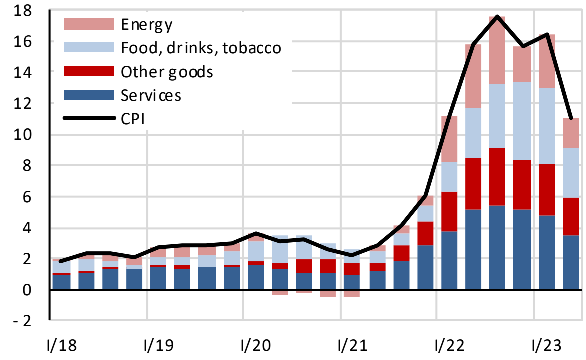
YoY growth rate in %



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

Graph 3.2.2: Consumer Prices in Main Divisions

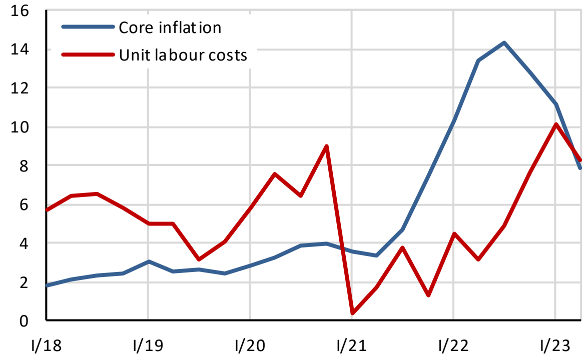
YoY growth of consumer price index in %, contributions in pp



Source: CZSO. Calculations of the MoF.

Graph 3.2.3: Core Inflation and Unit Labour Costs

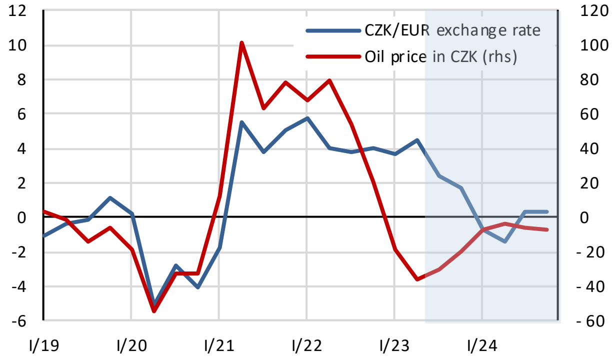
YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.2.4: CZK/EUR and Koruna Price of Oil

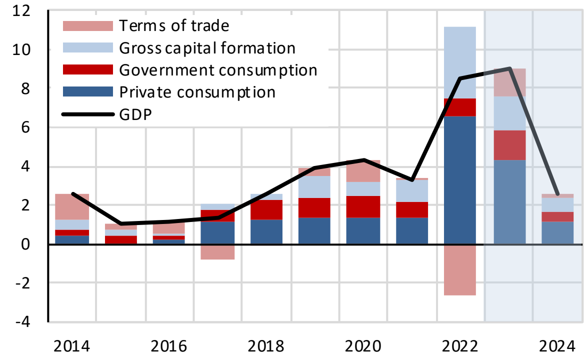
CZK/EUR appreciation, YoY change in CZK price of oil, in %



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

Graph 3.2.5: Gross Domestic Product Deflator

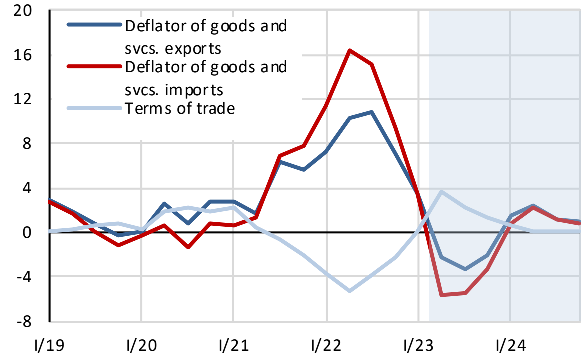
growth rate in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.2.6: Terms of Trade

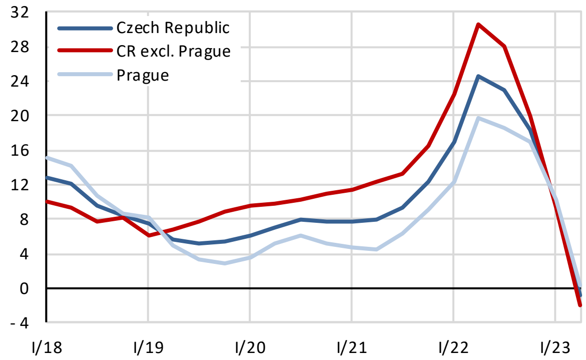
YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.2.7: Offering Prices of Flats

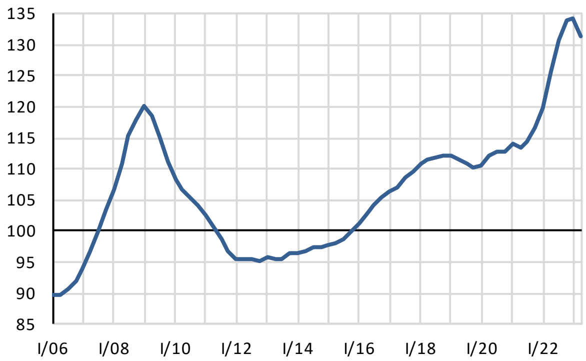
YoY growth rate in %



Source: CZSO.

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 Index											
Level	*average 2015=100*	**103.1**	**105.3**	**108.3**	**111.8**	**116.1**	**133.6**	**148.1**	**152.3**	**155.9**	**159.0**
Average inflation rate	*%*	**2.5**	**2.1**	**2.8**	**3.2**	**3.8**	**15.1**	**10.9**	**2.8**	**2.3**	**2.0**
Administrative measures [1)]	*percentage points*	-0.1	0.3	0.6	0.5	0.0	2.8	4.3	-0.3	0.3	0.3
Market increase	*percentage points*	2.6	1.8	2.2	2.7	3.8	12.3	6.6	3.2	2.0	1.8
Harmonized index of consumer prices											
Level	*average 2015=100*	**103.1**	**105.1**	**107.8**	**111.4**	**115.1**	**132.1**	**148.2**	**152.7**	**156.3**	**159.5**
Average inflation rate	*growth in %*	**2.4**	**2.0**	**2.6**	**3.3**	**3.3**	**14.8**	**12.2**	**3.0**	**2.3**	**2.0**
Deflators											
GDP	*average 2015=100*	**102.5**	**105.1**	**109.2**	**113.9**	**117.7**	**127.7**	**139.2**	**142.8**	**145.8**	**148.3**
	growth in %	1.3	2.6	3.9	4.3	3.3	8.5	9.0	2.6	2.1	1.7
Gross domestic expenditure	*average 2015=100*	**102.9**	**105.8**	**109.7**	**113.4**	**117.3**	**131.0**	**141.3**	**144.8**	**147.9**	**150.4**
	growth in %	2.3	2.8	3.7	3.4	3.4	11.6	7.9	2.5	2.1	1.7
Consumption of households	*average 2015=100*	**102.7**	**105.3**	**108.3**	**111.4**	**114.6**	**131.8**	**144.6**	**148.1**	**151.4**	**154.4**
	growth in %	2.3	2.5	2.8	2.9	2.9	15.0	9.7	2.4	2.2	2.0
Consumption of government	*average 2015=100*	**105.0**	**110.6**	**116.6**	**122.6**	**127.5**	**133.0**	**142.3**	**146.1**	**150.0**	**153.3**
	growth in %	3.5	5.4	5.4	5.2	4.0	4.3	7.0	2.7	2.6	2.2
Fixed capital formation	*average 2015=100*	**102.0**	**103.6**	**107.7**	**110.8**	**115.2**	**128.0**	**133.8**	**136.3**	**138.2**	**139.4**
	growth in %	1.5	1.6	4.0	2.9	3.9	11.1	4.5	1.9	1.4	0.9
Exports of goods and services	*average 2015=100*	**96.9**	**96.3**	**97.5**	**99.0**	**103.0**	**112.2**	**110.9**	**112.6**	**113.5**	**114.2**
	growth in %	-0.7	-0.6	1.3	1.5	4.1	8.9	-1.1	1.5	0.8	0.6
Imports of goods and services	*average 2015=100*	**96.9**	**96.3**	**97.1**	**97.0**	**101.1**	**114.4**	**111.0**	**112.4**	**113.2**	**113.7**
	growth in %	0.3	-0.6	0.8	0.0	4.2	13.1	-3.0	1.3	0.7	0.5
Terms of trade	*average 2015=100*	**100.0**	**100.0**	**100.5**	**102.0**	**101.9**	**98.1**	**100.0**	**100.2**	**100.3**	**100.4**
	growth in %	-1.0	0.0	0.5	1.5	-0.1	-3.7	1.9	0.2	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

		2022				2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Consumer Price Index	*average 2015=100*	**126.4**	**132.8**	**137.6**	**137.6**	**147.1**	**147.6**	**148.7**	**149.1**
	growth in %	11.2	15.8	17.6	15.7	16.4	11.1	8.1	8.4
Of which the contribution of:									
Administrative measures [1)]	*percentage points*	2.2	3.1	3.6	2.5	4.9	4.0	3.4	4.9
Market increase	*percentage points*	9.0	12.7	14.0	13.2	11.5	7.1	4.6	3.5
Harmonized index of consumer prices	*average 2015=100*	**124.7**	**131.4**	**135.9**	**136.5**	**147.1**	**147.9**	**148.6**	**149.3**
	growth in %	10.2	15.0	17.4	16.5	18.0	12.6	9.4	9.4
Deflators									
GDP	*average 2015=100*	**122.3**	**125.3**	**130.0**	**133.0**	**136.4**	**138.4**	**139.3**	**142.4**
	growth in %	6.2	6.7	9.6	11.5	11.6	10.5	7.2	7.1
Gross domestic expenditure	*average 2015=100*	**124.1**	**129.2**	**133.6**	**136.4**	**138.8**	**139.6**	**141.5**	**145.0**
	growth in %	9.2	11.1	12.7	13.5	11.8	8.1	5.9	6.3
Consumption of households	*average 2015=100*	**124.8**	**130.8**	**135.0**	**136.7**	**143.0**	**143.5**	**144.4**	**147.1**
	growth in %	11.1	15.0	16.9	17.0	14.6	9.8	7.0	7.6
Consumption of government	*average 2015=100*	**125.8**	**130.6**	**132.3**	**141.4**	**137.2**	**140.5**	**140.0**	**150.1**
	growth in %	5.1	1.6	3.4	6.5	9.1	7.6	5.8	6.1
Fixed capital formation	*average 2015=100*	**124.2**	**124.4**	**129.8**	**132.8**	**133.7**	**130.2**	**134.5**	**136.5**
	growth in %	10.6	10.0	11.6	12.1	7.6	4.7	3.6	2.8
Exports of goods and services	*average 2015=100*	**107.8**	**112.5**	**115.8**	**112.7**	**111.6**	**110.0**	**111.9**	**110.4**
	growth in %	7.3	10.3	10.8	7.0	3.5	-2.3	-3.4	-2.1
Imports of goods and services	*average 2015=100*	**108.4**	**115.6**	**118.6**	**114.7**	**112.1**	**109.0**	**112.1**	**110.8**
	growth in %	11.4	16.4	15.2	9.4	3.4	-5.7	-5.5	-3.4
Terms of trade	*average 2015=100*	**99.5**	**97.3**	**97.6**	**98.3**	**99.6**	**100.8**	**99.8**	**99.6**
	growth in %	-3.6	-5.3	-3.8	-2.2	0.1	3.6	2.2	1.4

[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 economic downturn has so far been reflected by an easing of the tense situation in the labour market. In spite of this, there is a perceptible shortage of workers in many industries and occupations, leading to an upward pressure on nominal earnings growth, which, however, has lagged far behind inflation.

