Ministry of Finance
Czech Republic

Convergence Programme
of the Czech Republic

April 2019

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List of Abbreviations

CNB	Czech National Bank
COFOG	Classification of the Functions of Government
CP	Convergence Programme of the Czech Republic
CZK	Czech koruna currency code
CZSO	Czech Statistical Office
EC	European Commission
ESA 2010	European System of National and Regional Accounts from year 2010
EU	European Union containing 28 countries
EUR	euro currency code
GDP	gross domestic product
MF CR	Ministry of Finance of the Czech Republic
p. a.	*per annum*
pp	percentage point
US	United States of America
USD	US Dollar currency code
VAT	value-added tax
YoY	year-on-year

Symbols Used in Tables

A dash (–) in place of a number indicates that the phenomenon did not occur or is not possible for logical reasons.
"Billion" means a thousand million.

Cut-off Date for Data Sources

Macroeconomic data used pertain to the 3 April 2019 release, fiscal data to the 5 April 2019 release and verification of the macroeconomic scenario by the Committee on Budgetary Forecasts to the 15 April 2019 release. Notification of general government deficit and debt was approved by Eurostat on 23 April 2019.

Note

In some cases, published aggregate data do not match the sums of individual items to the last decimal place due to rounding.

Introduction and Summary

The public finances of the Czech Republic ended in a surplus last year for the third time in a row, with the contribution of all of its components. The surplus, even after adjustment for the effects of the economic boom, was accompanied by strong investment activity by central and local government. Although the Czech Republic managed to use all the funds allocated in the current financial which could be used by the end of 2018, the growth of national investment exceeded 20%. As regards taxes, we could see their more effective collection, with the European Commission calculations showing the gap between the maximum and actual VAT revenue significantly reduced. This is a direct consequence of the measures in place to combat tax evasion, in particular VAT control statement and electronic registration of sales.

The Convergence Programme of the Czech Republic 2019–2022, submitted in accordance with Article 121 of the Treaty on the Functioning of the European Union and the applicable version of Council Regulation (EC) No. 1466/97, was approved by the Government of the Czech Republic on 29 April 2019. The Convergence Programme is consistent with the National Reform Programme of the Czech Republic (OG, 2019), which complements it with a detailed description of the implemented and planned reform measures. It is compiled in accordance with the rules of the opinion of the Council's Economic and Financial Committee on the content and format of stability and convergence programmes (EFC, 2017). The document was also presented, discusses and acknowledged in the relevant committees of the Chamber of Deputies and the Senate of the Parliament of the Czech Republic in April 2019. The opinion of the Council of the European Union of May 2018 on last year's Convergence Programme of the Czech Republic was acknowledged in June 2018 by a resolution of the competent Committee on European Affairs of the Chamber of Deputies, and in July 2018 it was discussed in the Senate, which agreed with the recommendations for the Czech Republic.

The Convergence Programme of the Czech Republic is divided into seven interconnected chapters. The first chapter presents the purposes and objectives of the Government's fiscal policy and the monetary policy framework of the Czech National Bank, whose implications for the macroeconomic and fiscal scenarios elaborate the following chapters.

The macroeconomic scenario in Chapter 2 is based on the Macroeconomic Forecast of the Ministry of Finance published in April (MF CR, 2019a). GDP growth reached 2.9% in 2018; for the years 2019 and 2020 we predict the economy to grow by 2.4% in both years. The main barriers to growth are the slowing down of our business partner economies and the shortage of labour, with labour market showing significant signs of overheating. We believe that the unemployment rate has already reached its bottom, and in the following years it should hover around 2.2%. The inflation rate should remain close to 2% inflation target of the Czech National Bank, despite the current inflationary trend in the national economy. In terms of the balance of current transactions, the Czech Republic's external relations can be considered balanced.

The general government sector reported a surplus of 0.9% of GDP in 2018 and the debt fell to 32.7% of GDP, i.e. below the 2009 level. The forecast for 2019, which, like the Government's fiscal strategy in future years, is addressed in Chapter 3, is based on the results of the government balance and debt notification, confirmed by Eurostat on 23 April 2019, and on Government-approved economic policy objectives as of 5 April 2019. For 2019, we estimate a surplus of 0.3% of GDP and an almost balance in structural terms. Therefore, the Czech Republic continues to meet its medium-term budgetary objective and this should also be the case over the entire forecast horizon. The general government debt should drop below 30% of GDP at the end of the forecast period.

The macroeconomic and fiscal scenarios were assessed by the Committee on Budgetary Forecasts on 15 April 2019 as realistic. In addition, in Chapter 4 the baseline scenario is supplemented to include a sensitivity analysis, which simulates the impact of alternative scenarios of economic developments based on a higher interest rate, lower economic growth in the EU and higher USD price of crude oil. An equally important part of this chapter is also an analysis of deviations of the current scenario from the scenario of the last Convergence Programme.

Chapter 5 addresses aspects of long-term sustainability of public finances. Total expenditure related to the demographic change should increase by more than 6 pp over the long term, mainly as a result of higher pension expenditure and increased health and long-term care demands. With regard to ageing, the Czech Republic is assessed as a medium-risk country in terms of long-term sustainability, which is also reflected in the stricter medium-term budgetary objective. In contrast, the level of public guarantees has practically no effect on long-term sustainability.

Chapter 6 covers qualitative aspects of revenue and expenditure in the general government sector. They mainly include the characteristics of tax changes related to the fight against tax evasion or the simplification of the tax administration. In addition, measures to rationalize public spending are presented.

The last chapter 7 deals with implemented or planned changes in the institutional environment of fiscal and budgetary policy and enhanced transparency of public finances. Emphasis is placed on the implementation of measures related to the rules of fiscal responsibility, the scope and quality of published data and anti-corruption measures, such as the law on conflicts of interest or the Supreme Audit Office Act amendment.

1 Purposes and Objectives of Economic Policy

On 27 June 2018, ANO 2011 and the Czech Social Democratic Party formed a minority government, which, with the support of the Communist Party of Bohemia and Moravia, won the vote of confidence on 12 July 2018. The government has set a number of objectives including the clarification of the rules for the funding of individual components of public finances or a pension reform. Concerning investment activities, its aim is to maximize the use and efficiency of the European Structural and Investment Funds.

After the exchange rate floor was ended in April 2017, the monetary policy implemented by the Czech National Bank has returned to the standard interest rate regime. During 2018, monetary policy rates rose five times to the current 1.75% for the two-week repo rate. Tightening of monetary conditions should also be supported by the appreciation of the CZK.

1.1 Fiscal Policy

Since 2017 budgetary and fiscal policy has been subject to the principles and rules set out in Act No. 23/2017 Coll., on fiscal responsibility rules. In the case of the State budget and State funds, this is in conformity with the medium-term budgetary objective, which the Czech Republic has set at −0.75% of GDP for the period 2020–2022 (see Box No. 3 in Chapter 7). Adhering to the objective ensures not only counter-cyclical impact of fiscal policy, but also long-term sustainability of public finances as a whole. Although the specific amount of state budget and state fund budget balances depend on the decision of the Government or the Chamber of Deputies of the Czech Parliament, it must be set within the framework of medium-term budgetary objective. Compliance with the framework is facilitated by two new institutions – the Czech Fiscal Council and the Committee on Budgetary Forecasts.

The revenue side is largely conditional on the development of relevant macroeconomic fundamentals, practically throughout the Convergence Programme period. The total amount of discretionary measures, approved by the Government, on the revenue side in 2020–2022 is minimal. The dominant measure is the discussed amendment to the Registration of Sales Act, which extends the range of stakeholders in line with the original Phase 3 and 4, while the positive impact on public budgets is offset by a reduction in the VAT rate on selected commodities. On the expenditure side, the Government is discussing several measures, particularly in the area of pensions and parental benefits. These measures are reflected in the prediction, but their concrete form is not yet definitive. The comparison with the minimalist scenarios is then included in Subchapter 3.2.3.

In light of the slowing economic growth and the gradual closing of the output gap, the Czech Government's objective is, after moderate fiscal expansion boosting consumption and investments, to maintain a stable trajectory of structural balances of public finances in the coming years (see Table 1.1). Over the entire period, the Czech Republic should therefore continue to meet its medium-term budgetary objective under the preventive arm of the Stability and Growth Pact.

Table 1.1: Fiscal Policy Stance
(in % of GDP)

	2020	2021	2022
General government balance	**-0.2**	**-0.3**	**-0.5**
Structural balance	-0.5	-0.5	-0.5
Primary structural balance	0.3	0.2	0.2

Source: MF CR.

1.2 Monetary Policy

CNB's monetary policy has been carried out in the inflation targeting regime since 1998. Since 1 January 2010, the inflation target is defined as a YoY growth in the consumer price index of 2% with a tolerance band of ±1 pp. The CNB defines the inflation target as medium-term and therefore tolerates some temporary deviations of actual inflation from the inflation target (e.g. due to adjustments of indirect taxes), where monetary policy does not normally respond to its primary impacts and focuses only on secondary manifestations.

During 2018, the CNB increased the two-week repo rate by 0.25 pp, five times in total, from 0.50% in January to 1.75% in December. It was a response not only to domestic inflationary pressures (primarily wage and salary increases, strong domestic demand growth in the environment of a positive output gap), but also to a reinflow of import prices (primarily a weaker CZK exchange rate and a rise in foreign prices). Despite the rising interest rate differential vis-à-vis the euro area, the CZK exchange rate against the euro depreciated by 1.0% YoY to EUR 1 = CZK 25.7 in March. We expect the CZK to re-establish appreciation in the upcoming period, similarly with the CNB's Inflation Report of February 2019 (CNB, 2019b).

The joint document of the Ministry of Finance of the Czech Republic and the CNB "Evaluation of the Fulfilment of the Maastricht Convergence Criteria and the Degree of Economic Alignment of the Czech Republic with the Euro Area", approved by the Government in December 2018 (Government Resolution No. 834/2018), recommended not to set a target date for euro area accession yet. The Czech Republic's actual readiness to adopt the euro has improved compared to previous years, although some shortcomings remain. The main obstacle to joining the monetary union is the unfinished process of real economic convergence to the euro area average, although it has resumed in recent years. However, the gap in most key indicators, especially price and wage levels, remains significant (see section 2.4). There are also persisting significant differences in the structure of the Czech economy compared to the euro area. Given the population ageing, the problem of the long-term sustainability of public finances is yet to be resolved. An obstacle to euro adoption is also the misalignment of the Czech and euro area financial cycles. Over the last years, the shape of the institutions and the rules of the euro area have changed considerably, and there are ongoing discussions on deepening the integration. With these unresolved problems, the absence of national monetary and exchange rate policy would lead to reduced effectiveness of the common monetary policy and sufficient space for the stabilization of public finances might not be created. With this in mind, the Government has not yet determined the target date of Euro-area accession, and it will not seek to enter the European exchange rate mechanism II for now. The updated document and recommendations will be submitted to the Government by the end of 2020.

2 Macroeconomic Scenario

The Czech economy appears to be beyond the peak of the business cycle. GDP growth should be exclusively driven by domestic demand, especially consumption of households and investments in fixed capital. The average inflation rate should hover within the tolerance band of the CNB's inflation target, though rather with a declining trend. The labour market shows signs of overheating and creates barriers to further extensive economic growth. The mismatch between the supply of and the demand for labour is reflected in wage developments, though the situation should undergo a correction as economic dynamics slow down gradually. The external position of the Czech economy, captured by the current external balance, should remain in a moderate surplus.

2.1 World Economy and Technical Assumptions

As a result of weakening world trade, global economic activity began to slow down in the second half of 2018, with global economic growth reaching 3.6% in 2018 as a whole (IMF, 2019). While the US economy grew by 2.9% as a result of the fading fiscal stimulus, performance of the euro area slowed down to 1.8%. Also, many emerging Asian economies, including China, have seen a slowdown in economic growth.

Real GDP in the EU increased by 1.9% in 2018. Growth was driven by domestic demand, especially household expenditures on consumption and gross fixed capital formation. Household consumption was positively influenced by further improvement in the labour market, still relatively high level of consumer confidence and low interest rates, while investments benefited from favourable financial conditions. The contribution of net exports was almost negligible.

Due to continuing tensions in international trade, the uncertainty surrounding the United Kingdom's withdrawal from the EU, or deteriorating consumer and business confidence, the EU's economic growth should slow down further in 2019. In the medium-term, we expect the above-mentioned factors to subside and the growth dynamics to increase very slowly. We expect EU GDP growth to reach 1.3% in 2019 (versus 1.5% in the EC's Winter Forecast, 2019a) and then slightly accelerate to 1.6% (versus 1.7% in the EC's winter forecast, 2019a) in the next year. Economic activity should continue to be driven by household final consumption expenditures, which will be supported in the medium term in particular by growth in wages and salaries related to the labour market situation. However, in some European economies, economic growth is likely to be moderated by persisting structural problems, notably low labour productivity growth or high indebtedness of the private sector as well as of the general government.

In 2018, the average Brent crude oil price was USD 71 per barrel. In 2019 and 2020, we expect a slight decline in the price to USD 66 a barrel (versus USD 61 a barrel according to the EC forecast, 2019a) and then to USD 65 a barrel (compared to USD 61 a barrel according to the EC forecast, 2019a). In the following years, the crude oil price could slightly decrease further to USD 62 a barrel in 2022. The expected development in Brent crude oil prices over the horizon of the Convergence Programme reflects the curve of futures prices.

