

Fiscal Outlook of the Czech Republic

November 2023

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The Fiscal Outlook of the Czech Republic is published by the Economic Policy Department of the MF CR, since 2016 annually, usually in November. It contains forecast of the current and next year (i.e. up to 2024) and also the outlook of some economic indicators to the following 2 years (i.e. up to 2026). The Outlook is available on internet pages of MF CR at:

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List of Abbreviations

c. p.	current prices
CR	Czech Republic
CNB	Czech National Bank
CZK	Czech koruna currency code
EC	European Commission
ECB	European Central Bank
ESA 2010	European System of National and Regional Accounts from year 2010
EU, EU27	European Union (EU27 coverage)
EUR	euro currency code
GDP	gross domestic product
IMF	International Monetary Fund
MF CR	Ministry of Finance of the Czech Republic
MoLSA	Ministry of Labour and Social Affairs of the Czech Republic
PEPP	Pandemic Emergency Purchase Programme
PSPP	Public Sector Purchase Programme
p. a.	<i>per annum</i> (per year)
pp	percentage point
s. p.	constant prices (volumes)

Country codes

AT – Austria, BE – Belgium, BG – Bulgaria, CY – Cyprus, CZ – Czech Republic, DE – Germany, DK – Denmark, EE – Estonia, ES – Spain, FI – Finland, FR – France, GR – Greece, HR – Croatia, HU – Hungary, IE – Ireland, IT – Italy, LT – Lithuania, LU – Luxembourg, LV – Latvia, MT – Malta, NL – Netherlands, PL – Poland, PT – Portugal, RO – Romania, SE – Sweden, SI – Slovenia, SK – Slovakia, UK – United Kingdom

Symbols Used in Tables

A dash (–) in place of number indicates that the phenomenon did not occur or is not possible for logical reasons.

Cut-off Date for Data Sources

Macroeconomic data used pertain to the 31 October 2023 release, fiscal data to the 1 November 2023 release, international comparison to the 23 October 2023 release and government bond yields to the 12 October 2023 release, respectively.

Note

In some cases, published aggregates do not match the sum of individual items to the last decimal point due to rounding. “Billion” means a thousand million.

Introduction and Summary

Over the past few years, public finances have gone through a period that has been exceptional in many respects. The recession in 2020 caused by the supply shock of the epidemic and related supportive measures was replaced by only a slight and temporary economic recovery. However, this was halted by the Russian aggression against Ukraine, the subsequent volatility and high prices of key commodities. The economy went through a mild recession in the second half of 2022 and has been essentially stagnant quarter-on-quarter since then. A recovery is not expected until the end of this year. In the following period, the economy should then grow at annual rates of between 2 and 2.5%.

Economic performance has been hampered by high inflation reaching double-digit levels for the second year running. High inflation also affects public finances, which cover additional expenditure, mainly in the social area or in subsidies and other transfers. Although some tax revenues are growing significantly faster, the overall effect on public finances is far from being clear. An example was the two extraordinary pension indexations during last year and another one since June this year. In particular, an extraordinary indexation based on data from January 2023 would already be so financially demanding that the government was forced to modify it. According to the forecast, inflation is expected to fall significantly next year to slightly above 3%, while price growth is expected to slow further in the outlook years to around 2%.

The draft state budget and state funds for 2024, as well as the year-on-year evolution of public finances, is influenced by several important factors. First, a number of one-off measures primarily related to energy prices will end. At the same time, a set of measures of the consolidation package, which brings changes to more than 60 legal norms, will enter into force. The impact of the end of the one-off measures and the consolidation package on the balance is more than 2 percentage points for 2024. In the opposite direction will be an increase in mandatory spending, including defence spending, and an increase in infrastructure investment.

The result of the public finances of the Czech Republic is primarily determined by the performance of the state budget. This reflects both the estimated result for this year of -3.6% of GDP and the expected year-on-year improvement of 1.4 percentage points to -2.2% of GDP for 2024. The expenditure frameworks for 2024 allowed the government to draft the state budget and state funds with a total deficit of CZK 270 billion. This space was used for a deficit of CZK 252 billion for the state budget and CZK 18 billion for the State Transport Infrastructure Fund. The deficits will also be reflected in the level of debt, which could increase by almost another 2 percentage points during 2023 and 2024, and by the end of 2026 the debt should reach around 47% of GDP.

Fiscal policy should be restrictive in subsequent years. The structural deficit of 2.5 % of GDP for this year is in line with the fiscal rule set by the Act on Budgetary Responsibility Rules. Over the next three years (until 2026), the structural deficit should gradually decline to a maximum of 1.75% of GDP according to the set trajectory. The current forecast projects the structural deficit in 2026 to be just below this value.

The issue of long-term financial sustainability of social systems has not been resolved. This is also negatively affected by the deterioration of public finances after 2019. The latest projections of pension expenditure

confirm previous trends of negative developments in the pension account balance from the end of the current decade. This trend will then be accelerated by the de facto capping of the retirement age at 65 taking place during the 2030s. Tightening of early retirement and the limitation of indexation will reduce the financial imbalance, but the potential linking of the retirement age to life expectancy would reduce the pension deficit by more than 40% at the end of the projection horizon.

The government's efforts to improve public finances in the form of the consolidation package are the subject of this year's thematic chapter. The first part of the chapter provides an overview of approaches to public finance consolidation, in particular the factors that have the potential to influence the success of the process.

Next, we present the content of the package and its most important measures. We also link these to the recommendations that are consistently made to the Czech Republic by international and supranational institutions, particularly regarding tax mix adjustment. This applies not only to excises, but especially to property taxes. However, the most significant revenue item is the 2 percentage point increase in the corporate income tax rate. In the case of a relatively lower rate, an increase in this tax is recommended by research studies as one of the least damaging revenue measures. The expenditure side of the package is primarily characterised by a decrease in subsidies, cuts in salaries and in operating costs of all ministries.

The last section quantifies the impact of the package. In terms of the volume of consolidation measures, the macroeconomic impacts on the performance of the Czech economy are not significant. Its timing in a period of renewed economic recovery, improved economic sentiment and lower uncertainties helps to fulfil the assumptions for the successful implementation of the consolidation, whose accompanying effect should be an anti-inflationary market effect.

1 Macroeconomic Framework of the Fiscal Forecast

The macroeconomic framework of the fiscal forecast works with a scenario in which the shortfall in oil and gas supplies from Russia to the EU is covered by a combination of imports from other suppliers, savings and a switch to alternative technologies. Furthermore, neither the ongoing war in Ukraine nor the tensions in the Middle East are assumed to lead to sustained commodity price increases on world markets. Supply chains should already be functioning without major problems over the forecast horizon.

Real **gross domestic product**, adjusted for seasonal and calendar effects, more or less stagnated in the first three quarters of 2023. Economic performance has thus still not surpassed pre-pandemic levels. For the whole of 2023, GDP could fall by 0.5%. Households continue to face the impact of high inflation this year, their real consumption should thus 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 economy's output could increase by 1.9%, mainly thanks to renewed growth in household consumption. Economic activity will be dampened by restrictive monetary and fiscal policies, but this will also help to reduce inflationary pressures. The economy could grow by around 2.4% a year in the coming years, driven by both domestic and external demand.

Household final consumption expenditure is affected by the continued decline in real disposable income and the restrictive monetary policy stance. On the contrary, consumer spending by refugees from Ukraine, who are already classified as residents as of Q4 2022, will have a positive impact on full-year consumption growth this year. The savings rate should increase further in view of 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. Taking these factors into account, real household consumption could fall by 2.7% this year. Thanks to the reduction in inflation, the aforementioned decline in the savings rate should be compounded by a renewed increase in real household income in 2024, which will, however, be dampened by some of the measures in the consolidation package. In the following years, private consumption is expected to grow more slowly, by 3.7% in 2025 and 2.7% in 2026.

Gross fixed capital formation is expected to slow down in 2023 due to economic problems in euro area countries. Restrictive monetary conditions will also take a toll on its dynamics. On the other hand, government spending co-financed by EU funds from the previous financial perspective as well as investments financed exclusively from national sources will have a positive impact. For next year, thanks to the expected economic growth in the euro area, we expect a recovery in private investment, but this will be hampered by the impact

of restrictive economic policy settings. The transition to the new financial perspective of EU funds will be reflected in a decline in general government investment. As a result, gross fixed capital formation may increase by 2.2% in 2023, while growth could slow to 1.7% in 2024. For 2025 and 2026, we expect investment growth to be slightly above 2%, driven by private investment activity.

High inflation continues to slow economic growth this year and reduce living standards. Not only food, electricity and natural gas, but also other categories of goods and services are contributing to the exceptionally strong rise in consumer prices. Strong domestic demand pressures are already being dampened by higher monetary policy rates. Year-on-year inflation has been declining at a rapid pace over the course of this year, but will be boosted in Q4 by the base effect of the energy-saving tariff, which lowered the price of electricity late last year. The average inflation rate could reach 10.8% this year. Annual consumer price inflation could be close to 3% throughout 2024. Annual consumer price inflation could reach close to 2% by the end of 2025 and remain at that level thereafter.

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 2.2% in 2022, it could rise to 2.7% this year and further to 2.8% in 2024. Thanks to strong labour demand, employment (in the national accounts methodology) should increase year-on-year over the forecast horizon. Government measures to facilitate and accelerate the recruitment of skilled labour from abroad will also have a positive impact on its dynamics. Persistent labour market tensions, together with elevated inflation expectations, are putting upward pressure on wage growth, which will, however, continue to lag behind inflation this year. Thus, average real wage growth should not resume until 2024. Wages and salaries could increase by 8.4% in 2023 and 6.5% in 2024. In the following years, wages and salaries could grow by around 4.5% per year.

The current account of the balance of payments was in a deficit of 4.3% of GDP in Q2 2023, mainly reflecting a deterioration in the primary income balance due to higher outflows of investment income (mainly in the form of dividends). Conversely, the unwinding of price pressures in the industrial and energy sectors and the improvement in conditions in the export-oriented automotive industry have led to a return to positive trade balance figures. At the same time, these factors

should continue to be a guiding factor. The current account deficit should thus gradually narrow to 2.4% of GDP this year and to 1.2% of GDP next year. In the following years, the deficit should hover at 0.7% of GDP.

The macroeconomic framework of the fiscal forecast is subject to a number of **risks** that, taken together, we consider to be **skewed to the downside**. The main downside risk relates to the ability to replace the shortfall in natural gas and oil supplies from Russia to the European Union with increased imports from other suppliers and demand-side measures. The possibility of renewed problems in supply chains is also a significant risk, especially for certain sectors of the economy

(automotive). In addition to the negative impact on economic performance, supply-side frictions would create additional inflationary pressures. These could also be triggered by a rise in energy commodity prices in the event of an escalation of tensions in the Middle East. The evolution of inflation and inflation expectations is also a risk, as is the overvaluation of residential property prices. On the positive side, however, the extraordinary increase in household savings in recent years could help cushion the impact of higher consumer prices on consumption. Economic growth could be supported by the successful integration of refugees from Ukraine and the full use of their human capital.

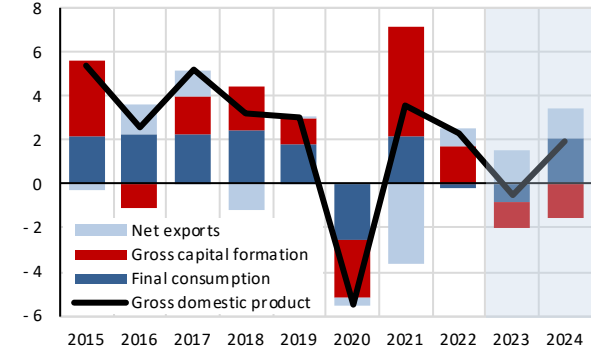
Table 1.1: Comparison of Fiscal Outlook and Convergence Programme Scenarios

		Fiscal Outlook (November 2023)					Convergence Programme (April 2023)				
		2022	2023	2024	2025	2026	2022	2023	2024	2025	2026
External Assumptions											
Real GDP in EU	change in %	3.5	0.5	1.3	1.5	1.3	3.6	0.7	1.5	1.5	1.3
Prices of oil (Brent)	USD/barrel	101.0	83.3	83.6	78.5	75.2	101.0	77.0	72.9	70.7	69.0
Exchange rate USD/EUR	USD/EUR	1.05	1.08	1.07	1.09	1.11	1.05	1.08	1.10	1.11	1.12
Exchange rate CZK/EUR	CZK/EUR	24.6	24.0	24.4	24.1	23.8	24.6	23.8	23.8	23.7	23.7
Real Values											
GDP	change in %	2.4	-0.5	1.9	2.4	2.3	2.5	0.1	3.0	2.9	2.5
Households consumption	change in %	-0.7	-2.7	3.9	3.7	2.7	-0.9	-2.7	3.9	4.0	3.0
Government consumption	change in %	0.6	2.4	1.6	2.0	2.0	0.6	1.6	1.3	1.6	1.8
Gross fixed capital formation	change in %	3.0	2.2	1.7	2.1	2.3	6.2	2.8	0.5	2.2	2.4
Contribution of final domestic demand	p.p.	0.6	-0.2	2.5	2.7	2.3	1.3	-0.1	2.2	2.7	2.4
Contribution of foreign trade	p.p.	0.9	1.5	1.3	0.8	0.2	0.2	0.8	1.4	1.0	0.8
Output gap	%	1.1	-0.7	-1.0	-0.3	0.3	0.0	-1.8	-1.2	-0.4	-0.1
Others											
Nominal GDP	CZK bn	6786	7363	7726	8096	8448	6795	7475	7989	8451	8856
Harmonised index of consumer prices	change in %	14.8	12.1	3.5	2.6	2.0	14.8	12.2	2.6	2.2	2.0
Employment	change in %	1.5	0.9	0.5	0.2	0.1	1.7	-0.4	0.5	0.2	0.1
Unemployment rate	%	2.2	2.7	2.8	2.7	2.6	2.3	3.0	2.8	2.7	2.7
Wages and salaries	change in %	9.3	8.4	6.5	4.6	4.4	9.1	7.5	5.8	4.4	4.5
General Government											
Revenue	% of GDP	41.4	42.6	42.0	41.7	41.5	41.0	41.1	39.6	39.0	38.5
Value-added tax	change in %	15.8	6.4	6.0	6.1	4.5	15.8	8.1	5.5	5.9	4.9
Excise taxes	change in %	-1.8	1.6	7.5	1.9	1.8	-1.8	0.8	6.3	0.3	0.0
Personal income tax	change in %	6.3	13.5	7.5	3.8	4.0	6.4	6.9	5.8	3.9	4.6
Corporate income tax	change in %	23.1	19.8	-1.2	1.9	1.4	9.8	25.2	1.2	5.6	0.5
Social security contributions	change in %	7.0	8.5	8.4	4.6	4.5	7.0	7.4	6.2	4.0	4.2
Expenditure	% of GDP	44.6	46.2	44.2	43.4	43.0	44.6	44.7	42.6	41.4	40.6
Compensation of employees	change in %	2.1	8.6	3.7	4.5	3.5	2.0	7.1	4.5	3.5	3.5
Intermediate consumption	change in %	10.8	11.8	4.8	4.5	4.8	10.6	10.0	3.5	4.0	4.5
Social transfers in kind	change in %	2.9	10.3	6.5	3.5	3.0	5.3	8.7	5.5	3.0	2.6
Social benefits other than in kind	change in %	9.0	11.9	4.2	3.1	3.0	9.0	12.5	3.2	2.3	2.0
Gross fixed capital formation	change in %	10.0	16.2	1.9	4.1	1.1	9.5	15.8	-2.7	1.9	1.5
Balance	% of GDP	-3.2	-3.6	-2.2	-1.7	-1.5	-3.6	-3.5	-2.9	-2.4	-2.2
Structural balance	% of GDP	-2.7	-2.5	-2.0	-1.7	-1.7	-2.8	-1.6	-2.6	-2.3	-2.2
Debt	% of GDP	44.2	44.7	45.9	46.5	47.0	44.1	43.5	44.0	44.4	45.0

Source: MF CR (2023a, 2023b).

Graph 1.1: Real GDP

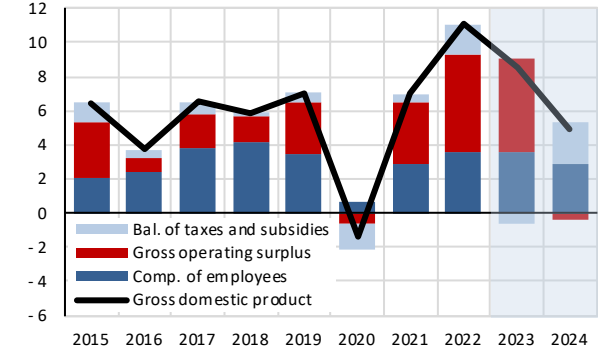
real GDP change in %, contributions in pp



Source: MF CR (2023b).

Graph 1.2: Nominal GDP – Income Approach

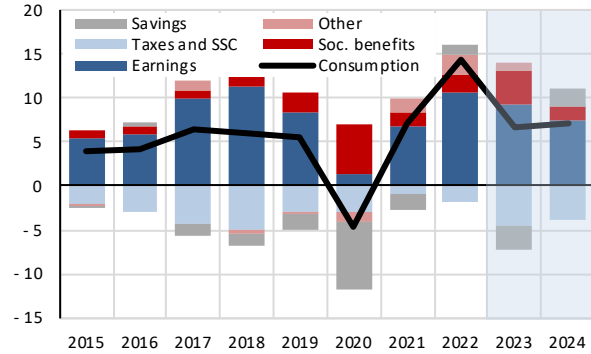
nominal GDP change in %, contributions in pp



Source: MF CR (2023b).

Graph 1.3: Nominal Households Consumption

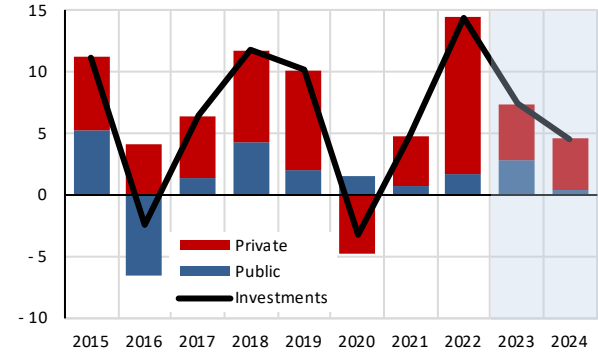
change of nominal households consumption in %, contributions in pp



Source: MF CR (2023b).

Graph 1.4: Nominal Investments

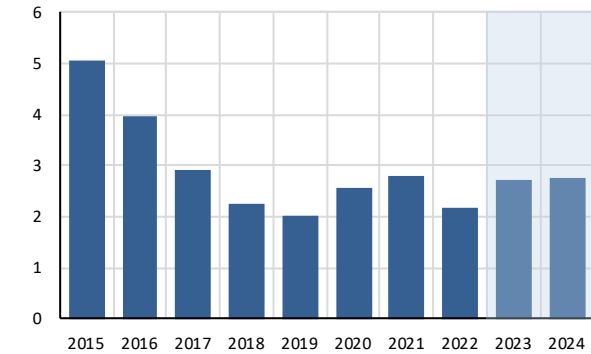
change of nominal investments in %, contributions in pp



Source: MF CR (2023b).

Graph 1.5: Unemployment Rate

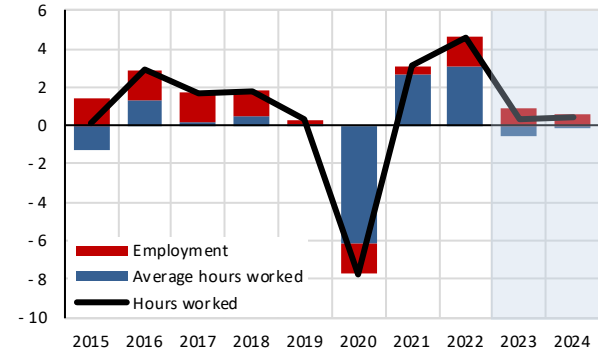
% of labour force, Labour Force Survey methodology



Source: MF CR (2023b).

Graph 1.6: Hours Worked

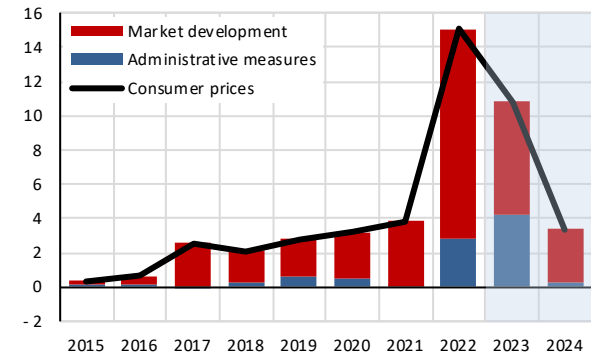
change in %, contributions in pp, National Accounts methodology



Source: MF CR (2023b).

Graph 1.7: Consumer Prices

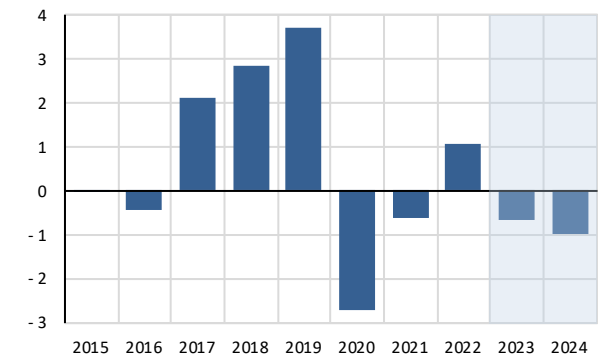
average rate of consumer price inflation in %, contributions in pp



Source: MF CR (2023b).

Graph 1.8: Output Gap

% of potential product



Source: MF CR (2023b).

2 General Government Development

The general government sector has been running deficits exceeding the Stability and Growth Pact benchmark of 3% of GDP since 2020. This is the result of measures taken on both the revenue and expenditure side during the covid-19 epidemic, followed by policies in response to the war in Ukraine, primarily related to energy availability and prices. In 2020 and 2021, the general government deficit thus exceeded 5% of GDP, but last year it fell to 3.2% of GDP.

One of the government's priorities is to implement adjustments on the revenue and expenditure side of public budgets that will lead to long-term sustainable public finances. This is reflected in the government's actions both in the medium term in the form of the approved consolidation package and adjustments in the pension system (see Chapter 4). Within the EU countries, the Czech Republic is assessed as a medium risk country, with medium risk identified in the medium and long term (EC, 2023e). Therefore, actions which have effects in the near future, as well as those that will have an effect later, lead to the recovery of public finances.

The forecast of the Fiscal Outlook of the CR envisages a gradual reduction of the general government deficit to 1.5% of GDP in 2026. The balance should fall below the **Maastricht criterion** and the **Stability and Growth Pact** reference value for excessive deficits in 2024. Both the consolidation package and the end of one-off measures related to the energy crisis should contribute to this.

The state budget is the main contributor to public finance deficits and bears by far the greatest burden of the stabilising function of economic policy and fiscal expansion. Consolidation of public finances therefore focuses primarily on adjusting its revenues and expenditures. The other entities within central government are generally in balance or in slight surplus on average. The exception for this and future years will probably be state funds, specifically the State transport infrastructure fund, which will cover part of its expenditure with loans. The structural deficit of central government institutions with a dominant share of the state budget should be mitigated by surplus balances of local governments and health insurance companies.

Both branches of the public finances have received significant compensations over the past years at the expense of the state budget in order to mitigate the negative effects of the recession and support measures on their management. For local governments, the surplus rose to almost 1% of GDP in 2021, where it also remained in 2022. In relative terms, we expect a slight decline in surpluses due to deferred spending at a time of high inflation, but these are still significant surpluses and comparable to the "pre-covid" period. In contrast, the double-digit growth rate of expenditure of health insurance companies led to a deficit in both 2020 and 2021 in the amount of 0.2% of GDP. As the epidemic fades, their performance returns to balanced or slightly surplus levels in 2022. This year, however, reimbursement settings are likely to lead the health care system into a slight deficit. For the following years, we expect expenditure dynamics to slow down relative to forecasted revenues and ensure the medium-term sustainability of the healthcare system.

Table 2.1: Fiscal Policy Stance

in % of GDP, fiscal effort in percentage points

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
							Forecast	Forecast	Outlook	Outlook
General government balance	1.5	0.9	0.3	-5.8	-5.1	-3.2	-3.6	-2.2	-1.7	-1.5
Cyclical component according to OECD method	0.7	1.0	1.3	-1.0	-0.2	0.4	-0.2	-0.4	-0.1	0.1
One-off and other temporary measures	0.0	-0.1	0.0	-2.3	-1.6	-0.9	-0.8	0.1	0.1	0.0
Structural balance according to OECD method	0.8	0.0	-1.0	-2.5	-3.3	-2.7	-2.5	-2.0	-1.7	-1.7
Fiscal effort according to OECD method	0.0	-0.8	-1.0	-1.5	-0.8	0.6	0.2	0.6	0.2	0.1
Cyclical component according to ECB method	0.7	1.4	2.0	-0.5	0.2	-0.3	-0.8	-0.4	0.1	0.6
Structural balance according to ECB method	0.8	-0.4	-1.7	-3.0	-3.7	-2.0	-2.0	-1.9	-1.9	-2.1
Fiscal effort according to ECB method	0.0	-1.2	-1.3	-1.3	-0.7	1.7	0.0	0.1	0.0	-0.2

Note: The method of Organisation of Economic Co-operation and Development calculates the cyclical component directly from output gap, whereas the European Central Bank models the cyclical development of specific macroeconomic bases (compensation of employees in the private sector, wages in the private sector, net operating surplus, consumption of households and unemployment). These bases have different cyclical behaviour than the GDP.

Source: CZSO (2023a, 2023b). Forecast and calculations by MF CR.

2.1 Balance, Structural Balance and Expenditure Frameworks

In 2023, the general government sector should reach a deficit of 3.6% of GDP. Adjusted for the impact of the business cycle and one-off operations reflecting mainly the economic and financial consequences of the Russian aggression against Ukraine with measures related to humanitarian aid, transfers and subsidies to households and firms due to high energy prices, we estimate a structural deficit of 2.5% of GDP.

In terms of the individual components of the public budgets, the state budget of the Czech Republic was proposed as a deficit of CZK 295 billion in an effort to mitigate the negative economic and social consequences of current crisis. Health insurance companies are likely to show a slight deficit this year, but local governments will sustain surplus for the whole of 2023.

In addition to the economic forecast for the second half of the year and the quarterly national accounts data for Q1 and Q2 2023, the estimate of the fiscal balance for this year is also based on the cash performance of key components of public budgets up-to-date. The cash balance of the state budget for the first 10 months of the year ended with a deficit of CZK 210.7 billion (MF CR, 2023c), and was thus CZK 76.0 billion better than for the same period of 2022. After adjustment for the EU and financial mechanisms funds, the deficit amounted to CZK 237.2 billion. At the end of September, the surplus of local governments increased by CZK 16.9 billion year-on-year to CZK 77.3 billion (MF CR, 2023d). Health insurance companies ended with a deficit of CZK 3.9 billion for the same period, which represents a year-on-year deterioration of CZK 7.9 billion.