According to the LFS, **employment** increased by 1.1% (*vs. 0.1%*) in Q1 2023. The number of employees was up 0.5%, while the number of entrepreneurs without employees rose by 7.7%. The number of entrepreneurs with employees fell by 3.4%, and the number of contributing family members fell by 56% (these indicators tend to be highly volatile, though). In H1 2023, according to preliminary data, employment in the national accounting methodology grew by 1.0% YoY.

According to the MoLSA data on job vacancies, a shortage of employees was evident in the middle of this year too. At the end of July, the number of vacancies was higher than the number of registered unemployed in 6 regions or 34 districts. However, far from all vacancies registered by the labour offices can be considered active. Of the vacancies offered on the websites of labour offices, around 41% were active at the forecast cut-off date (offers with the last change after 1 February 2023 and a start date on or after 1 May 2023). According to the CZSO's business cycle survey, the shortage of employees remains the main 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 the slowdown in the growth of demand for foreign workers, the level of demand remains strong. According to data from the MoLSA, the number of foreign employees rose by 36,000 YoY to 803,000 in July. Workers from Ukraine and Slovakia have long dominated, with the number of Ukrainian employees rising to 273,000 in July.

Given the usual lag, the economic downturn could translate into a small quarter-on-quarter decline in seasonally adjusted employment in Q2 2023. However, the subsequent recovery in the economy and labour demand should support employment over the remainder of the forecast horizon. It could thus increase by 1.0% (*vs. a decline of 0.2%*) this year and by 0.7% (*vs. 0.6%*) next year.

The **unemployment rate** (LFS) rose to 2.6% (*vs. 2.7%*) in Q1. The seasonally adjusted unemployment rate for the 15–64 age group rose to 2.6% in June. Given the above factors, the unemployment rate could rise to 2.8% (*vs. 3.0%*) on average for the whole of this year, and we expect it to fall to 2.7% (*vs. 2.8%*) in 2024. A more pronounced fall in the unemployment rate will be dampened by lower economic growth.

The **share of unemployed persons** (MoLSA) in the labour office registers has been increasing slightly year-on-year since last October and could rise to 3.6% (*vs. 3.8%*) for the whole of 2023. Next year it could fall slightly to 3.5% (*vs. 3.6%*) thanks to expected economic growth.

The **participation rate** (20–64 years) increased by 1.0 pp YoY to 83.8% (*vs. 81.2%*) in Q1. Over the forecast horizon, the main supporting factor will be the increase in the statutory retirement age. The demographic effect in the form of the changing share of age groups with a naturally high economic activity rate has been positive in previous years, but its impact will be slightly negative from this year. From Q2 2023 onwards, we expect refugees from Ukraine to be captured in the population statistics of the LFS, creating a break in the LFS population time series and related ratios. As a result of this bump in the working-age population, the participation rate for this year as a whole could fall to 82.8% (*vs. 81.9%*), and rise (after that effect wears off) to 83.2% (*vs. 82.4%)* in 2024.

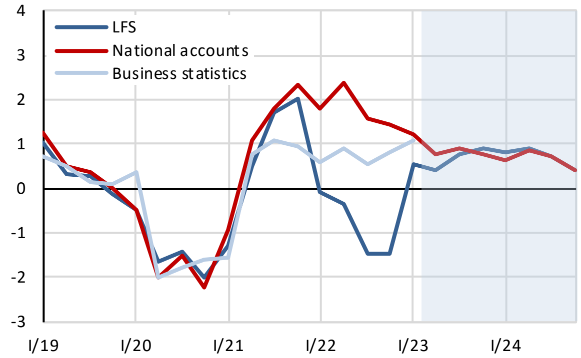
The **volume of wages and salaries** increased by 10.2% (*vs. 9.6%*) in Q1 2023. The largest contributor to this was a 9.4% increase in wages and salaries in the most important manufacturing sector (with a 0.1% increase in the number of employees).

The dynamics of the wage bill should be supported this year by labour shortages, increased inflation expectations and a growing number of employees. In addition, the minimum wage was increased by 6.8% from 1 January 2023. The guaranteed wage increased at the same rate in the highest job group (but this is likely to be received by a marginal number of people), while the other grades remained unchanged. Next year, wages and salaries will be supported by the automatic indexation of salaries of teaching staff, but the consolidation package will still result in a significant year-on-year reduction in the contribution of the public sector. Earnings dynamics will thus be driven by the private sector throughout the forecast horizon. Wages and salaries could increase by 8.4% (*vs. 7.5%*) this year and by 6.1% (*vs. 5.8%*) in 2024.

The average wage (business statistics, full-time equivalent) increased by 8.6% (*vs. 9.7%*) in Q1 2023, with manufacturing contributing the most (2.0 pp). The average nominal wage increased most in the electricity, gas, steam and air conditioning supply (by 23.1%), and least in education (by 3.9%). In 2023, taking into account the above factors, the average wage could increase by 8.1% (*vs. 8.0%*), while next year its growth could slow down to 5.8% (*vs. 5.7%*).

Graph 3.3.1: Employees in Different Statistics

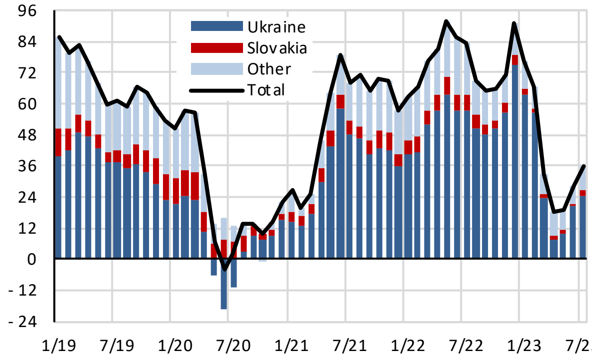
YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.3.2: Number of Foreign Employees in the CR

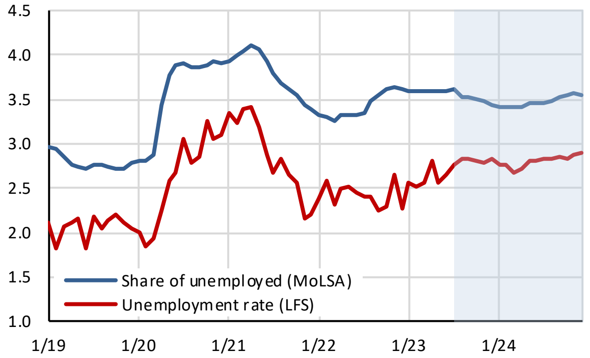
YoY change in thousands of persons



Source: MoLSA. Calculations of the MoF.

Graph 3.3.3: Indicators of Unemployment

seasonally adjusted data, in%



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

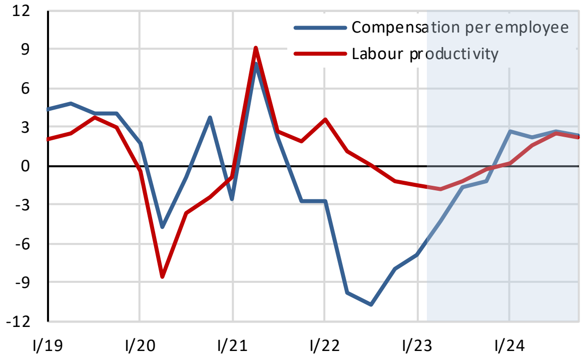
Graph 3.3.4: Social Security Contributions and Earnings

YoY growth rate in%

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

Graph 3.3.5: Compens. per Employee and Productivity

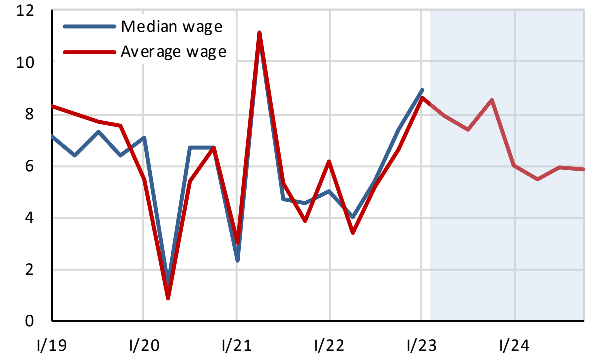
YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.3.6: Nominal Monthly Wages

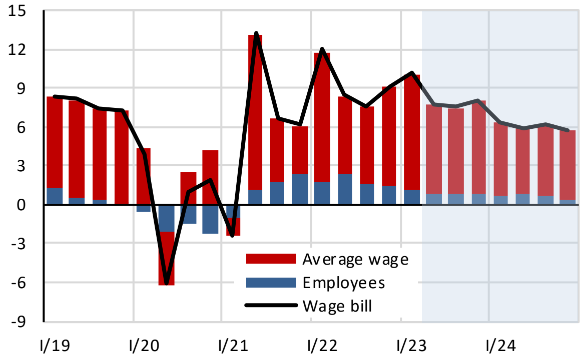
YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.3.7: Nominal Wage Bill

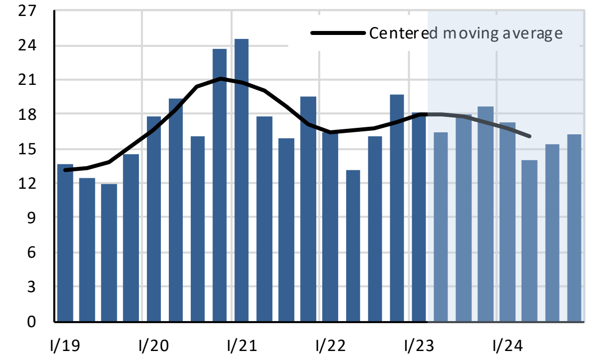
YoY growth rate in %, domestic concept of the wage bill