Based on the recent developments of the USD/EUR exchange rate, we have made a technical assumption of exchange rate stability at EUR 1.14/USD for 2019–2022. Therefore, we anticipate the same USD/EUR exchange rate for 2019 and 2020 as the EC in its Winter Forecast (EC, 2019a).

The CZK's exchange rate against the euro averaged CZK 25.6/EUR in 2018 and the CZK thus strengthened by 2.7%. The appreciation of the CZK should continue in the coming years, given the differential in labour productivity growth and interest rates, but will be dampened by increased risk aversion of investors. The pace of appreciation of the CZK/EUR exchange rate should gradually accelerate from 0.5% in 2019 to 1.9% in 2022.

Taking into account the expected inflation development and the anticipated set-up of monetary policy of the CNB and the European Central Bank, we expect a gradual slight increase in long-term interest rates of up to 2.4% in 2022.

Table 2.1: Assumptions of the Scenario

		2018	2019	2020	2021	2022
USD/EUR exchange rate	*annual average*	1.18	1.14	1.14	1.14	1.14
CZK/EUR exchange rate	*annual average*	25.6	25.5	25.1	24.6	24.2
Government bond yield to maturity 10Y	*in % p.a.*	2.0	2.2	2.4	2.4	2.4
PRIBOR 3M	*in % p.a.*	1.2	2.1	2.3	2.3	2.3
GDP EU28	*real growth in %*	1.9	1.3	1.6	1.8	2.0
Oil prices (Brent)	*USD/barrel*	71.4	66.0	64.7	62.9	61.6

Source: CNB (2019a), EIA (2019), Eurostat (2019). MF CR calculations.

2.2 Current Developments and a Medium-term Scenario

2.2.1 Economic Growth and the Demand Side

Real GDP growth slowed down to 2.9% in 2018. Gross fixed capital formation was the main growth-promoting factor, but final consumption expenditures of both households and the general government sector also increased. The foreign trade balance and the change in inventories then had a negative impact on economic growth.

Household consumption in 2018 was supported by an increase in employment and earnings, low interest rates and a high level of consumer confidence. An increase in the savings rate had an opposite effect. The continuing growth in wages and salaries will have a positive effect on the dynamics of household final consumption expenditures in 2019 and 2020, but the expected slight increase in the savings rate and low employment growth should weigh on their growth. A number of changes in the social area, in particular an increase in old-age pensions or a planned increase in parental allowance in 2020, should also have a positive effect. Real growth in household consumption could thus reach 2.9% in 2019, slowing slightly in 2020 to 2.8%. Given the forecast for the wage bill and expected inflation developments, household consumption could increase by 2.5% and 2.1% in 2021 and 2022, respectively.

The general government sector's real final consumption expenditures could increase by about 2% per year over the horizon of the Convergence Programme. This will be supported not only by the development of compensation of employees but also by the dynamics of intermediate consumption and social transfers in kind (see Chapter 3).

Gross fixed capital formation increased by 10.5% in 2018, driven both by private investments and dynamic investment activity of the general government (see Section 3.1), especially in the second half of the year. Private investments are stimulated by increases in gross operating surplus, slightly above-average capacity utilization in manufacturing, continuing – albeit slower – economic growth abroad and last but not least by a shortage of labour. Rising interest rates should have a roughly neutral effect on the dynamics of investment activity. Conversely, they could be slowed down by materialization of some significantly negative risks in the external environment (in particular the United Kingdom's withdrawal from the EU without a deal, the tensions in trade relations between the US and China, or the US and the EU). For investments of the general government sector, we expect growth in spending mainly financed from national resources. Planned purchases of military equipment worth more than CZK 80 billion (detailed information is not yet known) represent a positive risk, though rather in the medium-term. Investments should also be supported by the continuing implementation of projects co-funded by EU funds under the 2014–2020 financial perspective. The year 2018 was exceptional due to this factor, as it included the deadlines for using the 2014 and 2015 allocations. Growth in gross fixed capital formation could thus slow from 3.1% in 2019 to 2.6% in 2021. A slight acceleration to 2.9% is foreseen for the year 2022 due to the impending closure of the current financial perspective.

Net exports decreased GDP growth by 0.7 pp in 2018. Given the expected development of export markets and the predicted growth in investments, which are the most import-intensive component of domestic demand, the contribution of net exports to GDP growth in 2019 should be slightly negative; consequently, the external trade balance should be basically neutral with respect to economic growth.

With regard to the development of individual expenditure components of GDP, we expect economic growth to slow down very gradually over the horizon of the Convergence Programme, from 2.4% in 2019 and 2020 to 2.2% in 2022.

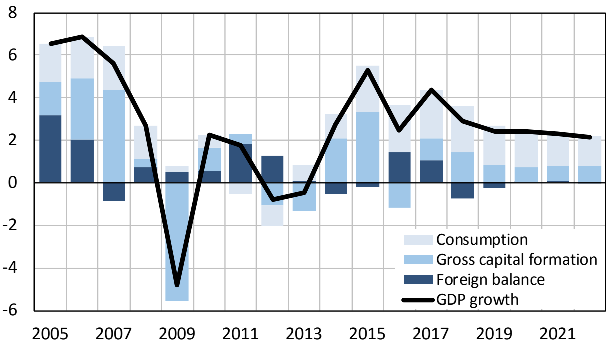
2.2.2 Potential Output and the Position of the Economy in the Cycle

Potential output growth accelerated slightly to 2.9% in 2018, outperforming the long-term average (since 1995) of 2.5% for the third consecutive year. The most significant component was the increase in total factor productivity with a contribution of almost 2 pp. The capital stock shows a relatively stable contribution of around 0.6 pp. Population ageing, connected also with a decrease in the size of the working-age population, reduced the dynamics of potential output by about 0.3 pp. On the other hand, a significant increase in the participation rate, reflected in a relatively dynamic increase in the labour force, more than compensates for this decline. The contribution of hours usually worked is more or less neutral.

With the predicted gradual decline in economic dynamics, potential product growth should be between 2.6% and 2.9% in the coming years. The structure of individual contributions should remain similar to that in previous years. This should lead to a gradual closing of the positive output gap from 1.7% in 2018 towards a balanced cyclical position.

Chart 2.1: Decomposition of GDP Growth

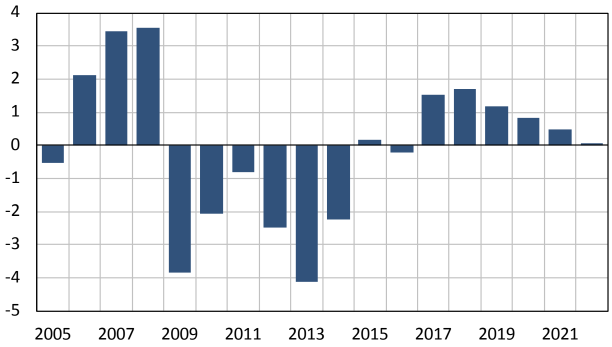
(growth in %, contributions to growth in percentage points)



Source: CZSO (2019a), MF CR (2019a). MF CR calculations and forecast.

Chart 2.2: Output Gap

(in % of potential product)



Note: The potential product and output gap are specified at the base of the gross value added, according to the MF CR method.
Source: MF CR calculations and forecast.

Table 2.2: Economic Output

(levels in CZK billions, increases in %, contributions to growth in percentage points)

	ESA Code	2018	2018	2019	2020	2021	2022
		Level	*Rate of change*				
Real GDP	B1*g	**5193**	**2.9**	**2.4**	**2.4**	**2.3**	**2.2**
Nominal GDP	B1*g	**5304**	**5.1**	**5.5**	**4.4**	**4.3**	**4.2**
Components of real GDP							
Private consumption expenditure	P.3	**2469**	**3.2**	**2.9**	**2.8**	**2.5**	**2.1**
Government consumption expenditure	P.3	**1004**	**3.7**	**2.2**	**1.9**	**1.9**	**1.9**
Gross fixed capital formation	P.51g	**1382**	**10.5**	**3.1**	**2.7**	**2.6**	**2.9**
Changes in inventories and net acquis. of valuables (% of GDP)	P.52+P.53	**-4**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.1**
Exports of goods and services	P.6	**4206**	**4.5**	**3.4**	**3.5**	**3.3**	**3.2**
Imports of goods and services	P.7	**3864**	**6.0**	**4.0**	**3.7**	**3.4**	**3.5**
Contributions to real GDP growth							
Final domestic demand		-	**4.8**	**2.7**	**2.4**	**2.3**	**2.1**
Changes in inventories and net acquis. of valuables	P.52+P.53	-	**-1.2**	**0.0**	**0.0**	**0.0**	**0.0**
External balance of goods and services	B.11	-	**-0.7**	**-0.3**	**0.0**	**0.1**	**0.0**

Note: Real levels are in 2017 prices. Changes in inventories and net acquisition of valuables on the sixth row express change in inventories as a per cent of GDP in current prices. The contribution of the change in inventories and net acquisition of valuables is calculated from real values.
Source: CZSO (2019a), MF CR (2019a). MF CR calculations and forecast.

2.2.3 Prices

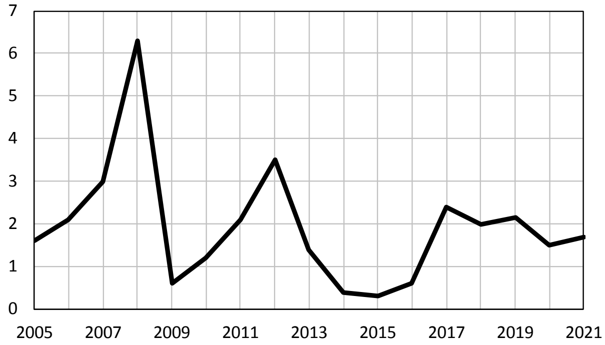
The inflation rate, measured by the harmonized index of consumer prices, reached 2.0% in 2018. Throughout the last year as well as at the beginning of this year, the YoY inflation hovered in a relatively narrow band around 2%. In 2019, GDP deflator should increase by 3.0%. The pace of the deflator should accelerate due to terms of trade and prices of capital goods (especially construction work), while the deflator of government final consumption expenditures should slow it down. In the following years, we expect an increase in deflator of around 2% given the slowing economic growth.

Increases in unit labour costs and growth in domestic demand in a positive output-gap environment should increase inflation throughout the horizon of the Convergence Programme. However, we expect that the importance of these factors will gradually diminish. The effect of the exchange rate on consumer prices should be approximately neutral in 2019, with the exchange rate expected to be an anti-inflationary factor in view of the expected moderate appreciation. In the same direction, but over the entire Convergence Programme horizon, the inflation rate should be affected by oil price developments.

The contribution of regulated prices to the inflation rate should be positive in 2019–2022. In the area of changes to indirect taxes, we expect that at the beginning of 2020, selected goods and services will be transferred to the second reduced VAT rate in connection with the expansion of electronic registration of sales. However, the effective price impact and the timing of this measure are associated with a considerable degree of uncertainty. Also, at the beginning of 2020, the VAT rate on heat and cold will be reduced. Overall, the contribution of administrative measures to inflation should be slightly positive, except in 2020, when the influence of the aforementioned changes to indirect taxes should outweigh the contribution of regulated prices.

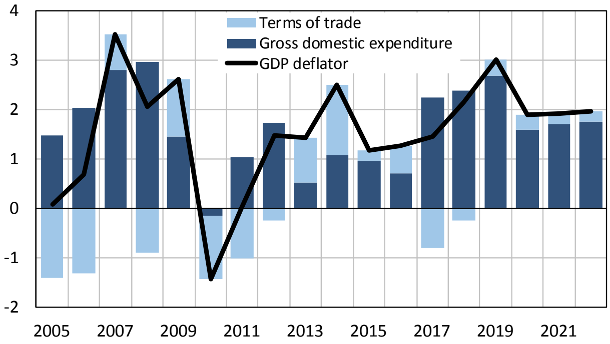
The harmonized index of consumer prices could thus increase by 2.1% this year, in 2020 inflation could slow down to 1.5%. In subsequent years, consumer prices could increase by 1.7% per year.

Chart 2.3: Harmonised Index of Consumer Prices
(YoY growth in %)



Source: Eurostat (2019a). MF CR calculations and forecast.

Chart 2.4: GDP Deflator
(YoY change in %, contributions in percentage points)



Source: CZSO (2019a). MF CR calculations and forecast.

Table 2.3: Prices of Goods and Services
(indices 2010=100, rate of change in %)

	2018	2018	2019	2020	2021	2022
	Level			*Rate of change*		
GDP deflator	**112.0**	**2.1**	**3.0**	**1.9**	**1.9**	**2.0**
Private consumption deflator	**111.4**	**2.6**	**2.6**	**1.7**	**1.8**	**1.8**
Harmonised index of consumer prices	**113.5**	**2.0**	**2.1**	**1.5**	**1.7**	**1.7**
Public consumption deflator	**118.2**	**5.0**	**4.2**	**2.3**	**2.3**	**2.3**
Investment deflator	**107.7**	**0.7**	**2.3**	**1.2**	**1.4**	**1.7**
Export price deflator (goods and services)	**104.5**	**-0.6**	**1.4**	**0.0**	**0.0**	**0.2**
Import price deflator (goods and services)	**103.8**	**-0.3**	**1.1**	**-0.4**	**-0.2**	**-0.1**
Average rate of inflation according to national consumer price index	**113.2**	**2.1**	**2.3**	**1.6**	**1.8**	**1.8**

Source: CZSO (2019a), Eurostat (2019). MF CR calculations and forecast.