We assume that the deficit in the state budget will continue to be a decisive factor for the general government balance in the coming years. For 2024, the Chamber of Deputies approved the state budget deficit of CZK 252 billion in the first reading (Chamber of Deputies Print No 549) and for the following years the government has prepared a plan to reduce the deficits to CZK 235 and 220 billion (Chamber of Deputies Print No. 550). In addition, part of the expenditure of the State transport infrastructure fund would be financed by a loan from the European Investment Bank leading to a deficit of CZK 18 billion in 2024. By contrast, local

governments should again show positive balances at the level around 0.6% of GDP over the entire outlook horizon, with slight surpluses also calculated in the case of social security funds. The general government deficit should thus fall by 1.4 pp to 2.2% of GDP in 2024. Then it should gradually improve to 1.5% of GDP in 2026.

The setting of the state budget and state funds is based on the fiscal rule which prescribes the maximum level of structural balances for the purposes of the **expenditure frameworks** of the state budget and state funds, taking into account the balances of other general government entities. The expenditure framework for the year 2024 is based on a structural deficit of 2.75% of GDP and is reduced by 0.5 pp for each subsequent year, i.e. 2.25% of GDP for 2025 and 1.75% of GDP for 2026, in accordance with the legislation currently in force.

We estimate **structural deficits** in the forecast and outlook at 2.0% of GDP in 2024, with a subsequent decline to 1.7% of GDP in 2025 and 2026. The year-on-year improvement in 2024 and 2025 is primarily due to the consolidation package.

The fiscal impulse (Graph 2.1.6), which quantifies the impact of fiscal policy on the economy, is expected to be virtually balanced in 2023. This is because the expenditure measures increasing the primary impulse are mitigated by tax revenue including windfall profits tax and excess revenue levy. The structure of one-off expenditure affecting the impulse does not change significantly this year, it still concerns mainly the support for households and businesses affected by the rise in energy price. The fact that the impulse is not negative in the context of positive fiscal effort (see Graph 2.1.5) is mainly due to the EU-funded expenditure. These affect economic growth in full, while the balance just to the extent of national financing. We expect a negative fiscal impulse in 2024. It will be driven by a positive fiscal effort related to the consolidation package, as well as by the impact of items excluded from fiscal effort calculation, notably the end of one-off spending in the energy sector and the decline in EU-funded spending. We expect a slightly negative impulse driven by the expenditure side in 2025 and a neutral impulse in 2026.

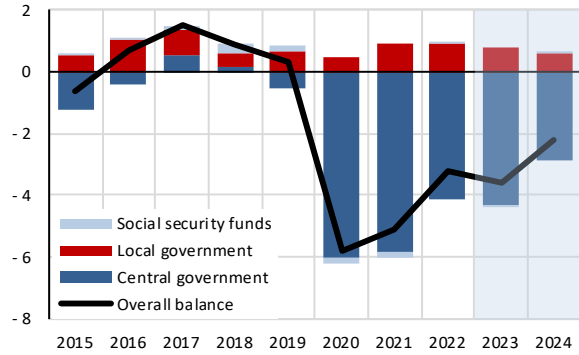
Table 2.1.1: General Government Development

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Total revenue	% of GDP	40.5	41.5	41.3	41.5	41.4	41.4	42.6	42.0	41.7	41.5
	change in %	6.6	8.5	6.7	-1.2	6.9	11.0	11.7	3.5	4.1	3.8
Total expenditure	% of GDP	39.0	40.6	41.1	47.2	46.5	44.6	46.2	44.2	43.4	43.0
	change in %	4.5	10.3	8.2	13.4	5.4	6.5	12.3	0.4	3.0	3.4
General government balance	% of GDP	1.5	0.9	0.3	-5.8	-5.1	-3.2	-3.6	-2.2	-1.7	-1.5
Central government	% of GDP	0.5	0.1	-0.6	-6.0	-5.8	-4.2	-4.3	-2.8	-2.4	-2.2
Local governments	% of GDP	0.8	0.4	0.6	0.5	0.9	0.9	0.8	0.6	0.6	0.6
Social security funds	% of GDP	0.2	0.3	0.2	-0.2	-0.2	0.0	0.0	0.1	0.1	0.1

Source: CZSO (2023a, 2023b). Forecast and calculations by MF CR.

Graph 2.1.1: General Government Balance

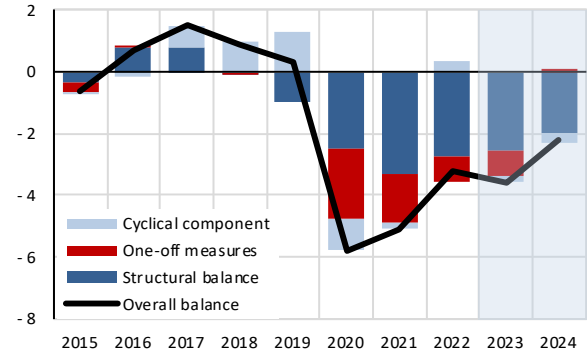
% of GDP



Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.1.2: Overall and Structural Balance

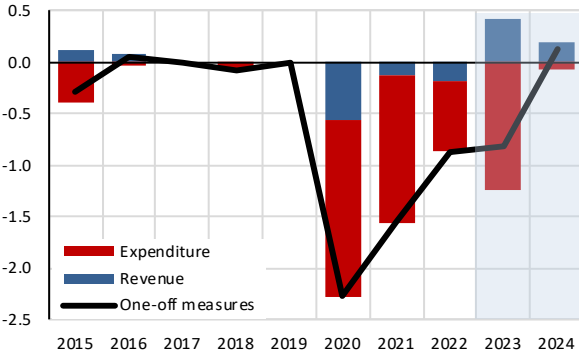
% of GDP



Source: CZSO (2023a, 2023b). MF CR calculations and forecast.

Graph 2.1.3: One-off and Temporary Measures

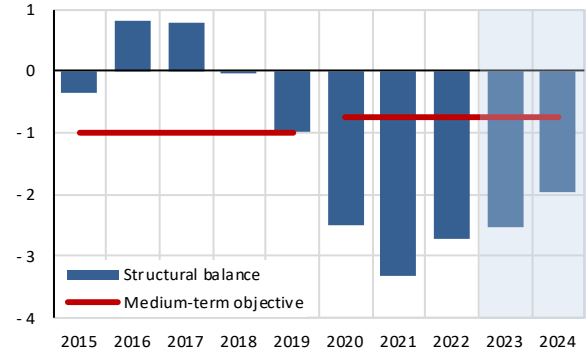
% of GDP



Source: MF CR.

Graph 2.1.4: Structural Balance and MTO

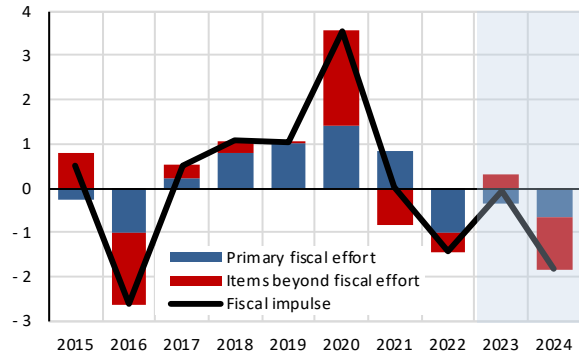
% of GDP



Source: MF CR.

Graph 2.1.5: Fiscal Effort and Fiscal Impulse

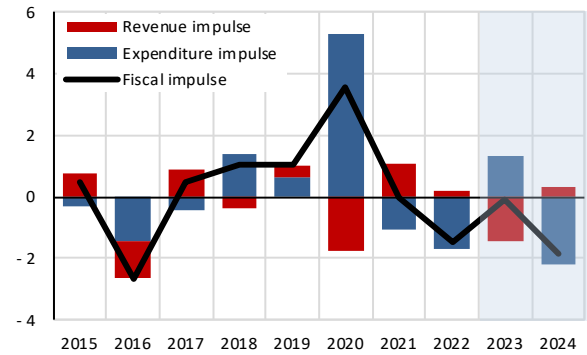
in percentage points, fiscal effort with opposite sign



Source: MF CR.

Graph 2.1.6: Overall Fiscal Impulse

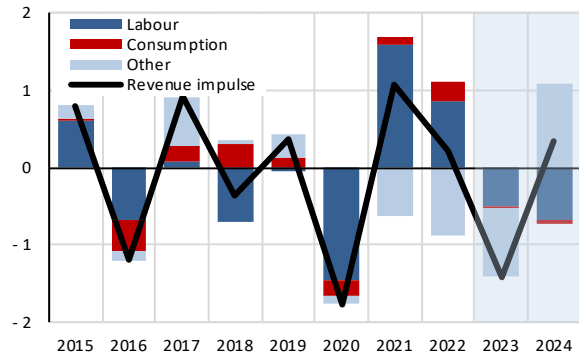
in percentage points



Source: MF CR.

Graph 2.1.7: Revenue Fiscal Impulse

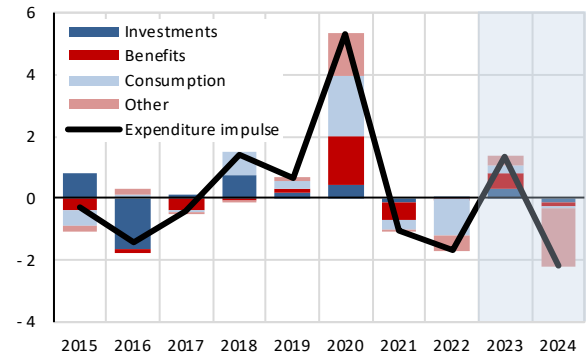
in percentage points



Source: MF CR.

Graph 2.1.8: Expenditure Fiscal Impulse

in percentage points



Source: MF CR.

2.2 General Government Revenue

Total general government revenue is expected to grow by almost 12% to reach 42.5% of GDP in 2023. Despite an estimated 9.3% growth in tax and insurance revenues (Graph 2.2.2), there should be only slight increase in the composite tax quota by 0.2 pp to 35.4% of GDP (Graph 2.2.1), due to high expected growth in nominal GDP. For the following years, we assume a significantly lower growth rate of total revenue, which should even gradually decline as a share of GDP to 41.3% of GDP in 2026.

Personal income tax revenue is expected to grow by 13.5% this year. In addition to the estimated 13% growth in the tax stemming from the wage bill development, we expect around 25% increase in capital tax. The extension of the flat-rate regime to taxpayers with income up to CZK 2 million per year will reduce tax revenue this year by an estimated CZK 0.4 billion (Act No. 366/2022 Coll.). By contrast, the end of the temporary increase in the limit for the application of the deduction for gifts to 30% of the tax base is likely to have a positive impact of CZK 0.3 billion (Act No. 128/2022 Coll.). The tax rate should slow down to 7.5% in 2024 and hover around 4% in the following two years. The estimated contribution of the consolidation package of CZK 8.1 billion to the tax revenue in 2024 results mainly from the shift of the threshold for applying the 23% tax rate to 36 times the average wage (48 times by 2023), the limitation of the tax credit for a spouse caring for a child under 3 years of age and, last but not least, the abolition of the tax credit for placing a child in a pre-school institution. Adjustments to the tax conditions for retirement savings products should be associated with a negative impact of CZK 0.6 billion in 2024, increased by a further CZK 0.5 billion in 2025 (Chamber of Deputies Print No. 474).

Social security contributions are also based on the expected earnings development, with an estimated increase of around 8.5% in 2023 and 2024. In addition, the monthly payment for one state insured person was increased to CZK 1,900 this year. In the following years, we expect automatic indexation of the payment based on inflation rate and real wage growth (Act No. 260/2022 Coll.). The additional revenue for health insurance companies from this title will reach approximately CZK 11 billion in 2023, and we are considering a similar increase for 2024 as well. In addition, this year's revenue reflects the termination of the payment of the extraordinary allowance for persons quarantined during the covid-19 disease, with an impact of up to CZK 2 billion (Act No. 518/2021 Coll.). The positive impact of the increase in the rate of social security contributions for risky professions almost negates the introduction of a discount on contributions for employers (5% of the aggregate of the monthly assessment bases of the employees to whom the discount is applied) when part-time work is arranged (Act No. 216/2022 Coll.). This year's annual revenue will

also be slightly reduced by the change in the taxation of business low-emission vehicles used as well for private purposes (Act No. 142/2022 Coll.) and the extension of the flat-rate regime (Act No. 366/2022 Coll.). The measures of the consolidation package are expected to bring in almost CZK 21 billion next year, of which the largest fiscal impact is related to the reintroduction of sickness insurance for employees in the amount of 0.6% (over CZK 13 billion), the increase in contribution rate on the self-employed (CZK 4.5 billion) and the capping of contribution relief for work performance agreements (CZK 3 billion). Due to the gradual increase in the minimum assessment base, the additional revenue from higher contributions of self-employed is also expected in 2025 and 2026, by an additional CZK 3 billion each year. Conversely, the introduction of the so-called long-term investment product and its tax benefits as an incentive to save for old age should be associated with a negative impact of CZK 0.6 billion in 2025 (Chamber of Deputies Print No. 474).

In the case of **corporate income tax**, we expect growth of almost 20% this year, followed by a slight correction in 2024 due to a year-on-year decrease in windfall profits tax revenue by CZK 26 billion (Act No. 366/2022 Coll.). The declining revenue of this extraordinary taxation will continue to negatively affect corporate income tax in 2025 and 2026, when we estimate its dynamics to be up to 2%. On the contrary, an increase in the corporate income tax rate by 2 pp will have a positive effect next year, with an expected benefit of CZK 22 billion (Senate Print No. 161). The exemption of government bond yields constitutes an exacerbating negative effect and will reduce the revenue throughout the entire outlook to the extent of up to CZK 2 billion per year. On the other hand, we expect a slightly positive budgetary effect in 2023 from the end of the temporary increase in the limit for claiming the donation deduction and the extension of the range of beneficiaries and purposes for supporting Ukraine (Act No. 128/2022 Coll.). A top-up tax ensuring a minimum level of taxation of large multinational and domestic groups could increase tax revenue by an estimated CZK 1 billion each year in 2024 and 2025 (Chamber of Deputies Print No. 515).

Value added tax is expected to grow by 6.4% this year. Its dynamics is dampened by the shift of the tax registration threshold from CZK 1 to CZK 2 billion with an estimated impact of CZK 3 billion (Act No. 366/2022 Coll.). On the contrary, the end of the tax waiver for the purchase of vaccines and tests will have a positive effect on the tax revenue. Over the next two years, the tax rate should hover around 6% and slow down to 4.5% at the end of the outlook horizon. The tax revenue in 2024 will be negatively affected by the consolidation package, which reduces the number of tax rates to two (21% and 12%) while shifting some goods and services to different rates (impact of

CZK 3.7 billion); on the other hand, there should be higher value added tax revenue due to an excise tax increase in 2024 (CZK 1 billion) and 2025 (another CZK 0.7 billion).

A growth in **excise duties**, as defined by national legislation, is driven this year by mineral oil tax revenue, which positively reflects the earlier abolition of the reduced rate on diesel (Act No. 234/2023 Coll.). An impact of the increase in rates on tobacco products (Act No. 609/2020 Coll.) is likely to be offset by lower sales and a continued shift towards less taxed alternatives. As a result, excise revenue is expected to grow by 1.6% in 2023, accelerate to 7.5% in 2024 and then return to levels around 2%. A significant expected increase in mineral oil tax revenue in 2024 is driven by the low base year 2023 due to the temporary reduction in the tax rate on diesel (CZK 5.6 billion), higher tax rates on tobacco products (impact of CZK 4.1 billion) and on alcohol (impact of CZK 0.8 billion) that will apply from 2024 as part of the consolidation package. The last two mentioned measures are expected to increase revenue by an additional CZK 3.2 billion in 2025 and CZK 2.9 billion in 2026. The package also abolishes the exemption of metallurgical and mineralogical processes from excise duties with an estimated benefit of CZK 0.7 billion in 2024.

The **levy on excessive revenues** brings in an estimated CZK 17.3 billion this year (Act No. 365/2022 Coll.). In contrast, the waiver of the **renewable energy levy** for households and companies, effective until the end of 2023, is likely to

represent an additional revenue shortfall of CZK 13.8 billion. The introduction of the Excluded Persons Register is expected to have a negative impact on **gambling tax** revenue this year by an additional CZK 0.5 billion (Act No. 186/2016 Coll.). We expect a similar impact on annual revenue in 2024, but this effect should be outweighed by the increase in the second gambling tax rate from 23% to 30% as part of the consolidation measures. The **real estate tax** (additional revenue of CZK 10 billion), which will be automatically indexed by the so-called inflation coefficient from 2025 onwards (Senate Print No. 161), also increases revenue from next year.

The acceleration of the dynamics of **revenue transfers** in 2023 reflects the completion of projects from the ending 2014–2020 financial perspective, the follow-up perspective 2021–2027 as well as funding from the NextGenerationEU. It is the funds from the NextGenerationEU that should partially offset the decline in accrual transfers accompanying the transition to the new financial perspective from 2024. In terms of **property income**, the forecast includes exceptionally high dividend receipts (notably CZK 54 billion from the energy company CEZ) and interest on loans granted under the Treasury liquidity management (reverse repo operations). Both sources are expected to decline significantly from 2024 onwards, given their extraordinary size this year.

Table 2.2.1: General Government Revenue Outlook

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Total revenue	<i>CZK bn</i>	2069	2245	2394	2367	2530	2808	3135	3244	3376	3506
	<i>change in %</i>	6.6	8.5	6.7	-1.2	6.9	11.0	11.7	3.5	4.1	3.8
Tax revenue	<i>CZK bn</i>	1043	1106	1179	1137	1174	1303	1433	1518	1595	1655
	<i>change in %</i>	7.2	6.1	6.6	-3.5	3.2	11.0	10.0	6.0	5.1	3.8
Taxes on production and imports	<i>CZK bn</i>	626	647	688	651	705	767	808	875	935	978
	<i>change in %</i>	6.7	3.4	6.3	-5.3	8.2	8.8	5.3	8.3	6.8	4.6
Value added tax	<i>CZK bn</i>	388	409	435	422	464	537	572	606	643	672
	<i>change in %</i>	9.5	5.4	6.6	-3.0	9.7	15.8	6.4	6.0	6.1	4.5
Excise taxes	<i>CZK bn</i>	164	165	168	157	162	159	161	173	177	180
	<i>change in %</i>	3.6	0.8	1.7	-6.4	2.6	-1.8	1.6	7.5	1.9	1.8
Current taxes	<i>CZK bn</i>	416	458	491	485	469	536	625	643	660	677
	<i>change in %</i>	8.0	10.1	7.0	-1.0	-3.5	14.3	16.6	2.9	2.7	2.6
Personal income tax	<i>CZK bn</i>	229	261	287	298	228	242	275	295	307	319
	<i>change in %</i>	10.5	13.8	10.2	3.6	-23.4	6.3	13.5	7.5	3.8	4.0
Corporate income tax	<i>CZK bn</i>	176	187	192	177	229	282	338	334	340	345
	<i>change in %</i>	5.2	6.3	2.9	-8.1	29.7	23.1	19.8	-1.2	1.9	1.4
Social contributions	<i>CZK bn</i>	760	834	895	909	1 013	1 084	1 176	1 275	1 333	1 393
	<i>change in %</i>	8.0	9.8	7.3	1.6	11.4	7.0	8.5	8.4	4.6	4.5
Property income	<i>CZK bn</i>	31	35	32	34	38	74	109	54	45	44
	<i>change in %</i>	-17.9	14.3	-7.5	5.6	12.5	93.3	47.3	-50.2	-17.3	-2.9
Other	<i>CZK bn</i>	236	270	288	286	305	347	417	397	403	414
	<i>change in %</i>	3.4	14.4	6.7	-0.7	6.6	13.7	20.2	-4.9	1.5	2.8
Revenues from the EU	<i>CZK bn</i>	38	60	64	65	67	78	131	100	98	102
	<i>change in %</i>	27.1	57.5	6.8	2.2	3.2	16.2	68.0	-23.6	-2.8	4.1
Tax burden	<i>% of GDP</i>	35.3	35.8	35.8	35.8	35.8	35.2	35.4	36.2	36.2	36.1

Note: Excise taxes are adjusted for subsidies on renewable energy resources.

Source: CZSO (2023b). Forecast and calculations by MF CR.

Table 2.2.2: Discretionary Revenue Measures

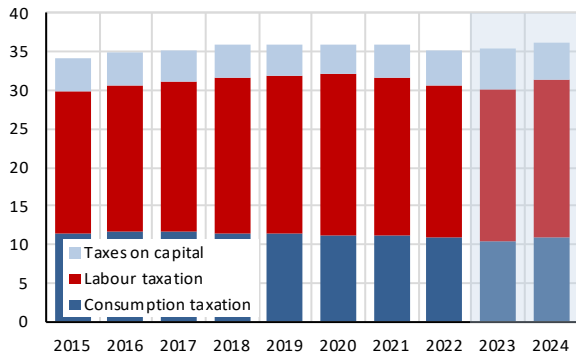
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Total revenue measures	<i>CZK bn</i>	18.7	16.5	13.3	-30.5	-74.4	-19.8	44.9	50.0	0.6	-3.9
Labour taxation	<i>CZK bn</i>	13.0	13.5	13.6	-21.4	-63.3	-9.2	2.3	28.1	2.2	3.9
Taxes on capital	<i>CZK bn</i>	1.5	0.3	-	-13.7	-1.4	-9.1	55.9	-8.9	-5.6	-7.9
Consumption taxation	<i>CZK bn</i>	8.4	2.6	-0.3	6.8	-12.0	-1.4	-13.1	27.7	4.2	0.2
Other revenue	<i>CZK bn</i>	-4.2	0.1	-	-2.3	2.3	-0.1	-0.2	3.0	-0.2	-0.1

Note: Figures represent YoY discretionary changes that are stemming from all envisaged and approved measures on revenue side. Positive values mean YoY improvement of a balance.

Source: MF CR.

Graph 2.2.1: Tax Revenue Structure

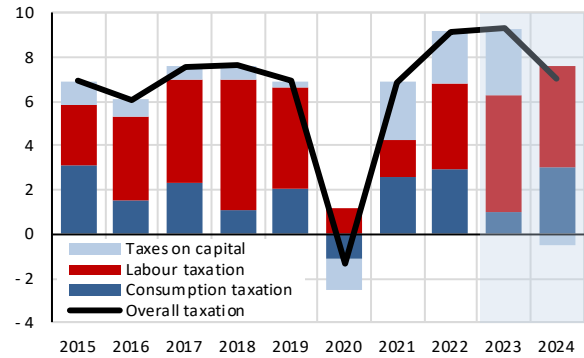
% of GDP



Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.2.2: Tax Revenue Development

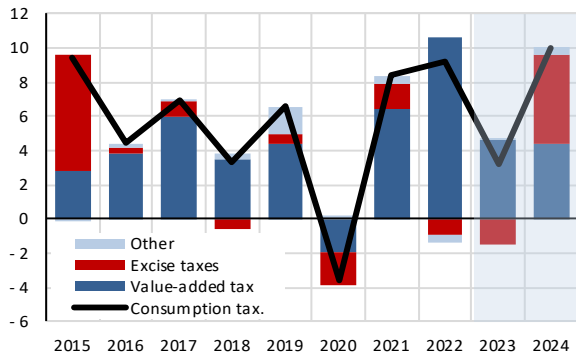
change in %, contributions in percentage points



Source: CZSO (2023b). MF CR forecast.

Graph 2.2.3: Taxation of Consumption

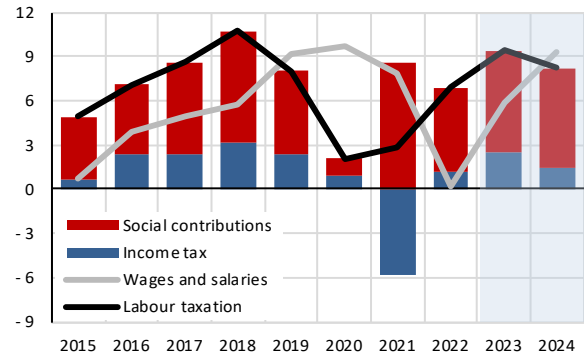
change in %, contributions in percentage points



Source: CZSO (2023b). MF CR forecast.

Graph 2.2.4: Taxation of Labour

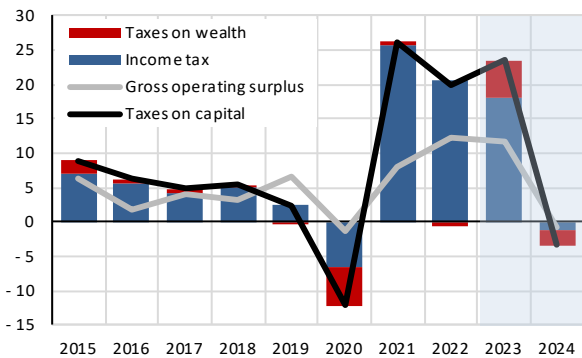
change in %, contributions in percentage points



Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.2.5: Taxation of Capital

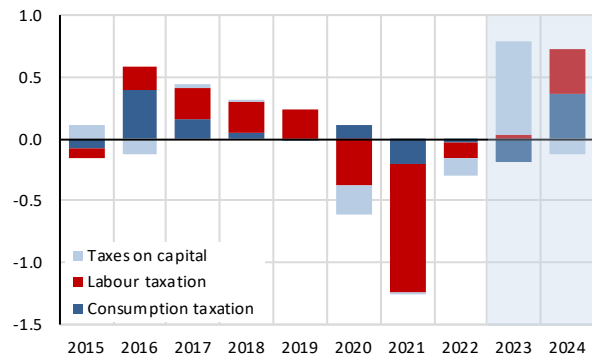
change in %, contributions in percentage points



Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.2.6: Discretionary Tax Measures

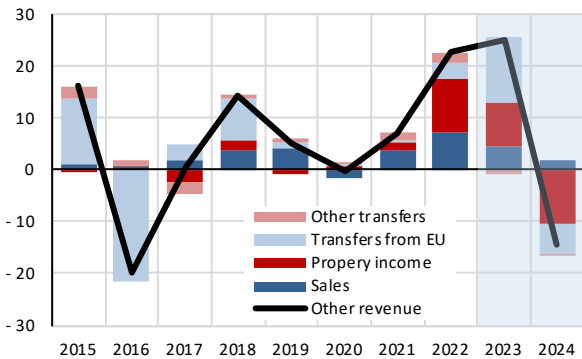
% of GDP



Source: MF CR.