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.3.8: 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*
Labour Force Survey											
Employment	*av. in thous.persons*	**5 222**	**5 294**	**5 303**	**5 235**	**5 213**	**5 171**	**5 221**	**5 257**	**5 270**	**5 277**
	growth in %	1.6	1.4	0.2	-1.3	-0.4	-0.8	1.0	0.7	0.2	0.1
Employees	*av. in thous.persons*	4 327	4 396	4 412	4 351	4 383	4 345	4 373	4 404	4 414	4 420
	growth in %	1.7	1.6	0.4	-1.4	0.7	-0.9	0.6	0.7	0.2	0.1
Entrepreneurs and	*av. in thous.persons*	894	897	891	884	831	826	848	854	856	857
self-employed	*growth in %*	1.4	0.4	-0.8	-0.7	-6.0	-0.6	2.7	0.6	0.2	0.1
Unemployment	*av. in thous.persons*	**156**	**122**	**109**	**137**	**150**	**123**	**150**	**148**	**143**	**141**
Unemployment rate	*average in %*	**2.9**	**2.2**	**2.0**	**2.6**	**2.8**	**2.3**	**2.8**	**2.7**	**2.6**	**2.6**
Long-term unemployment [1]	*av. in thous.persons*	**54**	**37**	**33**	**30**	**41**	**32**	**.**	**.**	**.**	**.**
Labour force	*av. in thous.persons*	**5 377**	**5 415**	**5 412**	**5 372**	**5 364**	**5 293**	**5 371**	**5 405**	**5 413**	**5 418**
	growth in %	0.5	0.7	-0.1	-0.7	-0.2	-1.3	1.5	0.7	0.1	0.1
Population aged 20–64	*av. in thous.persons*	**6 456**	**6 414**	**6 383**	**6 355**	**6 311**	**6 142**	**6 262**	**6 287**	**6 280**	**6 276**
	growth in %	-0.8	-0.7	-0.5	-0.4	-0.7	-2.7	2.0	0.4	-0.1	-0.1
Employment/Pop. 20–64	*average in %*	**80.9**	**82.5**	**83.1**	**82.4**	**82.6**	**84.2**	**83.4**	**83.6**	**83.9**	**84.1**
Employment rate 20–64 [2]	*average in %*	**78.9**	**80.3**	**80.7**	**80.0**	**80.3**	**81.7**	**80.9**	**81.3**	**81.5**	**81.7**
Labour force/Pop. 20–64	*average in %*	**83.3**	**84.4**	**84.8**	**84.5**	**85.0**	**86.2**	**85.8**	**86.0**	**86.2**	**86.3**
Participation rate 20–64 [3]	*average in %*	**80.8**	**81.7**	**81.9**	**81.8**	**82.2**	**83.2**	**82.8**	**83.2**	**83.4**	**83.5**
Participation rate 15–64 [3]	*average in %*	**75.9**	**76.6**	**76.7**	**76.4**	**76.6**	**77.3**	**76.5**	**76.5**	**76.4**	**76.3**
Registered unemployment											
Unemployment	*av. in thous.persons*	**318**	**242**	**212**	**259**	**280**	**252**	**264**	**261**	**260**	**252**
Share of unemployed [4]	*average in %*	**4.3**	**3.2**	**2.8**	**3.5**	**3.8**	**3.4**	**3.6**	**3.5**	**3.4**	**3.4**
Wages and salaries											
Average monthly wage [5]											
Nominal	*CZK monthly*	29 638	32 051	34 578	36 176	38 277	40 317	43 572	46 104	48 064	50 126
	growth in %	6.7	8.1	7.9	4.6	5.8	5.3	8.1	5.8	4.3	4.3
Real	*CZK 2015*	28 747	30 438	31 928	32 358	32 969	30 177	29 415	30 271	30 834	31 516
	growth in %	4.3	5.9	4.9	1.3	1.9	-8.5	-2.5	2.9	1.9	2.2
Median monthly wage	*CZK monthly*	**25 398**	**27 561**	**29 439**	**31 049**	**32 795**	**34 589**	**.**	**.**	**.**	**.**
	growth in %	7.2	8.5	6.8	5.5	5.6	5.5	.	.	.	.
Wage bill	*growth in %*	**9.2**	**9.6**	**7.8**	**0.1**	**5.9**	**9.3**	**8.4**	**6.1**	**4.3**	**4.4**
Labour productivity	*growth in %*	**3.6**	**1.9**	**2.8**	**-3.9**	**3.2**	**0.8**	**-1.2**	**1.6**	**2.2**	**2.2**
Unit labour costs [6]	*growth in %*	**3.5**	**6.1**	**4.3**	**7.3**	**1.8**	**5.1**	**8.3**	**3.7**	**2.0**	**2.1**
Compens. of employees / GDP	*%*	**42.8**	**44.3**	**44.6**	**46.0**	**45.6**	**44.3**	**44.0**	**44.4**	**44.3**	**44.4**

Note: Following the 2021 Census, new demographic weights have been applied in the LFS since Q1 2022. This results in a break in time series.

[1] *Persons in unemployment for longer than 12 months.*

[2] *The indicator does not include employment over 64 years.*

[3] *The indicator does not include labour force over 64 years.*

[4] *Share of available job seekers aged 15 to 64 years in the population of the same age.*

[5] *Derived from full-time-equivalent employers in the entire economy.*

[6] *Ratio of nominal compensation per employee to real productivity of labour.*

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

Table 3.3.2: Labour Market – quarterly

		2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2 *Estimate*	2023 Q3 *Forecast*	2023 Q4 *Forecast*
Labour Force Survey									
Employment	*av. in thous. persons*	**5 141**	**5 160**	**5 188**	**5 194**	**5 198**	**5 193**	**5 237**	**5 256**
	YoY growth in %	-0.5	-0.2	-1.3	-1.2	1.1	0.6	0.9	1.2
	QoQ growth in %	-1.5	0.3	-0.1	0.7	-0.1	-0.1	0.3	0.4
Employees	*av. in thous. persons*	4 330	4 336	4 357	4 357	4 352	4 353	4 390	4 396
	growth in %	-0.1	-0.4	-1.5	-1.5	0.5	0.4	0.7	0.9
Entrepreneurs and	*av. in thous. persons*	811	824	830	837	846	840	847	860
self-employed	*growth in %*	-2.6	0.6	-0.6	0.1	4.3	1.9	2.0	2.8
Unemployment	*av. in thous.persons*	**130**	**126**	**118**	**117**	**141**	**148**	**159**	**150**
Unemployment rate	*average in %*	**2.5**	**2.4**	**2.2**	**2.2**	**2.6**	**2.8**	**3.0**	**2.8**
Long-term unemployment [1]	*av. in thous.persons*	**37**	**31**	**30**	**32**	**39**	**.**	**.**	**.**
Labour force	*av. in thous. persons*	**5 271**	**5 286**	**5 305**	**5 311**	**5 339**	**5 341**	**5 396**	**5 406**
	growth in %	-1.4	-0.8	-1.8	-1.2	1.3	1.0	1.7	1.8
Population aged 20–64	*av. in thous. persons*	**6 151**	**6 139**	**6 139**	**6 139**	**6 144**	**6 307**	**6 301**	**6 296**
	growth in %	-2.9	-2.9	-2.7	-2.3	-0.1	2.7	2.6	2.5
Employment/Pop. 20–64	*average in %*	**83.6**	**84.1**	**84.5**	**84.6**	**84.6**	**82.3**	**83.1**	**83.5**
	increase over a year	2.0	2.2	1.2	0.9	1.0	0.0	0.0	0.0
Employment rate 20–64 [2]	*average in %*	**80.8**	**81.2**	**81.7**	**82.1**	**82.1**	**79.9**	**80.7**	**81.1**
	increase over a year	1.7	1.9	1.2	1.1	1.3	-1.3	-1.0	-1.0
Labour force/Pop. 20–64	*average in %*	**85.7**	**86.1**	**86.4**	**86.5**	**86.9**	**84.7**	**85.6**	**85.9**
	increase over a year	1.3	1.8	0.8	0.9	1.2	-1.4	-0.8	-0.6
Participation rate 20–64 [3]	*average in %*	**82.8**	**83.1**	**83.4**	**83.5**	**83.8**	**81.8**	**82.7**	**83.0**
	increase over a year	1.0	1.4	0.7	0.7	1.0	-1.3	-0.7	-0.5
Participation rate 15–64 [3]	*average in %*	**77.0**	**77.1**	**77.6**	**77.5**	**77.8**	**75.5**	**76.3**	**76.5**
	increase over a year	0.7	1.1	0.5	0.4	0.9	-1.6	-1.3	-1.0
Registered unemployment									
Unemployment	*av. in thous. persons*	**262**	**240**	**245**	**259**	**279**	**259**	**259**	**257**
Share of unemployed [4]	*average in %*	**3.5**	**3.3**	**3.3**	**3.5**	**3.8**	**3.5**	**3.5**	**3.4**
Wages and salaries									
Average monthly wage [5]									
Nominal	*CZK monthly*	37 999	40 093	39 848	43 279	41 265	43 258	42 788	46 977
	growth in %	6.1	3.4	5.2	6.6	8.6	7.9	7.4	8.5
Real	*CZK 2015*	30 063	30 191	28 959	31 453	28 052	29 307	28 779	31 501
	growth in %	-4.6	-10.7	-10.6	-7.9	-6.7	-2.9	-0.6	0.2
Median monthly wage	*CZK monthly*	**31 904**	**34 117**	**34 984**	**37 349**	**34 741**	**.**	**.**	**.**
	growth in %	5.0	4.0	5.4	7.4	8.9	.	.	.
Wage bill	*growth in %*	**12.0**	**8.5**	**7.7**	**9.2**	**10.2**	**7.8**	**7.5**	**8.1**

Note: Following the 2021 Census, new demographic weights have been applied in the LFS since Q1 2022. This results in a break in time series.

[1] *Persons in unemployment for longer than 12 months.*

[2] *The indicator does not include employment over 64 years.*

[3] *The indicator does not include labour force over 64 years.*

[4] *Share of available job seekers aged 15 to 64 years in the population of the same age.*

[5] *Derived from full-time-equivalent employers in the entire economy.*

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

Table 3.3.3: Income and Expenditures of Households – yearly

		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**	**3 260**	**3 458**
	growth in %	5.4	6.0	9.1	9.3	7.0	1.9	5.7	7.7	8.1	6.1
Gross operating surplus	*bill.CZK*	**691**	**703**	**740**	**801**	**845**	**833**	**856**	**927**	**971**	**1 008**
and mixed income	*growth in %*	2.4	1.7	5.2	8.3	5.5	-1.4	2.7	8.3	4.8	3.8
Property income received	*bill.CZK*	**127**	**133**	**162**	**162**	**163**	**129**	**171**	**234**	**268**	**276**
	growth in %	-4.3	4.1	21.9	0.2	0.5	-20.9	32.5	37.0	14.6	2.8
Social benefits not-in-kind	*bill.CZK*	**613**	**630**	**650**	**685**	**738**	**885**	**923**	**985**	**1 110**	**1 146**
	growth in %	2.8	2.8	3.2	5.4	7.7	19.9	4.3	6.6	12.7	3.2
Other current transfers received	*bill.CZK*	**181**	**217**	**244**	**281**	**338**	**363**	**471**	**571**	**610**	**637**
	growth in %	13.3	19.4	12.8	15.1	20.4	7.3	29.8	21.2	6.8	4.4
Current expenditure											
Property income paid	*bill.CZK*	**14**	**14**	**13**	**19**	**28**	**27**	**26**	**50**	**64**	**66**
	growth in %	-10.7	0.2	-7.4	43.2	44.8	-2.7	-2.3	89.5	26.9	3.9
Curr. taxes on income and property	*bill.CZK*	**205**	**227**	**264**	**309**	**316**	**342**	**266**	**265**	**297**	**319**
	growth in %	3.9	10.8	16.3	16.9	2.3	8.3	-22.3	-0.5	12.4	7.2
Social contributions	*bill.CZK*	**732**	**775**	**836**	**911**	**976**	**1028**	**1129**	**1181**	**1 280**	**1 384**
	growth in %	5.3	5.8	7.9	9.0	7.1	5.3	9.8	4.6	8.4	8.1
Other current transfers paid	*bill.CZK*	**169**	**207**	**238**	**278**	**335**	**358**	**469**	**549**	**589**	**617**
	growth in %	12.5	22.4	15.3	16.5	20.6	6.7	31.1	17.1	7.2	4.8
Gross disposable income	*bill.CZK*	**2 414**	**2 497**	**2 666**	**2 842**	**3 029**	**3 106**	**3 331**	**3 687**	**3 989**	**4 138**
	growth in %	3.7	3.4	6.8	6.6	6.6	2.5	7.3	10.7	8.2	3.7
Final consumption	*bill.CZK*	**2 152**	**2 241**	**2 383**	**2 524**	**2 663**	**2 536**	**2 716**	**3 104**	**3 287**	**3 499**
	growth in %	3.9	4.1	6.4	5.9	5.5	-4.8	7.1	14.3	5.9	6.4
Change in share in pension funds	*bill.CZK*	**33**	**31**	**32**	**33**	**37**	**38**	**38**	**28**	**10**	**14**
Gross savings	*bill.CZK*	**295**	**286**	**315**	**350**	**404**	**607**	**653**	**611**	**712**	**653**
Capital transfers											
(income (-) / expenditure (+))	*bill.CZK*	**-12**	**-14**	**-11**	**-12**	**-13**	**-41**	**-35**	**-25**	**-26**	**-26**
Gross capital formation	*bill.CZK*	**220**	**237**	**216**	**261**	**297**	**300**	**314**	**310**	**319**	**330**
	growth in %	2.9	7.9	-9.2	21.2	13.7	0.9	4.9	-1.3	2.7	3.6
Change in financial assets and liab.	*bill.CZK*	**85**	**61**	**110**	**101**	**116**	**348**	**375**	**327**	**421**	**349**
Real disposable income	*growth in %*	**3.7**	**3.0**	**4.4**	**4.0**	**3.7**	**-0.4**	**4.3**	**-3.8**	**-1.3**	**1.3**
Gross savings rate	*%*	**12.1**	**11.3**	**11.7**	**12.2**	**13.2**	**19.3**	**19.4**	**16.4**	**17.8**	**15.7**

Source: CZSO. Calculations of the MoF.