Box 1: Differences between the Consumer Price Index and Harmonized Index of Consumer Prices

In its regular macroeconomic forecasts, the Ministry of Finance of the Czech Republic publishes a forecast of consumer prices on the basis of the national consumer price index (CPI) and the harmonized index of consumer prices (HICP) comparable across the EU.

Table 2.4: CPI and HICP Comparison
(in %)

	Y-o-Y growth in February 2019		Weight in 2019	
	CPI	**HICP**	**CPI**	**HICP**
Food and non-alcoholic beverages	1.3	1.2	17.8	18.5
Alcoholic beverages, tobacco	3.2	3.2	9.2	9.2
Clothing and footwear	-1.2	-1.2	4.1	4.6
Housing, water, energy, fuel	5.4	4.9	25.7	15.1
Actual rentals for housing	3.8	3.8	3.4	3.7
Imputed rentals for housing	5.9	-	10.4	-
Maintenance and repair of the dwelling	4.7	4.6	0.9	1.0
Water supply and miscellaneous services relating to the dwelling	2.1	2.0	2.0	1.9
Electricity, gas and other fuels	6.2	6.0	9.0	8.5
Furnishings, households equipment and maintenance	1.4	1.4	5.8	6.5
Health	3.5	3.5	2.5	2.9
Transport	0.1	0.3	10.2	12.2
Post and telecommunication	-1.3	-1.4	2.9	3.3
Recreation and culture	2.2	2.9	8.6	8.9
Education	2.2	2.2	0.6	0.6
Restaurants and hotels	3.8	3.6	5.9	11.5
Miscellaneous goods and services	4.2	4.3	6.7	6.8
Total	**2.7**	**2.4**	**100.0**	**100.0**

Source: CZSO (2019a), Eurostat (2019).

The main differences between the two indices include:

- HICP consumer basket weights, unlike in the CPI, change annually;
- HICP weights, unlike in the CPI, take into account sales from foreigners' purchases in the Czech Republic;
- CPI, unlike the HICP, includes imputed rents in terms of price statistics (home ownership costs). Thus, the weight of the housing section in the CPI consumer basket reaches a considerable 25.7% (imputed rents account for 10.4% in the consumer basket). In contrast, the weight of the housing section in the HICP consumer basket is only 15.1%.

HICP data are available since January 1996. From the long-term perspective, the development of both indices has been very similar. According to the HICP, between January 1996 and February 2019 the average annual price increase was 2.8%; according to CPI, it was 2.9%. However, there are periods when the development of both indices diverges more. For example, in January 2019, the YoY CPI growth was 0.5 pp higher than the YoY HICP growth, while in February 2019 this deviation decreased to 0.3 pp. A look at the structure of both indices (see Table 2.4) shows that this is mainly due to the aforementioned imputed rent. Indeed, in the structure of both indices, except the almost identical weight of "recreation and culture" section, price growth was most different in the "housing, water, energy, fuel" section, with the price increases for each group of goods within this section included in both indices being almost the same.

2.2.4 Labour Market and Wages

The continuing tense labour market situation has been reflected in the strong dynamics of most key indicators and continues to represent a major barrier to growth in production. Due to the strong demand for labour, the increase in employment in 2018 slowed down only slightly to 1.4%. Accordingly, the unemployment rate dropped to 2.0% at the end of 2018 and continued to be by far the lowest in the EU. Compensation of employees grew by 9.5% last year, the fastest pace in the last 22 years. The dynamics of earnings was largely due to low and medium income professions. Fast-growing household incomes have fuelled their consumption.

Given the extremely low unemployment rate, there is little room for further decline. The number of vacancies at the beginning of 2019 exceeded the number of available job seekers registered at labour offices by approximately 90 thousand. The high vacancy rate, partly moderated by foreign recruitment, should to some extent dampen the effects of the expected slowdown in economic growth on employment. The unemployment rate could thus stagnate in the coming years.

The increase in wages and salaries, together with the temporarily higher population representation of age groups with a naturally high rate of economic activity, was reflected in a dynamic increase in the participation rate, but these effects should gradually fade away in the Convergence Programme horizon. By contrast, the increasing statutory and effective retirement age should have a stable and positive effect on the development of the participation rate. These factors may thus continue to outweigh the impact of the population decline in the productive age group of 20–64 years. Given the level of the unemployment rate, the age structure of population, the development of participation and the weakening demand for labour, we expect that employment could increase by 0.4% in 2019 and then almost stagnate in the following years.

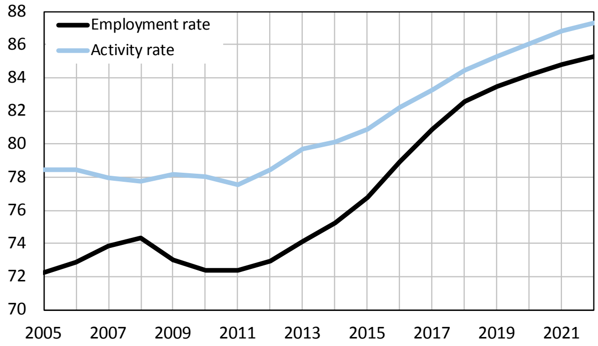
The persisting frictions on the labour market, the increase in the minimum and guaranteed wage and the increase in salary scales in the general government sector in 2019 are the main impulses for the rise in the wage bill. However, in the following years, the dynamics of earnings should slow down to 5% in view of the expected economic slowdown. The dynamics of wages and salaries should thus approach the values that are sustainable in the long-run in terms of competitiveness of the Czech economy, assuming its unchanged structure. The share of compensation of employees in GDP could exceed 45% in the Convergence Programme horizon, which should not fundamentally deviate from the level of EU states with comparable output and economic level.

Table 2.5: Employment and Compensation of Employees
(price levels in current prices, rate of change in %)

	ESA Code	2018	2018	2019	2020	2021	2022
		Level	*Rate of change*				
Employment (thous. of persons)		5429.7	1.6	0.4	0.2	0.1	0.0
Employment (bn. hours worked)		9.8	2.0	0.8	0.4	0.3	0.1
Unemployment rate (%)		2.2	2.2	2.2	2.2	2.3	2.3
Labour productivity (thous. CZK/person)		956.5	1.3	2.0	2.3	2.2	2.1
Labour productivity (CZK/hours)		532.2	0.9	1.6	2.0	2.0	2.1
Compensation of employees (bn. CZK)	D.1	2287.8	9.5	7.5	5.9	5.5	5.0
Compensation per employee (thous. CZK/person)		490.8	7.6	6.9	5.7	5.3	5.0

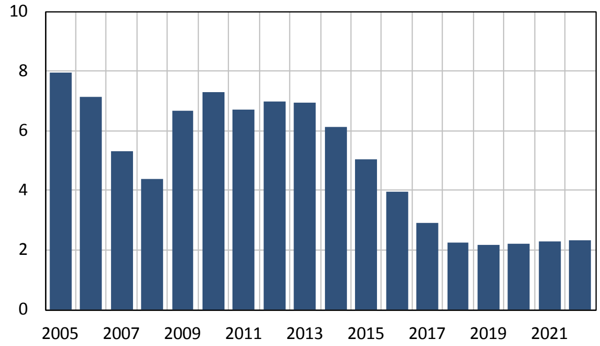
Note: Employment and compensation of employees are based on domestic concept of national accounts. Unemployment rate is based on the Labour Force Survey methodology. Labour productivity is calculated as real GDP (in 2017 prices) per employed person or hour worked.
Source: CZSO (2019a, 2019c). MF CR calculations and forecast.

Chart 2.5: Employment and Participation Rates
(in %)



Source: CZSO (2019c). MF CR calculations and forecast.

Chart 2.6: Unemployment Rate
(in %)



Source: CZSO (2019c). MF CR calculations and forecast.

2.3 Foreign Relations and Sectoral Balances

This part is elaborated in the national accounts methodology, which enables to allocate the surplus or deficit in external relations, based on the relationship between investments and savings, among individual economic sectors. It differs from the analogous, commonly used methodology of the balance of payments, for example, in the manner of data processing or classification of some items.

Since 2013, the Czech economy has been reporting a surplus of net lending/borrowing to non-residents. It reached 1.0% of GDP in 2018, increasing by 0.2 pp YoY.

The development in individual items is very diverse. The surplus on the balance of goods dropped markedly, from 5.0% in 2017 to 3.8% of GDP due to strong domestic demand for imports (mainly of investment nature), but also due to slower growth in export markets and export performance. The surplus on the balance of services also decreased slightly.

Conversely, there was a substantial improvement in the long-term deficit of the primary income balance, which is mainly influenced by distributed income of foreign-controlled companies. The primary income deficit decreased by 1.1 pp to 5.1% of GDP, mainly due to a decline in profits from foreign direct investments, while the volume of reinvested earnings fell by almost a third compared to year 2017, which was exceptionally successful in this respect.

The current external balance thus reached a nearly balanced result with a surplus of 0.1% of GDP for the third consecutive year (the current account in the balance of payments methodology has been in surplus since 2014).

The surplus of capital transfers increased by 0.5 pp to 1.1% of GDP due to the successful implementation of projects co-financed by EU funds.

In subsequent years, the surplus of net lending/borrowing should gradually increase. Reduction in the surplus on the balance of goods should slow down and then gradually stop, showing lower domestic demand dynamics and associated weaker import growth. Other balances should remain generally stable or improve slightly.

In terms of sectoral balances, the balance of the private sector should show a gradual increase in the surplus, taking into account the given trajectory of the general government sector balances.

Table 2.6: Sectoral Balances
(in % of GDP)

	ESA Code	2018	2019	2020	2021	2022
Net lending/borrowing vis-à-vis the rest of the world	B.9	**1.0**	**1.0**	**1.2**	**1.5**	**1.6**
Balance of goods and services		6.2	6.0	6.0	6.1	6.1
Balance of primary incomes and transfers		-6.1	-6.0	-6.0	-5.9	-5.8
Capital account		1.1	1.2	1.3	1.4	1.5
Net lending/borrowing of the private sector	B.9	**0.1**	**0.7**	**1.4**	**1.8**	**2.1**
Net lending/borrowing of general government	B.9	**0.9**	**0.3**	**-0.2**	**-0.3**	**-0.5**
Statistical discrepancy		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Note: National Accounts Methodology. Net lending/borrowing of the general government for 2018–2019 notification, years 2020–2022 outlook.
Source: CZSO (2019a). MF CR calculations and forecast.

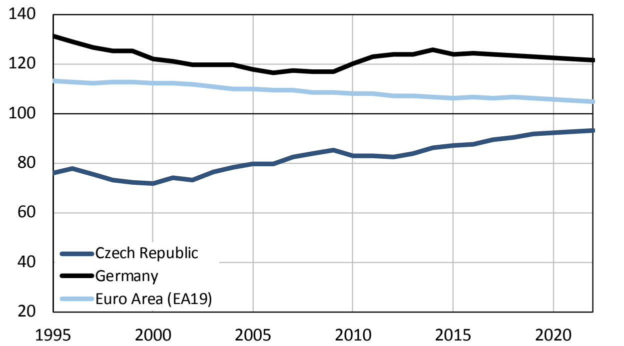
2.4 Convergence

According to a preliminary estimate, the economic level of the Czech Republic, expressed as GDP per capita in current purchasing power parity, reached in 2018 approximately 90% of the economic level of the EU and 73% of the economic level of Germany. The relative economic level of the Czech Republic increased by 14 pp compared to the EU in 2000–2009. Then, however, the convergence process stopped due to slower economic growth and recession (Chart 2.7). From 2010 to 2013, the economic level of the Czech Republic fluctuated between 82% and 84% of the EU average. The economic recovery in 2014 and strong economic growth in 2015 led to a renewal of the convergence process, which should also continue in the coming years.

The Czech Republic's comparative price level had been increasing almost continuously from 1995 to 2008, when it reached 71% of the EU average (Chart 2.8). In 2009–2012, a period of stability of the relative price level around 70% of the EU average followed. Subsequently, the comparative price level decreased to 63% of the EU average in 2014 and 2015 due to weakening of the CZK/EUR exchange rate by monetary policy, which helped improve price competitiveness of the Czech economy in that period. Since 2017, when the exchange rate floor was terminated, the Czech Republic's price level again started to converge to the EU average due to the exchange rate appreciation. In the forecast years, the rise in comparative price levels should continue.

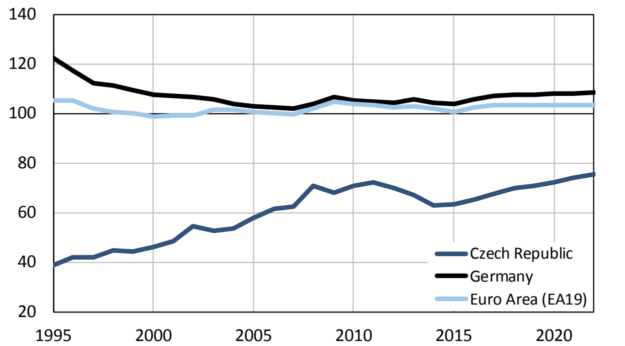
The average wage in the private sector, converted by the exchange rate, reached 44% of the average wage in the EU in 2008, but then the convergence process in this area temporarily stopped. It was not renewed until 2016. From 39% in 2014 and 2015, the private sector's average wage, thanks to strong earnings growth, gradually increased to 47% of the EU level in 2018. It should move further towards the EU average in 2019–2022, in view of the further expected dynamic wage growth and a moderate appreciation of the CZK/EUR exchange rate.