Graph 2.2.7: Other Revenue

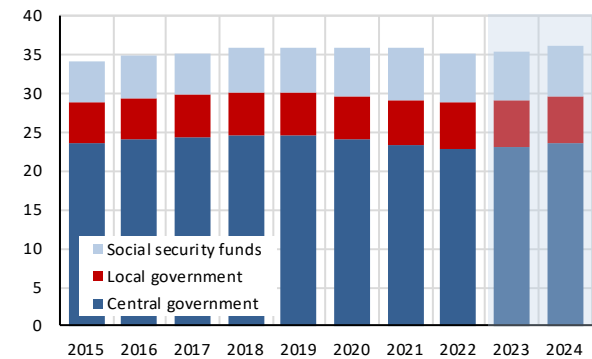
change in %, contributions in percentage points



Source: CZSO (2023b). MF CR forecast.

Graph 2.2.8: Tax and Social Revenue by Subsectors

% of GDP



Source: CZSO (2023a, 2023b). MF CR forecast.

2.3 General Government Expenditure

General government expenditure is projected to grow by 12.3% in 2023 (see Graph 2.3.2), but only by 1.5 pp to 46.1% of GDP in relative terms, given the high expected nominal GDP growth rate (see Graph 2.3.1). The increase in spending is largely attributable to the support provided to households and firms during the energy crisis that fade away from 2024. Therefore, in the outlook years, combined with the consolidation package, we expect the total expenditure to GDP ratio to fall again to below 43% in 2026.

The growth rate of **final consumption expenditure** is expected to more than double to 9.6% this year, before returning to and remaining at an average level of around 4.5%. This year's estimated increase is mainly driven by strong growth in **intermediate consumption** (see Graph 2.3.8), reflecting the slowing, but still exceptionally high inflation rate and the impact of EU co-financed projects. After double-digit growth in intermediate consumption in 2023, its dynamics should slow down substantially to 4.8% next year, also due to savings of 5% in each ministry's operating expenditure, and remain in the 4–5% range until the end of the outlook.

Compensation of employees is expected to show above-average growth of 8.6% this year (Graph 2.3.3). As of January 2023, salary scales for soldiers and members of the security forces have increased, as have the salaries of teaching staff. In addition, the year-on-year increase in compensation is due to an increase in salary scales for selected groups of civil servants since September 2022. Salaries in the education sector will continue to rise in 2024, when an amendment to the Education Act (Act No. 183/2023 Coll.) newly guarantees that the total amount of funds earmarked for teachers' salaries will correspond to at least 130% of the average gross wage in the national economy. In addition, we expect an increase of salaries in the health care sector. On the other hand, the consolidation brings savings in the salary area in the total amount of CZK 9.4 billion, of which CZK 4.1 billion is attributable to a 2% reduction in public sector salaries. The average rate of compensation of employees between 2024 and 2026 is expected to remain below 4%.

The 10.3% increase in **social transfers in kind** reflects expenditure on healthcare and social services, also financed by higher payments for the state insured persons. The increase of the living and subsistence minimum, reflected in the amount of the housing allowance, together with the adjustment of the housing allowance (Act No. 456/2022 Coll.), entails additional expenditure estimated at around CZK 1 billion. The increased mobility allowance approved with effect from December 2022 will require an additional CZK 0.7 billion this year (Act No. 358/2022 Coll.). In 2024, social transfers in kind should still grow at an above-average rate of 6.5%, but their dynamics should already be slowing down, which is also due to the high base year of

2023. In the case of social housing benefits, we expect a relatively higher level to be maintained, but the increase should be mainly driven by the expenditures of health insurance companies, made possible by the increase in social security contributions, including payments for state insured persons. In the years 2025–2026, we expect a further slowdown in the pace of social transfers in kind, in line with declining dynamics of wages and salaries in the economy as well as slowing increases in payments for state insured. Rising household incomes should also ease the pressure on housing and material need-related social benefit payments.

As regards **cash social benefits** (see Graph 2.3.4), we count with a rise in pension benefits in particular this year (16.8%). The average pension has risen by CZK 825 since January in accordance with the statutory indexation formula (Government Regulation No. 290/2022 Coll. and No. 291/2022 Coll.). In addition, there was an increase of CZK 500 per month for each child raised, with an impact exceeding CZK 18 billion (Act No. 323/2021 Coll.). Expenditure on pension benefits was further increased by the modified extraordinary indexation in June (Act No. 71/2023 Coll.), when all pensions were increased by CZK 400 and earnings-related component by 2.3%. The average old-age pension was thus further increased by CZK 750. The budgetary impact of the extraordinary indexation this year is around CZK 15 billion. However, the additional impact this year is also due to the cost of last year's extraordinary indexations for the corresponding part of the year. The amendment to the Pension Insurance Act (Act No. 270/2023 Coll.) brought, among other things, a tightening of the conditions for early retirement which led to an increased interest in its granting in the period before the Act came into force (we estimate the fiscal cost at CZK 1.5 billion). On the contrary, in 2024, these measures should be associated with a positive annual impact of around CZK 2 billion. The adjustment of the pension payment period from the so-called sliding month to the calendar month and the associated abolition of the one-off supplementary payment during the regular indexation in January should result in savings of about CZK 1 billion per year starting in 2024 (Act No. 321/2023 Coll.).

In the area of pro-family policy, the child allowances in the basic and increased rates were increased by CZK 200 from January 2023 (Act No. 456/2022 Coll.) and foster care benefits were increased from October 2022 (Government Regulation No. 292/2022 Coll.) with a total calculated impact of just under CZK 2 billion. Dependent child maintenance will require an additional CZK 0.2 billion this year (Act No. 588/2020 Coll.). The increase in the parental allowance by CZK 50,000 (CZK 75,000 in the case of multiples) for children born from 1 January 2024 should be associated with

additional costs of CZK 0.4 billion in 2024, increased by a further CZK 1.8 billion in each of the two remaining years of the outlook (Chamber of Deputies Print No. 489).

A further CZK 0.8 billion increase in expenditure on social benefits this year is related to the valorisation of the living and subsistence minima from July 2022 (Government Regulation No. 204/2022 Coll.) and January 2023 (Government Regulation No. 436/2022 Coll.). We are also counting on higher expenditure on unemployment benefits this year, which is also reflected in the state budget's cash performance to date, but the tightening of the conditions for entitlement in the event of re-registration should lead to savings of CZK 0.8 billion from next year (Senate Print No. 161). Humanitarian benefits for Ukrainian refugees, including countable housing costs, will cost the state budget an estimated CZK 7.2 billion this year and CZK 6 billion next year (Act No. 66/2022 Coll., Act No. 198/2022 Coll. and Act No. 75/2023 Coll.). The termination of the payment of the crisis nursing allowance (Act No. 520/2021 Coll.) and the one-off child allowance paid last year (Act No. 196/2022 Coll.) should dampen this year's growth in cash social benefits to an estimated 11.9%. In 2024, we expect significantly more moderate growth of around 4%, which should slow further down to 3% in 2026.

This year's exceptionally high dynamics of **subsidies** is primarily due to the support to households, companies, public and other institutions in the form of capping energy prices in the estimated amount exceeding CZK 46 billion (Government Regulation No. 5/2023 Coll.). In order to limit the impact of high electricity prices on customers, the Government also approved a subsidy of CZK 22.7 billion to the Czech Transmission System Operator for this year (Government Resolution No. 112/2023). The state also pays compensation to distributors to cover part of the costs of electricity losses in regional and local distribution systems and losses in gas systems in the total estimated amount of CZK 15.4 billion (Government Regulation No. 463/2022 Coll.). In connection with the ongoing conflict in Ukraine and the accommodation of Ukrainian refugees in private accommodation facilities paid for by the local governments with a contribution from the state budget, the forecast for this year assumes an amount of CZK 7.3 billion (Government Regulation No. 206/2022 Coll., as amended by Government Regulation No. 322/2022 Coll.). As a result, subsidies should grow by 42.5% in 2023. The stabilisation of energy markets and savings within the consolidation package should lead to a reduction of subsidies by more than 40% in 2024 to 1.6% of GDP and should remain at this level until the end of the outlook horizon.

This year's 8.4% growth in **transfers**, the base of which in 2022 was increased by extraordinary expenditures, mainly the payment to the Czech Post in the amount of CZK 7.5 billion and the so-called energy saving tariff in the amount of CZK 17.4 billion, should be replaced by a double-digit decline in 2024 and 2025. This year, CZK 1.2 billion should be paid to households providing accommodation to Ukrainian refugees, which is by CZK 0.4 billion less than in 2022. The end of the compensation bonus payment also has a positive effect on the year-on-year dynamics, but the implementation of guarantees provided by the National Development Bank and the Export Guarantee and Insurance Company in the total amount of CZK 4.3 billion and subsidies to non-government entities financed under the National Recovery Plan will have the opposite effect. From 2025 onwards, the state budget should save CZK 2 billion annually by reducing the maximum amount of the contribution to building savings product (Senate Print No. 161).

Investment in fixed assets, with an estimated growth of 16.2% this year (Graph 2.3.6), should be significantly supported by the EU budget not only because of the end of the 2014–2020 programming period, but also because of the use of funds from the current 2021–2027 programming period, as well as funds from the NextGenerationEU. The share of EU co-financed projects in total investment is expected to increase by more than 6 pp year-on-year to 25%. From institutional perspective, investment activity is mainly driven by local government investment, which grew by 19.2% year-on-year in the first half of this year, while central government investment reached only 7.2%. Next year, fixed asset investment will be influenced by increased defence spending, which is to reach 2% of GDP (Act No. 177/2023 Coll.). In the case of EU co-financed expenditure, the ramp-up of investments financed in connection with the National Recovery Plan or the unfolding financial perspective 2021–2027 will play a role. The dynamics of total investments could reach less than 2% in 2024, while their growth will be significantly hampered by EU co-financed investments. In the following years, although the inflow of funds related to the new financial perspective will increase, on the other hand, the dynamics of the NextGenerationEU will significantly weaken.

Higher debt and interest rates development are resulting in an increase in **interest costs**, which are likely to reach 1.3% of GDP this year and further increase in the coming years to 1.5% of GDP at the end of the outlook (see Graph 2.3.7).

Table 2.3.1: General Government Expenditure

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Total expenditure	<i>CZK bn</i>	1 992	2 196	2 378	2 696	2 841	3 026	3 399	3 414	3 516	3 636
	<i>change in %</i>	4.5	10.3	8.2	13.4	5.4	6.5	12.3	0.4	3.0	3.4
Compensation of employees	<i>CZK bn</i>	462	521	576	633	676	690	750	777	812	841
	<i>change in %</i>	10.1	12.8	10.5	10.0	6.8	2.1	8.6	3.7	4.5	3.5
Intermediate consumption	<i>CZK bn</i>	296	326	339	346	355	393	439	460	481	504
	<i>change in %</i>	1.6	10.0	4.1	2.0	2.5	10.8	11.8	4.8	4.5	4.8
Social benefits other than in kind	<i>CZK bn</i>	624	658	709	821	859	936	1 048	1 091	1 125	1 159
	<i>change in %</i>	3.1	5.5	7.7	15.8	4.7	9.0	11.9	4.2	3.1	3.0
Social transfers in kind	<i>CZK bn</i>	152	160	177	205	219	226	249	265	274	283
	<i>change in %</i>	3.1	4.7	10.9	15.8	7.1	2.9	10.3	6.5	3.5	3.0
Property income	<i>CZK bn</i>	38	40	41	44	46	78	97	110	117	124
	<i>change in %</i>	-14.2	6.7	1.5	7.6	5.1	69.4	24.2	12.7	6.4	6.5
Subsidies	<i>CZK bn</i>	110	119	128	173	200	151	215	126	126	133
	<i>change in %</i>	1.7	8.8	7.3	35.1	15.8	-24.6	42.5	-41.4	0.0	5.5
Gross fixed capital formation	<i>CZK bn</i>	171	224	253	277	287	316	367	374	390	394
	<i>change in %</i>	10.2	31.3	12.6	9.5	3.8	10.0	16.2	1.9	4.1	1.1
Capital transfers	<i>CZK bn</i>	30	35	36	67	55	53	59	50	38	37
	<i>change in %</i>	-14.9	16.2	1.3	87.8	-17.5	-3.7	11.6	-16.1	-24.8	-2.7
Other expenditure	<i>CZK bn</i>	109	113	120	130	142	182	174	159	153	161
	<i>change in %</i>	9.1	3.6	6.0	8.5	9.5	28.2	-4.5	-8.6	-3.7	5.3

Source: CZSO (2023b). Forecast and calculations by MF CR.

Table 2.3.2: Discretionary Expenditure Measures

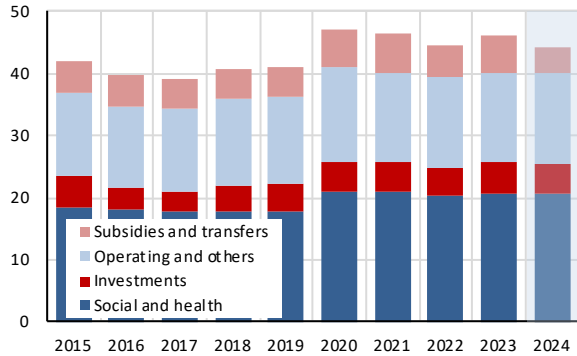
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
Total expenditure measures	<i>CZK bn</i>	-49.3	-61.6	-47.5	-181.2	5.9	16.5	-71.5	156.3	15.1	-1.8
Social benefits	<i>CZK bn</i>	-3.5	-10.9	-17.3	-49.4	19.7	-31.0	7.0	20.0	3.7	-1.8
Compensation of employees*	<i>CZK bn</i>	-27.7	-32.2	-30.0	-34.3	-9.4	3.3	-25.5	1.9	-0.1	-
Healthcare	<i>CZK bn</i>	-10.1	-13.0	-	-24.7	5.9	12.5	-1.4	1.7	-	-
Subsidies	<i>CZK bn</i>	-4.3	0.5	-1.6	-44.9	-12.3	45.9	-79.6	123.4	8.7	-
Capital transfers	<i>CZK bn</i>	2.9	-6.1	5.6	-27.4	8.8	4.0	13.6	0.6	-	-
Other expenditure	<i>CZK bn</i>	-6.6	0.2	-4.3	-0.5	-6.7	-18.1	14.4	8.8	2.8	-

Note: Figures represent YoY discretionary changes that are stemming from all envisaged and approved measures on expenditure side. Positive values mean YoY improvement of balance. *) Compensation of employees are updated not earlier than the final agreement on the state budget proposal.

Source: MF CR.

Graph 2.3.1: Total Expenditure Structure

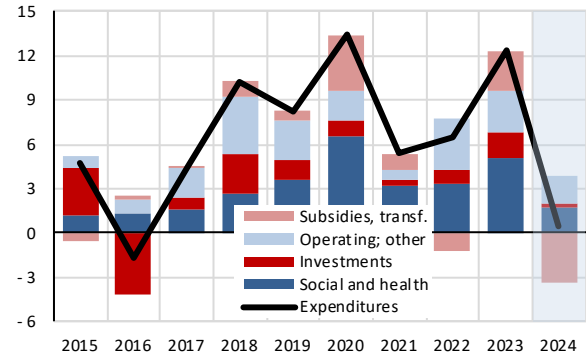
% of GDP



Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.3.2: Total Expenditure Development

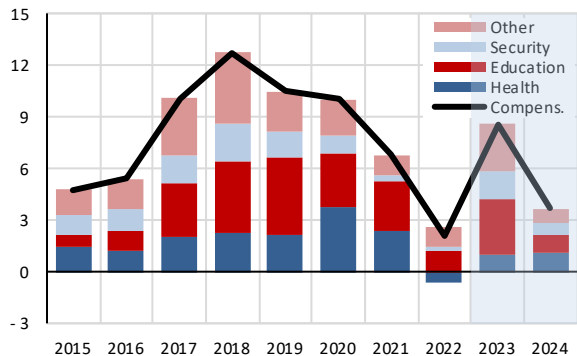
change in %, contributions in percentage points



Source: CZSO (2023b). MF CR forecast.

Graph 2.3.3: Compensation of Employees

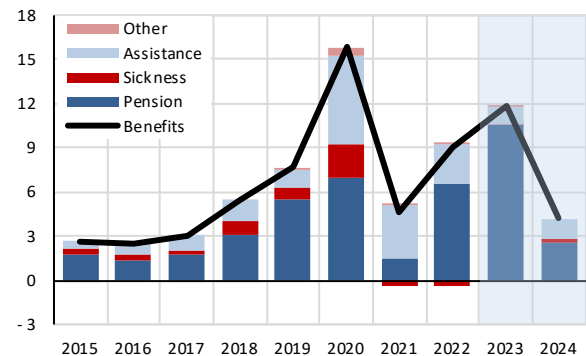
change in %, contributions in percentage points



Source: CZSO (2023b). MF CR forecast.

Graph 2.3.4: Cash Social Benefits

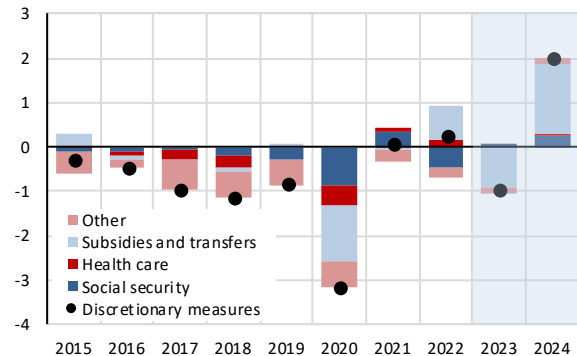
change in %, contributions in percentage points



Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.3.5: Discretionary Expenditure Measures

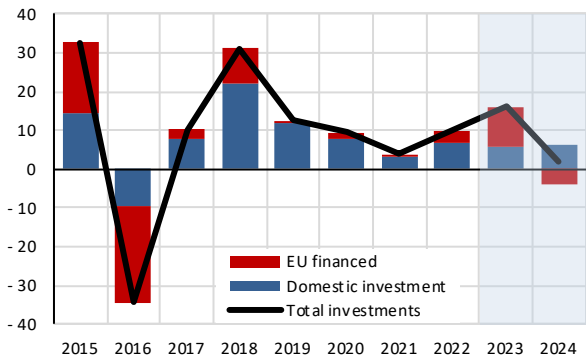
% of GDP



Source: MF CR.

Graph 2.3.6: General Government Investment

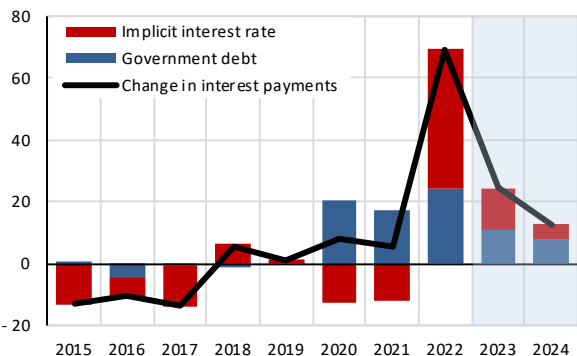
change in %, contributions in percentage points



Source: CZSO (2023b). MF CR forecast.

Graph 2.3.7: Interest Expenditure

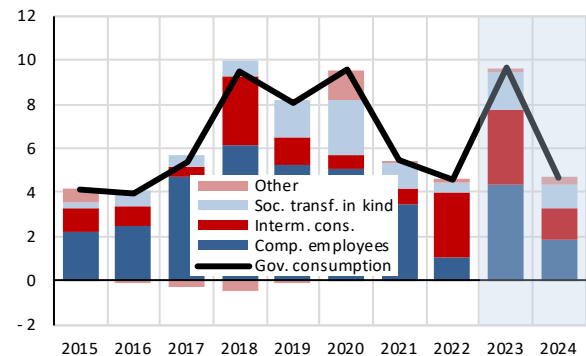
change in %, contributions in percentage points



Source: CZSO (2023b). MF CR forecast.

Graph 2.3.8: Final Consumption Expenditure

change in %, contributions in percentage points



Source: CZSO (2023b). MF CR forecast.

2.4 General Government Debt

The deficit performance of the general government sector will be reflected in the level of debt, which is expected to reach 44.7% of GDP at the end of 2023. The relatively low increase in the debt quota by 0.6 pp is mainly attributable to the projected nominal GDP growth of 8.7%. Although we forecast a slight deceleration in the increase in the debt quota in the outlook years, we expect it to rise to 45.9% of GDP next year, which should imply an increase in debt of 1.1 pp compared to 2023. At the end of 2026, debt should reach a value of around 47% of GDP.

Thus, the CR should meet the **Maastricht debt benchmark** and the **Stability and Growth Pact criterion** (60% of GDP). The level of the debt quota also fulfils the **national rule** set by the Fiskal Responsibility Rules Act, which assesses the level of general government debt net of the cash reserve generated by the financing of government debt against the 55% of GDP threshold (Table 2.4.1).

In terms of contributions to the change in indebtedness, the dominant factors in this year are the primary deficit and the development of interest costs. Primary deficits should gradually decline, both as a result of economic growth and the measures adopted in the consolidation package. At the end of the horizon, we forecast a general government primary deficit of 0.1% of GDP. In contrast, interest costs should gradually increase up to 1.5% of GDP at the end of the outlook. The forecast assumes a gradual decline in government bond yields.

The yield on 10-year government bond for convergence purposes is anticipated to decline from an expected average of 4.4% p.a. in 2023 by 0.8 pp in 2024, with a decline also expected in the outlook years. 5-year bond yields should follow a similar path. Nominal economic growth in the outlook years should continue to hold back the increase in the debt quota, even though its pace will significantly slow down compared to current values.

The current forecast does not foresee any significant privatisation revenues under Act No. 92/1991 Coll., on the conditions of transfer of state property to other persons, as amended.

The largest share of general government debt is held by central government (Table 2.4.1), whose debt is expected to exceed CZK 3,400 billion in 2023. It would thus account for about 97% of total (unconsolidated) general government debt. Local government debt accounts for the remaining roughly 3%. We estimate that it will reach CZK 93.3 billion in 2023 and will rather stagnate in the following years due to the projected surpluses. The social security funds have constantly a negligible indebtedness. In the case of health insurance companies, we assume them to be virtually balanced. Given that the performance of the general government sector will be determined by central government deficits adjusted by surpluses of other subsectors, we expect the weight of central government debt to increase slightly further to almost 98% by the end of the outlook horizon.

Table 2.4.1: Gross Consolidated Government Debt

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
								Forecast	Forecast	Outlook	Outlook
General government	<i>CZK bn</i>	1 750	1 735	1 740	2 150	2 567	2 998	3 293	3 543	3 766	3 970
Central government	<i>CZK bn</i>	1 734	1 752	1 793	2 223	2 661	3 105	3 403	3 662	3 900	4 122
Local government	<i>CZK bn</i>	85	84	84	87	87	89	93	92	91	91
Social security funds	<i>CZK bn</i>	0	0	0	1	1	0	0	0	0	0
General government debt to GDP ratio	<i>% of GDP</i>	34.2	32.1	30.0	37.7	42.0	44.2	44.7	45.9	46.5	47.0
Contributions to change in debt-to-GDP ratio											
Change in debt	<i>p.p.</i>	-2.3	-2.2	-2.0	7.6	4.4	2.2	0.6	1.1	0.7	0.5
Primary deficit	<i>p.p.</i>	-2.2	-1.6	-1.0	5.0	4.3	2.1	2.3	0.8	0.3	0.1
Interest	<i>p.p.</i>	0.7	0.7	0.7	0.8	0.8	1.1	1.3	1.4	1.4	1.5
Nominal GDP growth	<i>p.p.</i>	-2.2	-1.9	-2.1	0.4	-2.5	-4.2	-3.5	-2.1	-2.1	-1.9
Stock-flow adjustment ¹⁾	<i>p.p.</i>	1.4	0.6	0.4	1.4	1.7	3.1	0.4	1.0	1.0	0.9
Debt for Act No. 23/2017 Coll. ²⁾	<i>% of GDP</i>	34.2	32.1	30.0	37.7	42.0	44.2	44.7	45.9	46.5	47.0
Liquid financial assets ³⁾	<i>% of GDP</i>	14.8	14.7	13.9	16.2	19.5	18.3	17.0	16.6	16.2	15.5
Net financial debt ⁴⁾	<i>% of GDP</i>	19.4	17.4	16.1	21.5	22.6	25.9	27.7	29.2	30.3	31.5

1) The stock-flow adjustment consists of differences between cash and accrual, net acquisition of financial assets and revaluation effects and other measures.

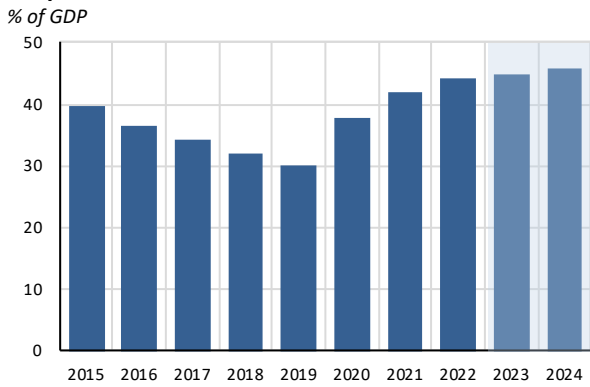
2) Public sector institutions debt according to Act No. 23/2017 Coll. is defined as the difference between the general government debt and disposable cash reserves created according to Act No. 218/2000 Coll.

3) Liquid financial assets are monetary gold, Special Drawing Rights, currency and deposits, market value of securities other than shares (in market value), shares and other equity quoted in stock exchange.

4) Net financial debt is the difference between the debt according to Act No. 23/2017 Coll. and liquid financial assets.

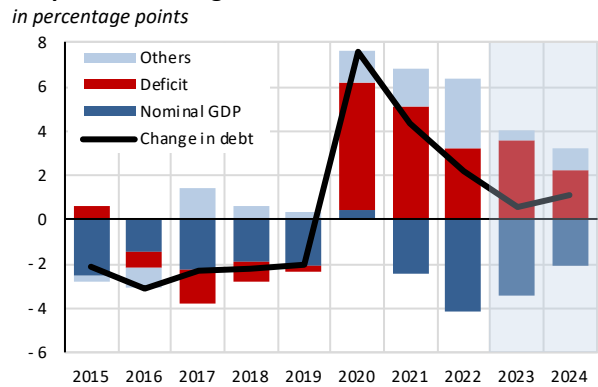
Source: CZSO (2023b). Forecast and calculations by MF CR.