3.4 External Relations

Export markets declined by 2.7% YoY (*vs. 2.6% growth*) in Q1 2023. The worse-than-estimated development was due solely to a decline in import intensity for most of the Czech Republic's main trading partners (by 5.4 pp). The decrease in imports reflects a lower volume of imported mineral fuels due to the easing of the threat of energy commodity shortages and a fall in imports for intermediate consumption due to worsening conditions in industry. The high accumulation of inventories last year due to fears of high inflation and shortfalls in component supplies probably also played a role. In view of the expected development of economic activity abroad (see Chapter 1.1) and the fall in import intensity, we expect export markets to decline by 2.5% (*vs. growth of 2.0%*). For next year, we expect export markets to grow by 2.7% (*vs. 2.9%*) in line with the recovery in economic activity abroad.

Export performance rose by 8.9% (*vs. 2.0%*) in Q1 2023, with a stronger recovery in automotive production contributing to the unprecedentedly strong growth as problems in global supply chains eased. The expected 7.0% (*vs. 0.9%*) performance increase this year should be supported by the unwinding of supply-side frictions and inventory drawdowns, but 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 (see Chapter 1.4). For 2024, in the context of a further easing of price pressures in industry, we estimate export performance to grow by 1.7% (*vs. 1.4%*).

The **current account of the balance of payments** reached a deficit of 5.1% of GDP (*vs. 5.4% of GDP*) in Q1 2023[1]. The year-on-year deterioration of the balance by 1.5% of GDP was due to higher outflows of investment income and a decline in the positive balance of services.

The **balance of goods** stagnated at −0.3% of GDP (*vs. −1.0% of GDP*) in Q1 2023 on a year-on-year basis, but the trade deficit narrowed significantly compared to the previous quarter. The quarter-on-quarter narrowing of the deficit 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 4.5% of GDP (*vs. 4.4% of GDP*) in Q1 2023. Given the evolution of oil prices (see Chapter 1.2) and other energy commodities (especially natural gas), we expect the deficit to ease to 3.7% of GDP (*vs. 3.5% of GDP* this year). In 2024, the deficit could narrow further to 3.4% of GDP (against *3.2% of GDP*).

We expect the balance of goods to return to surplus this year, at 2.4% of GDP (*vs. a deficit of 0.3% of GDP*), and for 2024 we project a further increase to 3.5% of GDP (*vs. 1.4% of GDP*). The balance of goods will be positively affected by improving terms of trade, exports of previously accumulated inventories and weaker import-intensive investment activity. In 2024, the widening surplus of foreign trade in goods will also be supported by the economic recovery abroad.

The **balance of services** recorded a surplus of 1.3% of GDP (*vs. 1.2% of GDP*) in Q1 2023. Higher costs in the transport sector and an increase in imports in insurance and consulting services contributed to the 0.4% of GDP year-on-year decline in the surplus. In the opposite direction, revenue growth in tourism and telecommunication services partly offset the deterioration of the balance. For the whole of this year, the services balance could end with a surplus of 1.3% of GDP (*unchanged*). Revenue growth in tourism will have a positive effect on the balance, but stagnating toll revenues will limit the increase in the surplus. Thanks to the projected economic recovery in the euro area (see Chapter 1.1), the services surplus could increase to 1.5% of GDP (*vs. 1.6% of GDP*) next year.

The **primary income** deficit widened by 0.9% of GDP year-on-year to 5.6% of GDP in Q1 2023 due to higher outflows of direct investment income (mainly in the form of dividends). In absolute terms, the deficit rose to a record CZK 390 billion. The higher deficit was also driven by the highest-ever dividend payout in Q3 2022, when the effect of the payment of retained profits of the domestic banking sector from 2019–2020 took effect. In the absence of this one-off factor, the deficit could narrow to 5.0% of GDP (*vs. 4.3% of GDP*) in 2023, and then widen slightly to 5.2% of GDP (*vs. 4.5% of GDP*) in 2024. The recovery in economic activity should boost the profitability of non-resident-owned firms.

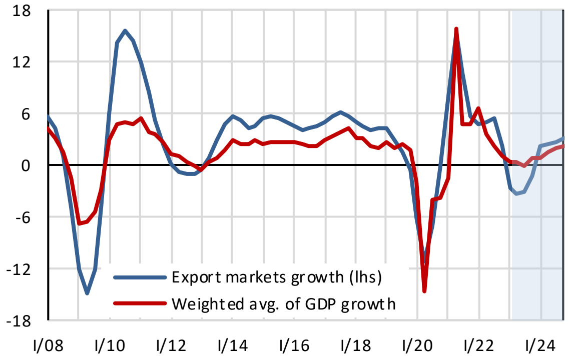
Against this background, we expect the **current account of the balance of payments** to be in deficit over the forecast horizon. The deficit could reach 1.7% of GDP (*vs. 3.5% of GDP*) this year and ease to 0.6% of GDP (*vs. 1.9% of GDP*) in 2024.

The **current external balance** (national accounts methodology) reached a deficit of 4.0% of GDP in Q1 2023 (see Graph 3.4.8). While households' savings were 4.8% of GDP higher than their investment, the relationship between savings and investment was reversed in the general government and non-financial corporations sectors, with gross capital formation higher than gross savings by 4.3% of GDP and 4.0% of GDP, respectively.

[1] All quarterly data relative to GDP are reported in annual moving totals.

Graph 3.4.1: GDP and Goods Imports of Partner Countries

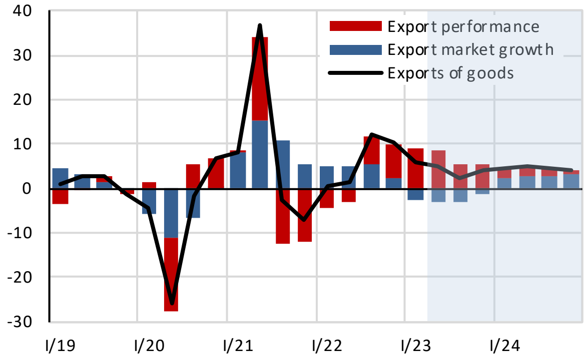
YoY growth rate in %, seasonally adjusted



Source: Eurostat. Calculations and forecast of the MoF.

Graph 3.4.2: Real Exports of Goods

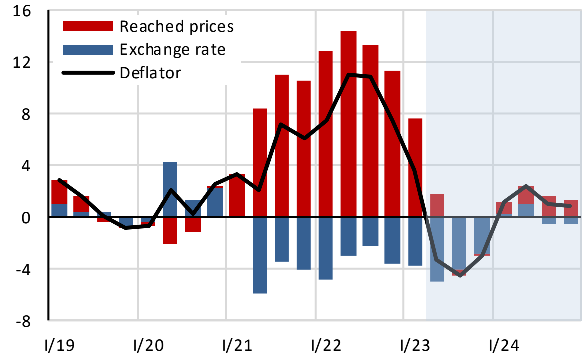
YoY growth in %, contributions in pp, seasonally adjusted



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

Graph 3.4.3: Deflator of Exports of Goods

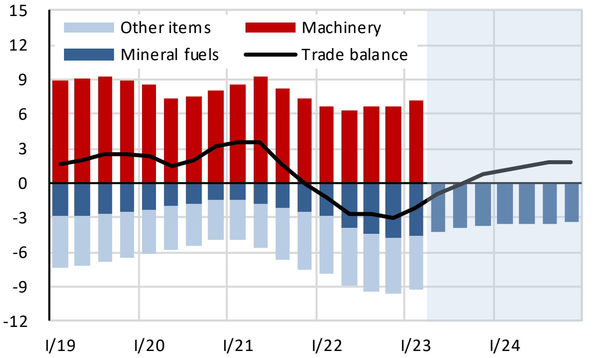
YoY growth in %, contributions in percentage points



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

Graph 3.4.4: Balance of Trade

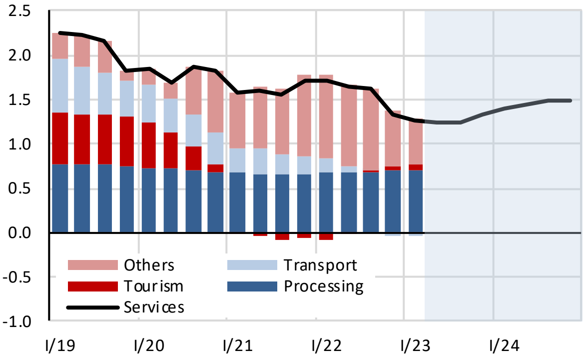
four-quarter moving totals, in % of GDP, change of ownership concept



Source: CZSO. Calculations and forecast of the MoF.

Graph 3.4.5: Balance of Services

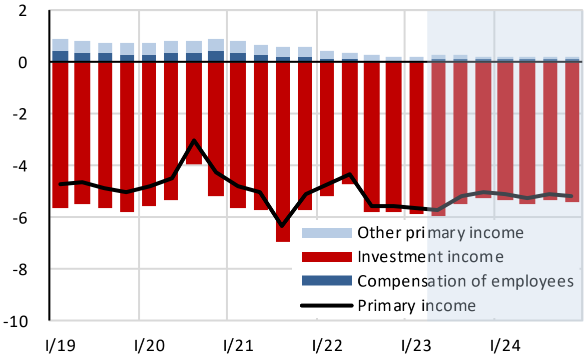
four-quarter moving totals, in % of GDP



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

Graph 3.4.6: Balance of Primary Income

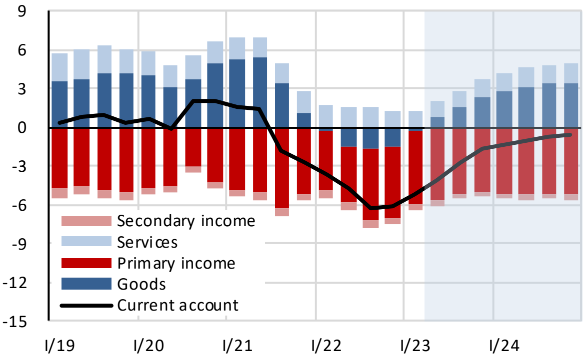
four-quarter moving totals, in % of GDP



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

Graph 3.4.7: Current Account

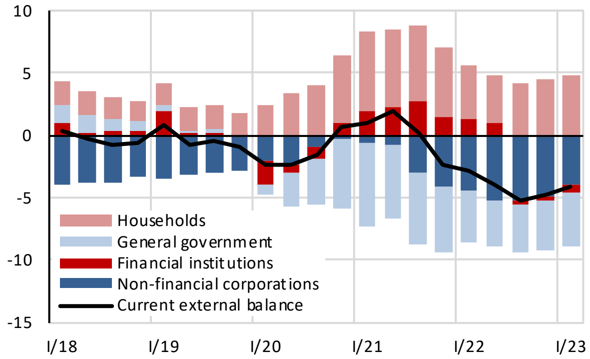
four-quarter moving totals, in % of GDP, BoP methodology