Chart 2.7: Relative Economic Level
(EU28=100, GDP per capita in current purchasing power parities)



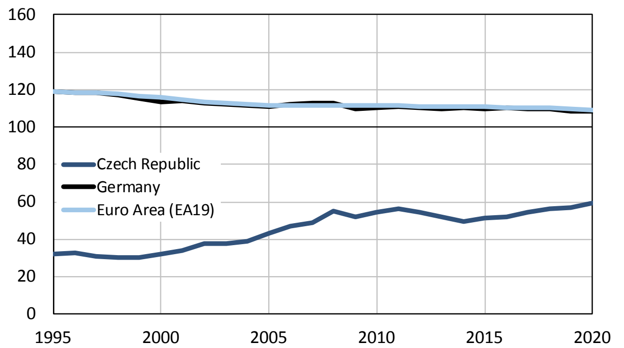
Source: CZSO (2019a), Eurostat (2019). MF CR calculations and forecast.

Chart 2.8: Comparative Price Level
(EU=100)



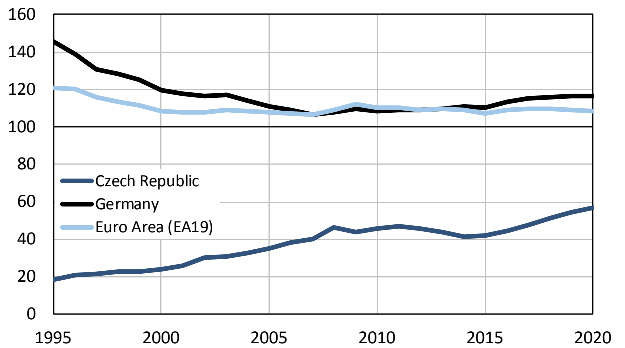
Source: CZSO (2019a), Eurostat (2019). MF CR calculations and forecast.

Chart 2.9: Real Labour Productivity
(EU28=100, constant prices of 2010)



Source: Eurostat (2019). MF CR and AMECO (2019) calculations and forecast.

Chart 2.10: Average Compensation of Employee
(EU28=100)



Source: AMECO (2019), Eurostat (2019). MF CR calculations and forecast.

3 General Government Sector Finances

In 2018, the general government sector of the Czech Republic had a surplus of 0.9% of GDP. All subsectors again contributed to the surplus. The positive balance was due to an increase in tax revenues and social security contributions, which rose YoY by more than 7%. On the expenditure side, there was a strong, almost 30% growth in investment. With the structural balance of 0.4% of GDP, the Czech Republic was among those EU Member States that safely fulfilled its medium-term budgetary objective and excelled in overall fiscal discipline. We are forecasting compliance with the medium-term budgetary objective over the entire Convergence Programme horizon, despite its tightening as a result of future age-related expenditure.

3.1 Current Developments in Economic Management of the General Government Sector

3.1.1 Economic Management in 2018

According to data published by the CZSO, the general government sector in 2018 reached a surplus of CZK 47.4 billion, i.e., 0.9% of GDP. The surplus was reached for the third year in a row and, again, with contribution of all subsectors. The balance adjusted for the effect of the business cycle and one-off or other temporary measures reached 0.4% of GDP.

The revenues of the general government sector increased YoY by 8.1% to 41.7% of GDP, with tax revenue including social security contributions being the determining factor for the dynamics. These were higher by almost CZK 132 billion (7.4%) compared to 2017, which is the highest ever YoY increase in absolute terms. Composite tax quota due to tax revenue elasticity, business cycle position and tax collection efficiency increased by 0.8 pp to 36.0% of GDP.

In particular, personal income tax and social security contributions, which are dependent on the development of wage bill in the economy, maintained high dynamics. The personal income tax revenue increased YoY by 13.8%. In addition to the effect of increasing volume of wages and salaries (9.3%) and changes in their distribution after an increase in the minimum and guaranteed wage, there was a positive effect of the electronic registration of sales (Act No. 112/2016 Coll.). A positive discretionary impact of CZK 0.5 billion was also due to the halving of the limit for flat-rate cost deductions of self-employed persons (from revenues of CZK 2 million to CZK 1 million per year), accompanied by the reintroduction of the possibility to apply tax credit on spouses and children (Act No. 170/2017 Coll.). On the other hand, a change in the taxation of pilots' income (Act No. 261/2017 Coll.), which enabled the pilots to work not only as employees but also as self-employed persons, was negatively reflected in personal income tax revenue. With effect from 1 January 2018, the tax credit on the first child was increased by CZK 150 per month (Act No. 200/2017 Coll.), which reduced the personal income tax revenue by CZK 2.4 billion. Other measures negatively influencing tax revenue included introduction of new sickness insurance allowances, in particular long-term care allowance (Act No. 310/2017 Coll., effective from 1 July 2018).

Similar factors to those applicable to personal income tax also determined the developments of social security contributions; in addition, increased payments for state-insured persons amounted to approx. CZK 3.1 billion per year in 2018. We attribute an additional increase of CZK 0.5 billion to electronic registration of sales. Conversely, the introduction of new sickness insurance benefits, i.e., in addition to the aforementioned long-term care allowance, also paternity leave (Act No. 148/2017 Coll.), totalled approximately CZK −0.7 billion. All these factors accounted for the 10% YoY growth in social security contributions.

The corporate income tax revenue remained almost unchanged YoY. The increasing share of compensations of employees in GDP was reflected in the profitability of companies. In addition to higher labour costs, their financial situation was also affected by a slightly slowing economic growth. The effect of electronic registration of sales was considerably smaller compared to 2017.

Revenues from taxes on production and imports increased by 4.8%. This growth was mainly due to VAT (up 5.4%). The total effect of discretionary measures was minimal last year. We estimate that the additional revenue from electronic registration of sales is about CZK 1 billion, while some measures introduced in 2017 decreased the tax revenue. These were the permission for the Czech Television and Czech Radio to claim a tax refund to the same extent as commercial stations and the transfer of newspapers and magazines from 15% to 10% tax rate. The cumulative budgetary impact of these two measures was CZK −0.4 billion.

Excise tax revenues increased by 0.7%. The year 2018 was the last of the three-year plan when the rate of excise duty on tobacco products increased (Act No. 315/2015 Coll.). The YoY effect on excise tax revenue growth was CZK 1.5 billion. This was counteracted by the Act on protection of health from harmful effects of addictive substances (Act No. 65/2017 Coll.), effective from the end of May 2017, whose full effect was reflected in the consumption of tobacco products in 2018. Tax revenues from production and imports were also positively influenced by almost three times higher revenues from the sale of pollution allowances.

With the acceleration of the implementation of projects funded by European structural and investment funds within general government sector, both current (24.8%) and capital (31.3%) transfers grew enormously.

The general government expenditure grew YoY by more than 10%, reaching 40.8% of GDP, driven mainly by growth in investment expenditure.

Gross fixed capital formation was the fastest growing item on the expenditure side. In addition, its 27.7% increase was funded by almost 70% from national sources, which in the ESA 2010 methodology has a direct impact on the general government balance, compared to expenditure financed by EU funds.

The acceleration of general government final consumption to 8.9% was driven by compensation of employees (12.7%). They reflected an increase in salaries of almost all general government employees by 10% (15% in the case of pedagogical workers) already at the end of 2017, plus a 10% increase in salaries in the health sector from January 2018.

The second dynamic component of expenditure on general government final consumption was intermediate consumption, whose 9.7% growth was also due to higher real consumption associated with the financing of current expenditure of EU projects. In particular, these were transport infrastructure expenditure implemented by the Road and Motorway Directorate and the Railway Infrastructure Administration.

In addition to compensation of employees and intermediate consumption, social transfers in kind also increased intensively (6.8%) primarily due to the rise in health system expenditure. The discretionary measures also reflected an increase of CZK 0.7 billion in disability benefits (Act No. 301/2017 Coll.), as well as a reduction in the protective limits for medicines for children under 18 and pensioners (Act No. 290/2017 Coll.) with a budgetary impact of CZK 0.4 billion. The social transfers in kind also included a 75% discount on the fare on buses and trains for pupils, students up to 26 years of age and seniors over 65 years of age, effective from September 2018, with the impact of approximately CZK −2 billion. (Government Resolution No. 206/2018).

The rate of cash social benefits almost doubled YoY to 5.2%, partly due to social measures already approved in 2017 and due to the macroeconomic environment. Pension benefits grew most (by almost CZK 20 billion), partly (CZK 2.5 billion) by a change in the indexation formula (see Subchapter 5.1). Other social measures aimed to support people with disabilities both by increasing benefits and providing them to a wider range of applicants as well as by supporting their employment. People with long-term illnesses or their carers also received larger grants. Finally, the State supported families with children by increasing social benefits, faster possible return of mothers to the labour market or by introducing paternity leave. Except for the above-mentioned impacts in the pension area, these measures meant a YoY increase in expenditure of CZK 9 billion. The cash social benefits also include the payment of the State for the state-insured persons, which was up CZK 3.1 billion YoY in 2018.

In an environment of rising government bond yields along the entire yield curve, 2018 saw the reversal of the declining trend in interest expenditure, which had been continuing since 2015. However, despite a more than 6% YoY increase in interest expenditure, their ratio in terms of GDP increased by only 0.1 pp to 0.8% of GDP.

From other expenditures, subsidies outside the general government sector recorded double-digit growth (10%). These were paid from national sources. The more than 5% increase in current transfers was mainly due to a one-fifth YoY increase in contributions to the EU budget, up CZK 7.4 billion in absolute terms. Capital transfers also included the transfer of assets to the water management infrastructure operator worth CZK 4.9 billion. However, this transaction had no impact on the general government balance.

3.1.2 Economic Management in 2019

For 2019, we expect the general government surplus of 0.3% of GDP, while the central government's negative balance should be outweighed by the positive performance of local governments and social security funds (health insurance companies). In terms of the structural balance, expansionary fiscal efforts should lead to almost balanced performance.

General government sector revenues should increase by 5% YoY to 41.5% of GDP. As in 2018, tax revenues, including social security contributions, are expected to have a dominant impact, with growth of 5.7%. The composite tax quota should remain almost unchanged YoY at 36.1% of GDP.

The forecast expects a higher YoY dynamics of income taxes. As in the previous year, it is mainly due to the expected double-digit growth in personal income tax. Its 10.3% increase should positively reflect the predicted growth in wages and salaries (of 7.5%), as well as a change in their distribution after increasing the minimum and guaranteed wage, taking into account the method of tax calculation. By approving the so-called tax package (Act No. 80/2019 Coll.), the limit of flat-rate cost deduction for self-employed persons was increased again (doubled). The measure, which will be applicable for the first time in 2019, i.e. in the tax declaration filed in 2020, should mean a YoY lower tax revenue of CZK 1.5 billion. A negative impact of CZK 0.2 billion is also expected in connection with the abolition of the so-called "qualifying period" when the tax base is reduced through a lower rate of sickness insurance. Of the other discretionary measures, only about CZK −0.2 billion is considered due to the introduction of long-term care allowance, which has been in force since mid-2018.

In addition to personal income tax, the corporate income tax revenue, expected to rise by 4.5%, should also contribute to the high income tax growth. The dynamics of this tax is primarily driven by the development of a gross operating surplus. The forecast for this year does not foresee any discretionary measures.

The development of social security contributions should be determined by similar factors as the personal income tax. In addition, the State plans to increase its payments for state-insured persons in the amount of approximately CZK 3 billion. Conversely, the decrease in the contribution rate of sickness insurance by 0.2 pp will have a negative discretionary impact of CZK 1.8 billion. It is a compensation of costs incurred by employers in connection with the obligation to pay employees compensation for wages even in the first 3 days of incapacity for work with effect from 1 July 2019 (Act No. 32/2019 Coll.). The decrease in the growth of social and health insurance will also be associated with the payment of long-term care allowance (Act No. 310/2017 Coll.), for which an impact of approximately CZK 0.4 billion is expected in 2019. All these factors, in aggregate, lead to the projected YoY growth in social security contributions of 6.7%.

As regards the VAT revenue, we predict a YoY increase of 5.2% for 2019. Its expected autonomous growth corresponds to the rise in nominal household consumption and the relevant part of government consumption of around 5.5%. With the amendment of the Value Added Tax Act (Act No. 6/2019 Coll.), with effect from 1 February 2019, the tax rate for land and water regular passenger mass transport was reduced from 15% to 10% with an expected impact of CZK −1.1 billion.

Excise tax revenue should maintain the same dynamics as in 2018 (0.7%). The commencement of the third period of excise tax refunds for diesel fuel and their unification for all activities in primary agricultural production (Act No. 453/2016 Coll.) should result in an impact of CZK −0.3 billion. Conversely, the prediction envisages a positive impact of CZK 0.1 billion on excise tax revenue in relation to the newly introduced taxation of heated tobacco products (Act No. 80/2019 Coll.).

As regards other revenues, we expect that both current and capital transfers will remain without significant YoY changes.

General government expenditure should increase by 6.5% and reach 41.2% of GDP, which is a YoY increase of 0.4 pp.