Graph 2.4.1: General Government Debt



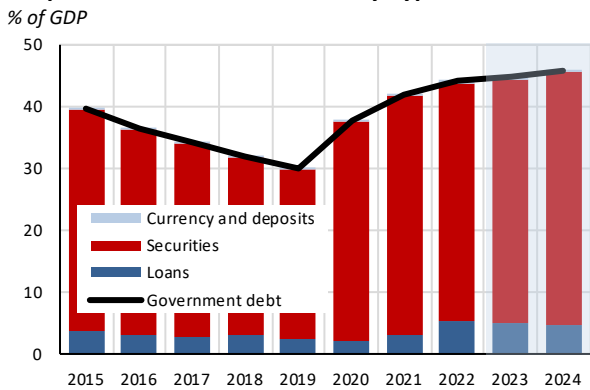
Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.4.2: Change in the Debt Ratio



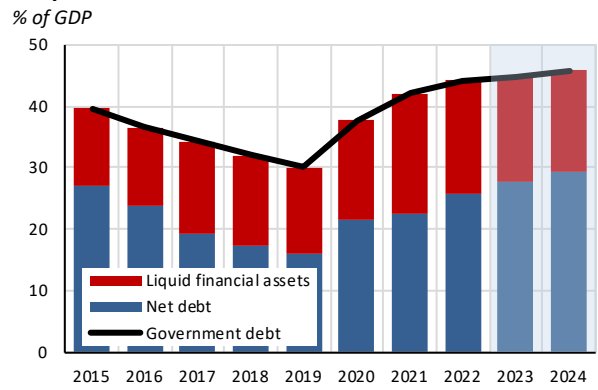
Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.4.3: Government Debt by Type of Instrument



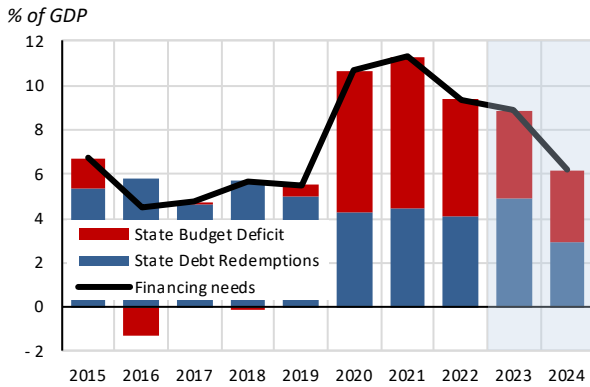
Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.4.4: Net and Gross Government Debt



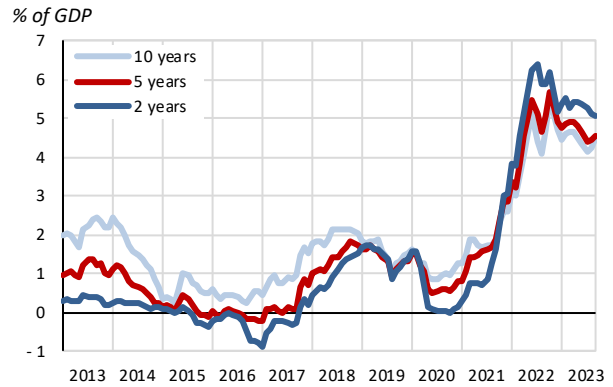
Source: CZSO (2023a, 2023b). MF CR forecast.

Graph 2.4.5: State Debt Financing Needs



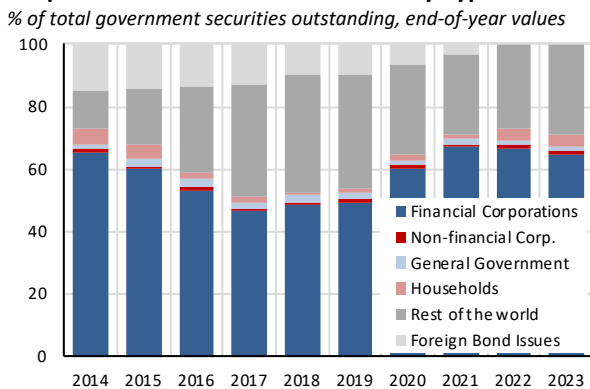
Source: CZSO (2023b). MF CR forecast.

Graph 2.4.6: Government Bond Yields by Maturity



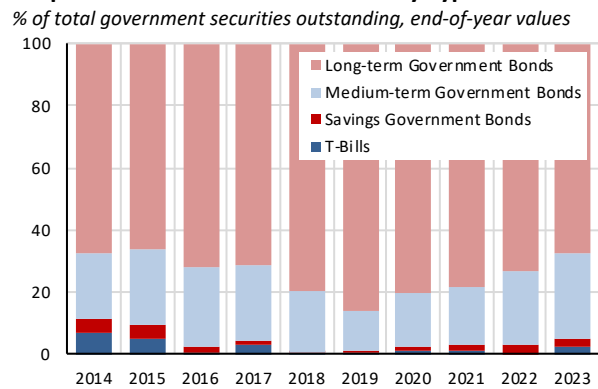
Source: CNB (2023).

Graph 2.4.7: Government Securities by Type of Holder



Note: The value for 2023 reflects the state at the end of September.
Source: MF CR.

Graph 2.4.8: Government Securities by Type of Instrument



Note: The value for 2023 reflects the state at the end of September.
Source: MF CR.

2.5 Sensitivity Analysis

The sensitivity analysis is calculated using a dynamic stochastic general equilibrium model developed by the MF CR. The alternative scenarios focus on some actual issues of possible future developments. The first scenario considers lower economic growth in the EU and its impact on the highly open Czech economy, which is dependent on the external environment. The second alternative scenario assesses a possible sudden increase in interest rates. Both alternative scenarios are derived from the baseline scenario of the Fiscal Outlook. In the alternative scenarios, we assume different developments from the baseline scenario, always in the first half of 2024.

Economic development in EU trading partners is important for the economic growth of the small open economy of the CR. The **first scenario** assumes **slower GDP growth in the EU** in 2024 by 2.6 pp, which corresponds to the standard deviation over the period 2002–2022.

A reduction in foreign demand for domestic products would be reflected in a decline in net exports in the first phase. However, subsequent pressure on currency depreciation would dampen the negative effects on net exports through more expensive imports. A worse outcome for foreign trade would be reflected in a slowdown in real GDP growth in the CR by 0.7 pp in 2024 compared to the baseline scenario. Lower growth in corporate profits due to weaker exports would slow investment growth by 0.7 pp. A negative income effect in the form of relatively lower wages and returns on capital would exacerbate the decline in household consumption by 0.3 pp.

The impact on the general government balance is negative by 0.3 pp in the first year of the outlook, with a maximum differential of 0.1 pp in subsequent years. Weaker economic performance has an impact on taxes and social security contributions on the revenue side, while on the expenditure side it leads mainly to an increase in spending on unemployment benefits. In the projection years, the effect of lower inflation on the statutory indexation of pension benefits is slightly positive. The debt quota would then increase by 0.4 pp more than in the baseline scenario. In addition to higher deficits, this would reflect a lower level of nominal GDP over the entire horizon.

The dynamic model in the **second scenario** simulates an additional **monetary policy tightening** for 2024 of 1.1 pp above the baseline scenario. This value corresponds to the standard deviation of short-term interest rate between 2002 and 2022.

A more restrictive monetary policy would have a slightly negative effect on economic development. The pressure on the appreciation of the Czech currency would lead to more expensive exports, while imported goods would become relatively cheaper. A slight slowdown in exports by 0.2 pp would, however, put downward pressure on imports, given the high import intensity of exports. Lower sales and a fall in profits of economic entities would have a similar effect. The result would be a slight reduction in import growth compared to the baseline scenario.

Lower household incomes due to slower wage growth would be another negative influence on consumption. In addition, a higher interest rate would motivate households to save and thus postpone consumption to the future. As a result, restrictive monetary policy would reduce the growth rate of household consumption by 0.2 pp.

Firms' profitability would fall as a result of the decline in foreign and domestic demands. Firms would react to the drop in profits and the rise in the cost of borrowings by slowing investment growth by 0.2 pp. A slowdown in aggregate demand would also lead to a 0.3 pp increase in the unemployment rate compared to the baseline scenario and to lower wage growth.

Given the negative impact of a higher interest rate on investment, consumption and exports, the resulting impact on GDP growth would also be negative, to the extent of 0.2 pp. Higher interest rate growth and slower output growth would lead to a 0.3 pp reduction in the inflation rate.

The impact on public finances is relatively smaller in this scenario than in the first one. The effects on revenue and expenditure almost offset each other, with the most important expenditure items, i.e. social expenditure rising less due to lower inflation and real wage dynamics. As a result, the general government debt-to-GDP ratio at the end of the projection horizon differs from the baseline scenario by only 0.2 pp.

Table 2.5.1: Baseline and Model Scenarios of Macroeconomic Simulations

		2023	2024	2025	2026
		Forecast	Forecast/ Simul.	Outlook/ Simul.	Outlook/ Simul.
Gross domestic product (real)	<i>change in %</i>	-0.5	1.9	2.4	2.3
Private consumption	<i>change in %</i>	-2.7	3.9	3.7	2.7
Gross fixed capital formation	<i>change in %</i>	2.2	1.7	2.1	2.3
Exports	<i>change in %</i>	2.4	4.2	3.4	2.5
Imports	<i>change in %</i>	0.3	2.6	2.5	2.4
Consumer Price Inflation	<i>change in %</i>	10.8	3.3	2.6	2.0
Employment	<i>change in %</i>	1.1	0.5	0.2	0.1
Wage bill	<i>change in %</i>	8.4	6.5	4.6	4.4
Unemployment rate	<i>in %</i>	2.7	2.8	2.7	2.6
General government balance	<i>% of GDP</i>	-3.6	-2.2	-1.7	-1.5
Gross government debt	<i>% of GDP</i>	44.7	45.9	46.5	47.0
Alternative Scenario I - Lower GDP Growth in EU in 2024					
Gross domestic product (real)	<i>change in %</i>	-0.5	1.2	2.5	2.3
Private consumption	<i>change in %</i>	-2.7	3.6	3.5	2.6
Gross fixed capital formation	<i>change in %</i>	2.2	0.9	1.8	2.2
Exports	<i>change in %</i>	2.4	2.4	3.3	2.5
Imports	<i>change in %</i>	0.3	1.1	2.1	2.4
Consumer Price Inflation	<i>change in %</i>	10.8	3.3	2.5	2.0
Employment	<i>change in %</i>	1.1	0.3	0.3	0.1
Wage bill	<i>change in %</i>	8.4	6.1	4.6	4.4
Unemployment rate	<i>in %</i>	2.7	3.0	2.7	2.6
General government balance	<i>% of GDP</i>	-3.6	-2.5	-1.8	-1.6
Gross government debt	<i>% of GDP</i>	44.7	46.2	46.9	47.4
Alternative Scenario II - Increase in Domestic Interest Rate					
Gross domestic product (real)	<i>change in %</i>	-0.5	1.7	2.4	2.3
Private consumption	<i>change in %</i>	-2.7	3.7	3.6	2.6
Gross fixed capital formation	<i>change in %</i>	2.2	1.5	2.2	2.3
Exports	<i>change in %</i>	2.4	4.0	3.3	2.5
Imports	<i>change in %</i>	0.3	2.4	2.5	2.4
Consumer Price Inflation	<i>change in %</i>	10.8	3.0	2.5	2.0
Employment	<i>change in %</i>	1.1	0.5	0.2	0.1
Wage bill	<i>change in %</i>	8.4	6.3	4.5	4.4
Unemployment rate	<i>in %</i>	2.7	3.0	2.7	2.6
General government balance	<i>% of GDP</i>	-3.6	-2.3	-1.8	-1.6
Gross government debt	<i>% of GDP</i>	44.7	46.0	46.7	47.2

Source: MF CR (2023b). MF CR forecast, calculations and simulations.

3 International Comparison

The post-pandemic period has put further enormous pressure on public finances in the EU, mainly as a result of compensations for the sharp increase in energy prices, causing some Member States to remain at higher deficits than allowed by EU rules and further deepening general government debt. Compared to pre-crisis year 2019, no country will have lower debt in absolute terms at the end of 2023. However, in 2022, the EU-wide deficit fell by 1.4 pp year-on-year to 3.3% of GDP and indebtedness decreased by 3.9 pp year-on-year to 83.5% of GDP.

EU countries are also facing a significant increase in interest expenditure from 2022 onwards, driven both by an increased supply of government bonds due to central government deficit performance, but above all by an extreme rise in debt instruments yields in response to restrictive central bank monetary policy. Last year, 10-year government bond yields for convergence purposes in EU countries increased by around 2.1 pp year-on-year on average, and this year so far by 1.5 pp year-on-year on average.

3.1 Public Balance and Debt in EU Countries

With the exception of Poland, Luxembourg and Denmark, the balance in relation to GDP will improve year-on-year in 2022 in all other EU countries, most notably in Greece (by 4.6 pp), Cyprus (by 4.3 pp), Ireland and Slovakia (by 3.2 pp). It should be added that Denmark continued to show a surplus, together with Croatia, Ireland, Cyprus and Sweden, and Luxembourg only a marginal deficit. On the other hand, the highest deficits were achieved by Italy in 2022 (8.0% of GDP), and Hungary, Romania and Malta were also above 5% of GDP, i.e. more or less the countries that had also been running the highest deficits the year before.

In 2022, 12 countries, including the “borderline” Slovenia, were above the Stability and Growth Pact reference value, i.e. 3 less than in 2021, yet only Romania remains subject to the excessive deficit procedure¹. The remaining 11 EU countries are still covered by the activation of the general escape clause in March 2020, under which they can deviate from the budgetary requirements set out in the European fiscal framework², as their excessive deficits were caused by unexpected economic developments due to adverse events.

For the year 2023, according to the autumn notification of the government deficit and debt, the highest deficit is expected in Slovakia (6.8% of GDP) and above 5% of GDP in Poland, Belgium, Italy and Hungary. Compared to 2022 balances, an improvement is predicted in 11 EU countries, most notably in Italy and Romania; by contrast, in Slovakia and Estonia the balance is expected to deteriorate year-on-year. The countries with surplus for 2023 are expected to be Denmark, Ireland³ and Cyprus. Compared to the 2023

spring notification, the 2023 balance is forecast to improve most in Lithuania (by 2.4 pp), Germany (by 1.7 pp) and the Netherlands (by 1.4 pp) due to the updated input data, while it deteriorates most in Hungary (by 1.3 pp), Italy and Poland (by 0.8 pp)⁴.

The same countries remain below the Stability and Growth Pact reference value for the deficit in 2023 as for 2022, with the exception of Bulgaria, Slovakia and Estonia. Austria will join these 12 countries.

The reduction in the level of general government debt in relation to the GDP was severely disrupted during the pandemic. After peaking in 2020 and 2021, indebtedness is slowly starting to decline in most EU countries. Sweden, Ireland, Denmark or Cyprus have even managed to reduce general government debt in absolute terms over the last few years. In 2022, all EU countries reduced their relative indebtedness, except the CR, Finland, Estonia and Luxembourg. The latter two countries, together with Bulgaria, still have the lowest levels of public debt. Meanwhile, Estonia’s debt grew at the highest rate in absolute terms (20.3%), followed by the CR with an increase of 16.8%. In previous year, 14 Member States met the debt criterion of 60% of GDP, with Slovakia adding to it compared to 2021. The amount of general government debt as a share of GDP fell the most year-on-year in Greece, Cyprus, Portugal and double-digit declines in Croatia and Ireland.

In 2023, relative indebtedness is expected to improve year-on-year in 18 EU countries, most notably again in Greece, Croatia, Portugal and Cyprus, which, along with Ireland and Sweden, is forecast to see a debt reduction in absolute terms. In contrast, the relative level of public debt is expected to increase the most in Belgium and Malta, and in absolute terms in Bulgaria and again in Estonia (by 13.0%

¹ The procedure is not yet closed and the EC Communication (2021a) of 24 November 2021 still applies, concluding that while Romania’s deficits are consistent with the targets set, the lack of fiscal effort does not guarantee the successful implementation of the medium-term consolidation strategy.

² Articles 5(1) and 6(3) for euro-area countries and Articles 9(1) and 10(3) for Member States in Council Regulation (EC) No 1466/97, and Articles 3(5) and 5(2) of Council Regulation (EC) No 1467/97.

³ In Ireland, perhaps rather unusually, the local government sub-sector is the only one in deficit in 2022 and forecast for 2023. From autumn

2021, data for the social security funds (usually health insurance companies) are also reported here, so Malta remains the only country in the EU that does not report data for this sub-sector.

⁴ Balance data were not available for Belgium and France and debt data for France in the framework of the 2023 spring notification. The corresponding comparison therefore does not include these countries.

and 12.4% respectively) and in Poland and Romania (by 12.4% and 12.4% respectively). The list of countries with indebtedness in relation to the reference value of 60% of GDP should remain the same in 2023 as in 2022. Comparing the projected end of 2023 with the pre-crisis year 2019, debt will decrease in relative terms in 8 countries - most notably in Greece (by 21.3 pp), Ireland (by 15.0 pp) and Cyprus (by 13.5 pp).

Compared to the 2023 spring notification, Malta and Portugal are presenting the largest reductions in indebtedness (both by 4.6 pp) due to better GDP growth forecasts, while Ireland and the CR are reporting the largest upward revisions, by 1.6 pp and 1.2 pp, respectively, mainly due to the deterioration in GDP forecasts. Changes in the absolute amount of debt are negligible and result from updates to input data or methodological adjustments.

3.2 Public Debt Financing in EU Countries

The government's gross borrowing requirement represents the resources to cover the financing needs that the government secures through borrowing operations. In EU countries, this is primarily the issuance and sale of government bonds. This is largely made up of medium- and long-term fixed-rate domestic government bonds, supplemented by short-term Treasury bill issues (which have grown in importance over the last three years), inflation-linked bonds or green bond issues (notably in Germany, France, the Netherlands and Sweden). In addition to debt instruments, governments receive loans and credits from international institutions. When composing a financing strategy (especially in recent years, due to the great uncertainty caused by the covid-19 pandemic, the war in Ukraine or high inflation), not only financing costs but also risk (refinancing, interest rate) must be taken into account. Governments have therefore reacted in recent years by updating their borrowing strategy throughout the year, for example by changing the structure and volume of instruments in scheduled auctions, issuing new instruments or adjusting the number of auctions. For example, France had to increase its borrowing requirements during 2022 due to higher inflation-related expenditure, while in Italy, the excess liquidity led to the cancellation of auctions.

Last year and this year, the bond markets in EU countries were primarily influenced by the restrictive monetary policy of central banks reacting to high inflation. In previous years, **euro area government bond yields** were significantly influenced by the European Central Bank's government bond purchase programmes. These support programmes, combined with a monetary policy of low interest rates, have kept government bond yields at very low levels, even for highly indebted countries. In particular, the southern European countries (Italy, Spain, France, Greece, Cyprus) were thus able to finance their borrowing requirements by issuing government bonds even with very long time to maturity at yields below the ones on 10-year government bonds for convergence purposes (hereinafter 10-year government bonds) of several times less indebted non-euro area countries. The bond market situation changed rapidly in 2022, as the European Central Bank gradually increased interest rates from July 2022 (up to the current 4.5% p.a. for the

primary rate and 4.0% p.a. for the deposit rate). In the first quarter of 2022, purchases of government bonds under the Pandemic Emergency Purchase Programme (PEPP) were also cancelled, with maturing principal amounts to be reinvested until at least the end of 2024. For the Public Sector Purchase Programme (PSPP), only reinvestments of maturing principal amounts were already realised in 2022, and these operations were also closed from July 2023. In response to the potential risk of a transmission of restrictive monetary policy into an excessive increase in spreads between euro area government bond yields⁵ (which would significantly increase the service cost of general government debt, especially in southern European countries), the so-called Transmission Protection Instrument was approved by the European Central Bank. This consists in the purchase of public sector bonds (with time to maturity of up to ten years) on the secondary market of those countries that will be affected by deteriorating conditions for the financing of the government's borrowing requirements and will meet the conditions of compliance with EU fiscal rules and fiscal sustainability. So far, this instrument has not been activated. The European Central Bank's monetary policy thus contributed strongly to the significant year-on-year rise in government bond yields last year, with virtually the entire government bond yield curve of all euro area countries moving up in parallel. At the shorter end (from negative levels at the start of 2022), yields to maturity rose by around 3.2 pp on average. At the long end, yields on 10-year government bonds rose on average by c. 2.5 pp. Compared to previous years, the **Greek** government, for example, was forced to finance part of its borrowing requirements during 2022 by issuing government bonds with shorter time to maturity⁶, and issued bonds with an average yield of 4% p.a. in the maturity segment up to ten years, while only a small amount of issuance was made at the long end of the yield curve. This led to a large year-on-year decline in the average time to maturity of newly issued debt

⁵ The average interest rate spread on 10-year government bonds in euro area countries compared to German government bonds almost doubled year-on-year last year to around 0.9 pp, and even reached 1.8 pp in the southern countries.

⁶ The weighted average time to maturity of government bond issues was 5.5 years in 2022 and 9.8 years in 2021.

instruments by 4.3 years to 5.5 years. In **Italy**, as in previous years, auctions of both medium-term government bonds and bonds with very long time to maturity were carried out (a new syndicated issue of a 30-year bond in amount of EUR 7 billion with a yield of 2.2% p.a. was carried out in February 2022, followed in March by issuance of the 15-year bond in amount of EUR 5 billion at yield of 3.3 % p.a., complemented by several auctions of 15 to 30-year bonds). However, the average auction yield to maturity rose year-on-year from its historic low in the last 20 years (0.1% p.a.) to 1.71% p.a. The rapid rise in government bond yields occurred even in countries where negative yields still persisted at the longer end of the yield curve in 2021 (e.g. in Latvia, 10-year government bond yields rose by an average of 2.3 pp year-on-year, in Slovakia by 2.2 pp, in Luxembourg by 2.1 pp or in Germany by 1.5 pp). For example, last year in **Slovakia** part of the borrowing requirements was financed by medium- and long-term government bond issues at an average yield to maturity of 2.3 % p.a. with an average time to maturity of 13.1 years, while the **German** government issued medium- and long-term government bonds at an average yield to maturity of 1.2 % p.a. Despite the marked rise in German government bond yields, particularly at the long end of the yield curve, the average time to maturity of newly issued bonds rose year-on-year by 1 year to 14.6 years in 2022.

Government bond yields have continued to rise this year, with a parallel upward shift of the entire yield curve at the end of Q3 by an average of 0.9 pp year-on-year. Ten-year government bond yields then rose by an average of 1.7 pp year-on-year over the same period (the largest growth is again in southern European countries, where, for example, in Greece, 10-year government bond yields are at level of 3.9% p.a. on average in the Q3 2023, in Italy even 4.3% p.a.). Thus, in **Greece**, this year⁷ so far, the development of debt instrument yields generates an average cost of financing of 3.3% p.a., the highest level in the last 10 years. Moreover, the average time to maturity of newly issued debt instruments is falling⁸, as the Greek government's borrowing requirements are largely financed by Treasury bill issues. Issuance of government bonds with longer time to maturity has been carried out in relatively smaller volumes, resulting in a gradual decline in the average time to maturity of central government debt⁹. Rapid yield increases over the past two years have also been recorded in Estonia and Slovakia, whose 10-year government bond yields are currently at one of the

highest levels (at 4.3% p.a. and 3.9% p.a. respectively in September) among euro area countries. **Estonia**, however, finances its borrowing requirements primarily through long-term loans, and government bond issuance had been marginal until 2020¹⁰. In the case of **Slovakia**, Treasury bills have not been involved in financing the borrowing requirements in the last two years, so it is largely covered by medium- and long-term government bond issues with an average yield to maturity this year of 3.8% p.a. Given the shape of the Slovak government bond yield curve, government bonds with shorter time to maturity are being issued this year, and auctions of very long-term bonds are significantly reduced. The rise in government bond yields has continued in **Germany**, with the average auction yield on medium- and long-term government bonds more than doubling year-on-year to 2.5% p.a., with an average time to maturity of the financing debt instruments of 15.2 years.

In non-euro area countries, 10-year government bond yields increased by an average of 2.6 pp year-on-year last year. The largest year-on-year increases in 10-year government bond yields were recorded in Hungary¹¹ (by an average of around 4.5 pp) and Poland (by an average of around 4.1 pp). The reason for such a rapid rise in government bond yields is mainly due to the restrictive monetary policy of central banks, which were raising base interest rates during 2022 in response to high inflation rates. In 2022, the Polish central bank raised the base interest rate by a total of 6 pp, and in Hungary even by 10.6 pp. At the end of September, the average year-on-year increase in government bond yields was around 0.9 pp, with Bulgaria recording the largest rise (2.2 pp). Due to the upward shift in the yield curve, many countries have adjusted the structure of debt instruments to finance their borrowing requirements. **In Hungary**, the volume of Treasury bills issued tripled last year. In the shorter maturities, fewer government bond auctions were conducted during the year, as this maturity segment achieved higher yields to maturity than the longer end of the yield curve. After extremely high yields along the entire length of the yield curve (especially in the period from Q4 2022 to the end of Q2 2023), there is currently a slight decline in Hungarian government bond yields across all maturities, but the inverse shape of the yield curve still persists. **Poland** also exhibited an inverted government bonds yield curve throughout last year. Nevertheless, there was a slight year-on-year decline in the average time to maturity of auctioned bonds, accompanied by a significant increase

⁷ In 2022, the average cost of debt financing in Greece was 1.3% p.a., about 2.5 times lower than during the 2010–2012 crisis.

⁸ The average time to maturity of debt instruments at auction fell year-on-year to 5.03 years, which (excluding 2019) is the lowest in 13 years.

⁹ Since the all-time high level of the average time to maturity of central government debt reached in 2019 (20.5 years), it has been steadily declining, reaching 17.2 years in 2023.

¹⁰ The share of government bonds in total debt in the long term was about 11% until 2020. In 2020, the Estonian government issued (18 years after the last issuance) government bonds in amount of EUR 1.5 billion to cover covid-19 related expenditure. Further issue of the 10-year government bonds in amount of EUR 1 billion was realised in 2022.

¹¹ In October 2022, the Hungarian 10-year government bond yield exceeded 10% p.a.