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 Forecast	2024 Forecast
GDP [1]	*average of 2010=100*	**109.2**	**111.5**	**114.9**	**117.5**	**119.6**	**113.7**	**119.3**	**122.7**	**123**	**125**
	growth in %	2.2	2.1	3.1	2.2	1.9	-4.9	4.9	2.9	0.4	1.4
Import intensity [2]	*average of 2010=100*	**109.9**	**112.4**	**115.2**	**117.8**	**118.1**	**116.8**	**122.4**	**124.2**	**121**	**122**
	growth in %	3.2	2.3	2.5	2.3	0.2	-1.1	4.8	1.4	-2.9	1.2
Export markets [3]	*average of 2010=100*	**120.1**	**125.3**	**132.4**	**138.4**	**141.3**	**132.9**	**146.0**	**152.3**	**148**	**152**
	growth in %	5.5	4.4	5.6	4.5	2.1	-6.0	9.9	4.3	-2.5	2.7
Export performance	*average of 2010=100*	**111.1**	**110.8**	**112.9**	**111.8**	**110.8**	**110.4**	**107.2**	**108.8**	**116**	**118**
	growth in %	-0.1	-0.2	1.9	-1.0	-0.9	-0.4	-2.8	1.5	7.0	1.7
Real exports	*average of 2010=100*	**133.4**	**138.9**	**149.5**	**154.7**	**156.6**	**146.6**	**156.5**	**165.8**	**173**	**181**
	growth in %	5.4	4.2	7.6	3.5	1.2	-6.4	6.7	5.9	4.2	4.5
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	-3.9	0.1
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**	**130**
	growth in %	-2.1	-0.7	2.1	3.0	0.7	-0.8	8.3	13.0	2.1	1.3
Exports deflator	*average of 2010=100*	**108.0**	**104.9**	**104.1**	**103.4**	**104.4**	**105.5**	**110.5**	**120.7**	**118**	**120**
	growth in %	-1.4	-2.8	-0.7	-0.7	1.0	1.1	4.7	9.2	-1.8	1.4
Nominal exports	*average of 2010=100*	**144.0**	**145.7**	**155.6**	**159.9**	**163.5**	**154.6**	**172.9**	**200.1**	**205**	**217**
	growth in %	3.9	1.2	6.8	2.8	2.2	-5.4	11.8	15.8	2.3	5.9

[1] Weighted average of GDP of eight most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France, Italy and Hungary.
[2] Index of ratio of real imports of goods to real GDP.
[3] Weighted average of imports of goods of main partners.
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				2023			
		Q1	Q2	Q3	Q4	Q1	Q2 Estimate	Q3 Forecast	Q4 Forecast
GDP [1]	*average of 2010=100*	**122.6**	**122.6**	**123.0**	**122.5**	**123.0**	**123**	**123**	**123**
	growth in %	5.6	3.0	1.9	1.0	0.3	0.3	0.1	0.8
Import intensity [2]	*average of 2010=100*	**123.4**	**124.7**	**124.9**	**123.6**	**119.7**	**120**	**121**	**121**
	growth in %	-0.8	1.9	3.4	1.2	-3.0	-3.5	-3.2	-1.9
Export markets [3]	*average of 2010=100*	**151.3**	**152.9**	**153.6**	**151.4**	**147.2**	**148**	**149**	**150**
	growth in %	4.8	5.0	5.4	2.2	-2.7	-3.2	-3.1	-1.1
Export performance	*average of 2010=100*	**106.5**	**106.4**	**110.4**	**112.0**	**116.0**	**115**	**116**	**118**
	growth in %	-4.3	-3.2	6.3	7.8	8.9	8.5	5.4	5.2
Real exports	*average of 2010=100*	**161.1**	**162.7**	**169.6**	**169.6**	**170.7**	**171**	**173**	**176**
	growth in %	0.3	1.6	12.1	10.2	6.0	5.0	2.1	4.0
1 / NEER	*average of 2010=100*	**95.6**	**95.9**	**96.4**	**95.0**	**92.0**	**91**	**93**	**92**
	growth in %	-4.8	-2.9	-2.1	-3.5	-3.7	-4.9	-4.1	-2.8
Prices on foreign markets	*average of 2010=100*	**121.6**	**126.6**	**128.2**	**127.7**	**131.0**	**129**	**128**	**127**
	growth in %	12.9	14.4	13.3	11.4	7.7	1.8	-0.5	-0.2
Exports deflator	*average of 2010=100*	**116.3**	**121.4**	**123.7**	**121.4**	**120.5**	**118**	**118**	**118**
	growth in %	7.5	11.1	10.9	7.5	3.6	-3.2	-4.5	-3.0
Nominal exports	*average of 2010=100*	**187.3**	**197.6**	**209.8**	**205.9**	**205.7**	**201**	**204**	**208**
	growth in %	7.9	12.8	24.3	18.4	9.8	1.6	-2.5	0.9

[1] Weighted average of GDP of eight most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France, Italy and Hungary.
[2] Index of ratio of real imports of goods to real GDP.
[3] Weighted average of imports of goods of main partners.
Source: CNB, CZSO, Eurostat. Calculations and forecast of the MoF.

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 Forecast	2024 Forecast
Goods and services	*bill.CZK*	**274**	**365**	**384**	**321**	**346**	**384**	**174**	**-9**	**273**	**385**
	% GDP	5.9	7.6	7.5	5.9	6.0	6.7	2.8	-0.1	3.7	5.0
Goods	*bill.CZK*	188	259	259	201	240	280	69	-99	175	269
	% GDP	4.1	5.4	5.1	3.7	4.1	4.9	1.1	-1.5	2.4	3.5
Services	*bill.CZK*	87	107	125	120	106	104	105	90	98	116
	% GDP	1.9	2.2	2.4	2.2	1.8	1.8	1.7	1.3	1.3	1.5
Primary income	*bill.CZK*	**-255**	**-253**	**-255**	**-260**	**-292**	**-242**	**-312**	**-375**	**-371**	**-401**
	% GDP	-5.5	-5.3	-5.0	-4.8	-5.0	-4.2	-5.1	-5.5	-5.0	-5.2
Secondary income	*bill.CZK*	**1**	**-27**	**-50**	**-37**	**-34**	**-28**	**-33**	**-31**	**-25**	**-32**
	% 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**	**-123**	**-48**
	% GDP	0.4	1.8	1.5	0.4	0.3	2.0	-2.8	-6.1	-1.7	-0.6
Capital account	*bill.CZK*	**99**	**52**	**45**	**13**	**24**	**67**	**104**	**7**	**60**	**80**
	% GDP	2.1	1.1	0.9	0.2	0.4	1.2	1.7	0.1	0.8	1.0
Net lending/borrowing	*bill.CZK*	**120**	**137**	**124**	**37**	**44**	**180**	**-64**	**-408**	**-63**	**31**
	% GDP	2.6	2.9	2.4	0.7	0.8	3.2	-1.1	-6.0	-0.9	0.4
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**	**4 519**	**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

		2022				2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Goods and services	*bill.CZK*	**92**	**13**	**-6**	**-9**	**67**	**148**	**205**	**273**
	% GDP	1.5	0.2	-0.1	-0.1	1.0	2.1	2.8	3.7
Goods	*bill.CZK*	-15	-93	-112	-99	-20	60	115	175
	% GDP	-0.2	-1.5	-1.7	-1.5	-0.3	0.8	1.6	2.4
Services	*bill.CZK*	106	106	107	90	87	88	90	98
	% GDP	1.7	1.7	1.6	1.3	1.3	1.2	1.2	1.3
Primary income	*bill.CZK*	**-293**	**-280**	**-366**	**-375**	**-390**	**-405**	**-373**	**-371**
	% GDP	-4.7	-4.4	-5.5	-5.5	-5.6	-5.7	-5.1	-5.0
Secondary income	*bill.CZK*	**-32**	**-38**	**-37**	**-31**	**-34**	**-32**	**-28**	**-25**
	% 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**	**-356**	**-289**	**-196**	**-123**
	% GDP	-3.7	-4.7	-6.2	-6.1	-5.1	-4.1	-2.7	-1.7
Capital account	*bill.CZK*	**96**	**87**	**65**	**7**	**30**	**40**	**50**	**60**
	% GDP	1.5	1.4	1.0	0.1	0.4	0.6	0.7	0.8
Net lending/borrowing	*bill.CZK*	**-134**	**-217**	**-344**	**-408**	**-327**	**-249**	**-146**	**-63**
	% GDP	-2.1	-3.4	-5.2	-6.0	-4.7	-3.5	-2.0	-0.9
Financial account	*bill.CZK*	**-121**	**-267**	**-416**	**-415**	**-333**	**.**	**.**	**.**
Direct investments	*bill.CZK*	-72.8	-67.5	-82.6	-172.4	-196.6	.	.	.
Portfolio investments	*bill.CZK*	137	337	265	331	239	.	.	.
Financial derivatives	*bill.CZK*	-65	-75	-68	-38	-8	.	.	.
Other investments	*bill.CZK*	-505	-745	-393	-229	155	.	.	.
Reserve assets	*bill.CZK*	386	283	-137	-307	-523	.	.	.
International investment position	*stock in bill.CZK*	**-951**	**-1 011**	**-1 333**	**-1 340**	**-1 280**	**.**	**.**	**.**
	% GDP	-15.2	-15.7	-20.2	-19.7	-18.4	.	.	.
Gross external debt	*stock in bill.CZK*	**4 685**	**4 631**	**4 406**	**4 454**	**4 388**	**.**	**.**	**.**
	% GDP	74.8	72.1	66.7	65.6	63.0	.	.	.

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

4 Survey of Other Institutions' Forecasts

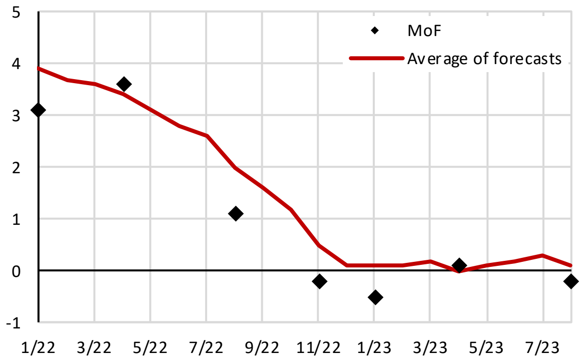
On average, the surveyed institutions expect the Czech economy to grow by 0.1% in 2023 and 2.4% in 2024. According to their estimates, the average inflation rate should reach 11.2% this year and fall to 3.1% next year. The average wage could rise by 8.8% this year and slow to 6.8% in 2024. The current account of the balance of payments could reach a deficit of 0.6% of GDP this year and be balanced next year.

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.

Growth of the Czech economy continues to be dampened by the impact of the Russian aggression against Ukraine, exceptionally strong growth in the cost of living and increased monetary policy rates. The government's consolidation package will slightly weigh on economic activity next year. In contrast to the average of the forecasts of the monitored institutions, the MoF expects real gross domestic product to fall by 0.2% this year. The forecast for next year does not differ much from the average of other institutions. The average inflation rate in the MoF's forecast for both years is a few tenths of a percentage point below the average of the forecasts of the monitored institutions. For 2024, the MoF expects price growth to return to the tolerance band around the CNB's inflation target. According to the MoF's forecast, the average wage will grow more slowly in both years than forecasts of the monitored institutions envisage. In line with the average of the monitored 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 4.1: Forecasts for Real GDP Growth in 2023

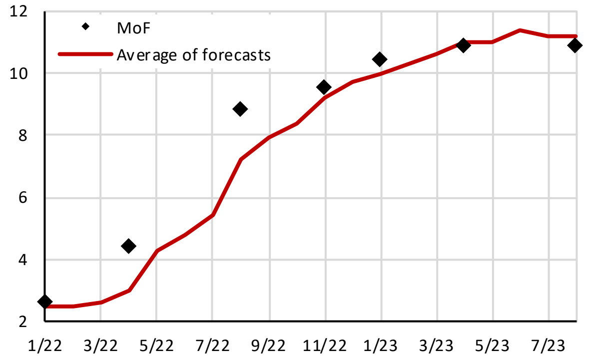
in %; the month, in which the survey was made on the horizontal axis



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

Graph 4.2: Forecasts for Average Inflation Rate in 2023

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



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

Table 4.1: Summary of the Surveyed Forecasts

		August 2023			August 2023
		min.	*max.*	*average*	*MoF forecast*
Gross domestic product (2023)	*growth in %, const.pr.*	-0.5	0.5	0.1	-0.2
Gross domestic product (2024)	*growth in %, const.pr.*	1.8	3.0	2.4	2.3
Average inflation rate (2023)	*%*	10.5	12.2	11.2	10.9
Average inflation rate (2024)	*%*	1.3	5.8	3.1	2.8
Average monthly wage (2023)	*growth in %*	7.7	10.0	8.8	8.1
Average monthly wage (2024)	*growth in %*	6.0	7.8	6.8	5.8
Current account / GDP (2023)	*%*	-2.9	1.0	-0.6	-1.7
Current account / GDP (2024)	*%*	-3.4	2.4	0.0	-0.6

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.