Compared to 2018, we expect a slowdown in growth of general government final consumption to 6.5%. Similarly to last year, it should be determined primarily by the strong dynamics of compensation of employees (10%). The increase in salary funds affects virtually all general government sector employees, especially teachers, with higher wage bill in education being the result of both tariff increases and the regional education reform.

In addition to compensation of employees, final consumption should also be driven by social transfers in kind. The primary reason for their expected more than 7% increase is the prognosis of healthcare system revenue, which is to some extent reflected in expenditure setting. The anticipated negative discretionary impact of approximately CZK 4 billion is related to the introduction of a 75% discount on the fare in buses and trains for pupils, students up to 26 years of age and seniors older than 65 years, which was partially reflected in the financial performance in 2018, but its full effect will be seen in 2019 (Government Resolution No. 206/2018).

Compared to the almost double-digit growth in intermediate consumption in 2018, growth in the expenditure on goods and services should be significantly slower (2.4%). We expect that the dynamics of purchases co-financed by EU funds should not be so high.

We are expecting a substantial increase in 2019 in the area of cash social benefits, reflecting both the approved measures, especially in the field of pension benefits, and the economic development. With effect from 1 January 2019, the flat rate component of pensions was increased from 9% to 10% of the average wage. At the same time, the recipients of pension benefits at the age of 85+ received an extra CZK 1,000 (Act No. 191/2018 Coll.). The impact of these discretionary measures exceeds CZK 14 billion. Together with autonomous developments in inflation and real wage growth, pensions rose by 7.3% in total by January 2019. Other measures that increase social expenditure are long-term care benefits with an impact of CZK 0.6 billion (Act No. 310/2017 Coll.) or an increase in care allowance for dependence levels 3 and 4 with an estimated additional expenditure of CZK 2.8 billion (Act No. 47/2019 Coll.). In total, cash social benefits should increase by 7.3%.

After an enormous increase in investment expenditure in 2018, we expect a slowdown in their growth to 5.5% this year. This growth should be driven mainly by investments financed from purely national resources.

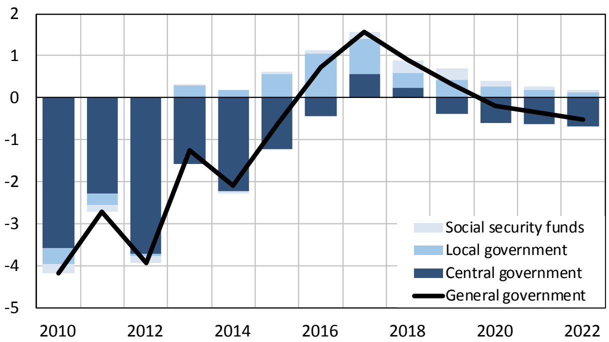
With regard to the expected development of the Czech Republic's monetary policy, we expect further growth in interest rates, which should also be reflected in the interest expenditure. Despite the fact that we predict their growth at more than 5%, in proportion to GDP it should remain at 2018 level (0.8% of GDP).

Current and capital transfers should increase by 3.7% and 3.8%.

3.2 Medium-term Outlook of General Government Sector Finances

The current fiscal policy setting, which serves as the basis for the forecast, is mainly driven by the expenditure of the State budget and State funds, which, combined with the developments of the other components of public budgets, must not exceed the medium-term budgetary objective.

Chart 3.1: Government Balance by Sub-sectors
(in % of GDP)



Note: Years 2018–2019 notification, years 2020–2022 outlook.
Source: CZSO (2019b). MF CR calculations and forecast.

For local governments, we expect continuing surplus, albeit with a gradually decreasing trend due to consistently slightly rising capital expenditures and the closing output gap. The estimated financial result of social security funds is based in particular on the predicted volume of wage bill in the economy, which is a key determining factor of the future growth in social security contributions. With regard to its slowing dynamics (see Section 2.2.4) and the assumption of a relatively stable growth in expenditures, we expect the surplus of health insurance companies to decline. The units of central government outside the State budget and State funds as a whole should see slight surpluses on average.

3.2.1 Expected Revenue Developments

The revenue of the general government sector is affected primarily by the macroeconomic developments in the forecast period. The impact of the discretionary measures adopted so far on the revenue side is relatively small. We expect an average increase in general government sector revenue of 4%, of which tax revenues (including social security contributions) should increase by 4.3%.

For the following period, we predict that the personal income tax revenue will grow at an average rate of almost 6%; however, the dynamics should slow down slightly. The growth rates in individual years are influenced mainly by the expected wage bill developments in the economy while taking into account wage distribution and the method of tax calculation. The last two phases of electronic registration of sales (Chamber of Deputies Print No. 205) should be launched together on 1 January 2020, with an expected impact of around CZK 2 billion. On the other hand, income tax revenue is likely to be reduced by the cancellation of the unrecompensed guard period related to a 0.2 pp decrease in the contribution rate of sickness insurance (part of the tax base for employees), which was approved with effect from 1 July 2019. The YoY impact in 2020 is estimated at about CZK −0.3 billion.

Social security contributions should also evolve in line with the growth in the wage bill in the economy and the agreed increase in the assessment base for the payment for state-insured persons by 5.1% for 2019 and 4.8% for 2020 (Act No. 297/2017 Coll.). For the other years, we adopt the technical assumption of similar growth of payments for state-insured persons in absolute terms for the purposes of the forecast. The average rate of social security contributions should be 5.1% over the forecast period. As part of discretionary measures, the aforementioned reduction in the sickness insurance rate affect negatively the revenue of social and health insurance systems, with an estimated impact of CZK 1.8 billion in 2020. The positive effect of electronic registration of sales on social security contributions should be about CZK 0.3 billion in 2020.

Corporate income tax revenue should grow on average by 3.4%. Moreover, the development, primarily determined by the rate of gross operating surplus, should be in 2020 positively influenced also by the last phase of electronic registration of sales with an expected impact of CZK 0.9 billion. The anticipated impact of amendments to tax laws resulting from the implementation of Council Directive 2016/1164/EU laying down rules against tax avoidance is CZK 0.2 billion.

As regards VAT revenues, we predict an average growth by 4.2%. Autonomous development corresponds to the growth of nominal household consumption, the relevant part of government consumption and the development of general government investments. In 2020, the tax revenue will be influenced by an amendment to the Registration of Sales Act, which, in addition to expanding the range of entities in connection with the electronic registration of sales, reassigns selected commodities to lower tax rates. The total impact is CZK −2.9 billion. The regulation of excessive deductions claimed by the Czech Television and Czech Radio within the amendment to the tax act (Act No. 80/2019 Coll.) of CZK 0.6 billion at the end of the forecast horizon should be positive.

The revenue on excise taxes should slightly increase in the entire forecast period, by around 0.3%, with its dynamics rather decreasing over time. Taxation of heated tobacco products should bring another CZK 0.2 billion in 2020.

As regards other revenue, we expect growth especially in investment subsidies in line with the approaching end of possible implementation of EU-funded projects in the 2014–2020 programming period.

3.2.2 Expected Expenditure Developments

In 2020–2022, we estimate an average YoY increase in general government expenditure of 4.7%. In relation to GDP, expenditure should be around 41.6% of GDP over the entire outlook horizon.

In 2020, we expect a significant increase in the area of cash social benefits, which reflects the proposed measures as well as autonomous developments. The most significant item of growth in social security expenditure is an increase in the volume of funds for pensions. As a result of the expected inflation rate close to the CNB's inflation target, and the higher real wages growth in recent years, we expect pension indexation of more than 5% for 2020; in the following years, the indexation according to the statutory formula is around 4.5% and 3.5% respectively. For 2020, the Czech government plans to increase the average pension by CZK 900 (Government Resolution No. 223/2019), i.e. CZK 150 to CZK 200 above the statutory formula, which represents an additional expenditure of approximately CZK 6 billion. The negative impact on the balance in 2020 is also due to an increase in the care allowance for dependence levels 3 and 4 with an impact of CZK 1.9 billion. The developments of cash social benefits also reflect, in the ESA 2010 methodology, higher payments for state-insured persons by CZK 3.5 billion. Another planned change in this area is the increase in the parental allowance from CZK 220,000 to CZK 300,000 with a likely impact of almost CZK 9 billion. As a result of the autonomous development and the aforementioned discretionary measures, the growth in cash social benefits should reach 6.8% in 2020, followed by a decrease in the annual growth rate to around 4%.

General government final consumption will be driven, in the years of the forecast, by compensations of employees, social transfers in kind and, to a lesser degree, by intermediate consumption. Over the entire forecast horizon, we expect relatively stable increases in all components of general government consumption. The 6% rate of compensations of employees should be determined by increasing salaries in education in line with the government's policy statement. However, the issue of growth in earnings across the salary sector is yet to be discussed and is not decided yet.

In 2020, the growth of social transfers in kind should slow down to 4%. The slowdown is largely explained by the effect of including fare discounts for pupils, students up to 26 years of age and seniors older than 65 years in 2018 and 2019. Similar growth is also predicted in the remaining years of the forecast. The estimate is based primarily on the assumption of a future, fundamentally stable inflationary trend and a slowing pace in the wage bill in the economy. Relatively stable expenditure growth should thus gradually lead to balanced finances of health insurance companies, which corresponds to the long-term average of their balances.

The growth in intermediate consumption should reach 3% in the years of the forecast, which corresponds to the prediction of the inflation rate and partial real growth (for more information see Section 2.2.3). Another factor is the current course of the European financial perspective 2014–2020, where operational programmes focused on non-investment projects show high success rate. We therefore assume that further funding of expenditure from these programmes will be distributed more evenly.

For fixed capital investments, we predict accelerating dynamics, which to some extent should be similar to the previous programming period. This should in particular relate to investments co-financed by the EU funds, and, to a lesser extent, also to investments from national sources which are, however, significantly higher in volume. A similar course was apparent at the end of the previous financial perspective in 2014 and 2015. Gradually, the rate of investment of the general government sector should increase from about 6% to almost 10%.

Table 3.1: A Structure of Discretionary Measures in 2019–2022

(YoY discretional change, in CZK billion)

	2019	2020	2021	2022
Revenue Discretioanry Measures	**12.0**	**-0.1**	**0.7**	**0.6**
Personal income tax	1.8	2.0	0.1	-
Corporate income tax	-	1.1	-	-
Social security contributions	11.8	-1.0	0.5	-
Value added tax	-1.1	-2.9	-	0.6
Consumption taxes	-0.2	0.2	-	-
Other revenue measures	-0.4	0.5	0.2	-
Expenditure Discretionary Measures	**-47.4**	**-17.4**	**-1.0**	**2.4**
Cash social benefits	-17.3	-16.4	-	-
Compensation to employees	-30.0	-1.0	-1.0	-
Health care	-	-	-	-
Other expenditure measures	-0.1	-	-	2.4
Total	**-35.4**	**-17.5**	**-0.3**	**3.0**
% of GDP	-0.6	-0.3	-0.0	0.0

Source: MF CR calculations and forecast.

Financial resources from EU funds should complement national resources mainly in the areas of investment in infrastructure, science and research.

In line with the monetary policy assumptions and interest rate developments, we estimate that interest expenditure will increase by about CZK 3 billion in 2020, and then it will increase only slightly. The development reflects the structure of previously issued government bonds due in individual years of forecast. In proportional terms, interest expenditure should fall from the current 0.8% of GDP to 0.7% of GDP at the end of forecast horizon (see section 3.4 for more details).

3.2.3 Comparison of Plans with Prediction Scenario

Table 3.2 presents a comparison of the baseline fiscal scenario containing autonomous development and the impact of at least government-approved or coalition-agreed measures, and the alternative scenario. The latter includes the following measures in the minimum impact scenarios: indexing pensions and increasing parental allowance. In addition, the Ministry of Finance of the Czech Republic submitted to the inter-ministerial comment procedure draft amendments to the Income Tax Act (extension of dividend revenue exemption), the Reserves Act (change in the method of creation and tax deductibility of technical reserves for insurance and reinsurance companies), the Gambling Tax Act (change in the rate of the gambling tax), the Excise Tax Act (raising the rates on alcohol and tobacco) and the Gas Tax Act (abolishing the tax exemption for household boiler room). Other changes being considered on the revenue or expenditure side are not yet specific.

The additional indexation of pensions (the baseline scenario) is expected to have an impact of CZK 6 billion, but this is not the definitive amount given that the exact amount of statutory indexation will be known in July 2019 at the earliest. However, a more pronounced deviation is unlikely. In contrast, several scenarios of the increase in parental allowance are discussed. The first scenario is an increase in the allowance in the case of the birth of a child after 31 December 2019, with an impact of less than CZK 4 billion. The second scenario, included in the baseline, is an increase in the allowance to all those actively receiving it, with an impact of almost CZK 9 billion. The third option is to pay it for each child under four years with an impact exceeding CZK 11 billion.

Applying only standard statutory indexation and the least expensive scenario for parental allowance increase would improve the overall balance by 0.2 pp each year of forecast. In the case of adoption of the proposed amendments in the tax area, revenues would increase by 0.2 pp over the entire Convergence Programme horizon. The overall effect on the general government balance was 0.4 pp. The structural balance would be almost zero throughout the period.