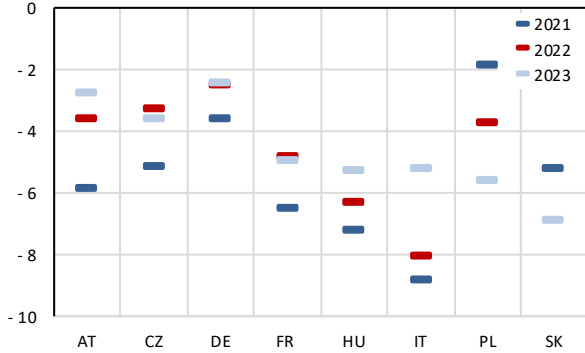
in the average auction yield to maturity by 5.4 pp to 6.4 % p.a. The decline in the average time to maturity has continued this year as well, accompanied by a fall in the average auction yield to maturity to 5.8 % p.a. This year the Polish government has even conducted several auctions of 24-year government bonds with an average yield to maturity of 6.1 % p.a, which have been the first auctions of government bonds with long time to maturity since 2020. The change in the maturity structure of medium- and long-term government bonds sold at auction was also evident in the **CR** last year, with a significant year-on-year increase in the volume of government bonds sold with time to maturity of up to 5 years and a decrease in the volume of bonds sold in the maturity segment of 10 to 15-year and longer than 15-year segment. This led to a year-on-year decline in the average time to maturity of medium- and long-term government bonds sold at auction by 2.3 years to 7.4 years, accompanied by a year-on-year increase in the average auction yield of fixed-rate medium- and long-term government bonds by 2.9 pp to 4.6 % p.a. This year, on the other hand, more government bonds with longer time to maturity have been sold at auctions (e.g. a year-on-year tripling of the volume of government bonds with time to maturity of over 15 years, with a significant increase in the volume of bonds sold also in the 10 to 15-year maturity segment), which was reflected in a year-on-year increase in the average time to maturity of bonds sold at auction to 9.3 years. This year, the average auction yield to maturity of medium- and long-term government bonds has then fallen slightly year-on-year to 4.5 % p.a. In contrast, central banks in Denmark and Sweden are pursuing less restrictive monetary policies. Their base interest rates have been increased over the last two years to maintain an approximately stable interest rate differential to the European Central Bank base rate. As a result, these countries have had the lowest government bond yields of the non-euro area countries for a long time. In **Denmark**, government bond auctions are being held this year in the 2- and 10-year maturity segments with average yields below 3% p.a., accompanied by several auctions of 30-year government bond with average yield at 2.6% p.a. In **Sweden**, the borrowing requirements in the last two years have been financed more by government bonds in the 10 to 15-year maturity segment (unlike the period before) with virtually no auction of government bonds with a time to maturity of more than 15 years.

However, government bond issues are not the only way to cover public debt. There are countries in the EU with a significant share of **loans for financing**. National autumn notifications of general government deficit and debt show that loans accounted for a significant share of the general government debt in Greece (74.1% of total debt in 2022, from which 98% are long-term loans), Estonia (54.1%) and Cyprus (38.2%). Sweden (35.9%) and Croatia (31.2%) also have a long-term share of loans of over 30% of total debt. In Estonia, the share of loans from European Investment Bank in total debt has fallen by around 34 pp since 2020, as the increase in debt is covered by government bond issues which the government has quite exceptionally resorted to in 2020 in the context of the pandemic and in 2022 to finance the impact of the energy crisis. In Greece, the share of loans (from the IMF and EU stabilisation mechanisms) in debt financing has been declining slightly over the last five years due to the return of Greek government bonds to the bond markets since 2017. By contrast, the largest year-on-year increase in the share of loans in total debt in EU countries was in the **CR** last year (by 5.1 pp to 12.6%), driven, among other things, by a EUR 2.5 billion loan from the European Commission through the Temporary Support to mitigate Unemployment Risks in an Emergency (SURE) facility.

EU countries also have the possibility to finance specific investments and reforms through soft loans from several EU instruments. The most important is the **Recovery and Resilience Facility**, which has a total allocation of EUR 385.8 billion for loans to Member States, of which EUR 56.6 billion has been drawn so far. Italy intends to use the largest share of the total allocation, having drawn down EUR46.5 billion of the EUR122.6 billion approved. Spain (EUR84.3 billion) and Poland (EUR34.5 billion) are also planning to use larger volumes of loans following revisions of their National Recovery and Resilience Plans. Romania (EUR 3.6 billion drawn of the EUR 14.9 billion allocation), Greece (EUR 5.3 billion drawn of the EUR 17.7 billion allocation) or Portugal (EUR 1.1 billion drawn of the EUR 5.9 billion allocation) plan to use smaller volumes of loans. Lithuania and Slovenia will also draw around EUR 1 billion. In Belgium and Cyprus, the planned volume of loans is up to EUR 0.3 billion. The **CR** plans to draw down a loan of CZK 19.4 billion (EC, 2023g) to finance investments in affordable housing, digitalisation or chip development.

Graph 3.1: Balance of Selected EU Countries

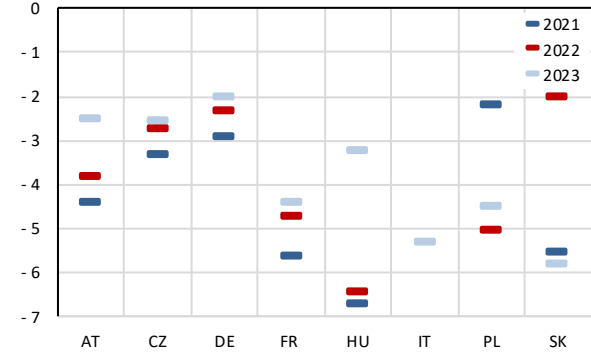
% of GDP



Source: Eurostat (2023b). CR data: CZSO (2023a, 2023b) and MF CR.

Graph 3.2: Structural Balance of Selected EU Countries

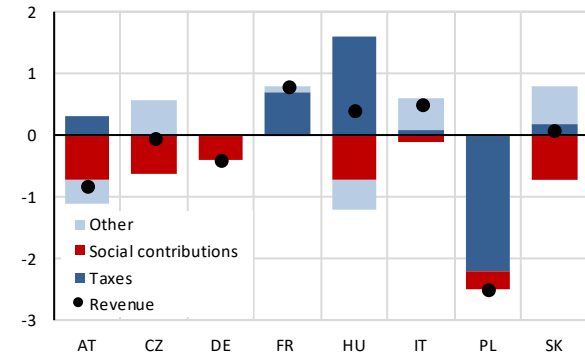
% of GDP



Source: EC (2023a). CR data: CZSO (2023a, 2023b) and MF CR.

Graph 3.3: Change in Revenue in 2021–2022

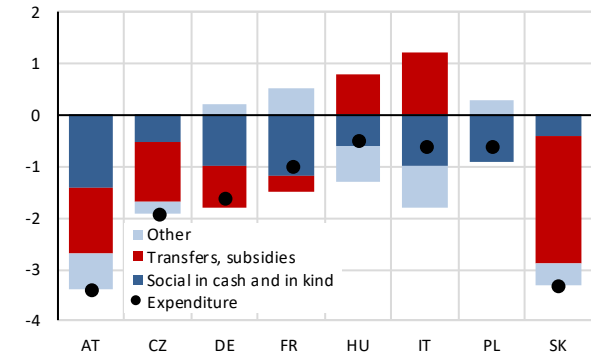
in percentage points



Source: Eurostat (2023a, 2023b). CR data: CZSO (2023a, 2023b).

Graph 3.4: Change in Expenditure in 2021–2022

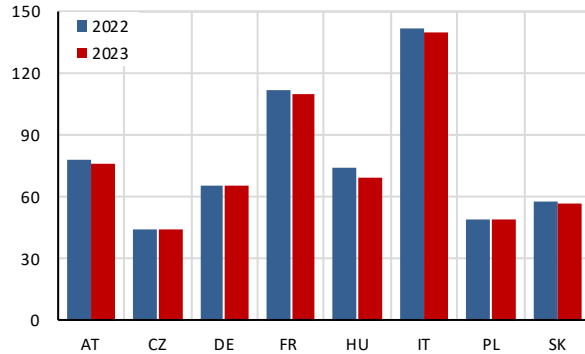
in percentage points



Source: Eurostat (2023a, 2023b). CR data: CZSO (2023a, 2023b).

Graph 3.5: Debt of Selected EU Countries

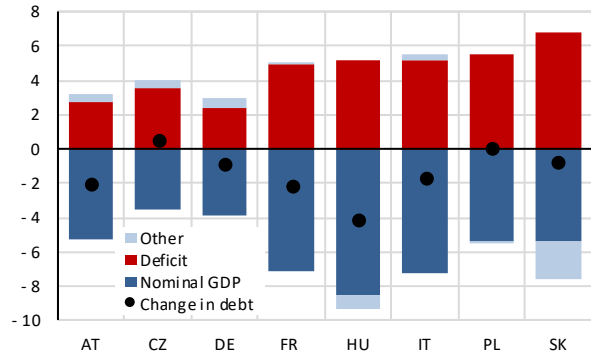
% of GDP



Source: Eurostat (2023b). CR data: CZSO (2023a, 2023b). and MF CR.

Graph 3.6: Change in Debt-to GDP ratio in 2022–2023

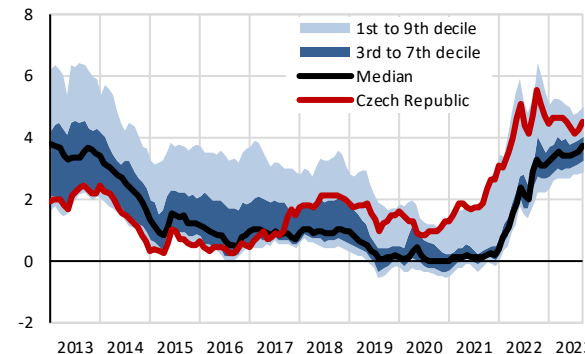
in percentage points



Source: Eurostat (2023b). CR data: CZSO (2023a, 2023b). and MF CR.

Graph 3.7: Bond Yields in the CR and EU Countries

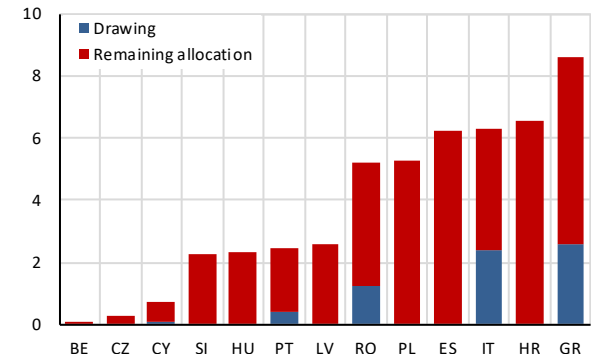
% p. a., government bond yields for convergence purposes



Source: ECB (2023).

Graph 3.8: Loans from the Recovery and Resilience Facility

% of GDP (2022), loan drawing as of 9 October 2023



Source: EC (2023h). MF CR calculations.

4 Long-term Sustainability of the Pension System

Long-term sustainability is one of the consistently discussed issues of Czech public finances. Although the process of population ageing is already present, the greatest risk is posed by demographic development that is likely to occur in the next few decades and will significantly increase the ratio of people of retirement age to the economically active population. This year, the government has come up with several changes to the pension system that make up the first part of the reform. The second part is currently being finalised. However, the population ageing does not only affect the pension system, but will also require active measures in the field of health care, long-term care or education.

4.1 Development of Parametric Changes in the Pension System

Factors that affect long-term projections, in addition to macroeconomic and demographic assumptions and projections (Table 4.1), include, of course, the pension provision settings.

Among the parameters of the pension system, the **statutory retirement age** deserves primary attention. With effect from 1 January 2018 (Act No. 203/2017 Coll.), the latest change so far has left the retirement age rising only until it is unified at 65 years for men and women during the next decade. The Ministry of Labour and Social Affairs is mandated by law to assess the retirement age at regular five-year intervals and, if necessary, propose adjustments to the retirement age so that insured persons spend, on average, a quarter of their lives in retirement. Moreover, changes in the setting of the retirement age should not affect persons who will be over 55 years of age at the time of the review. Although the first assessment (MoLSA, 2019) indicated a need to adjust the retirement age for at least those currently in their forties and younger, the government decided to leave the statutory retirement age at its current setting of 65 years for the time being. However, an adjustment to the retirement age is being prepared to provide for automatic recalculation according to life expectancy.

The development of the statutory retirement age also affects the conditions of permanent **widow's and widower's pensions**, where the age limit is linked to old-age pensions. For **early retirement pensions**, the threshold is reduced to three years before the statutory

retirement age. Simultaneously, the penalty for early retirement in the first two years has been tightened (the penalty is increased to 1.5% of the calculation base for each quarter) and the insurance period required for entitlement has been extended to 40 years (Act No. 270/2023 Coll.).

Pension indexation is determined by the sum of the increase in the pensioners' cost-of-living index (the consumer price index will no longer be taken into account) and one-third (instead of one-half) of the real wage growth (Act No. 270/2023 Coll.). Indexation is carried out once a year on 1 January, except for the case the inflation rate reaches at least 5% since the end of the previous reference period. In such exceptional cases, a partial increase and a temporary allowance of a uniform amount are applied. The remaining increase in line with inflation shall then be carried out in January of the following year. There is a possibility of discretion regarding pension indexation with effect from 2017 (Act No. 212/2016 Coll.). If the increase in the average pension benefit under the statutory indexation is less than 2.7%, the government is entitled to raise pension indexation rate up to this value by regulation. In other cases, the statutory indexation formula is applied. A fundamental change in pension indexation is its restriction concerning early pensions (Act No. 270/2023 Coll.). The earnings related component of these pensions is not indexed from the time of granting the early retirement pension until the statutory retirement age is reached.

4.2 Pension Projections

Eurostat's latest population projection (2023c) foresees a decline in the Czech population by 1.7% in the long term by 2070 compared to today. The dependency ratio, measured as the ratio of people aged 65 and over to people of working age, is supposed to reach approximately 47% by 2070. The development is not only a consequence of the decline in the number of people of working age, but also of the increase in life expectancy. The share of people aged 85 in the number of people aged 65 and over is projected to more than double over the projection horizon (Graph 4.1).

Demographic developments and the statutory retirement age primarily determine the trend in long-term pension projections. This implies that pension expenditure is

expected to grow more slowly relative to GDP until 2030. After 2030, the increase in the retirement age comes to a halt and the larger cohorts born in the 1970s start retiring. This leads to a rather dramatic increase in spending to more than 11% of GDP just before 2060, with a subsequent decline to 10.4% of GDP at the end of the projection horizon in 2070 (Table 4.1, lower part). The decline in spending is driven by demographic factors, as people born in less numerous cohorts of the 1990s replace those born earlier during a demographic bulge.

The long-term projections assume constant **revenues of the pension system** in line with a constant share of labour compensation in GDP and a constant

contribution rate. Taking into account the projected evolution of expenditure, we expect the balance to be negative over the entire projection horizon (Graph 4.3). Developments in recent years point to a widening of the pension deficit due to the economic impact of the pandemic. From a surplus of 0.3% of GDP in 2019, the balance ended up with a deficit of 0.7% of GDP in 2020. In contrast, in 2021, there was a resumption of revenue growth and the impact of the pandemic is strongly reflected on the expenditure side by a decline in the number of pension beneficiaries. The system thus ended up nearly balanced. As a result of falling real wages and lower social security contributions' dynamics on the one hand, and a significant increase in inflation leading to two extraordinary indexations in 2022, the pension system's balance fell back into deficit of more than 0.3% of GDP. We expect its further deepening to around 1% of GDP in 2023. As the situation stabilises (lower inflation rates), the balance should gradually improve and we project a deficit of 0.2–0.3% of GDP around 2030. However, the balance will deteriorate again in the following period due to demographic development, deepening to –3.4% of GDP around 2060. In the last decade of the projection (see above), the deficit should start to decline, falling by around 0.6 pp by the end of 2070.

Compared to previous EC projections (2021b), we currently expect a lower expenditure-to-GDP ratio (Graph 4.4), which should be around 0.8% of GDP lower at its peak. One of the reasons for this is more favourable demographic and macroeconomic assumptions, which have a positive impact on the ratio, especially in the first two decades of the projections. Thereafter, the effect of the recent amendment to the pension law starts to become more pronounced, contributing to a reduction in pension expenditure of almost 0.5% of GDP per year around 2060. The impact of the change in pension indexation (depending on a lower adjustment for the real wage growth rate from one half to one third) amounts to about 0.3% of GDP, and the remaining 0.2% of GDP can be attributed to the tightening of conditions for early retirement.

The assumptions of the baseline scenario over such a long horizon are, of course, subject to considerable

uncertainty. A change in assumptions can then be quite important for the assessment of the sustainability of the system. Therefore, several alternative scenarios are calculated with regard to the selected parameters of macroeconomic or demographic developments.

Investment that would increase the growth rate of **total factor productivity** by 0.2 pp would lead to a 0.2 pp decrease in the ratio of pension expenditure to GDP. The scenario of a drop in total factor productivity would have a negative impact on expenditures of a similar scale, pushing them up by 0.3 pp (see Graph 4.2).

A two-year increase in the **life expectancy** would increase pension expenditure by 0.7 pp due to the effect of a longer average duration of old-age pensions (see Graph 4.5).

A 20% lower **fertility rate** would burden the pension account with 0.6 pp higher expenditure (Graph 4.6). However, the fertility rate has already increased substantially in recent years and is likely to fall rather than rise in the coming years. At the same time, under the current setting of pension system parameters, spending over a given horizon declines relatively at higher fertility rates, but the pressure on the pension system would be all the greater beyond its end, i.e. after 2070.

The **retirement age** plays a significant role in the evolution of expenditure. Continuing to raise it above the current ceiling of 65 years in line with the evolution of life expectancy would reduce expenditure pressures by up to 1.4% of GDP in the long run (Graph 4.7). Conversely, if further growth would almost immediately stop and remain at 63 years, additional expenditure pressures would deepen the system deficit by up to 1.2% of GDP in 2070.

The last scenario works with different assumptions on the evolution of the **net migration balance**, which is on average around 25,000 people in the long run of the baseline scenario. It turns out that a one-third higher net annual inflow from abroad would reduce expenditure by 0.3% of GDP at the end of the projection horizon (Graph 4.8). Conversely, a one-third lower net migration balance would increase expenditure by 0.4% of GDP.

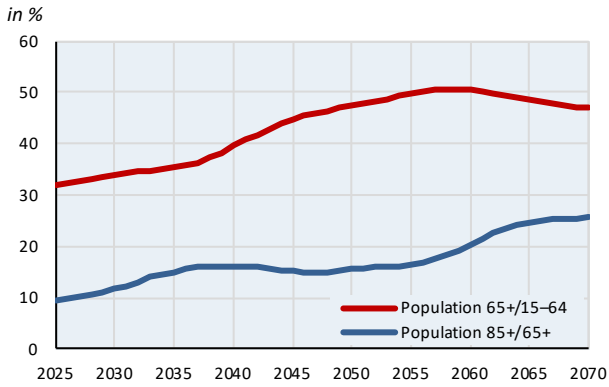
Table 4.1: Basic Demographic and Macroeconomic Assumptions and Pension Expenditure Projections

		2022	2030	2040	2050	2060	2070
			Projection	Projection	Projection	Projection	Projection
Hourly labour productivity	change in %	0.5	1.6	2.3	2.0	1.6	1.2
Real GDP	change in %	2.5	1.3	1.6	1.6	1.6	1.2
Participation rate (aged 20–64)	%	83.1	81.9	81.0	81.4	82.1	81.5
Unemployment rate (aged 20–64)	%	2.2	2.6	2.7	2.7	2.6	2.6
Population aged 65+	% of total population	20.4	21.5	24.3	27.3	28.6	27.4
Total pensions	% of GDP	8.7	8.0	9.2	10.6	11.0	10.4
Old-age pensions	% of GDP	7.3	6.8	7.9	9.4	9.7	9.2
Disability pensions	% of GDP	0.9	0.7	0.7	0.6	0.6	0.6
Survivors' pensions	% of GDP	0.5	0.5	0.6	0.6	0.7	0.6

Note: The values in the table correspond to the assumptions of the long-term projections at the time they were made in the first half of 2023. The sum of values for each type of pension expenditure is not necessarily equal to the total expenditure due to rounding.

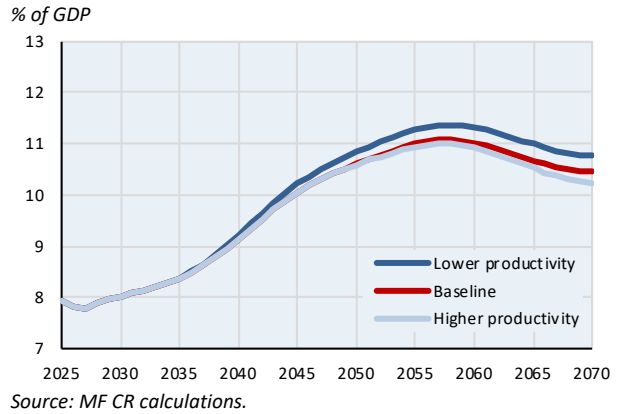
Source: EC (2023b), Eurostat (2023c), MF CR calculations.

Graph 4.1: Dependency Ratio and 85+/65+ Ratio



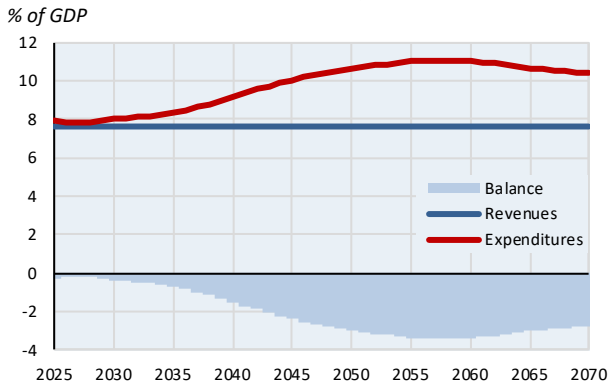
Source: Eurostat (2023c). MF CR adjustment.

Graph 4.2: Alternative Productivity Scenarios



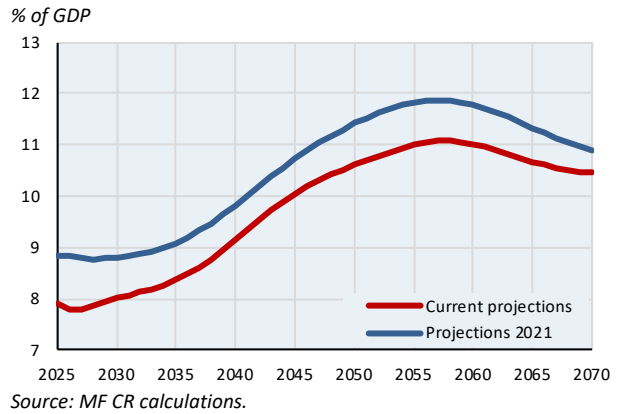
Source: MF CR calculations.

Graph 4.3: Pension Revenue, Expenditure and Balance



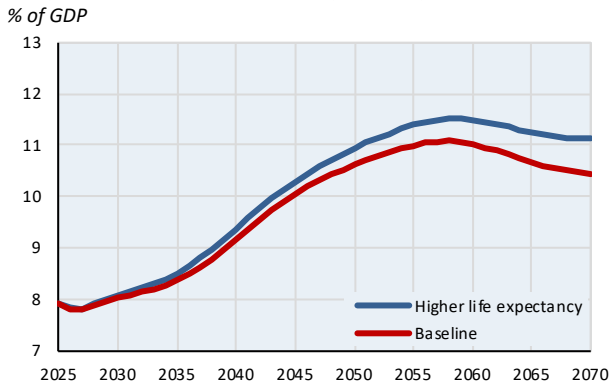
Source: MF CR calculations.

Graph 4.4: Previous and Current Expenditure Projections



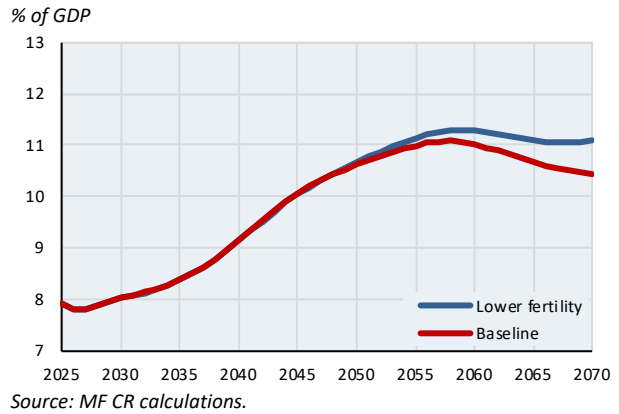
Source: MF CR calculations.

Graph 4.5: Alternative Life Expectancy Scenarios



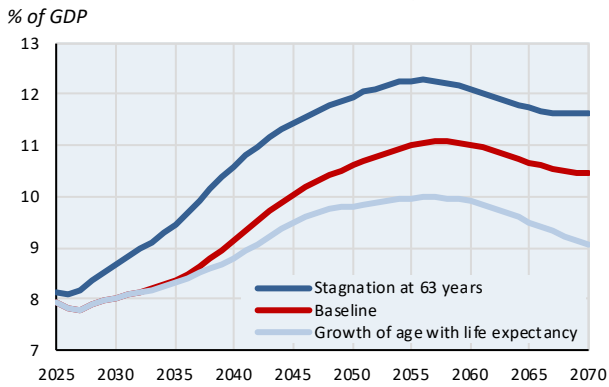
Source: MF CR calculations.

Graph 4.6: Alternative Fertility Rates Scenarios



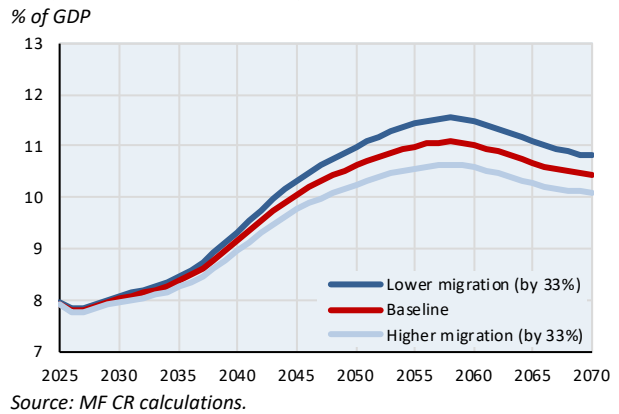
Source: MF CR calculations.

Graph 4.7: Alternative Retirement Age Scenarios



Source: MF CR calculations.

Graph 4.8: Alternative Migration Scenarios



Source: MF CR calculations.

5 Consolidation Package

Responsible budgetary policy is one of the Government's priorities. In November 2022, intensive negotiations were launched across the government coalition on the form, scope and composition of public finance consolidation. The full set of measures was presented on 11 May 2023 and approved by the Government at its meeting on 28 June 2023 (Government Resolution No 469). These are crucial measures that determine the future direction of Czech public finances and their long-term sustainability in the context of adjustments to the pension system. The package also includes an amendment to the Act on the Rules of Budgetary Responsibility and implies a return to the medium-term budgetary objective at least three years faster than the current version of the Act.