5 Affordability of Owner-Occupied Housing in the CR

Housing affordability is one of the main aspects affecting the quality of human life (Streimikiene, 2015). In recent years, house prices and rent levels have increased at a high rate, far exceeding the increase in income of most households. In the Czech Republic, mainly for historical reasons, the proportion of households living in their own property is relatively high (Graph 5.1). This share is higher among wealthier households, while households with lower incomes are more likely to finance the acquisition of their own property with a mortgage loan (Graph 5.2), which necessarily translates into increased financial vulnerability, especially for low-income households.

Over the last more than 20 years, the share of mortgage loans in total lending has been gradually increasing (Graph 5.3), which was supported by very low interest rates on loans intended for house purchases (Graph 5.4). The high demand for real estate, partly made possible by the prior affordable financing, was subsequently reflected in a rapid rise in house and apartment prices, which was then in recent years followed by property purchases motivated by the desire to hedge against high inflation. In the long run, the returns on owning and renting a real-estate have been equalizing (Gallin, 2008), and thus the problem of the unaffordability of owner-occupied housing is inevitably reflected in the affordability of rental housing with some delay. The combination of these factors creates a major economic problem affecting mainly low-income households, which have a higher relative share of housing expenditure (Graph 5.5).

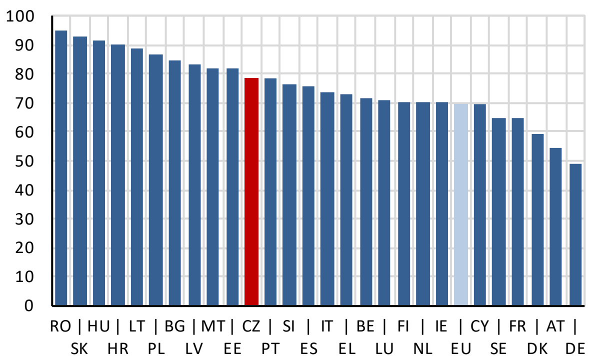
When analysing the availability of owner-occupied housing in the Czech Republic, it is important to take into account the unequal distribution of income in society. Indicators of affordability based solely on average-based variables lack much of their informative value. The credit expansion, largely made up of mortgage loans in recent years, has caused a sharp rise in residential property prices, which has exacerbated inequality in the distribution of wealth among households (Causa et al., 2019). Matlack and Vigdor (2008) then point out that the positive wealth effect of households benefiting from an expanding real estate market creates additional demand that further increases house prices in locations with a rigid property supply.

One of the key data sources for the analysis were microdata from the Survey on Income and Living Conditions (SILC) of Czech Statistical Office (CZSO) covering the period 2015–2022.The survey maps the current living situation of households in the Czech Republic, their sociodemographic structure, the type, quality and financial intensity of housing, as well as the working, material and health conditions of persons living in households. It also establishes the level and composition of their income and provides information on the proportion of the population living in certain material deprivation, or the proportion of persons at risk of income poverty and social exclusion. The survey is carried out by direct interviewing in households. Due to the one-year lag in reported household income, income in 2022 was calculated using experimental data from the CZSO on the distribution of different types of income based on total household income and the evolution of these incomes according to aggregate GDP data between 2021 and 2022.

As part of the analysis of the affordability of owner-occupied housing, households were divided into quintile bands (1 = poorest households, 5 = richest households) according to the level of their disposable income per consumption unit as defined by the EU (the weight of the first adult in the household is 1.0, that of each additional adult, or more specifically, a person aged 13 or older, is 0.5, and that of a child aged 13 or younger is 0.3). This approach is more in line with the real economic situation than a distribution based on net disposable income alone. The sample was narrowed to households where the head of household was employed or self-employed.

Graph 5.1: Home Ownership Share

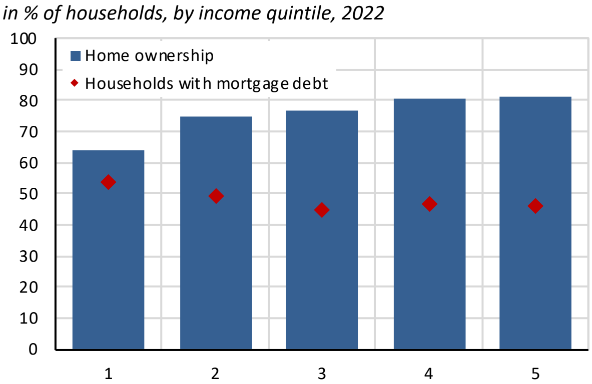
in %, 2021



Source: Eurostat.

Graph 5.2: Home Ownership and Mortgages in the CR

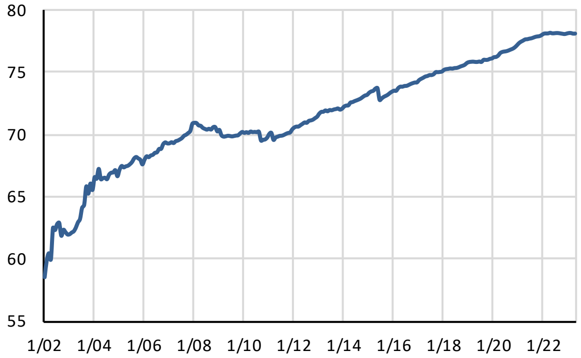
in % of households, by income quintile, 2022



Source: CZSO. Calculations of the MoF.

Graph 5.3: Loans for House Purchases

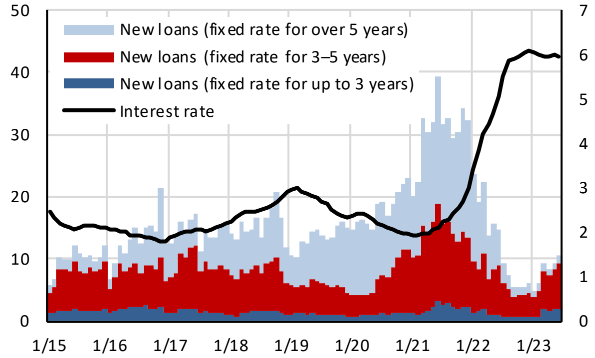
in % of total household loans



Source: CNB. Calculations of the MoF.

Graph 5.4: Mortgages – Interest Rates and New Volumes

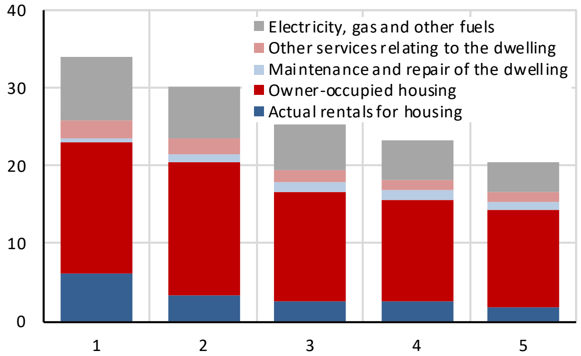
interest rates in % (rhs), volumes in CZK million (lhs)



Source: CNB. Calculations of the MoF.

Graph 5.5: Households' Housing Expenditure

in % of net incomes, by income quintile, 2020



Source: CZSO. Calculations of the MoF.

5.1 Real Estate Price Developments

Realised property prices in the Czech Republic have risen by 167% since 2015, offering prices by 103% and the house price index by 112% (Graph 5.6). The price increase was the second largest in Europe after Hungary (Graph 5.7; Graph 5.8 then offers a comparison of the evolution of the cost of owner-occupied housing and of the actual rentals). There are significant regional differences in property prices, with prices of flats in Prague in particular (CZK 6.8 million for an average flat of 60 sqm in Q1 2023), but also in other larger cities, are significantly above the national average (CZK 3.9 million).

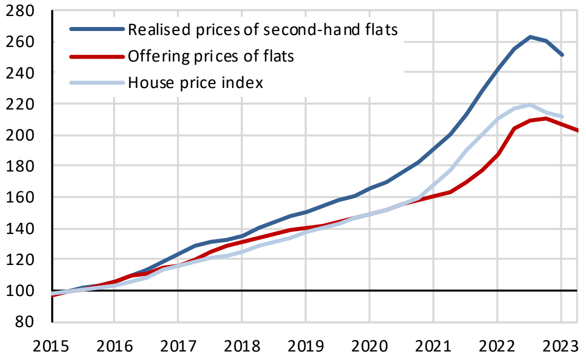
On the demand side, the rapid price growth was mainly supported by low interest rates on mortgage loans (Graph 5.4). Monthly mortgage repayments have been lower than equivalent rents for many years, supporting the already traditionally high demand for owner-occupied housing in the Czech Republic. This is related both to the historical legacy of a post-socialist country and to the high level of conservatism of Czech households, distrust in financial markets investing and low financial literacy (Capital Market Association of the Czech Republic, 2022).

The demand for property is also influenced by the expected appreciation of this real asset, or the prospect of a further increase in the cost of owning a home in the future, which motivates consumers to make the purchase essentially for prudential or speculative reasons. In recent years, demand has been boosted by the motivation to hedge against high inflation by investing in real assets. Many dwellings, especially in Prague, are unoccupied, as suggested by the 2021 census data – however, for methodological reasons, reliable data on the actual number of such dwellings are not available (CZSO, 2022).

On the supply side, the upward pressure on property prices is caused mainly by the insufficient volume of new construction. In the long term, the number of new dwellings does not cover the population growth, the high rate of immigration and the demand for investment dwellings. One of the main causes is relatively rigid regional planning that restricts densification of larger cities, leading to suburbanization, which can entail, among other things, congestion in transport infrastructure and increased environmental burdens (Kahn, 2000; Wang et al., 2017). New construction is also hampered by the significant administrative hurdles associated with the processing of building permits – in the Doing Business ranking (World Bank, 2020), the Czech Republic ranked 157th out of 186 countries in the overall assessment of the bureaucratic burden associated with the processing of building permits (within Europe, only Moldova, Kosovo and Albania were worse off). The average processing time was 246 days (the average time in OECD countries was 152 days). In addition, more recently, new or even existing construction projects have been put on hold (Graph 5.9 and Graph 5.10) due to high rising costs of materials and other production inputs (Graph 5.11) and tightening financing conditions due to rising interest rates.

Graph 5.6: House Prices Development in the CR

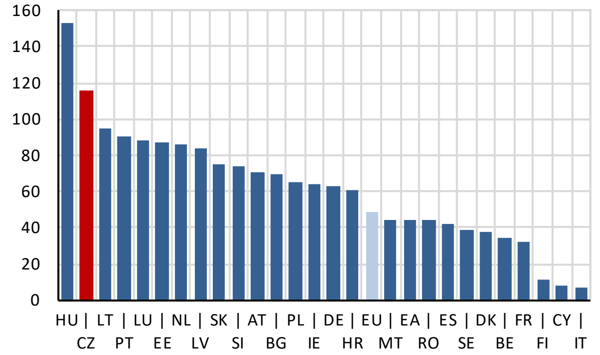
2015=100



Source: CZSO. Calculations of the MoF.