Table 3.2: Comparison of the Convergence Programme Forecast Scenario with the Intentions of Fiscal Policy
(in % of GDP)

	2019	2020	2021	2022
Total revenue	**41.5**	**41.3**	**41.2**	**41.2**
Total revenue in alternative scenario	41.5	41.5	41.5	41.4
Proposed revenue measures	-	0.2	0.2	0.2
Total expenditure	**41.2**	**41.5**	**41.6**	**41.7**
Total expenditure in alternative scenario	41.2	41.3	41.4	41.5
Proposed expenditure measures with minimized impact	-	0.2	0.2	0.2
General government balance	**0.3**	**-0.2**	**-0.3**	**-0.5**
General government balance in alternative scenario	0.3	0.2	0.1	-0.1
Impact difference in proposed measures	-	0.4	0.4	0.4

Source: MF CR calculations and forecast.

3.3 Structural Balance and Fiscal Stance

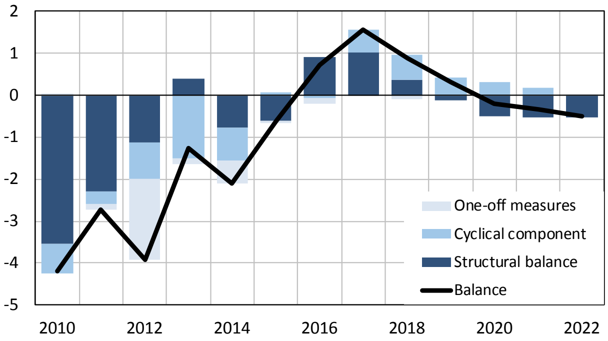
3.3.1 Cyclical and Structural Balance

The structural balance in 2018 reached a surplus of 0.4% of GDP, and in 2019 it should be almost zero. In 2020, we expect an expansive fiscal policy of 0.4 pp. In the following years, the structural balance should remain at −0.5% of GDP. Interest expenditure ratio to GDP should fall slightly at the end of the Convergence Programme horizon. Accordingly, the primary structural balance should develop similarly to the structural balance.

The only one-off measure in 2018 was the expenditure of CZK 4.3 billion for the realisation of Czech Export Bank's guarantee for Adularya company power plant in Turkey. We do not expect any one-off measures in 2019–2022.

Chart 3.2 shows the general government balance developments taking into account the effect of items which show sensitivity to the position of the economy in the business cycle. As shown in Chart 2.2, the Czech economy is probably currently already in a period of closing positive output gap. The cyclical component should reach 0.4% of GDP in 2019, and we expect it to decline gradually to almost zero at the end of the horizon.

Chart 3.2: General Government Balance Decomposition
(in % of GDP)



Source: CZSO (2019b). MF CR calculations and forecast.

3.3.2 Fiscal Effort and Expenditure Rule of the Stability and Growth Pact

The negative fiscal effort in 2018, as shown in Table 3.3, was related not only to the continuing increase in wage and salary expenditure, but also to a significant increase in investment activity. The further growth of these expenditure items is also the cause of the negative fiscal effort in 2019. Negative effort in 2020 will be caused by a slight acceleration of investment and an increase in cash social benefits, especially in the area of pensions and parental allowance. In 2021 and 2022, we expect essentially neutral fiscal policy.

A view on fiscal effort and the structural balance in 2020–2022 is complemented by the Stability and Growth Pact's expenditure rule, which stipulates that the growth in adjusted real expenditure of general government sector should be in line with the average growth of potential output (2.7% for the Czech Republic, according to EC, 2018b). However, the Czech Republic should achieve better structural balances than the medium-term budgetary objective over the forecast period. In such a case, the rate of real adjusted expenditure may exceed potential output growth, as is likely to be the case in 2020 and 2021 (Table 3.3).

Table 3.3: Structural Balance, Fiscal Effort and Adjusted Real Expenditures Growth
(in % of GDP, pp of GDP, growth in %)

		2018	2019	2020	2021	2022
General government balance	*% of GDP*	**0.9**	**0.3**	**-0.2**	**-0.3**	**-0.5**
Structural balance	*% of GDP*	**0.4**	**-0.1**	**-0.5**	**-0.5**	**-0.5**
Fiscal effort	*pp of GDP*	-0.7	-0.5	-0.4	0.0	0.0
Adjusted real expenditures	*growth in %*	-	-	**3.5**	**2.9**	**2.2**

Note: Adjusted real expenditures are the general government expenditures adjusted for the volatility of investment expenditure financed by national means, interest expenditure, transfers from the EU (current international co-operation and investment subsidies), non-discretionary change in the unemployment benefits and discretionary revenue measures.
Source: CZSO (2019b). MF CR calculations and forecast.

3.4 General Government Debt, Strategy and Stability of State Debt

By the end of 2019, we expect the general government sector debt to be 31.5% of GDP. The 1.2 pp YoY decline in debt is due to a decrease in state debt in relative terms, a decline in the debt of the local government sector (both in absolute and relative terms) in connection with its expected surplus and nominal GDP growth.

The general government sector debt has declined significantly in recent years. Since 2013, it has decreased by 12.2 pp, which today ranks the Czech Republic among the least indebted countries in the EU, safely meeting the Maastricht debt criterion (60% of GDP). This creates a fiscal space in case of major shocks. The level of the debt quota also fulfils the national rule laid down in Act No. 23/2017 Coll., on fiscal responsibility rules, which assesses the level of general government debt adjusted for the cash reserve created by state debt financing against the 55% of GDP ceiling. For 2018, the value of such adjusted debt reached 32.7% of GDP, we expect it to reach 31.5% of GDP in 2019.

We also predict a further decline in the debt quota between 2020 and 2022, by 1.1 pp in total to 29.7% of GDP (see Table 3.4). The absolute amount of the general government debt for 2020–2022 is derived in particular from the planned performance of the State budget and State funds and the expected state debt development, as well as from the expected surplus of local governments.

Interest expenditure should decrease from 0.8% of GDP in 2019 to 0.7% of GDP at the end of the forecast horizon. In absolute terms, we expect only a slight increase in interest expenditure, given the predicted growth in yields to maturity. It will reflect the assumed monetary policy settings of the CNB and the European Central Bank, inflation developments and the inverse yield curve of government bonds. Consequently, long-term interest rates for convergence purposes should rise from 2.2% in 2019 to 2.4% in 2022.

The positive perception of Czech fiscal discipline in the financial markets is emphasised by both international institutions and rating agencies. Scope Ratings confirmed its rating of the Czech Republic in the first half of 2018, as did Standard & Poor's in January 2019. Moody's even improved its outlook from stable to positive, confirming long-term liabilities in domestic and foreign currency at A1 (MF CR, 2018b). In July 2018, JCR also improved the rating of the Czech Republic from AA− to AA for long-term obligations in local currency and from A+ to AA− for long-term obligations in foreign currencies, both with stable outlook. In August 2018, Fitch Ratings also increased the rating of the Czech Republic's long-term obligations in local and foreign currencies to the AA− grade with a stable outlook. In the international comparison with the EU countries, the Czech Republic has for several years achieved better rating score than the euro area average. Positive perception also contributed to achieving negative interest yields on euro-denominated government bonds in the first quarter of this year.

In December 2018, the Ministry of Finance launched the sale of the so-called Republic Bonds intended for individuals. They aim to increase households' share in State debt, enable them to get yields from bonds, and contribute to debt stability. Republic Bonds are issued with a maturity of up to 6 years. For the reinvestment government bond with the issue date of 1 July 2019, the yield was set at an average of 1.91% p. a. and will be reinvested once a year in the same bond issue according to the issue conditions. At the same time, individuals may apply for an anti-inflationary government bond with a yield determined according to development of consumer prices plus 0.5% p. a., also reinvested once a year. The Republic Bond is offered for subscription continuously, with the Ministry of Finance of the Czech Republic working towards gradually digitizing the system of selling government bonds. The success of the pilot phase of the Republic Bond is planned to be evaluated in June 2019.

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

After adjusting the level of gross general government debt by the value of liquid financial assets (defined in ESA 2010 as currency, deposits and securities including shares listed on a stock exchange), the net financial debt was at 17.7% of GDP at the end of 2018. Its development was influenced both by the general government surplus leading to higher amount of assets and the decrease of the general government debt quota. If necessary, the amount of potential liquidity for debt repayments would then be about 15.0% of GDP.

The highest share in the general government debt is held by the central government subsector (see Table 3.4). In 2019, the value of its debt is expected to be over CZK 1,786 billion, accounting for about 96% of the total general government debt. The local government debt represents approx. 4% of the total debt. We expect it to be almost CZK 79 billion in 2019 and to gradually fall in 2020–2022 due to projected surplus performance and, to a certain extent, also due to effect of Act No. 23/2017 Coll., on fiscal responsibility rules. The Act stipulates for local governments a minimum amount of principal repayment above a prudent level of liabilities (for details see MF CR, 2016). The social security funds subsector has consistently shown negligible indebtedness.

Since most of the central government debt is state debt, Ministry of Finance focuses on the sustainability and stability in terms of key risk indicators. Their management was particularly important in the period of above-average volatility on financial markets associated with the debt crisis events in the euro area countries. Debt portfolio management continues to contribute to a prudent approach to debt sustainability and increases the country's transparency on the government bond market. In designing a medium-term state debt management strategy (MF CR, 2018b), emphasis is placed on the refinancing, interest rate and monetary risks as the most important sources of uncertainty. The basic indicators for the assessment of the individual risks are given in Table 3.5. The values of individual indicators for 2019–2022 fulfil the strategic objectives announced for the medium term.

Table 3.4: General Government Debt by Sub-sectors
(in % of GDP)

	ESA Code	2017	2018	2019	2020	2021	2022
General government	S.13	**34,7**	**32,7**	**31,5**	**30,8**	**30,2**	**29,7**
Central government	S.1311	34,4	33,0	31,9	31,3	30,7	30,2
Local government	S.1313	1,7	1,6	1,4	1,3	1,1	1,1
Social security funds	S.1314	0,0	0,0	0,0	0,0	0,0	0,0
Net financial debt [1]		19,7	17,7	16,5	16,0	15,6	15,5
Public sector institutions debt according to Act No. 23/2017 Coll. [2]		**34,7**	**32,7**	**31,5**	**30,8**	**30,2**	**29,7**

1) Net financial debt is the difference between gross debt and liquid financial assets (monetary gold, Special Drawing Rights, currency and deposits, securities other than shares (consolidated at market value), shares and other equity quoted in stock exchange).
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.
Source: CZSO (2019b). MF CR calculations and forecast.

Table 3.5: The State Debt's Refinancing, Interest and Debt Denominated in Foreign Currency

(in % of debt, average maturity in years)

		2017	2018	2019	2020	2021	2022
Refinancing							
Average maturity	*years*	**5.0**	**5.4**	**5.8**	**5.9**	**6.0**	**6.0**
Debt due within 1 year	*% of debt*	**18.5**	**17.8**	**13.8**	**13.0**	**11.8**	**11.3**
State Debt's Interest							
Debt with interest fixation within 1 year	*% of debt*	**33.5**	**33.6**	**30.0**	**30.6**	**32.8**	**30.0**
Fixed interest long-term debt due within 1 year	*% of debt*	15.5	14.7	7.4	9.0	9.4	4.1
Variable interest long-term debt	*% of debt*	12.7	13.4	17.5	18.2	20.0	22.5
Monetary instruments	*% of debt*	2.7	2.7	2.4	2.3	2.3	2.2
Effect of derivative operations	*% of debt*	2.6	2.8	2.7	1.1	1.2	1.1
Foreign Currency Exposition							
Foreign-currency exposition of the state debt[1)]	*% of debt*	**10.9**	**10.3**	**10.2**	**9.9**	**9.7**	**9.4**
EUR exposition	*% of debt*	10.6	10.0	9.8	9.6	9.3	9.1

Note: Data are in the national methodology.

1) State debt denominated in foreign currencies adjusted for collateral and assets.

Source: MF CR. MF CR calculations and forecast.

4 Comparison with the Previous Convergence Programme of the Czech Republic and Sensitivity Analysis

4.1 Comparison with the Previous Convergence Programme of the Czech Republic

4.1.1 Macroeconomic Scenario

Compared to the Convergence Programme scenario of April 2018, the lower world trade growth in 2018 led to a slowdown in global economic activity and a reduction in the predicted economic growth of major trading partners, primarily in the EU itself. Fulfilment of the agreement of the Organization of the Petroleum Exporting Countries and other participating countries to cut oil production was then reflected in assumptions about oil price developments (see Subchapter 2.1).

The Czech Republic's economic performance grew slower in 2018 compared to the Convergence Programme scenario of April 2018. While both gross fixed capital formation and general government consumption showed much more dynamic growth, private consumption expenditure, despite a strong growth in nominal disposable income, slowed as a result of a rise in the savings rate. The weakening dynamics of economic activity was also reflected in the estimate of macroeconomic developments for 2019 and 2020. The decline in the estimated GDP growth is due to the deteriorated outlook for private consumption and investment, mainly for 2019 (see subchapter 2.2.1).

A slight adjustment of the inflation rate forecast for 2019 and 2020 takes into account the strong growth in unit labour costs, the dynamics of domestic demand in an environment of positive output gap, the higher expected oil price, the weaker CZK/EUR exchange rate and the adopted legislative amendments (see Subchapter 2.2.3).

In the labour market, the variations in the 2018 scenarios, such as sharper decline in unemployment rates and higher employment growth, were hardly reflected in the years of the Convergence Programme outlook. Resources for higher employment growth and room for further decline in the unemployment rate are already significantly reduced (see Subchapter 2.2.4).