The beginning of the third decade of the 21st century was marked by significant supply shocks caused by the covid-19 disease pandemic, followed by the war in Ukraine and the energy crisis. A number of countries responded to the situation with significant fiscal expansions, which worsened the public debt burden. Although most of the key measures in European economies shared common features, in the CR some of the changes were permanent, which exacerbated the structural imbalance between public revenues and expenditures. The CR entered the period of deterioration with one of the lowest public debt-to-GDP ratios in the EU and public budget surpluses. However, after 2019, domestic public finances show the second highest increase in debt in the EU (Graph 5.1). Although the debt dynamics has already slowed down, it owes this to strong growth in nominal GDP. While the CR continues to meet the 60% of GDP criterion for the level of general government debt as well as the national debt rule (see section 2.4), the fiscal policy space is shrinking significantly taking into account additional demands stemming from the challenges of energy self-sufficiency,

an ageing population and the costs associated with the transition to a low-carbon economy. At the same time, the role of public finances and fiscal policy is difficult to substitute, as recent crises have shown. In the CR, this is particularly true of the state budget, which is by far the largest contributor to shock mitigation. Healthy public finances allow the public sector to satisfactorily fulfil its functions – allocative in cases of market inefficiency in resource allocation (market failure), redistributive, thanks to which wealth and incomes are reallocated, and finally stabilising, which is based on mitigating cyclical fluctuations in the economy and their negative effects on employment or the price level.

The consolidation package prepared by the Czech government in the first half of 2023 significantly improves the state budget. Its focus is mainly on the short to medium term. To achieve a low risk of financial unsustainability of public policies in the long term, further steps will be needed, for example to address the structural problems of the pension, health and long-term care systems in light of the ageing of the Czech population.

5.1 Approaches to Consolidating Public Finances

At this point, it is worth asking the question of what form the consolidation should take and what factors determine its success. A number of authors have attempted to answer these questions. First of all, Bibow (2004), who performed an empirical analysis of the experience of consolidation measures in the US, Japan and the euro area during the 1990s, identified two distinct consolidation strategies. The first relies on economic growth, while the second relies on austerity measures. The author argues that the fiscal retrenchment approach can be successful in terms of outcomes in small open economies, as the negative effects of retrenchment can be offset or even outweighed by positive economic development abroad. Therefore, the right timing of structural deficit reduction plays an important role. An example of successful consolidation was the Swedish one in the 1990s. However, Molnár (2012) and Okwuokei (2014) pointed out that the experience with this type of “adjustment” of public budgets was mixed. In the context of open economies, Barrios et al. (2010) find no support for the thesis that, in general, currency devaluation or depreciation of exchange rates are a guarantee of

achieving successful fiscal consolidation. This result can be explained by a number of possible factors, such as the degree of openness of the economy or the way exchange rate changes are reflected in the domestic price level. In contrast, Lambertini and Tavares (2005) analyzed data from OECD countries over the period 1970–1998 and noted that natural depreciation of both nominal and real exchange rates, enhancing competitiveness, often preceded episodes of successful fiscal consolidation. A one per cent average currency depreciation in the years preceding a consolidation led to a roughly two per cent increase in the probability of its success. Bilicka et al. (2012) also studied the effect of currency depreciation on the success of fiscal consolidation, specifically in the UK during the Great Recession. Also as a result of this, the currency gradually weakened against both the dollar and the euro, which would suggest a mitigation of negative effects on aggregate demand through a net export stimulus, but econometric estimates did not support this assumption.

However, large economies cannot rely too heavily on this mechanism of substituting foreign for domestic

growth factors when consolidating their public finances, as the example of Japan has shown. On the other hand, they have all the macroeconomic tools at their disposal to support domestic demand growth. The key parameter for the success of consolidation is the optimal interplay between fiscal and monetary policy. It is Japan that has failed to find the optimal approach to consolidation; in the 1990s, fiscal consolidation there was contrary to the recommendations of experts. In this context, going forward, Fournier et al. (2022) suggested that Japan should pursue a supportive fiscal policy in the short run to reduce the negative output gap and minimize hysteresis, i.e., to mitigate persisting negative effects of the crisis on the economy. In the medium term, however, a gradual fiscal consolidation should already be in place, motivated by the need to stabilise debt and gradually restore the financial resources necessary in the face of growing demographic pressures.

The US is an example of a successful implementation of this consolidation approach, as it managed to keep domestic demand on a growth trajectory while maintaining sustainable public finances. In the early recession of the 1990s, economic policy was not set restrictively, the built-in fiscal stabilisers were allowed to operate freely, while monetary policy was eased in time and at a sufficient level to stimulate private spending. Supported by strong growth in domestic aggregate demand, a passive form of consolidation of public finances in the US was encouraged, as good economic conditions brought additional revenues to public budgets and, at the same time, savings in social welfare spending. The US adopted a similar countercyclical approach in the case of the turn-of-the-millennium recession (Truger et al., 2010). In contrast, the euro area at the beginning of this century is cited as a case of failed consolidation, which was based on an uncoordinated, counterproductive mix of austerity and monetary policy efforts to maintain price stability.

Austerity and the associated stagnation reduce tax revenues, eventually leading to an increase in tax burdens and social security contributions, while the austerity trend in public investment will be offset by the rising cost of unemployment benefits and public debt servicing. Thus, economic stagnation and high unemployment not only negatively affect the generations of the time, but also the generations that follow, who will inherit less capital along with more debt (Bibow, 2004).

In addition to the above, the success of consolidation can also be determined by its structure (see below for more details), its duration (De Rugy and Salmon, 2020), while the effect of the size of consolidation measures (measured by the change in the primary balance) is disputable (Okwuokei, 2014; De Rugy and Salmon, 2020). Although the aforementioned parameters can be set correctly, the way in which consolidation is communicated is also important (McCrae et al., 2009). However, there is also controversy in the academic discourse about how consolidation will affect economic growth. Until about the 1990s, the prevailing view, based on Keynesian economic theory, was that fiscal consolidation as a restrictive fiscal policy would lead to negative effects on economic output (Samuelson, 1997). Since the end of the last century, some authors of studies have begun to point out the possible existence of so-called non-Keynesian effects of fiscal consolidations, which are characterized by an increase in aggregate demand through a reduction in interest rates stimulating investment and also due to an increase in consumption induced by the expectation of a future reduction in the tax burden and thus higher incomes (e.g. Giavazzi and Pagano, 1990; 1996; CZSO, 2004). The research of non-Keynesian effects is still of interest to experts, but their existence is rather debatable (Georgantas et al, 2023; Alesina et al., 2019; Afonso et al., 2022).

5.2 The Optimal Structure of Fiscal Consolidations

The consolidation package (Senate Document No. 161) contains measures that improve the public finance balance by CZK 114 billion in 2024.¹² In 2025, it foresees a further positive impact on public budgets of CZK 24 billion, bringing the public budgets in both years to almost CZK 138 billion. The ratio of the quantified impacts of the measures on the revenue and expenditure side of public budgets does not contradict the prevailing conclusions presented in the literature, which still slightly favours expenditure-oriented consolidation. In their studies, Alesina et al. (2017; 2018; 2019) conclude that expenditure-oriented

consolidations had a milder negative impact on economic growth than tax increases. These studies also pointed out that social transfers are not negative taxes and that their reduction hurts economic growth less than an equivalent tax increase. The reason for this differential effect is private investment (i.e. not net exports or private consumption). Alesina et al. also estimated multipliers for different types of consolidations depending on the stage of the business cycle. They found that the multiplier having a negative impact on economic output for consolidation through spending is about three times lower than for consolidation through tax increases, and that multipliers are generally lower during recessions. Similar conclusions were reached by De Rugy and Salmon (2020), who found through their empirical analysis that

¹² All reported figures on the budgetary impact of the consolidation package are presented in the accrual methodology for the whole public finances.

strategies based on spending cuts were more successful in reducing debt levels than those based on tax changes. Spending cuts caused only minimal negative effects on economic growth, while tax increases resulted in deep and long-lasting declines. Successful consolidations have been at least two-thirds based on spending cuts. A much more cautious conclusion has been contributed to the professional discourse by a recent study by Balasundharam et al. (2023), who argue that the mix of revenue and expenditure measures should be tailored to the conditions in a given economy. Countries with a relatively large public sector (relative to GDP) logically have scope for reducing current expenditures, especially wage costs and transfers. Conversely, for countries with low revenues relative to GDP, more weight should be given to increasing them, which may prove necessary not only for fiscal consolidation but also to address long-term challenges such as poverty reduction, climate change or population ageing.

A growing body of research shows that revenue-focused fiscal consolidations can also be successful (Kasun, 2019; Bhattarai and Benjasak, 2021; Ciminelli et al., 2017). Indeed, the context and initial conditions for consolidation are crucial. It depends on the existing tax burden as well as the choice of instruments, the position of the economy in the cycle or the marginal propensity to consume. In this context, Paulus et al. (2017) point out that revenue-based consolidations of public finances (rather than relying on changes in value added tax, a regressive tax by nature) can also have a less disruptive short-term impact on aggregate demand in some cases,

as they do not affect the budgets of liquidity-constrained households as much as consolidations based on spending cuts. In other words, public spending cuts have a much worse impact on liquidity-constrained households than tax increases, due to the fact that cuts can include, for example, reductions in cash and in-kind social benefits, etc. And these can be a much more important source of income for low-income households than adjustments on the revenue side of public budgets.

One of the criteria for a successful consolidation of public finances based primarily on changes on the revenue side is the initial tax burden. Economic agents in the CR are taxed at a rather lower rate compared to the average of euro area and EU countries (Graph 5.3), while at the same time the tax quota in the CR does not exceed that of other central and eastern European economies. In 2022, it differed in the CR, Slovakia, Poland and Hungary by only tenths of a pp.

On tax revenues in the CR, OECD (2023e) recommends a revision of the system to better align economic, social and environmental objectives. The document also criticised the current set-up of the value added tax rate system relying on two reduced rates, which it assessed as ineffective in terms of combating poverty. At the same time, however, it expressed concern about the low level of burden of less distortionary taxes in relation to economic growth, such as environmental taxes and real estate taxes.

5.3 Content of the Consolidation Package

On the expenditure side of public budgets, CZK 49 billion should be saved in the first year of the consolidation package and another CZK 16 billion in 2025. Most of the savings is planned to be achieved through the revision and definitive cancellation of some subsidies paid. The approach was chosen because of the costliness, lack of transparency, inconsistency and non-addressability of the subsidies. A significant proportion of the subsidies are not linked to their original objective of reducing social, regional, health and many other inequalities. The participation of the final beneficiaries of EU subsidies is also increasing (MF CR, 2023e; 2023g). A significant part of the savings is also to take place in the public sector. Central government will reduce operational expenditure by 5% and public sector salary costs will be reduced. The volume of funding for civil service salaries will be reduced by 2%, the rate of growth in salaries of constitutional officials will slow down and there will be a 50% reduction in the cultural and social needs fund (i.e. a fund created by public institutions from which some benefits are paid for the employees).¹³

In addition to these more significant items, further savings of several billion CZK should be achieved. These include the abolition of 77 territorial offices of the Financial Administration and offices of the Customs Administration, whose services were in low demand. Salary compensation for temporary incapacity for work should now be paid from the salary appropriations and not from the expenditure limits set outside the salary area. The abolition of stamp duties as a means of payment, the use of electronic penalty notes instead of the current paper ones and the institutional integration of judicial claims under the Customs Administration should also help consolidate public finances. Overall, CZK 16 billion will be saved in both years on expenditure related to compensation of employees¹⁴ and state operational costs. In addition, the payment of unemployment benefits will be tightened and the maximum annual state support for building savings financial product will be reduced from CZK 2,000 to CZK 1,000, which will bring CZK 3 billion to public budgets.

¹³ In addition, half of the allocated amount should be used for employer contributions to retirement security products.

¹⁴ The amount is expressed as gross, i.e. including relevant direct taxes and social security contributions.

A further CZK 5 billion will be saved through lower interest costs due to a fall in the deficit, or more precisely debt.

The adjustments on the revenue side of the public budgets for 2024 and 2025 are expected to bring in additional public revenue in the total amount of CZK 73 billion (from which CZK 65 billion in 2024 and CZK 8 billion in 2025), and their effects are spread over a much larger number of items than on the expenditure side. One of the most significant changes is the increase in the corporate income tax rate by 2 pp to 21%, which will boost revenues by CZK 22 billion and which will exclusively benefit the state budget. This will bring corporate taxation closer to the EU or OECD average (Graph 5.5). Within Central Europe, the Czech tax rate is the same as in Poland, but lower than in Slovakia (21%) and clearly lower than in Austria (24%) or Germany (29.9%). On the other hand, it is significantly higher than in Hungary, which has a 9% rate, making it the lowest in the OECD. In terms of average effective rates (Graph 5.6)¹⁵, which provide a more accurate picture of the impact of corporate tax systems on the tax burden, the CR's position is not particularly out of line with the average in the context of post-communist countries in Central Europe, but in terms of the level of EU countries, the CR shows a significantly below average position.

The second most impactful measure is the reintroduction of the sickness insurance rate for employees. From 2024, there should be two rates, the current 2.1% paid by the employer and a new 0.6% paid by the employee. We estimate that its introduction will increase general government revenues by at least CZK 13 billion. The motivation for this measure is to eliminate the imbalance in the sickness insurance system, which has been affected by the rate cuts in 2009 and 2019, and by the additional costs of benefits such as paternity or care leave.

An equally important item of the consolidation package is the increase in the real estate tax to approximately 1.8 times. Although the revenue of the tax will continue to accrue to the local governments, there will be adequate changes in the tax assignment between the state budget and local governments (see above, e.g. for corporate income tax). However, municipalities are given the power to set a local coefficient for agricultural land (arable land, vineyards, hop-growing areas, gardens and orchards) between 0.5 and 1.5. In other words, a municipality will be able to completely eliminate the increase in real estate tax on agricultural land if it sets the local coefficient at 0.5. At the same time, the

¹⁵ The OECD (2022a; very detailed in: 2022b) provides a precise methodology for calculating effective corporate tax rates. OECD (2022a) calculates effective tax rates based on two different scenarios, namely a scenario with fixed real interest rates and inflation of 3% and 1% and a scenario working with actual values of these variables. The scenario with fixed macroeconomic variables allows for better comparability of tax systems as differences are not related to changes in macroeconomic conditions (OECD, 2022b).

possibility for local governments to completely exempt such land from real estate tax is maintained. Last but not least, the package introduces the so-called inflation coefficient, the purpose of which is to prevent a decrease in the real value of the tax. It is estimated that the changes in the real estate tax will bring over CZK 10 billion to public budgets (MF CR, 2023f).

Increasing the real estate tax is in line with many of the broadly coinciding recommendations of the EC (2022; 2023c) or the OECD (2023e; 2020b), as well as with the conclusions of one of the most recent IMF studies, which recommended, among other things, an increase in property taxes (including real estate tax) on the revenue side to ensure additional inflows of finance (Balasundharam et al., 2023). Property tax revenues in the CR are very low (Graph 5.7), amounting to 0.2% of GDP (OECD classification¹⁶), which is the second lowest value among OECD countries. Other Central European countries collect many times more in property taxes relative to the size of the economy. If attention is focused directly on the (recurrent) real estate tax,¹⁷ the

¹⁶ The OECD (2023d, 2016) classifies property taxes into the following groups:

- 4100 Recurrent taxes on immovable property
 - 4110 Households recurrent taxes on immovable property
 - 4120 Other than households recurrent taxes on immovable property
- 4200 Recurrent taxes on net wealth
 - 4210 Individual recurrent taxes on net wealth
 - 4220 Corporate recurrent taxes on net wealth
- 4300 Estate, inheritance and gift taxes
 - 4310 Estate and inheritance taxes
 - 4320 Gift taxes
- 4400 Taxes on financial and capital transactions
- 4500 Non-recurrent taxes on property
 - 4510 Non-recurrent taxes on net wealth
 - 4520 Non-recurrent taxes on property other than net wealth
 - 4600 Other recurrent taxes on property except 4100 and 4200

In the CR, the road tax levied in the domestic tax system is assigned to property taxes, while the OECD classification classifies it in group 5000 taxes on goods and services, and in subgroup 5200 taxes on use or permission to use goods or perform activities, 5212 Recurrent taxes paid by others: motor vehicles (Andrlík, 2012; Láchová, 2007; OECD, 2023d; 2016).

¹⁷ Recurrent taxes on immovable property (item 4100 of the classification) are defined in the OECD methodology as taxes levied periodically in connection with the use or ownership of immovable property. The subject of taxation is usually land and buildings. This type of tax may take the form of a percentage of the assessed value of the property based on national rental income, sales price or capitalised income, or based on other significant characteristics of the property (such as its size or location) from which the expected rent derived from the property or its capital value can be derived. They may be imposed on both owners and tenants and may also be paid by one level of government to another level of government with respect to property under the jurisdiction of that level of government. Debts are not taken into account in the assessment of these taxes and differ from taxes on net wealth in this respect. Recurrent taxes on immovable property are further subdivided into taxes paid by households (4110) and taxes paid by other entities (4120). See OECD (2022c).

CR is again among the OECD countries with the lowest tax revenue to GDP ratio (Graph 5.8).

With an impact of several billions CZK, it is expected that some tax exemptions will be abolished or reduced. In particular, the conditions for the application of the tax deduction for the spouse will be tightened, which should now apply only to married persons who care for a child under 3 years of age. The aim is to return these carers back into the labour market earlier and a positive impact of CZK 2 billion is expected. A complete abolition is foreseen in the case of the tax credit for placing a child in pre-school, which is an example of inefficient redistribution. Its beneficiaries are primarily families with higher incomes who have a sufficiently high tax base, while low-income families do not benefit from the tax credit for placing a child in a pre-school facility because they cannot claim the credit due to their low tax base. The abolition will bring public budgets funds exceeding CZK 2 billion. For similar reasons, it is also proposed to abolish the exemption of non-cash benefits to employees from half the average wage level (without changes to the pension savings advantage) and to abolish the exemption of above-the-line meal vouchers. The same fate should befall the student tax credit. The average student does not have very high earnings,¹⁸ so in reality they will only benefit from the basic tax credit, while the student tax credit is used by students with higher earnings. At the same time, the aim is to minimise the number of cases where some people have student status only formally in order to enjoy the benefits associated with this status. A specific case is the abolition of the deduction for union membership fees, as other non-profit organisations do not have a similar exemption. The last major modified exception is the limit for the exemption of income from raffles and gambling, which should now be reduced to CZK 50,000 from the current CZK 1 million. The tax deductibility of the purchase of passenger cars for business purposes should also be limited to the first CZK 2 million of the car price (Senate Document No. 161; MF CR, 2023e, 2023f).

The total impact, estimated for 2024–2026 at around CZK 10 billion, is associated with an increase in the tax burden on the self-employed. The proposal foresees an increase in the minimum assessment base for social insurance (part of social security contributions) from 25% to 40% of the average wage at a rate of 5 pps per year during 2024–2026. At the same time, the tax base for the payment of social insurance will increase by 5 pps to 55%. There has been a long-standing debate in the CR about the low pension contributions of self-employed workers, and the OECD (2023e; 2020a) has also noted the problem in its documents, recommending that the

contribution base for the self-employed should be brought closer to that for employees. The proposal of the new law follows the spirit of these recommendations and should bring some redress in this area, bringing the relative participation of self-employed persons in the financing of the social security system closer to the relative participation of employees.

The consolidation package also includes increased taxation of “vices”. All the changes to excise duties and gambling should bring in about CZK 10 billion to public budgets in the years 2024–2025, but along with the gradual rollout of some of the measures, there are other impacts exceeding CZK 5 billion in the next two years (i.e. 2026–2027). Although the demand for the goods on which excise and gambling taxes are imposed is typically inelastic, the level of taxation has been set to reflect the baseline level and plans for adjustments in taxation in neighbouring economies. Excise duty on cigarettes and similar products is expected to increase by 10% in 2024 and then by 5% per year from 2025 to 2027. For heated tobacco, taxation should increase by 15% in each year between 2024 and 2027, increasing the tax burden on heated tobacco from the current 21% to 29%. Compared to the original proposal for the consolidation package, the current provision is more lenient in the introduction of excise duty on e-cigarettes, which should be staggered over four years, with an increase in rates of 2.5 CZK each year, starting with a rate of 2.5 CZK per 1 ml of refill in 2024. The approach is then analogous for nicotine sachets (MoF, 2023e, 2023f). An increase in the tax burden on alcohol, which is currently similar to that in Germany and lower than in Poland and Slovakia, should work on a similar principle to that for tobacco products. Tax rates on alcohol are increased over a three-year horizon, but at a different pace. The tax will increase by 10% in 2024 and 2025 and then by 5% in 2026. In the case of gambling, taxation on some forms of gambling will increase from 23% to 30%. For technical gaming and lotteries, the basic rate will remain unchanged, as an increase might no longer lead to an increase in revenue. A change in the tax assignment is also planned, with the revenue from the tax on internet gambling going only to the state budget, while 45% of the tax revenue from ‘land-based’ gambling will be allocated to local government budgets and 55% to the state budget. The revenue will be distributed among local governments in such a way that 22.5% will be allocated according to the number of gaming machines authorised on a given territory and 22.5% to all local governments according to their population (MF CR, 2023e, 2023f).

The package also includes a modest increase in personal income tax, which will affect high-income households. The income tax rate currently stands at 15%, with the marginal tax rate of 23% for annual incomes above 48 times the average wage. This threshold would now be reduced to 36 times the average wage, thus implying a wider range of wealthier households would pay the higher personal income tax. The adjustment should

¹⁸ According to data from the Eurostudent.eu project, which focuses on collecting and analysing comparable data on the social dimension of European tertiary education, the average Czech student was able to earn an income of CZK 8,236 through his or her own efforts. The average relates to the period 2018–2021 (Eurostudent.eu, 2022).

bring almost CZK 3 billion to public budgets between 2024 and 2025.

There is generally limited scope for taxing labour income. According to the OECD (Graph 5.9 and Graph 5.10), even after the tax reform of 2020 (Act No. 609/2020 Coll.), earnings in the CR are still burdened above average by income tax and social security contributions. Nevertheless, the situation has improved considerably in this sense. Currently, the level of labour taxation in the CR is roughly at the level of Spain, Luxembourg or the Baltic States. In the Central European context, the current level of labour taxation is lower than in most neighbouring countries except Poland, which taxes labour at less than 34%. In contrast, the Slovak and Hungarian workforce pays more than 41% of its labour costs to the public budgets, in Austria the ratio is almost 47% and in Germany it is even more than 1 pp higher (OECD, 2023a). In terms of implicit labour taxation, the CR is slightly below average compared to the EU and euro area averages. It has moved towards current levels as a result of the 2020 tax package (EC, 2023d).

An additional CZK 3 billion should come from the tightening of concessions on contributions to the social system for performance agreements. At present, it is possible to have multi-employer agreements with agreed remuneration below CZK 10,000 without the employee having to pay social security contributions. According to the proposed amendment to the Sickness Insurance Act, in the case of a performance agreements with one employer, the decisive income will be 25 % of the average monthly wage, calculated in accordance with Section 23b(4) of Act No. 589/1992 Coll., instead of the current fixed amount of CZK 10,000 for single-employer agreements. In case of multiple performance agreements with different employers in a calendar month, the decisive income will be 40% of the average wage. Exceeding these income thresholds will give rise to an obligation to pay social security contributions.

The consolidation package also simplifies the value added tax system. It is proposed to consolidate the two reduced rates into one 12% rate. Thus, there should be only two tax rates (except for the exemption of products and services listed by law). Goods and services such as foodstuffs, construction work, child car seats or funeral services and certain medicinal preparations will be subject to the reduced 12% rate; only occasional and special public bus services for passengers will move from the basic rate to the reduced rate. Conversely, the tax burden on accommodation and catering services, heat and hot water supplies, public transport, water and sewerage charges or printed newspapers and magazines will be slightly increased, as these were previously taxed at 10%. Items of no social or health importance should be moved to the basic tax rate of 21%. These include hairdressing and barbering services, draught beer, services of authors and artists, collection, transport and dumping of municipal waste, repair of shoes, leather goods and bicycles, cleaning work, firewood and certain periodicals. In addition, this

transfer should cover cut flowers and decorative foliage or the import of works of art, collectibles and antiques.

Graph 5.4 contains the latest available data on effective value added tax rates calculated by the EC (2023f). The effective tax rate in this case is defined as the sum of the value added tax liability from six main components: final household consumption, final government consumption, final consumption of non-profit institutions serving households, intermediate consumption, gross fixed capital formation and other largely country-specific adjustments such as rebates, reductions and exemptions, and the tax base (EC, 2023f). These data show that among the countries neighbouring the CR, Poland has the highest effective value added tax rate (11.9%), but the CR reported an effective income tax rate only 0.1 pp lower. The effective rate was lower in Slovakia (10.6%) and Austria (10.4%) as well as in Germany (10.2%), while the highest among the neighbouring countries was in Hungary (14.4%). Although value added tax adjustments have an overall negative impact on public finances, the overall reduction makes sense in terms of international comparison.

There will also be a number of other minor changes on the revenue side. The price of an annual motorway vignette will be increased by CZK 800 to CZK 2,300 from March 2024 and the prices of other vignettes should be based on this price level. The modification should also include an indexation mechanism reflecting both changes in the price level and the length of the motorway network. The change in the price of the vignette will take place through cumulative indexation principle, which leads to occasional adjustment of the price of the vignette only in the order of whole tens of CZK each time. The additional revenue from the sale of the vignette, estimated at CZK 1 billion, will belong to State Fund for Transport Infrastructure, but the state budget will save expenditure on a subsidy to this fund corresponding to the revenue from the sale of the vignette.

In line with the Government's programme declaration, the Mining Act (Act No. 44/1988 Coll.) is being amended, which brings an increase in the fees imposed on mineral extraction. This includes an increase in the remuneration from the mining area in which mining activities are permitted, from the current CZK 1,000 per hectare to CZK 1,500 per hectare. At the same time, it also modifies the tax assignment so that a larger part of the increased revenue is distributed among the local governments on whose territory mining takes place. The existing system of reimbursement on the quantity extracted and the unit rate according to the type of mineral regulated by Government Decree No. 98/2016 Coll., on reimbursement rates, will be maintained, but changes will be made to the unit rate for construction raw materials, oil and gas by 2%, for opencast coal by 3% and for silicate and other raw materials by 1%. This rate will also apply to deeply mined hard coal. The low proposed percentage for silicate raw materials is due to the desire to preserve the international competitiveness of raw material extraction in the CR (Government Office, 2023).

In addition, the consolidation package will limit the exemption for the sale of securities with the effect from 2025. The proposal provides for a limitation of the exemption of income from the sale of a security or a share in a company if the time test of 3 years or 5 years between

the acquisition and the sale is met to CZK 40 mil. per taxpayer. The current limit of CZK 100,000 per taxable year for the exemption of income of individuals from the sale of securities should remain unchanged (MF CR, 2023e).

5.4 Impact of the Consolidation Package on the Economy

5.4.1 Cumulative Economic Impacts

The dynamic structural general equilibrium models of the MF CR and the EC were used to estimate the macroeconomic impact of the consolidation package. Overall, we estimate that the measures will result in a slowdown in real GDP growth of 0.3 pp per year between 2024 and 2026. The primary source of the weakening economic performance will be lower household consumption and non-investment spending by the general government sector.