Graph 5.7: House Price Growth

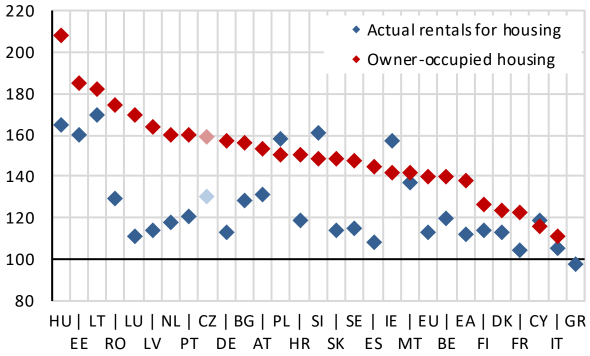
growth in %, between 2015 and 2022



Source: Eurostat. Calculations of the MoF.

Graph 5.8: Housing Costs

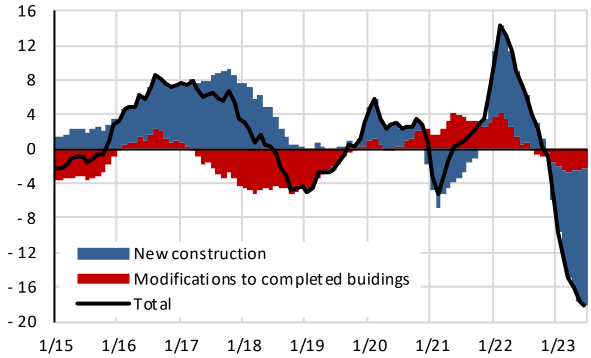
2015 = 100, actual rentals June 2023, owner-occupied housing Q1 2023



Source: Eurostat.

Graph 5.9: Building Permits – Number of Resid. Buildings

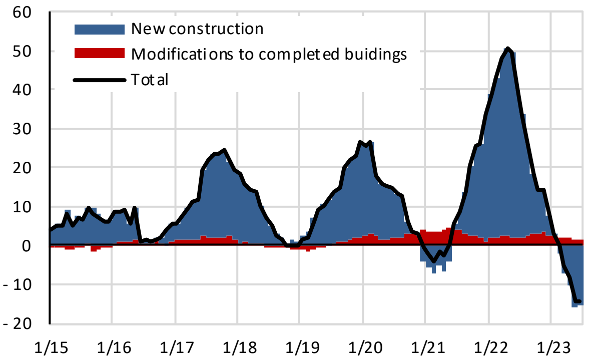
YoY growth rate in %, annual moving average



Source: CZSO. Calculations of the MoF.

Graph 5.10: Building Permits – Value of Resid. Buildings

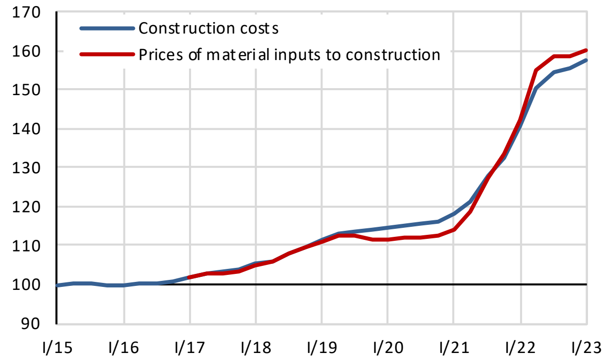
YoY growth rate in %, annual moving average



Source: CZSO. Calculations of the MoF.

Graph 5.11: Construction Costs of Residential Buildings

2015=100



Source: CZSO. Calculations of the MoF.

5.2 Affordability of Owner-Occupied Housing

High house prices are reflected in higher household spending, either directly or indirectly through rising rents (Graph 5.12). Housing costs for lower-income households are as high as 34% of net disposable income, and around 20% for the highest-income households.

While realised house prices have risen by 167% since 2015, net household income has only increased by between 53% and 63% over the period 2015–2022, depending on income quintile (Graph 5.13). As a result, the ratio of house prices to net annual income has increased significantly for all income groups (Graph 5.14).

The extent of the deterioration in the house price to income ratio has exhibited large regional heterogeneity. In 2022, the average gross monthly wage in Prague was CZK 49,661 and in the Czech Republic CZK 40,321. In 2015, the average gross wage in Prague was CZK 33,819 and in the Czech Republic CZK 26,591, which means a 47% and 52% increase respectively. Realised prices of flats in the same period increased by 155% in the Czech Republic and 111% in Prague. However, it should be noted that in the meantime there have been changes to the effective tax rate on labour income, in particular its decrease from 1 January 2021. Despite the relatively more pronounced decline in affordability in the rest of the country, the situation in the capital remains significantly worse – to buy an average flat in Prague in 2015, 7.8 times the average annual wage was needed, whereas in 2022 it was already 11.6 times (nationally, in the same period, the number of annual wages needed to buy a flat increased from 4.7 to 8.3).

The affordability of owner-occupied housing depends primarily on house prices and household net disposable income. However, the acquisition of property is usually financed by a mortgage loan, and so the interest rate, which affects the loan repayment, is also a major determinant of affordability. The risk premium included in the interest rate further exacerbates the position of poorer households and their costs.

Risks are mainly assessed by the internal processes of commercial banks, but some of them are also addressed at the national level by central bank regulations. Commercial banks assess the applicant's ability to cover all his/her debts with his/her income, reflecting the riskiness of the applicant's income by type (salary, investment income, etc.). It may seem problematic that banks assess primarily the applicant's current income, which is partly required by regulatory requirements (CNB, 2021; CNB, 2023), rather than an estimate of longer-term income. There is a significant difference between current and future income, particularly for young, college-educated individuals who are in beginnings of their careers and can expect their income to grow rapidly and thus, *ceteris paribus,* represent lower-risk applicants.

The CNB has been setting conditions for mortgage lending since 2015 through recommendations and since H2 2021 on the basis of Act No. 6/1993 Coll., on the Czech National Bank, as amended by Act No. 219/2021 Coll., in order to limit systemic risks. Of these binding limits, the LTV indicator, i.e. the ratio of the loan amount to the value of the property, must first of all be met. The level of this indicator is currently at 90% for applicants under 36 years of age and 80% for other applicants. This means that in Q1 2023, households with older members had to have their own savings of at least 20% of the value of the property, i.e. an average of CZK 787,000 per apartment with an area of 60 square metres in the Czech Republic and CZK 1,366,000 in Prague, while in 2015 the figure was CZK 303,000 in the Czech Republic and CZK 631,000 in Prague. An alternative solution to having cash is to pledge additional real estate.

Currently, the DTI (debt to net annual income ratio) also needs to be met. This is now set at 9.5 times annual income for applicants under 36 years of age and 8.5 times annual income for other applicants. Thus, in Q1 2023, an applicant over 36 years of age applying for a loan of 80% of the property price would need a net monthly disposable income of CZK 30,880 and CZK 53,579 for the purchase of an average apartment in the Czech Republic and Prague, respectively (or CZK 27,630 and CZK 47,939 for applicants under 36 years of age).

From July 2023, the CNB suspended the DSTI (debt service to net monthly income) limit. It was set at 50% for applicants under 36 years of age and 45% for other applicants. This limit is particularly restrictive in times of high interest rates. In Q1 2023, the net income required to purchase an average apartment was CZK 41,890 in the Czech Republic and CZK 72,682 in Prague (respectively CZK 37,701 and CZK 65,414 for applicants under 36).

In 2022, 64% of households in the lowest income quintile met the official DTI limits for buying a 60 sqm apartment at the average realised price. Yet, as recently as 2015, 93% of the poorest households met this limit at then-current incomes and real-estate prices. By 2022, only 47% of the poorest quintile met the DSTI limit, compared to 96% in 2015. Last year, the DSTI limit was already restrictive for some households in the third quintile, indicating that the affordability of homeownership is moving away from even the middle class.

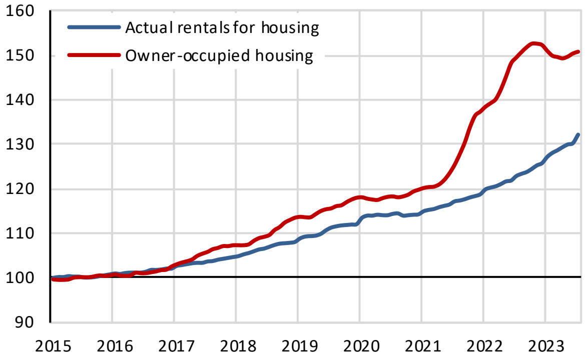
The average instalment of an 80% mortgage with a maturity of 30 years on a property in the Czech Republic was CZK 4,576 in 2015 (20% of the then net disposable income of the poorest quintile), in H2 2022 it was already CZK 19,385 (53% of the net disposable income of the poorest quintile in 2022). In Prague, the average instalment of a similar mortgage was CZK 9,541 in 2015 and CZK 33,475 in H2 2022 (Graph 5.15 and Graph 5.16).

Graphs 5.17 and 5.18 show theoretical budget constraints of households by income quintile (the vertical axis is the house price, the horizontal axis is the mortgage interest rate, and the curves represent the possible combinations of these variables at which households still meet the limit). The limit is set by the amount of a mortgage payment with a maturity of 30 years for an average apartment in the Czech Republic, provided that this amount does not exceed 50% of net disposable income. The budget constraints for all income groups have improved between 2015 and 2022 given the growth in net incomes; however, if we take into account the level of interest rates and the average price of the average property, it is clear that the affordability of owner-occupied housing has deteriorated significantly over the period under review.

Homeowners, and indirectly through tax incidence also tenants, are exposed to property tax. Its annual amount for individual income quintiles ranges from approximately CZK 1,000 to CZK 1,600. The property tax is regressive, proportionally more burdensome for poorer households among homeowners (Graph 5.19). However, its level is very low – the second lowest in the OECD as a proportion of GDP (0.2% of GDP, about nine times lower than the OECD average), and given the current absence of automatic indexation, this proportion has been declining further over the years.

Graph 5.12: Actual Rentals and Owner-occupied Housing

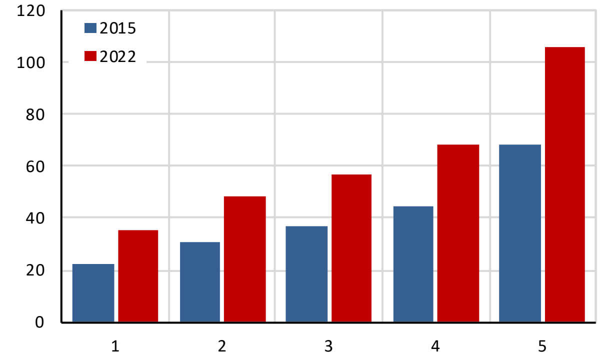
2015=100



Source: CZSO. Calculations of the MoF.

Graph 5.13: Monthly Net Income of Households

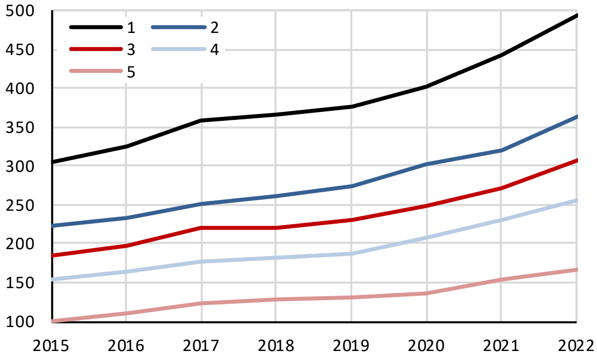
in CZK thousands, by income quintile



Source: CZSO. Calculations of the MoF.