In terms of external balance, a more favourable balance of net lending/borrowing is expected over the entire Convergence Programme horizon (see Subchapter 2.3).

4.1.2 Fiscal Scenario

Although general government revenues increased by 8.1% in 2018, compared to the prediction of 6.4%, the general government balance for 2018 ended up with a lower surplus than in last year's Convergence Programme (see Chapter 3 and Table 4.1), as expenditure rose by 10.1%. This exceeded the prediction from April 2018 by more than 3 pp. The difference between the fiscal predictions for 2019–2022 is thus caused not only by the different expected macroeconomic developments (see Subchapter 4.1.1), but also by the different 2018 base.

Excise taxes should show lower dynamics over the entire horizon compared to the previous Convergence Programme. This is mainly due to the updated impact of discretionary measures and the inclusion of a new tax on heated tobacco products. Weaker growth in private final consumption expenditure was reflected in VAT, which revenue rose by 5.4% in 2018 (versus the prediction of 6.8%). Income tax revenue increased by 7.0% (versus the prediction of 6.8%). The decisive cause of the different developments was the personal income tax, which responded to a higher rate of wage growth in the economy. For the same reason, the social security contributions revenue increased by 9.8% (versus 7.7% in the previous Convergence Programme); the difference is also in the volume of the total payment for the state-insured persons, for which we expected a value higher by about CZK 0.5 billion. For 2019, we estimate a higher rate of tax revenue growth by about 0.5 pp, driven by higher expected income tax revenues including social security contributions due to a 1 pp higher predicted rate of wage bill in the economy. In 2020 and 2021, the rate of total tax revenue is similar to last year's scenario.

On the expenditure side, one of the reasons for the higher growth in actual expenditure in 2018 is the development of intermediate consumption, whose pace was more than 6 pp higher than last year's estimates, affected by the higher-than-expected increase in EU funds allocated for 2014 and 2015. For prediction and outlook, we estimate growth of around 3%, similar to last year's scenario. A more pronounced increase in 2018 is also apparent in compensation of employees; mainly as a result of higher outlays into the education area linked to past government reform measures. In subsequent years, the rates of compensation of employees in the new forecast are only slightly higher. Social transfers in kind are very similar in both scenarios. Growth in gross fixed capital formation also has a significant impact on expenditure. The 2018 scenario provided for a slower start-up of projects co-financed by EU funds, although it was significantly increased due to the low base of 2017. Similarly, investments financed from national sources grew faster. The years of the forecast reflect the growth adjustment mainly from EU co-financed investments, especially due to the base.

For cash social benefits, the difference between the two scenarios is particularly noticeable in 2020. The first reason is the higher expected indexation of pensions due to the development of the average real wage, the second is the additional increase of pensions by CZK 900 on average, and the third reason is an increase in the parental allowance.

The lower general government balances, at comparable levels of nominal GDP, are a major factor in the slower reduction of general government debt-to-GDP ratio.

Table 4.1: Change in the Indicators of the Scenario

		April 2018 CP				April 2019 CP			
		2018	2019	2020	2021	2018	2019	2020	2021
External Assumptions									
GDP growth in EU28	*%*	**2.4**	**2.0**	**1.9**	**1.9**	**1.9**	**1.3**	**1.6**	**1.8**
Prices of oil (Brent)	*USD/barrel*	**65.2**	**61.4**	**58.6**	**57.1**	**71.4**	**66.0**	**64.7**	**62.9**
Exchange rate USD/EUR	*USD/EUR*	**1.23**	**1.23**	**1.23**	**1.23**	**1.18**	**1.14**	**1.14**	**1.14**
Exchange rate CZK/EUR	*CZK/EUR*	**25.1**	**24.7**	**24.3**	**23.9**	**25.6**	**25.5**	**25.1**	**24.6**
Real Values									
GDP	*change in %*	**3.6**	**3.3**	**2.6**	**2.4**	**2.9**	**2.4**	**2.4**	**2.3**
Households consumption	*change in %*	4.3	4.1	2.9	2.6	3.2	2.9	2.8	2.5
Government consumption	*change in %*	1.9	2.0	1.8	1.8	3.7	2.2	1.9	1.9
Gross fixed capital formation	*change in %*	5.7	4.4	3.0	2.8	10.5	3.1	2.7	2.6
Contribution of final domestic demand	*p.p.*	3.9	3.4	2.5	2.3	4.8	2.7	2.4	2.3
Contribution of foreign trade	*p.p.*	-0.2	-0.1	0.1	0.2	-0.7	-0.3	0.0	0.1
Output gap	*%*	**2.1**	**2.5**	**2.4**	**2.2**	**1.7**	**1.2**	**0.8**	**0.5**
Others									
Nominal GDP	*CZK bn.*	**5320**	**5596**	**5840**	**6094**	**5304**	**5595**	**5839**	**6090**
Harmonised index of consumer prices	*change in %*	**1.9**	**1.9**	**1.8**	**1.7**	**2.0**	**2.1**	**1.5**	**1.7**
GDP deflator	*change in %*	**1.5**	**1.8**	**1.7**	**1.9**	**2.1**	**3.0**	**1.9**	**1.9**
Employment	*change in %*	**0.7**	**0.2**	**0.2**	**0.1**	**1.6**	**0.4**	**0.2**	**0.1**
Unemployment rate	*%*	**2.4**	**2.3**	**2.3**	**2.3**	**2.2**	**2.2**	**2.2**	**2.3**
Wages and salaries	*change in %*	**7.7**	**6.5**	**5.5**	**5.4**	**9.3**	**7.5**	**5.9**	**5.5**
Balance of goods and services	*% of GDP*	**6.5**	**6.1**	**6.1**	**6.2**	**6.2**	**6.0**	**6.0**	**6.1**
Net lending/borrowing	*% of GDP*	**0.4**	**0.4**	**0.6**	**1.0**	**1.0**	**1.0**	**1.2**	**1.5**
General Government									
General government revenue	*% of GDP*	**40.9**	**40.6**	**40.5**	**40.4**	**41.7**	**41.5**	**41.3**	**41.2**
Taxes on production and imports	*change in %*	3.8	3.2	3.3	3.1	4.8	3.2	2.1	3.1
Current taxes on income, wealth etc.	*change in %*	6.8	5.1	3.9	3.9	7.0	7.6	5.3	4.6
Social security contributions	*change in %*	7.7	6.3	5.4	5.4	9.8	6.7	5.1	5.3
General government expenditure	*% of GDP*	**39.4**	**39.5**	**39.5**	**39.5**	**40.8**	**41.2**	**41.5**	**41.6**
Compensation of employees	*change in %*	7.5	9.0	5.0	5.0	12.7	10.0	6.0	6.0
Intermediate consumption	*change in %*	3.5	3.0	3.0	3.0	9.7	2.4	3.0	3.0
Social transfers in kind	*change in %*	4.5	3.5	3.5	3.5	6.8	7.2	4.0	4.0
Social transfers other than in kind	*change in %*	5.9	6.8	3.8	3.8	5.2	7.3	6.8	4.2
Gross fixed capital formation	*change in %*	14.9	6.9	6.9	8.6	27.7	5.5	6.4	7.9
General government balance	*% of GDP*	**1.5**	**1.1**	**1.0**	**0.9**	**0.9**	**0.3**	**-0.2**	**-0.3**
General government debt	*% of GDP*	**32.9**	**31.6**	**30.7**	**29.9**	**32.7**	**31.5**	**30.8**	**30.2**

Source: CNB (2019a), CZSO (2019a), EIA (2019), Eurostat (2019), MF CR (2018a).

4.2 Sensitivity Analysis

The sensitivity analysis is calculated by means of a dynamic stochastic general equilibrium model developed by the Ministry of Finance. Alternative scenarios focus on some current issues of possible future developments. The first scenario considers lower economic growth in the EU and its impact on a highly open Czech economy dependent on the external environment. Another alternative scenario assesses a possible sudden increase in interest rates. The last analysis responds to uncertainty about the future developments of crude oil prices, and analyses a situation of its sharp rise. All alternative scenarios are derived from the baseline Convergence Programme scenario described in chapters 2 and 3. In alternative scenarios, we expect a different development from the baseline scenario, starting each time with first quarter of 2020.

4.2.1 Lower GDP Growth in the EU in 2020

The economic development of the Czech Republic's EU trading partners is essential for the economic growth of the Czech small open economy. This scenario assumes a slower GDP growth in the EU for 2020 by 2 pp, which corresponds to the standard deviation of EU GDP growth from 2002 to 2018. In the following years, growth in the EU will return to the baseline scenario.

In the first phase, the decline in foreign demand for domestic products would negatively impact net exports. However, the subsequent pressure on currency depreciation would dampen the decline in net exports through more expensive imports. A worse foreign trade balance would be reflected in a slowdown in real GDP growth in the Czech Republic by 0.5 pp in 2020 compared to the baseline scenario. Lower growth in corporate profits due to weaker exports would slow investment growth by 0.1 pp. Lower output of companies would also negatively affect demand for labour and consequently reduce nominal wage growth. A negative income effect in the form of relatively lower wages and capital returns would reduce growth in household consumption, which would slow down by 0.1 pp. Finally, lower wage growth and a decline in capital gains would create disinflationary pressures of 0.1 pp.

The slowdown in aggregate demand growth would lead to a lower tax collection, which would result in a decline in the general government sector balance by 0.1 pp, followed by a slower reduction in the general government debt in relation to GDP.

4.2.2 Rise in the National Interest Rate

The dynamic model in this scenario simulates the additional tightening of monetary policy for 2020 by 1.2 pp above the baseline scenario. The value of 1.2 pp corresponds to the standard deviation in the development of the short-term interest rate in the period from 2002 to 2018.

A more restrictive monetary policy would have a negative effect on economic development. The pressure on the appreciation of the Czech currency would lead to a rise in the price of export, thus reducing the external demand for domestic production. Conversely, imported goods would become relatively cheaper. Export decrease would, due to the high import intensity of exports, lead to the decrease in imports, as well as the lower income and the decrease of profits of the economic entities in the period of slowing economic growth. The result would be a slight decrease in the growth of imports by 0.1 to 0.2 pp against the baseline scenario.

Another negative impact on consumption is represented by relatively lower household incomes due to lower wage growth. Moreover, a higher rate of interest motivates individuals to save, thus postponing consumption into the future. In sum, a restrictive monetary policy would result in a slowdown in household consumption growth of 0.1–0.2 pp.

Profitability of companies would decrease due to a decline in both domestic and foreign demand. Companies would respond to the decrease in profit and more expensive credit by lowering investment growth by up to 0.2 pp. A slowdown in aggregate demand would further lead to an increase in the unemployment rate compared to the baseline scenario by 0.3 pp and also lower wage growth.

Given the negative impact of higher interest rates on investment, consumption and exports, the resulting impact on GDP growth would also be negative (0.1 pp). The slowdown in economic growth would lead to disinflationary pressures of 0.1 pp.

The slowdown in economic expansion as a result of lower household incomes and corporate profits would reduce the revenue from selected taxes. This would lead to a decline in the general government balance, including higher debt service costs and, consequently, a slower decline in the debt quota.

4.2.3 Higher Oil Prices

An alternative scenario for oil price developments is based on the assumption that the average price in 2020 will be 50% higher than in the baseline scenario (USD 97.1 per barrel versus USD 64.7 per barrel). Higher oil price would be reflected in increased import prices and higher input prices. Companies facing higher energy costs would reflect them in the prices of their final products. Inflation would thus increase by about 1 pp. Higher price level would result in lower domestic demand. The slowdown in demand for domestic and foreign goods would be reflected in a fall in consumption rate of growth by up to 0.5 pp.

Declining aggregate demand would negatively affect domestic production. The profitability of companies would also decrease due to rising energy costs and lower export opportunities. There would also be a certain downturn in investment activity. The growth rate of investment would decrease by 0.2 to 0.6 pp. Another effect of reduced production activity would be a fall in employment growth. Lower demand for work would result in an increase in the unemployment rate by 0.1 pp. Overall, the higher price of oil would slow down the real GDP growth by 0.3 pp.

The general government balance would deteriorate due to lower tax collection. The effect impacting general government spending would be negligible.