Lower demand would slow household consumption growth by around 0.3 pp, mainly due to an increase in the overall tax burden, either in the form of higher taxes or the abolition of selected tax credits and deductions. In the case of government non-investment spending, we estimate a slowdown in growth of around 2 pp, reflecting lower subsidies and reductions in operating costs. On the positive side, there is no reduction in general government investment and we do not expect the measures to have a significant impact on overall investment activity.

The impact on foreign trade will be slightly positive. While lower domestic demand will translate into lower import growth, domestic production will be more oriented abroad for the same reason, causing exports to grow slightly faster. The overall impact on the growth rate of net exports will be in the range of 0.3 to 0.4 pp.

In terms of the fiscal impulse, most of the impact is concentrated in 2024. The “input” impulse is 1.4–1.5% of GDP, and 1.1% of GDP after accounting for second-round effects, which is the quantified magnitude of the year-on-year improvement in the general government balance next year. The relatively low impact on economic performance (0.3 pp, see above) is driven by the composition of the package. It consists of measures that have relatively low multiplier effects in the small open economy of the CR. In this respect, it should be mentioned that a positive factor of the package is that it avoids cuts in investment, which traditionally have the highest multipliers.

Labour market effects will be rather moderate given the current situation of very low unemployment. We estimate that employment will fall by 0.2 to 0.3 pp, which will be reflected in an increase in unemployment of the same magnitude.¹⁹ At the same time, wage and salary growth in the economy will slow by 0.3 to 0.4 pp.

5.4.2 Impact on Household Consumption

The impact of the consolidation package on household consumption is expected to be mainly through a reduction in disposable income. The dynamics of consumer income will be weakened mainly as a result of the reintroduction of sickness insurance, the increase in the real estate tax rate, lower volume of salaries in the state administration and the increase in the social security contributions of self-employed. The more noticeable effect will therefore be felt by households of real estates owners (the higher taxation will probably have only a limited impact on rents) and, to some extent, by self-employed and civil servants.

Excise duties increases on tobacco and alcohol could have a small impact. According to the MF CR’s estimate (2022), the price elasticity of the alcoholic beverages and tobacco section is the lowest within the consumer basket (in absolute terms). A 1% increase in the price of alcohol and tobacco would, *ceteris paribus*, result in only a 0.1% decrease in demand in this category. Changes in value added tax rates, assuming a uniform impact on goods prices, will translate into a slight decrease in the average effective rate of value added tax and should thus have a positive impact on real household spending. Spending savings will be more noticeable for low-income groups and pensioner households. The impact on specific households will depend in particular on the extent to which changes in value added tax rates are passed through to final prices and the composition of household consumption baskets, which affects the scope for substitution of consumption towards cheaper products and services. We estimate that the measures of the consolidation package and their second-round effects reflected in reduced demand should, in aggregate, reduce the growth rate of real household consumption in 2024 by around 0.3 pp.

Despite the shifting of the threshold for the increased personal income tax rate to three times the average wage, high-income households can maintain or even increase their consumption thanks to the reserves built up during the coronavirus pandemic (whether for forced or precautionary reasons). Irrespective of the possible use of the savings on an increased scale, we expect a gradual normalisation of the propensity to consumption. The savings rate rose sharply by 6 pp to 19.3% in 2020, but has remained at historically high levels later. The savings rate could be around 15% next year, compared with a long-term average of around 12% before the pandemic.

¹⁹ This is a model estimate. Given the specificities of the Czech labour market, the real impact in this area can be expected to be smaller.

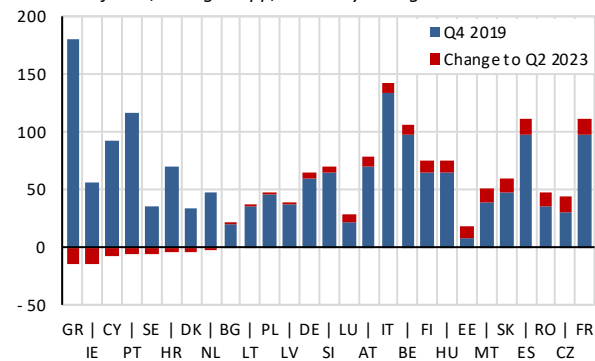
5.4.3 Impact on Inflation

The fiscal consolidation package would be reflected in the consumer prices index both directly through changes in indirect taxes and indirectly through its impact on the market component of inflation. The methodology of the CZSO and Eurostat (2018) for capturing changes in indirect taxes in the administrative component is based on a purely mechanical calculation with a de facto 100% pass-through to prices. It is not possible to isolate the real impact in the case where the tax change is not immediately fully passed through to final prices for consumers. In the long term, due to the existence of a competitive environment, full pass-through can be expected, but in the short term this may not be the case in the event of a rate cut. In the MF CR (2023b), we assume an aggregate rate of immediate pass-through of the rate cut to consumer prices of almost two-thirds, but differentially for different sections of the consumer basket depending on estimates of the degree of market competition and other factors.

As part of indirect taxes, excise duties on alcohol and tobacco products will be increased, which will increase inflation by around 0.2 pp next year. Changes to value added tax rates will be reflected in the administrative component of inflation in full in the price statistics, and should reduce inflation by around 0.2 pp. For administered prices, the consolidation primarily involves an increase in the price of the motorway vignette from March 2024, which should translate into an increase in average consumer price inflation of almost 0.1 pp next year.

Graph 5.1: Public Debt in the EU and Its Change

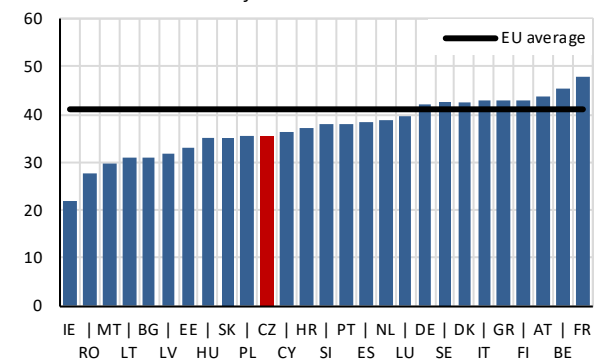
debt in % of GDP, change in pp, sorted by change in debt



Source: Eurostat (2023a).

Graph 5.3: Compound Tax Quota in the EU Countries (2022)

tax and social revenue in % of GDP



Source: Eurostat (2023a).

The current fiscal consolidation will have a restrictive effect on the economy as a result of the increase in net public revenues, thereby creating downward pressure on price dynamics in the coming years (Erceg and Lindé, 2012; Daniel et al., 2006). The impact on the market component of inflation in 2024, net of the implicit component arising from the changes in value added tax rates mentioned above, is estimated at around -0.3 pp due to the reduction in aggregate demand.

The overall impact of the fiscal consolidation package on the inflation rate in 2024 is broadly neutral. However, there are transitory price effects of an administrative nature working towards higher inflation, which are not reflected in core inflation. In the medium and long term, then, the current fiscal consolidation is purely anti-inflationary.

Table 5.1: Impact of Consolidation Package on Average Inflation Rate in 2024

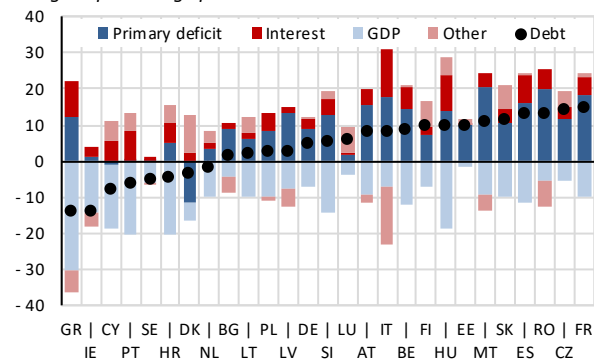
impact in percentage points

	Impact
Indirect taxes	0.3
of which: excise duties	0.2
of which: VAT – administrative component	-0.2
– effect of imperfect pass-through	0.3
Regulated prices	0.1
Market component	-0.3
Total	0.1

Source: MF CR calculations.

Graph 5.2: Change in Public Debt in the EU

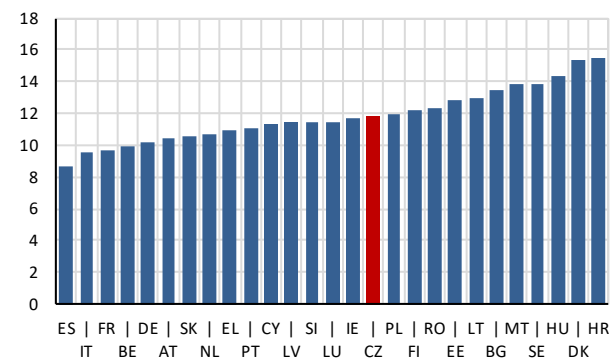
change in percentage points between Q4 2019 and Q2 2023



Source: Eurostat (2023a). MF CR calculations.

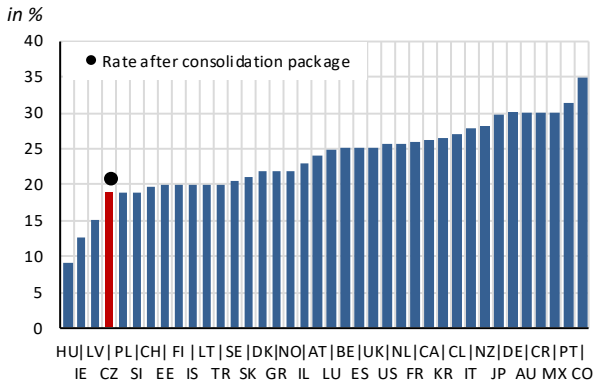
Graph 5.4: Effective Tax Rate of Value-added Tax (2021)

in %



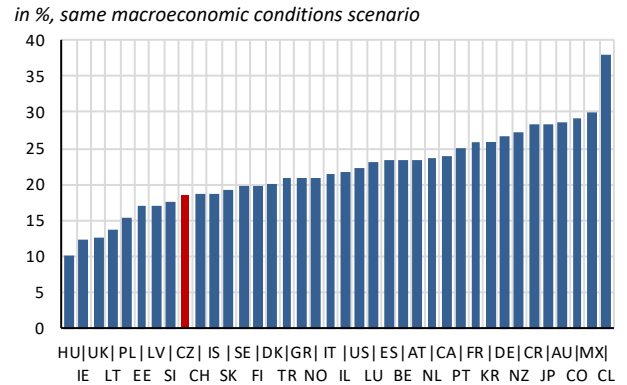
Source: EC (2023f).

Graph 5.5: Statutory Tax Rate of Corporate Income Tax (2023)



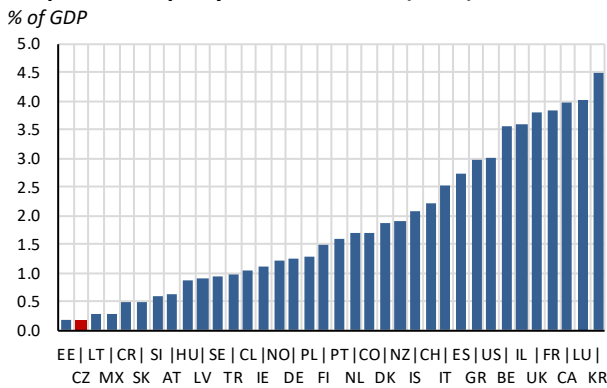
Note: Taxation on central and regional level.
Source: OECD (2023c).

Graph 5.6: Effective Tax Rate of Corporate Income Tax (2021)



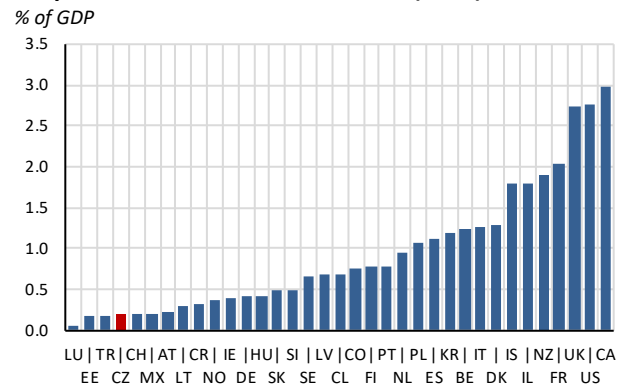
Source: OECD (2023b).

Graph 5.7: Property Taxes Revenue (2021)



Source: OECD (2023d).

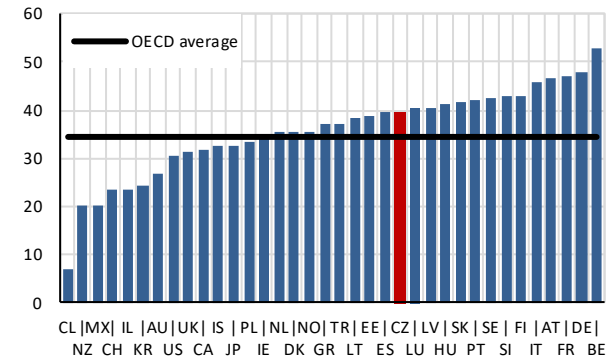
Graph 5.8: Real Estate Tax Revenue (2021)



Source: OECD (2023d).

Graph 5.9: Tax Burden on Labour (2022)

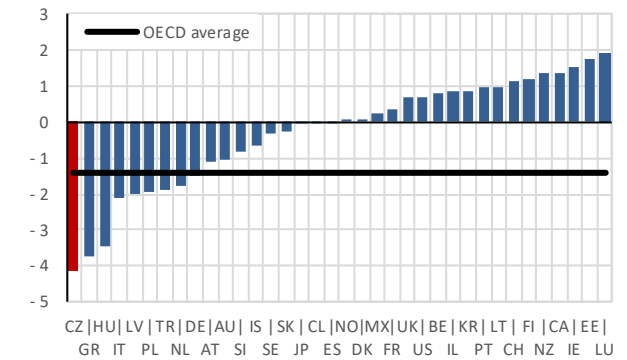
tax and contributions paid by employee and employer in % of labour costs



Note: Tax burden of childless person with average income.
Source: OECD (2023a).

Graph 5.10: Change of Tax Burden on Labour 2019–2022

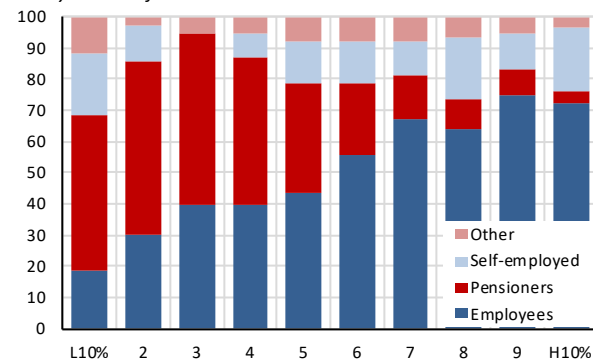
In percentage points



Note: Tax burden of childless person with average income.
Source: OECD (2020c; 2023a). MF CR calculations.

Graph 5.11: Population Groups by Income

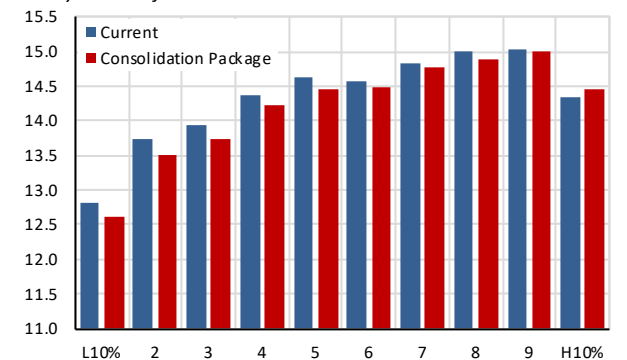
in % by deciles of income



Source: CZSO (2023c, 2023d). MF CR calculations.

Graph 5.12: Effective VAT Rate by Income

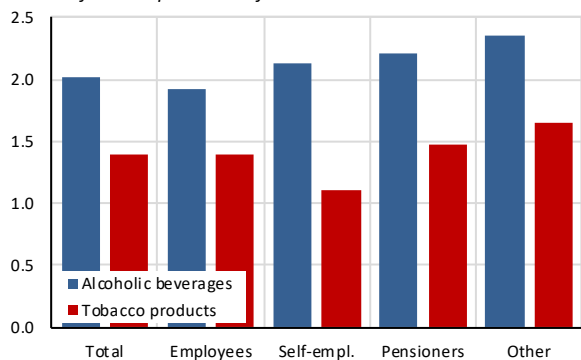
in % by deciles of income



Source: CZSO (2023c, 2023d). MF CR calculations.

Graph 5.13: Consumption Spending / Household Category

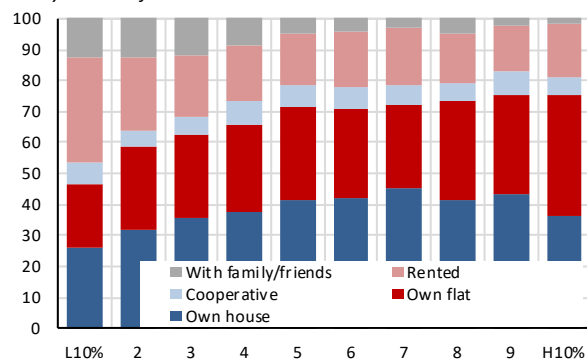
% share of total expenditure of household



Source: CZSO (2023c). MF CR calculations.

Graph 5.14: Type of Housing by Income

in % by deciles of income



Source: CZSO (2023d). MF CR calculations.

Table 5.2: Accrual Impacts of the Consolidation Package by Categories (for 2024–2025)

CZK bn., % of total impact

		2024	2025	Total	%
Revenues	CZK billion	65.0	7.9	72.8	53.0
Value added tax	CZK billion	-2.7	0.7	-2.0	-1.5
Excise duties	CZK billion	5.7	3.2	8.9	6.5
Taxation of gambling	CZK billion	1.1	0.0	1.1	0.8
Real estate tax	CZK billion	10.0	0.6	10.6	7.7
Personal income tax	CZK billion	8.2	0.3	8.5	6.2
Corporate income tax	CZK billion	21.9	0.0	21.9	15.9
Social and health insurance	CZK billion	21.5	3.0	24.5	17.8
Increase in the fee for the extraction of minerals (with an increase for black coal)	CZK billion	0.6	0.0	0.6	0.4
Increase in the price of the motorway vignette and its valorization	CZK billion	1.3	0.1	1.4	1.0
Others (esp. the impact of the reduction in the volume of salaries on revenues)	CZK billion	-2.6	0.0	-2.6	-1.9
Expenditures	CZK billion	48.8	15.8	64.6	47.0
Compensation of employees	CZK billion	12.0	-0.1	11.9	8.7
Savings in interest costs due to a lower deficit	CZK billion	0.0	4.5	4.5	3.3
Change in the terms of payment of unemployment benefits	CZK billion	1.0	0.0	1.0	0.7
Reduction of building savings support for existing contracts by 50%	CZK billion	0.0	2.0	2.0	1.5
Intermediate consumption (state operation and termination of customs offices)	CZK billion	3.9	0.6	4.6	3.3
Reduction of national subsidies	CZK billion	31.6	8.7	40.3	29.3
Adjustment of national funding of EU projects	CZK billion	0.3	0.0	0.3	0.2
Total	CZK billion	113.7	23.7	137.4	100.0

Source: MF CR calculations.

Table 5.3: Overview of Specific Measures of the Consolidation Package on Expenditure Side

Measures	Details
<p>Compensation of employees</p> <ul style="list-style-type: none"> – Integration of judicial claims under the wing of the Customs Administration – Salary compensation for temporary incapacity for work should now be paid from the salary appropriations and not from the expenditure limits set outside the salary area. – Abolition of 77 territorial offices of the Financial Administration and offices of the Customs Admin., incl. revenues from the sale of buildings – Reduction of the volume of salaries in the state administration by 2% – Constitutional officials' salaries (base 94% of average) 	<ul style="list-style-type: none"> – In addition to saving administrative expenses, the aggregation of administration in one place increases the efficiency of collection and is also friendlier in relation to the debtor who has only one creditor. – Currently, salary compensation in case of temporary incapacity for work (quarantine) is paid from the expenditure limits set outside the salary area, although other salary compensation is paid from the salary limit. – Their operation was ineffective, without corresponding demand. – The item is an ever-increasing regular expenditure of the state budget. – Constitutional officials' salaries will rise at a slower pace in solidarity with the declining real wages in the economy.
<p>Lower interest costs due to a fall in the deficit (debt)</p>	<p>CZK 5 billion will be saved on interest costs.</p>
<p>Change in the conditions for payment of unemployment benefits</p>	<p>Due to the persistently minimal long-term unemployment in the CR, the current form of robust unemployment support is not viable.</p>
<p>50% reduction in building savings support for existing contracts</p>	<p>In recent years, building savings have lost their original function. Moreover, people generally use the money they have saved for purposes other than their own housing.</p>
<p>Intermediate consumption</p> <ul style="list-style-type: none"> – Electronic penalty notes – 5% reduction in operating expenses in each ministry. – Abolition of stamp duties as a means of payment 	<ul style="list-style-type: none"> – Simplify, speed up processes and make sanctioning processes more transparent. – The government thereby demonstrates its commitment to start from itself. – With the increase in electronic card payments and cashless transfers, the need for them has decreased significantly, and a number of frauds have been indicated in the past in connection with their use.
<p>Reduction of national subsidies worth tens of billions of CZK.</p>	<p>The current situation is unsystematic, inefficient and unclear. The original intention of subsidies to reduce regional or other inequalities (social, health, educational, etc.) has disappeared. Gradually, national subsidy titles became a business that distorts the market environment especially in favor of large companies; non-viable projects are also maintained. In addition, the number of national subsidized titles is growing disproportionately, and with it, the costly administration for their provision is also increasing.</p>
<p>Adjustment of national funding of EU projects</p>	<p>Reducing the share of co-financing from EU funds by increasing the co-participation of the end beneficiaries of the subsidy.</p>
<p>Lower subsidy to the State Fund for Transport Infrastructure (SFDI) due to the price increase and its valorization of motorway vignette</p>	<p>SFDI will receive more money from the increase in the price of the motorway vignette and its valorization.</p>

Source: MF CR.

Table 5.4: Overview of Specific Measures of the Consolidation Package on Revenue Side

Measures	Details
Changes in value added tax	System of reduced rates will be unified and clearer. Also, reduces VAT on a number of sensitive goods/services, such as food without beverages, selected pharma products, construction, children's car seats or funeral services. Govt proposes to move items without social/health significance included in reduced rate to basic rate.
Changes in excise duties <ul style="list-style-type: none"> – Changes to tobacco taxation – Changes to alcohol taxation – Abolition of exemptions in metallurgy and mineralogy – Green diesel – comprehensive determination of returns – Taxation of aviation fuel (abolition of exemption) 	<ul style="list-style-type: none"> – Regular increases in excise duty on tobacco products of +10% in 2024 and +5% in each year 2025–2027. Increase the tax on heated tobacco by 15% in each year 2024–2027. Introduction of a new excise tax on nicotine pouches and refills for e-cigarettes. – Alcohol excise duty increase of +10% in 2024–2025 for each year and a further +5% in 2026. – Natural gas and other gases, electricity, solid fuels and cancellation of diesel tax refunds
Changes in taxes on lotteries, gambling and betting	The base rate of 35% applied to lotteries and technical games remains. The income from all online gambling games will now be 100% income of the state budget, and at the same time the income from all land-based gambling games will be 45% income of municipalities and 55% income of the state budget.
Real estate tax changes (increasing the average tax rate by 80% and valorization depending on inflation)	Tax on real estate in the CR is very low compared to OECD. Aut. valor. mechanism should prevent the real value of the tax from
Changes in personal income tax <ul style="list-style-type: none"> – Shifting the threshold for the next progression band from 4 to 3 times the average wage – Limitation of exemptions 	<ul style="list-style-type: none"> – It is a solidarity step so that even high-income employees participate more in the consolidation of public finances. – E. g.: Lowering the limit for exempting income from raffles and gambling to 50,000 CZK; limitation of the tax deduction for the spouse; taxation of above-the-line meal vouchers; cancellation of the tax credit for a child in pre-school; canceling the student tax credit; cancellation of the exemption of executive flats; limiting exemption of non-monetary benefits to employees, etc.
Changes to corporate income tax <ul style="list-style-type: none"> – Increase in corporate taxes by 2 pp and adjustment of tax – Limitation of tax advantage when purchasing passenger cars for business purposes (depreciation limit) – Taxation of only realized forex operations; functional currency 	<ul style="list-style-type: none"> – The current rate is below the EU average. – Further: Temporary introduction of extraordinary depreciation for purely electric vehicles. – Companies will be allowed to keep accounts in foreign currency.
Measures with an impact on social and health insurance <ul style="list-style-type: none"> – Increase in the contribution rate on the self-employed – Reintroduction of employee sickness insurance at the rate of 0.6% – Capping of contribution relief for performance agreements 	<ul style="list-style-type: none"> – In the years 2024–2026, it is proposed to increase the minimum assessment base for the social insurance of the self-employed from 25% to 40% of the average wage. It is further proposed that self-employed persons should pay insurance premiums of at least 55% instead of the current 50% of the tax base. Both groups (employees and self-employed) are taxed at the same tax rate (15% and 23%). – In 2009, this contribution was unsystematically abolished, in 2019 the rate paid by employers as compensation for the cancellation of the waiting period was reduced. Since then, the health insurance account has shown a negative balance. – Two limits for the emergence of participation in the insurance of an employee working on an performance agreement. The first will be set for agreements with one employer, in the amount of 25% of the average wage, and the second for the creation of insurance participation in the case of multiple agreements with multiple employers, in the amount of 40% of the average wage.
Increase in mineral extraction fees	The existing system is preserved, only the amount of the share of the rate to the reference price for coal is adjusted by 3%, for building materials by 2% and for silicate and other raw materials. by 1%.
Increase in the price of the motorway vignette incl. Indexation	To CZK 2,300 from CZK 1,500 (real value preserved by indexation)

Source: MF CR.

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A Annex of Tables

The data on general government sector aggregates in ESA 2010 methodology are consolidated at the relevant levels.