Graph 5.14: Ratio of House Prices to Incomes

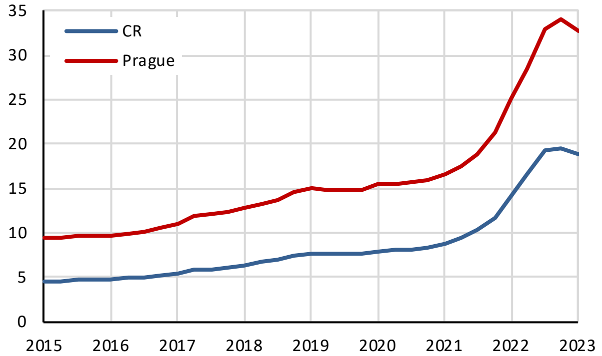
ratio for income quintile 5 in year 2015=100, by income quintile



Source: CZSO. Calculations of the MoF.

Graph 5.15: Monthly Instalment of a New Mortgage

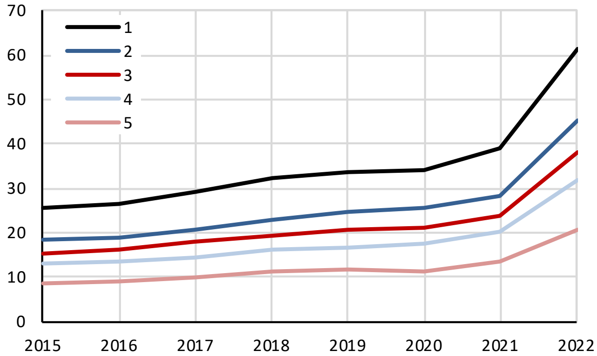
in CZK thousands, second-hand flat, 60 sqm, 80% LTV, 30year maturity



Source: CNB, CZSO. Calculations of the MoF.

Graph 5.16: Mortgage Instalments

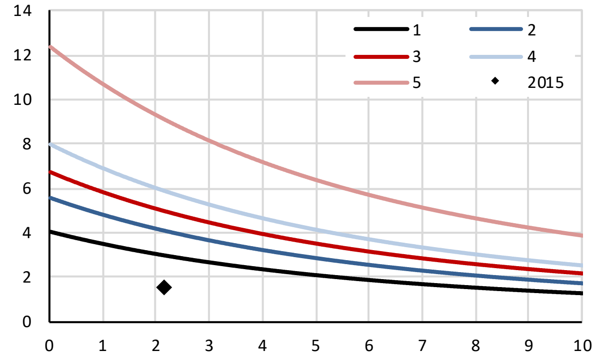
% of net income, second-hand flat, 60 sqm, by income quintile



Source: CNB, CZSO. Calculations of the MoF.

Graph 5.17: Household Budget Constraint – 2015

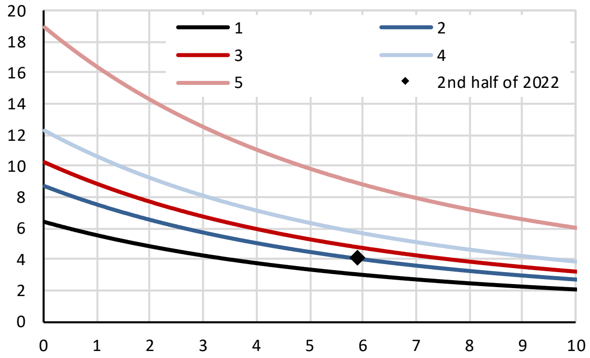
house price in CZK million (y-axis), interest rate in % (x-axis), 50% DSTI, by income quintile, point shows the market situation in 2015



Source: CNB, CZSO. Calculations of the MoF.

Graph 5.18: Household Budget Constraint – 2022

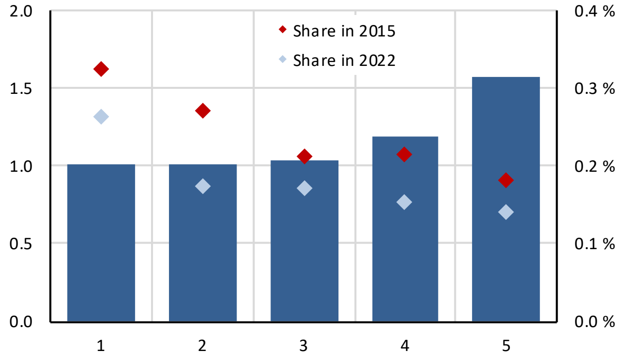
house price in CZK million (y-axis), interest rate in % (x-axis), 50% DSTI, by income quintile, point shows the market situation in H2 2022



Source: CNB, CZSO. Calculations of the MoF.

Graph 5.19: Property Tax

homeowner households, average of years 2015–2022 in CZK ths. a year (lhs), % of net income (rhs)



Source: CZSO. Calculations of the MoF.

5.3 Risks to the Economy

The unaffordability of owner-occupied housing can have a major impact on financial stability. Higher house prices lead to an increase in household debt through higher volumes of new mortgage lending. Households are subsequently exposed to increased interest rate risk – a sudden and sharp rise in interest rates during loan refixing will increase the cost of debt service, potentially contributing to a rise in number of defaulted loans with negative effects on the banking sector's loan portfolios and ultimately the economy as a whole. This threat is addressed by the previously mentioned limits on mortgage lending by the CNB, which reduce the possibility that interest rate movements will lead to a more significant increase in the volume of defaulted mortgage loans. Because of the interest rate risk, an excessively high volume of mortgage lending in the economy may pose some threat in the context of the central bank's monetary policy implementation, as financial stability concerns may limit the room for manoeuvre in pursuing the primary objective of price stability.

The exchange rate risk associated with foreign currency mortgage loans poses an additional threat to the domestic economy if the share of such loans is significant. Lower interest rates on foreign currency may encourage households to expose themselves to the risk of fluctuations in the exchange rate of the domestic currency in which their primary income is usually denominated. In the event of an economic crisis, an increase in risk aversion among investors may lead to an outflow of financial flows from the domestic economy and a subsequent sharp depreciation of the domestic currency. This phenomenon is particularly evident in less developed economies. A sudden increase in repayment amounts may cause an increase in the volume of mortgage loans in default. For this reason, especially after the experience following a major financial crisis (e.g. the mortgage crisis in Iceland or Hungary), commercial banks have been restricted by regulation from granting mortgage loans in a currency that does not correspond to the currency of the applicant's primary income (Act No. 257/2016 Coll., on Consumer Credit, as amended; Directive 2014/17/EU of the European Parliament and of the Council on credit agreements for consumers relating to residential immovable property; European Systemic Risk Board Recommendation ESRB/2011/1 on lending in foreign currencies).

A risk associated with the unaffordability of owner-occupied housing that should not be overlooked is the impact on the inequality of wealth distribution in society. In the event of a prolonged and excessive rise in house prices, the value of the assets of households with their own property increases. Conversely, for young and low-income households in particular, the ability to enter the owner-occupied housing market and to benefit from any appreciation of property is reduced. Moreover, as rental housing is in a certain balance with owner-occupied housing in the long run, rising property prices inevitably lead to higher rents – i.e. an increase in the incomes of property owners and, conversely, an increase in the cost of living for those who cannot afford their own property. Thus, in a period of rapid house price growth, wealth and income inequality between households without property and those who own property may increase. However, it should be pointed out that when prices fall, the effect is reversed, and in countries with a high share of owner-occupation even across poorer segments of the population, for whom property is proportionally the largest component of their wealth, the impacts on inequality are more substantial (OECD, 2021).

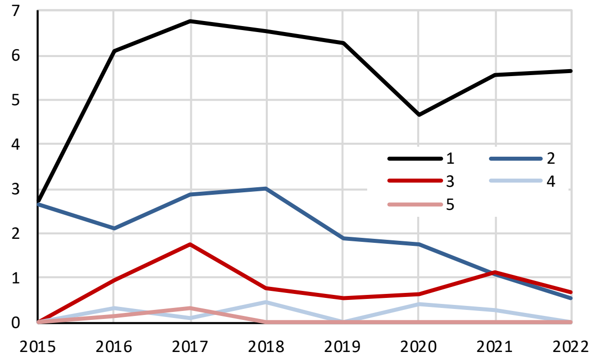
When deciding between the alternatives of owning and renting a property, households decide primarily on the basis of a comparison of their expenditures, but also on the basis of other factors such as mobility options (from an economic point of view, mainly in the form of relocation for job opportunities and expectations of future income) or personal preferences (a greater sense of security, the psychological effect of "living in one's own home" or a way of providing for retirement). According to Causa et al. (2019), owning one's own home improves the future financial conditions of households and, at the national level, due to the higher share of the value of one's own property in the total wealth of the middle class than that of the richest households, it reduces the inequality of wealth distribution (however, most national inequality indicators do not take into account the fact that the wealth situation of the poorest households, who cannot afford their own property, worsens; see the previous paragraph), so its higher share in the national economy is desirable in this respect. Rental housing is associated with higher mobility for its users, according to Causa et al. (2019) especially in the case of poorer households, but given the other benefits of ownership housing, their study suggests that it is advisable to promote mobility mainly through legislation – primarily by regulating contractual relations between tenant and landlord (shorter notice periods, etc.).

House prices and affordability also play a crucial role in government policies. In an effort to implement measures aimed at increasing housing affordability, a number of projects have been implemented over the years, whether it is more favourable mortgage loans for young families, support for rental housing under a subsidy programme, subsidies for the renovation of older properties to expand the real estate supply or many others. In the context of support for owner-occupied housing, state expenditure is further burdened by the contribution to building savings (the use of which is not conditional and the objective of supporting owner-occupied housing is thus rather formal) or by tax advantages for mortgage and building savings loans.

Government spending is also under pressure from housing allowance, which until 2022 were mainly drawn by the poorest households (Graph 5.20). A household whose housing costs (rent or comparable costs in the case of owner-occupied housing, energy and utility costs) exceed 30 per cent of net qualifying income is eligible for housing allowance, up to the standard costs set by government regulation. Following the latest increase in these normative costs from January 2023 by Government Resolution No. 289/2022, a very wide range of households can potentially benefit from the housing allowance (in the first half of 2023, an average of 240,000 allowances were paid per month in the average amount of CZK 5,670, which represents a 43% increase in the number and 35% increase in the amount of allowances compared to 2022). In the case of rental housing in Prague and Brno, these are households consisting of an individual or two persons with a combined income of up to CZK 60,430, households of three persons up to CZK 69,373 and households of more than three persons up to CZK 83,316. In smaller municipalities, a household of less than three persons with an income of up to CZK 50,456, a household of three persons up to CZK 56,330 and a household of more than three persons up to CZK 67,590. However, households living in their own property can also benefit from the housing allowance – households of less than three persons with a net income up to CZK 36,440, households with three persons up to CZK 45,203 and households with more than three persons up to CZK 54,560

Graph 5.20: Housing Allowance

average for all households in rental housing, in CZK thousands a year



Source: CZSO. Calculations of the MoF.

5.4 Conclusions

The Czech Republic has a historically high proportion of owner-occupied housing. However, in recent years, its affordability has been low compared to other European countries, and it has been declining at a rapid pace. The situation is clearly most serious in Prague, where the disproportion between demand and supply is the greatest. However, the heterogeneity is not only based on location, but also on the income distribution of households. Lower-income households are more likely to be mortgage-burdened, which exposes them to numerous financial risks. These risks can have a major impact on the implementation and effects of the CNB's monetary policy.

The situation on the real estate market in the Czech Republic has an impact on the state budget. On the expenditure side, these include programmes related to efforts to improve housing affordability for households and transfers in the form of housing allowance and supplement for housing. The State budget also supports owner-occupied housing through tax advantages on mortgage and building savings loans.

The rise in property prices has had the largest impact on young and low-income households, who do not have access to their own housing and have not been able to benefit from previous developments. Thus, there has been a significant relative redistribution of wealth towards homeowners in recent years.

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