Table A.1: General Government Revenue

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total revenue	<i>CZK bn</i>	1 714	1 762	1 910	1 941	2 069	2 245	2 394	2 367	2 530	2 808
	<i>% growth</i>	2.8	2.8	8.4	1.6	6.6	8.5	6.7	-1.2	6.9	11.0
Current taxes on inc., wealth, etc.	<i>CZK bn</i>	313	335	354	385	416	458	491	485	469	536
	<i>% growth</i>	3.3	7.1	5.6	8.8	8.0	10.1	7.0	-1.0	-3.5	14.3
Social contributions ¹⁾	<i>CZK bn</i>	607	629	663	703	760	834	895	909	1 013	1 084
	<i>% growth</i>	1.1	3.6	5.5	6.1	8.0	9.8	7.3	1.6	11.4	7.0
Taxes on production and imports ²⁾	<i>CZK bn</i>	521	513	562	587	626	647	688	651	705	767
	<i>% growth</i>	3.9	-1.6	9.5	4.4	6.7	3.4	6.3	-5.3	8.2	8.8
Capital taxes ³⁾	<i>CZK bn</i>	0	0	0	0	0	0	0	0	0	0
	<i>% growth</i>	-33.3	-93.5	10.0	54.5	70.6	-24.1	-45.5	191.7	-40.0	19.0
Property income	<i>CZK bn</i>	38	37	37	37	31	35	32	34	38	74
	<i>% growth</i>	6.9	-2.3	-0.4	0.8	-17.9	14.3	-7.5	5.6	12.5	93.3
Interest	<i>CZK bn</i>	10	8	7	6	5	8	12	10	9	40
	<i>% growth</i>	-6.1	-13.4	-21.2	-7.8	-19.7	66.0	40.1	-16.5	-4.4	337.5
Other property income	<i>CZK bn</i>	28	29	30	31	26	27	21	24	29	34
	<i>% growth</i>	12.3	1.6	5.8	2.8	-17.6	4.3	-22.2	17.9	19.2	16.3
Sales ⁴⁾	<i>CZK bn</i>	150	152	155	158	163	174	186	181	194	219
	<i>% growth</i>	1.1	1.8	2.0	1.7	3.4	6.4	7.3	-2.7	6.8	12.8
Other current transfers and subs.	<i>CZK bn</i>	44	42	49	40	40	51	53	51	56	62
	<i>% growth</i>	13.5	-4.5	15.1	-18.5	1.5	26.0	5.1	-3.7	8.5	11.0
Investment grants	<i>CZK bn</i>	36	49	81	23	26	42	44	49	50	60
	<i>% growth</i>	1.5	36.3	66.6	-72.1	15.4	60.4	5.2	10.4	3.8	18.0
Other capital transfers	<i>CZK bn</i>	5	5	9	8	6	4	5	5	5	7
	<i>% growth</i>	18.6	-10.6	92.3	-6.1	-21.3	-40.9	20.7	4.8	5.3	36.3

¹⁾ Compulsory and voluntary payments of employers (on behalf of employees), employees, self-employed and self-payers to social security institutions and health insurance enterprises.

²⁾ Compulsory payments, which are levied by general government, in respect of the production or import and/or usage of production factors (for example VAT, excises etc.).

³⁾ Irregular taxes to the government on the values of the property, assets or net worth owned by institutional.

⁴⁾ Consists of market output, output produced for own final use and payments for other non-market output.

Source: CZSO (2023b).

Table A.2: General Government Tax Revenue and Social Contributions

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Taxes and social contributions	<i>CZK bn</i>	1 441	1 477	1 579	1 675	1 802	1 940	2 074	2 046	2 187	2 387
	<i>% growth</i>	2.5	2.5	6.9	6.1	7.6	7.6	6.9	-1.3	6.9	9.2
Current taxes on income, wealth, etc.	<i>CZK bn</i>	313	335	354	385	416	458	491	485	469	536
	<i>% growth</i>	3.3	7.1	5.6	8.8	8.0	10.1	7.0	-1.0	-3.5	14.3
Individuals or households	<i>CZK bn</i>	170	181	187	207	229	261	287	298	228	242
	<i>% growth</i>	3.1	6.5	3.0	10.9	10.5	13.8	10.2	3.6	-23.4	6.3
Corporations	<i>CZK bn</i>	133	144	157	167	176	187	192	177	229	282
	<i>% growth</i>	4.0	8.5	8.8	6.8	5.2	6.3	2.9	-8.1	29.7	23.1
Levy on lottery revenue	<i>CZK bn</i>	-	-	-	-	-	-	-	-	-	-
	<i>% growth</i>	-	-	-	-	-	-	-	-	-	-
Other current taxes	<i>CZK bn</i>	10	10	11	11	12	11	11	11	11	11
	<i>% growth</i>	-1.4	0.0	5.4	2.2	4.4	-5.8	-0.6	-0.8	4.0	-2.8
Social security contributions	<i>CZK bn</i>	607	629	663	703	760	834	895	909	1 013	1 084
	<i>% growth</i>	1.1	3.6	5.5	6.1	8.0	9.8	7.3	1.6	11.4	7.0
Social insurance	<i>CZK bn</i>	372	385	406	431	470	516	555	543	598	642
	<i>% growth</i>	0.4	3.3	5.6	6.2	9.0	9.8	7.5	-2.2	10.2	7.4
Health insurance	<i>CZK bn</i>	227	237	249	264	281	308	329	354	402	427
	<i>% growth</i>	2	4	5	6	6	10	7	8	13	6
Payments for state-insured	<i>CZK bn</i>	53.7	59.9	60.9	62.3	65.3	68.4	71.9	97.3	126.3	129.4
	<i>% growth</i>	1.5	11.5	1.8	2.1	4.8	4.8	5.1	35.4	29.9	2.4
Injury insurance	<i>CZK bn</i>	6	6	7	7	8	8	9	9	10	10
	<i>% growth</i>	0.2	0.9	4.0	5.5	6.7	9.7	7.2	1.4	5.4	6.4
Imputed social contributions	<i>CZK bn</i>	1	1	1	1	1	1	2	3	4	5
	<i>% growth</i>	4.6	-21.5	40.1	-1.9	16.1	21.9	30.9	70.3	11.9	35.0
Taxes on production and imports	<i>CZK bn</i>	521	513	562	587	626	647	688	651	705	767
	<i>% growth</i>	3.9	-1.6	9.5	4.4	6.7	3.4	6.3	-5.3	8.2	8.8
Taxes on products ¹⁾	<i>CZK bn</i>	501	489	538	562	601	619	650	611	661	729
	<i>% growth</i>	4.7	-2.3	10.0	4.4	6.9	3.1	4.9	-5.9	8.2	10.2
Value added tax	<i>CZK bn</i>	304	319	333	354	388	409	435	422	464	537
	<i>% growth</i>	6.2	5.2	4.3	6.2	9.5	5.4	6.6	-3.0	9.7	15.8
Excises	<i>CZK bn</i>	179	151	183	181	186	186	188	177	183	172
	<i>% growth</i>	1.6	-15.4	21.0	-0.8	2.3	0.0	1.3	-5.8	3.3	-6.1
Other taxes on products ²⁾	<i>CZK bn</i>	19	19	22	27	28	25	26	12	15	20
	<i>% growth</i>	10.5	0.0	17.5	20.4	3.9	-8.6	3.9	-55.9	28.9	34.1
Other taxes on production ³⁾	<i>CZK bn</i>	20	24	24	25	25	28	38	40	44	38
	<i>% growth</i>	-13.1	18.4	-0.3	5.3	2.4	9.9	37.2	4.9	8.7	-12.2
Capital taxes	<i>CZK bn</i>	0	0	0	0	0	0	0	0	0	0
	<i>% growth</i>	-33.3	-93.5	10.0	54.5	70.6	-24.1	-45.5	191.7	-40.0	19.0

¹⁾ Taxes that are payable per unit of good or service produced or transacted.

²⁾ This item contains, for example, customs duty, taxes from imported agricultural products, taxes from financial and capital transactions, payments from entertainment, lottery, game and betting taxes and other.

³⁾ All taxes that enterprises incur as a result of engaging in production, independently of the quantity or value of the goods and services produced or sold (real estate tax, road tax, waste water toll etc.).

Source: CZSO (2023b).

Table A.3: General Government Expenditure

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total expenditure	<i>CZK bn</i>	1 767	1 852	1 940	1 907	1 992	2 196	2 378	2 696	2 841	3 026
	<i>% growth</i>	-3.3	4.8	4.7	-1.7	4.5	10.3	8.2	13.4	5.4	6.5
Compensation of employees	<i>CZK bn</i>	367	380	398	419	462	521	576	633	676	690
	<i>% growth</i>	2.0	3.5	4.8	5.4	10.1	12.8	10.5	10.0	6.8	2.1
Intermediate consumption	<i>CZK bn</i>	270	274	284	291	296	326	339	346	355	393
	<i>% growth</i>	4.1	1.5	3.5	2.8	1.6	10.0	4.1	2.0	2.5	10.8
Social benefits other than in kind ¹⁾	<i>CZK bn</i>	564	576	591	605	624	658	709	821	859	936
	<i>% growth</i>	1.8	2.0	2.6	2.5	3.1	5.5	7.7	15.8	4.7	9.0
Social transfers in kind	<i>CZK bn</i>	133	140	142	148	152	160	177	205	219	226
	<i>% growth</i>	2.6	4.8	1.4	4.3	3.1	4.7	10.9	15.8	7.1	2.9
Property income	<i>CZK bn</i>	55	57	49	44	38	40	41	44	46	78
	<i>% growth</i>	-5.8	2.6	-13.0	-10.6	-14.2	6.7	1.5	7.6	5.1	69.4
Interest	<i>CZK bn</i>	55	56	49	44	38	40	41	44	46	78
	<i>% growth</i>	-4.9	2.0	-12.7	-10.6	-13.6	5.8	1.3	8.0	5.4	69.2
Other property income	<i>CZK bn</i>	0	1	0	0	0	0	0	0	0	1
	<i>% growth</i>	-69.4	119.1	-44.4	-1.8	-91.2	1246.4	29.7	-24.9	-30.8	105.1
Subsidies	<i>CZK bn</i>	96	99	105	108	110	119	128	173	200	151
	<i>% growth</i>	5.1	3.8	5.6	2.6	1.7	8.8	7.3	35.1	15.8	-24.6
Gross fixed capital formation	<i>CZK bn</i>	152	178	236	155	171	224	253	277	287	316
	<i>% growth</i>	-10.0	16.8	32.8	-34.3	10.2	31.3	12.6	9.5	3.8	10.0
Capital transfers ²⁾	<i>CZK bn</i>	39	60	41	36	30	35	36	67	55	53
	<i>% growth</i>	-67.5	53.4	-32.3	-12.8	-14.9	16.2	1.3	87.8	-17.5	-3.7
Investment grants ³⁾	<i>CZK bn</i>	21	18	15	13	15	23	18	22	23	25
	<i>% growth</i>	-32.2	-14.5	-19.1	-12.8	14.4	57.6	-20.3	18.1	7.7	7.8
Other capital transfers	<i>CZK bn</i>	18	42	26	23	16	12	17	45	32	28
	<i>% growth</i>	-79.8	133.5	-37.9	-12.8	-31.4	-22.6	42.4	162.3	-29.6	-12.1
Other expenditure	<i>CZK bn</i>	90	89	95	100	109	113	120	130	142	182
	<i>% growth</i>	7.3	-1.2	6.6	5.6	9.1	3.6	6.0	8.5	9.5	28.2
Final consumption expenditure	<i>CZK bn</i>	817	840	875	910	959	1 050	1 134	1 243	1 310	1 371
	<i>% growth</i>	2.7	2.8	4.1	4.0	5.4	9.5	8.0	9.5	5.4	4.6
Collective consumption ⁴⁾	<i>CZK bn</i>	378	384	405	423	442	484	511	538	543	576
	<i>% growth</i>	3.5	1.7	5.4	4.3	4.6	9.6	5.6	5.2	0.9	6.2
Individual consumption	<i>CZK bn</i>	439	456	470	487	517	566	623	705	768	794
	<i>% growth</i>	2.1	3.8	3.1	3.6	6.1	9.5	10.2	13.1	8.9	3.5

¹⁾ Social benefits, which should serve households to relieve their costs or losses stemming from existence or development of some risks or needs. Mainly benefits paid in case of old age, disability, sickness, motherhood, unemployment, work injury, work sickness, current social need etc.

²⁾ Transactions of capital distribution, which have no influence either on beneficiary's ordinary income or these transaction's payer but on amount of their net property. Both in cash and in kind.

³⁾ Capital transfers in cash or in kind made by governments to other institutional units to finance all or part of the costs of their gross fixed capital formation.

⁴⁾ Value of all collective services provided to the whole society or to specific groups, i.e. expenditure for public services, defence, security, justice, health protection, environmental protection, research and development, infrastructure development and economy.

Source: CZSO (2023b), MF CR.

Table A.4: General Government Net Lending/Borrowing by Subsectors

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
General government	<i>CZK bn</i>	-53	-90	-30	34	77	48	17	-329	-311	-218
Central government	<i>CZK bn</i>	-66	-95	-58	-20	27	8	-32	-344	-357	-282
Local governments	<i>CZK bn</i>	12	8	26	50	42	24	38	26	56	64
Social security funds	<i>CZK bn</i>	0.9	-2.7	1.9	4.9	8.2	16.6	11.4	-11.7	-9.3	0.4

Source: CZSO (2023b).

Table A.5: General Government Debt by Instruments

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
General government debt	<i>CZK bn</i>	1 840	1 819	1 836	1 755	1 750	1 735	1 740	2 150	2 567	2 998
	<i>% growth</i>	1.9	-1.2	0.9	-4.4	-0.3	-0.9	0.3	23.5	19.4	16.8
Currency and deposits	<i>CZK bn</i>	9	14	7	9	6	9	5	11	16	22
	<i>% growth</i>	-5.2	56.2	-48.8	31.1	-35.6	47.0	-40.8	112.6	48.0	38.1
Securities other than shares	<i>CZK bn</i>	1 639	1 623	1 648	1 593	1 602	1 554	1 596	2 012	2 358	2 597
	<i>% growth</i>	2.2	-1.0	1.6	-3.4	0.6	-3.0	2.7	26.1	17.2	10.2
Loans	<i>CZK bn</i>	192	182	181	153	141	172	139	127	193	378
	<i>% growth</i>	-0.1	-5.3	-0.9	-15.5	-7.4	21.8	-19.0	-8.8	51.6	96.2

Note: Government debt consists of following financial instruments: currency and deposits, securities issued other than shares excluding financial derivatives and loans. It is expressed in the nominal value, which is considered equivalent to the face value. It is consolidated, i.e. the debt in holding of other subjects of the government sector is omitted.

Source: CZSO (2023b).

Table A.6: General Government Balance and Debt of EU Countries

in % of GDP

	Balance					Debt				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
EU27	-0.5	-6.7	-4.7	-3.3	.	77.7	90.0	87.4	83.5	.
EA20 ¹⁾	-0.6	-7.1	-5.2	-3.6	-3.3	84.1	97.2	94.7	90.9	.
Austria	0.6	-8.0	-5.8	-3.5	-2.7	70.6	83.0	82.5	78.4	76.4
Belgium	-2.0	-8.9	-5.4	-3.5	-5.2	97.6	111.8	108.0	104.3	107.4
Bulgaria	2.1	-3.8	-4.0	-2.9	-3.0	20.0	24.6	23.9	22.6	22.9
Croatia	0.2	-7.3	-2.5	0.1	-0.3	70.9	86.8	78.1	68.2	60.7
Cyprus	0.9	-5.7	-1.9	2.4	2.5	93.0	114.9	99.3	85.6	79.5
Czech Republic ²⁾	0.3	-5.8	-5.1	-3.2	-3.6	30.0	37.7	42.0	44.2	44.7
Denmark	4.1	0.4	4.1	3.3	2.0	33.7	42.3	36.0	29.8	30.8
Estonia	0.1	-5.4	-2.5	-1.0	-3.3	8.5	18.6	17.8	18.5	19.4
Finland	-0.9	-5.6	-2.8	-0.8	-2.4	64.9	74.7	72.5	73.3	74.2
France	-3.1	-9.0	-6.5	-4.8	-4.9	97.4	114.6	112.9	111.8	109.7
Germany	1.5	-4.3	-3.6	-2.5	-2.4	59.6	68.8	69.0	66.1	65.2
Greece	0.9	-9.7	-7.0	-2.4	-1.8	180.6	207.0	195.0	172.6	159.3
Hungary	-2.0	-7.6	-7.2	-6.2	-5.2	65.3	79.3	76.7	73.9	69.8
Ireland	0.5	-5.0	-1.5	1.7	1.8	57.1	58.1	54.4	44.4	42.1
Italy	-1.5	-9.6	-8.8	-8.0	-5.2	134.2	154.9	147.1	141.7	140.0
Latvia	-0.5	-4.5	-7.2	-4.6	-4.0	36.7	42.2	44.0	41.0	39.6
Lithuania	0.5	-6.5	-1.1	-0.7	-2.3	35.8	46.2	43.4	38.1	37.9
Luxembourg	2.2	-3.4	0.6	-0.3	-1.9	22.4	24.6	24.5	24.7	25.0
Malta	0.5	-9.6	-7.5	-5.7	-5.0	40.0	52.2	54.0	52.3	54.5
Netherlands	1.8	-3.7	-2.2	-0.1	-1.6	48.6	54.7	51.7	50.1	47.6
Poland	-0.7	-6.9	-1.8	-3.7	-5.6	45.7	57.2	53.6	49.3	49.3
Portugal	0.1	-5.8	-2.9	-0.3	-0.4	116.6	134.9	124.5	112.4	106.1
Romania	-4.3	-9.3	-7.2	-6.3	-4.4	35.1	46.8	48.5	47.2	47.0
Slovakia	-1.2	-5.3	-5.2	-2.0	-6.8	48.0	58.9	61.1	57.8	57.1
Slovenia	0.7	-7.6	-4.6	-3.0	-4.5	65.4	79.5	74.4	72.3	69.9
Spain	-3.1	-10.1	-6.7	-4.7	-3.9	98.2	120.3	116.8	111.6	110.5
Sweden	0.5	-2.8	0.0	1.1	-0.2	35.6	39.9	36.5	32.9	30.3

¹⁾ 20 current member states – Austria, Belgium, Croatia, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, Spain.

²⁾ Data for 2023 are based on the current estimate of MF CR.

Source: Eurostat (2023b).

Table A.7: Transactions of General Government of EU Countries in 2022*in % of GDP*

	Revenue	Expenditure	Compen. of employees	Cash social benefits	Collective consumption	Individual consumption	Investments ¹	Interest expenditure
European Union	46.3	49.6	10.1	16.2	7.9	13.4	3.2	1.6
Euro Area	46.9	50.5	9.9	16.8	7.9	13.6	3.0	1.7
Austria	49.6	53.2	10.4	18.2	7.1	13.5	3.4	0.9
Belgium	49.6	53.2	12.3	17.2	8.3	15.5	2.7	1.5
Bulgaria	38.5	41.4	10.1	12.0	9.1	9.2	2.3	0.4
Croatia	45.0	44.9	11.2	11.9	10.1	11.1	3.8	1.4
Cyprus	41.2	38.8	11.4	11.9	7.8	10.7	2.6	1.5
Czech Republic	41.4	44.6	10.2	13.8	8.5	11.7	4.7	1.1
Denmark	48.3	45.0	13.6	13.7	6.5	15.3	3.1	0.7
Estonia	38.8	39.8	10.5	11.5	8.4	11.1	5.1	0.1
Finland	52.5	53.3	12.4	17.6	8.2	15.8	4.1	0.6
France	53.5	58.3	12.4	19.4	8.2	15.8	3.7	1.9
Germany	47.0	49.5	7.9	16.0	8.0	14.0	2.6	0.7
Greece	50.5	52.9	11.0	18.0	10.1	9.8	3.6	2.5
Hungary	42.6	48.8	10.3	10.4	11.4	9.1	5.4	2.8
Ireland	22.9	21.2	5.7	5.6	3.7	7.6	2.0	0.7
Italy	48.0	56.1	9.6	20.9	7.9	11.3	2.7	4.3
Latvia	35.8	40.4	10.6	11.8	9.3	9.7	3.9	0.4
Lithuania	35.7	36.4	10.1	12.1	6.6	10.2	3.2	0.4
Luxembourg	43.6	43.9	10.2	15.6	7.0	10.9	4.2	0.2
Malta	34.2	39.9	10.7	7.7	6.9	11.7	3.4	1.0
Netherlands	43.4	43.5	8.3	9.9	8.1	17.0	3.2	0.5
Poland	40.2	43.9	9.8	15.0	8.1	10.2	4.1	1.5
Portugal	43.8	44.1	10.7	16.5	7.5	10.1	2.4	1.9
Romania	33.7	40.0	10.0	12.2	9.2	7.1	4.3	1.5
Slovakia	40.2	42.3	10.6	14.5	10.6	10.0	3.0	1.0
Slovenia	44.1	47.2	11.4	16.0	7.4	12.1	5.4	1.1
Spain	42.6	47.4	11.5	17.0	8.1	12.2	2.8	2.4
Sweden	48.7	47.6	11.7	11.3	7.1	17.8	4.8	0.5

¹⁾ *Gross fixed capital formation.*²⁾ *20 current member states – Austria, Belgium, Croatia, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, Spain.**Source: Eurostat (2023a).*

B Glossary

Accrual methodology means that economic transactions are recorded at the time an economic value is created, transformed or cancelled or when amounts due or claims increase or decrease, regardless of when the transaction will be paid (unlike the cash principle employed in the budgeting process of the state budget).

Capital transfers include acquisition or loss of an asset without equivalent consideration. They may be made in cash or in kind.

Cash social benefits are social security benefits (e.g. pensions, social welfare benefits) paid out from the government to households.

Compensation of employees is composed of wages and salaries incl. accessories, i. e. contributions paid by employers (social security contributions or other contributions such as the Cultural and Social Needs Fund). This is a component of the final consumption of the general government.

Cyclically adjusted balance of the general government sector is used to identify the fiscal policy stance because it does not include impact of those parts of revenues and expenditures which are generated by the position of the economy in the business cycle.

Discretionary measures are direct interventions of the government in the structure of general government revenue and expenditure.

Government **final consumption expenditure** includes government payments which are subsequently used for consumption of individuals in the household sector (mainly reimbursement of healthcare by health insurance companies for services provided by medical facilities) or they are consumed by the entire society (such as expenditure on army, police, judiciary, state administration, etc.).

Fiscal effort is an annual change in the structural balance indicating expansive or restrictive fiscal policy in a given year.

Fiscal impulse is used to assess the impact of the government's fiscal policy on economic growth. It is usually expressed in annual terms, where a decrease in certain government revenues or an increase in certain government expenditures represents a positive impulse, and an increase in certain revenues or a decrease in certain expenditures represents a negative impulse. The basis for calculation of the fiscal impulse is the YoY change in the cyclically-adjusted balance with the opposite sign, adjusted for: interest payments, income from EU Funds, financial mechanisms and contributions to the EU budget and certain one-off and temporary measures. See also MF CR (2015).

The **general government sector** is defined by internationally harmonized rules at the EU level. In the CR, the general government sector includes, in the ESA 2010 methodology, three main subsectors: central government, local government and social security funds.

Government Deficit and Debt Notification is quantification of fiscal indicators submitted by each EU Member State twice a year to the European Commission, according to the Council Regulation (EC) No. 479/2009 of 25 May 2009 on the

application of the Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Community, as amended. It is compiled for the general government sector using the accrual methodology. The Czech Statistical Office processes data for the past four years $t-4$ to $t-1$; MF CR supplies prediction for the current year t . Notification includes a basic set of notification tables, which include mainly key indicators such as balance and debt, including explanations of the link to balance in the national methodology as well as a number of additional questionnaires such as a table of state guarantees, etc.

Gross fixed capital formation expresses net acquisition of fixed capital, i.e. its acquisitions less disposals, achieved by production activities of production and institutional units. It represents investment activities of units.

Intermediate Consumption is a component of the final consumption of the general government and contains the general government purchase of goods and services, which are consumed in the given time period.

Medium-Term Objective (MTO) is expressed in the structural balance and implies long-term sustainability of public finance of the country. For the CR it currently corresponds to the level of structural balance of -0.75% of GDP.

One-off and other temporary operations are measures on the expenditure or revenue side which only have a temporary impact on general government balance, and they often stem from events outside the direct control of the government (e.g. expenditures on removing the consequences of floods).

Output gap is the difference between real and potential product (often expressed as a ratio to potential product). It determines the position of the economy in the business cycle.

Social transfers in kind reflect the value of goods and services provided particularly in the form of health and social care, education, housing. They are mostly in-kind benefits related to the health insurance (amounts for medical devices, medical or dental treatment, surgery, etc.), funded by health insurance companies to those, who provide these goods and services. They are a component of the final consumption of the general government.

Subsidies are current non-repayable payments made by the government sector or European Union institutions to resident producers.

Structural balance is the difference between cyclically adjusted balance, and one-off and temporary operations (for both components see above).

General government **tax revenue** is divided into consumption, labour and capital taxation. Consumption taxation is mainly represented by value-added and excise taxes, as well as import duties, gambling taxes, certain other items of product taxes, pollution taxes and household licence payments. Labour taxation consists of personal income tax and social and health insurance contributions. Capital taxation includes, in addition to corporate income tax, taxes on financial transactions, certain items of taxes on production and current taxes on capital.

C Lists of Thematic Chapters and Boxes of Previous Fiscal Outlooks of the Czech Republic

List of Thematic Chapters of Previous Fiscal Outlooks of the Czech Republic

Published	Topic
November 2015	Fiscal Impulse Fiscal Framework Reform in the Czech Republic
November 2016	Long-term Projections of Public Expenditure on Health Care
November 2017	Fiscal Councils
November 2019	Proposal for the New EU Fiscal Rule
January 2021	Measures to support the Economy in Response to the COVID-19 Pandemic
November 2021	EU Funds and their Impact in the Czech Republic
November 2022	Participation Rates and Setting up of Social Systems
November 2023	Consolidation Package

List of Thematic Boxes of Previous Fiscal Outlooks of the Czech Republic

Published	Box Topic
May 2015	Box 1: Expansion of the General Government Sector
November 2015	Box 1: Expansion of the General Government Sector Box 2: Czech Economy Growth and the Tax Revenue Development in 2015 Box 3: Expenditure Rule Technique
November 2016	Box 1: Effect of Supply Factors on Health-Care Expenditure
November 2017	Box 1: Requirements of Directive 2011/85/EU and Regulation No 473/2013 on establishment of national fiscal councils Box 2: Selected recommendations of the European Fiscal Board for the implementation of fiscal policy and public budgeting in the euro-area countries for 2018
November 2018	Box 1: Changes in the Methodical Classification of Certain Revenue and Expenditure of General Government Sector Box2: National Methodology for the Classification of One-off and Other Temporary Measures
November 2019	Box 1: Healthy Ageing Box 2: Pension Expenditure in the CR and EU Member States Box 3: Excluding Specific Items from Expenditure Rules
January 2021	Box 1: Reaction of the Euro area Yield Curve of the Government Bonds on the ECB's measures Box 2 OECD Conclusions in the Review of the Pension System of the Czech Republic Box 3: Selected Studies to prevent the Spread of the Disease and mitigate the Economic Impact Box 4: Temporary Framework for State Aid Measures to support Economy Affected by COVID-19
November 2021	Box 1: Yield "Anomaly" on the Bond Market in EU Countries
November 2022	Box 1: Annual Update of Eurostat's Demographic Projections Box 2: Analysis of Factors affecting the Labour Market Position of Women with Children