Table 4.2: Basic Macroeconomic Indicators – Sensitivity Scenarios

		2019	2020	2021	2022
Baseline Scenario					
Gross domestic product	*Y-o-Y in %*	**2.4**	**2.4**	**2.3**	**2.2**
Private consumption	*Y-o-Y in %*	2.9	2.8	2.5	2.1
Gross fixed capital formation	*Y-o-Y in %*	3.1	2.7	2.6	2.9
Exports of goods and services	*Y-o-Y in %*	3.4	3.5	3.3	3.2
Imports of goods and services	*Y-o-Y in %*	4.0	3.7	3.4	3.5
Harmonised index of consumer prices	*Y-o-Y in %*	**2.1**	**1.5**	**1.7**	**1.7**
Unemployment rate	*in %*	**2.2**	**2.2**	**2.3**	**2.3**
General government balance	*% of GDP*	**0.3**	**-0.2**	**-0.3**	**-0.5**
Gross government debt	*% of GDP*	**31.5**	**30.8**	**30.2**	**29.7**
Alternative Scenario I - Lower GDP Growth in EU in 2020					
Gross domestic product	*Y-o-Y in %*	**2.4**	**1.9**	**2.2**	**2.2**
Private consumption	*Y-o-Y in %*	2.9	2.7	2.4	2.0
Gross fixed capital formation	*Y-o-Y in %*	3.1	2.6	2.5	2.9
Exports of goods and services	*Y-o-Y in %*	3.4	1.7	2.9	3.2
Imports of goods and services	*Y-o-Y in %*	4.0	2.7	3.0	3.4
Harmonised index of consumer prices	*Y-o-Y in %*	**2.1**	**1.4**	**1.6**	**1.6**
Unemployment rate	*in %*	**2.2**	**2.6**	**2.5**	**2.3**
General government balance	*% of GDP*	**0.3**	**-0.3**	**-0.4**	**-0.5**
Gross government debt	*% of GDP*	**31.5**	**30.9**	**30.4**	**29.9**
Alternative Scenario II - Higher interest rates					
Gross domestic product	*Y-o-Y in %*	**2.4**	**2.3**	**2.2**	**2.1**
Private consumption	*Y-o-Y in %*	2.9	2.7	2.3	1.9
Gross fixed capital formation	*Y-o-Y in %*	3.1	2.6	2.4	2.8
Exports of goods and services	*Y-o-Y in %*	3.4	3.2	3.1	3.2
Imports of goods and services	*Y-o-Y in %*	4.0	3.6	3.2	3.4
Harmonised index of consumer prices	*Y-o-Y in %*	**2.1**	**1.4**	**1.6**	**1.6**
Unemployment rate	*in %*	**2.2**	**2.5**	**2.6**	**2.3**
General government balance	*% of GDP*	**0.3**	**-0.4**	**-0.6**	**-0.6**
Gross government debt	*% of GDP*	**31.5**	**31.0**	**30.7**	**30.3**
Alternative Scenario III - Higher oil prices					
Gross domestic product	*Y-o-Y in %*	**2.4**	**2.1**	**2.0**	**1.9**
Private consumption	*Y-o-Y in %*	2.9	2.3	2.2	1.8
Gross fixed capital formation	*Y-o-Y in %*	3.1	2.5	2.0	2.4
Exports of goods and services	*Y-o-Y in %*	3.4	3.0	2.8	2.9
Imports of goods and services	*Y-o-Y in %*	4.0	3.3	3.0	3.1
Harmonised index of consumer prices	*Y-o-Y in %*	**2.1**	**2.5**	**2.3**	**2.0**
Unemployment rate	*in %*	**2.2**	**2.3**	**2.3**	**2.3**
General government balance	*% of GDP*	**0.3**	**-0.3**	**-0.5**	**-0.7**
Gross government debt	*% of GDP*	**31.5**	**30.9**	**30.5**	**30.2**

Note: Different values in the text and in the table are caused by the rounding of values to one decimal place.
Source: CZSO (2019a), EIA (2019), Eurostat (2019), MF CR calculations.

4.3 Verification of Macroeconomic Scenario by the Committee on Budgetary Forecasts

At its meeting on 15 April 2019, the Committee on Budgetary Forecasts assessed, in accordance with Act No. 23/2017 Coll., the macroeconomic scenario of the Convergence Programme in terms of the probability of its materialisation. The Committee assessed the macroeconomic forecast as realistic. Six out of a total of eight present members of the Committee voted for this assessment.

The Committee also assessed the revenue side of the fiscal prediction of the general government sector contained in the Convergence Programme. The majority of the Committee assessed the fiscal forecast as realistic. Six out of seven present Committee members voted for this assessment.

5 Sustainability of Public Finance

Long-term sustainability is a consistently discussed issue of Czech public finances. The highest risk is associated with the expected demographic development, which will, in the next decades, probably significantly increase the ratio of people of retirement age to the economically active population. However, the population ageing is not a matter of a distant future, but it is already evident today. This creates pressure on future expenditure of social security systems, and hence a need to reform these systems. In the past, several professional groups were set up in the Czech Republic to reform the pension system, but so far no broad political consensus has been found for a comprehensive reform. In 2019, the latest expert team – the Fair Pensions Commission – began its activities. However, the phenomenon of population ageing does not only apply to old-age pensions but also to other parts of public finances such as health care, long-term care or education.

5.1 Government Strategy and Implemented Reforms

5.1.1 Current State of the Public Pension System

The pay-as-you-go pension system underwent a number of changes concerning, in particular, the adjustments of retirement age, the calculation of pensions and the method or amount of indexation. The pension calculation technique was last changed with effect from 30 September 2011, when the so-called reduction limits affecting the assessment base of insured persons were adjusted. Starting in 2015, the income level relevant to the calculation of pensions is included in full up to 44% of the average wage and above this limit up to 400% of the average wage, only 26% is included. Income above 400% of the average wage does not affect the assessment basis for the calculation of pension.

The current pension system legislation in respect of retirement age applies with effect from 1 January 2018 (Act No. 203/2017 Coll.). The retirement age of men and women will increase until it reaches 65 years around 2030. The Ministry of Labour and Social Affairs is also required by law to submit a report on the pension system to the government at five-year intervals (the first report is planned for June 2019). The reports aim to evaluate the current retirement age and, where applicable, determine any proposals for its adjustment so that insured persons can spend a quarter of their lives in retirement. Moreover, changes to the retirement age should not apply to persons who are over 55 years of age at the time of revision. However, the revision mechanism does not oblige the government to present an amendment to the retirement age to the Parliament for approval; it is only a recommendation. The development of the statutory retirement age also influences the conditions for permanent widows and widowers pensions, where the age limit is associated with old-age retirement age. As regards early retirements, the limit has been gradually shifting from three to five years before the statutory retirement age. This maximum five-year period may be used, at the cost of significant penalties, by persons whose statutory retirement age is 65 years (or more).

The most recent amendment to the pay-as-you-go pension system was made in September 2018 (Act No. 191/2018 Coll.). With this amendment, the flat rate component of all types of pensions increased from 9% of the average wage to 10%. The second amendment increases the pension of persons over the age of 85 by CZK 1,000 per month. Both changes are effective from 1 January 2019.

In the area of early old age retirements, several penalty rates apply, which progressively reduce the pension benefit throughout the period of its provision. Up to 360 days before the statutory retirement age, there is a 0.9% decrease; between the 361st to the 720th day before reaching the retirement age, the decrease is 1.2%, and, finally, for periods exceeding 720 days (until the statutory retirement age), the decrease is 1.5%. The assessment of old-age pension subsequently decreases by these amounts for every commenced period of 90 days.

In addition, a so-called pre-retirement scheme has been established which enables those subscribing to a supplementary pension scheme (the 3rd pillar) to draw funds up to 5 years before reaching the statutory retirement age without imposing any sanctions. However, pre-retirement is conditional upon having a minimum amount of accumulated funds in the private 3rd pillar so as to provide a monthly pension amounting to at least 30% of the average wage. The old-age pension is not reduced for the years of pre-retirement. Until the end of 2018, only 3,915 persons had used the possibility of pre-retirement, with an average benefit of CZK 9,189. In terms of sustainability of the pension system, this measure has a completely negligible effect.

Concerning disability pensions in the Czech Republic, there are three groups depending on the disability level. Disability pension can be granted to a person whose working ability has fallen by at least 35% due to long-term adverse health condition. Level 1 disability applies to a decrease in working ability from 35% to 49%, level 2 from 50% to 69%, and level 3 from 70%.

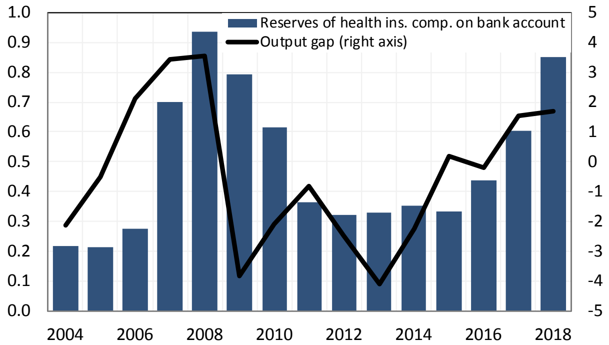
The indexation of pensions paid from the pay-as-you-go system is determined as a sum of consumer price index growth or pensioner cost of living index growth (whichever is higher) and one half of real wage growth. This regulation applies from 1 January 2018, also following the adoption of Act No. 203/2017 Coll. Previously, the indexation formula was a sum of consumer price index growth and one third of real wage growth. Moreover, given the low inflation rate in the recent past, a change in the indexation of pensions was approved that, with effect from 2017, returned limited discretion to the government (Act No. 212/2016 Coll.). Should the increase in the average pension not reach 2.7% under the standard indexation formula, the government may order indexation of pensions up to that value. In other cases it is proceeded strictly in accordance with the statutory indexation formula.

5.1.2 Developments in the Healthcare System

The ratio of health insurance company's balance accounts to total health care expenditure has been growing slightly since 2016. This development has increased the short-term resilience of the public health insurance system to weaker negative shocks, such as in the form of recession, similar to 2012 and 2013. However, at the end of 2019, the expected health insurance company's balance accounts at around 14% of total health care expenditure may not be sufficient in a deeper economic downturn.

Chart 5.1: Health Insurance Company's Balance Accounts

(left axis: in % of GDP, right axis: in % of potential product)



Source: Statements of Health insurance Companies, MF CR.

Moreover, the problem of ageing population with a faster pace of growth in health care expenditure compared to revenues causes that in terms of sustainability the risks of the current public health insurance system are not negligible in the medium and long term. It is clear that measures will have to be implemented to address both the available resources of the public health insurance system, including the structure of funding sources, as well as the financial requirements in individual health care segments.

In the area of health care financing resources, the assessment base for payments for state-insured persons increased to CZK 7,540 as of 1 January 2019, with an increase to CZK 7,903 in 2020 (Act No. 297/2017 Coll.). This will lead to YoY increase in payments for state-insured persons by approx. CZK 3.5 billion. The purpose of this measure was to introduce a certain level of stability and to increase the predictability of the development of part of revenues of the public health insurance system. As a result of the increase in the minimum wage (Government Regulation No. 273/2018 Coll.), as of 1 January 2019 the monthly health insurance contributions for persons without taxable income also increased to CZK 1,803. However, the impact of this increase is negligible within the overall system resources.

In the segment of inpatient care, implementation of the DRG Restart project continues. The aim of this project is to create a long-term sustainable data, information and personnel base for optimizing the system of reimbursement of inpatient care in the Czech Republic. As part of this project, in 2018 data was collected and validated from a specified network of reference health care facilities, followed by the quantification of the cost of inpatient care. A classification system for acute inpatient care (CZ-DRG) should be implemented this year after simulations and testing of impacts on the reimbursement system. The reimbursement method change should lead to higher effectiveness of inpatient care funding as the system will reflect real prices of procedures.

5.2 Fiscal Impacts of Population Ageing

The results of impacts of population ageing are based on long-term projections carried out in cooperation with the Ageing Working Group at the Council of the EU's Economic Policy Committee. The analyses are based on assumptions about demographic development and a methodologically consistent macroeconomic framework for EU countries and Norway (EC, 2017). The projections, therefore, do not reflect the current medium-term macroeconomic and fiscal outlook of the Czech Republic. Projections are carried out under the assumption of unchanged policies. Therefore, they give information about a system that is legislatively anchored at the time of projection calculation, taking into account common practice where discretion is allowed by law. Long-term analyses do not aim to predict specific values but show the trends and dynamics in the long run until 2070.

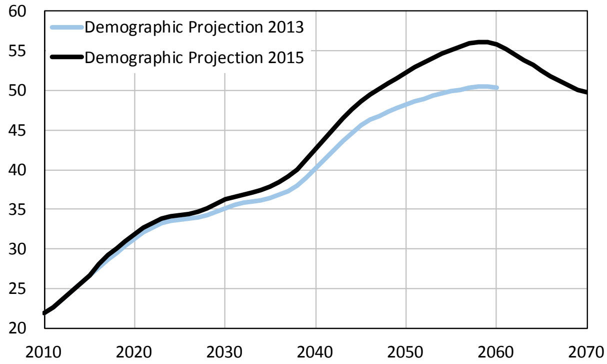
The current update to long-term projections was made in autumn 2017 in connection with the 2018 Ageing Report (EC, 2018a). The projection thus reflects all approved changes in the pension system with effect from 1 January 2018 (Act No. 203/2017 Coll.). Long-term projections including measures given by Act No. 191/2018 Coll. are contained in MF CR (2018f).

The population projection of Eurostat (EC, 2017), predicts a relatively significant decrease in the number of Czech population in the long run (see Box 2), the CZSO (2018) predicts a more moderate decline. The dependency ratio measured as the ratio of people over the age of 65 to the working age population (15–64 years) should almost double by 2060 and reach approximately 56% (see Chart 5.2).

That will be, of course, not only a consequence of the decline in the working age population but also of increasing average life expectancy. The share of people aged 85 and older in the population of people aged 65 and older should more than double in the projection horizon. In the last decade of projections, the dependency ratio should decrease. The strong growth after 2035 and the peak in the period between 2045 and 2060 are mainly due to the baby boomers born in the 1970s. After 2060, their influence should diminish.

Chart 5.2: Old-age Dependency Ratio

(in %, ratio of persons aged 65+ to persons aged 15–64 years)



Source: EC (2014, 2017).

The participation rates for age cohorts above 54 years are increasing in the projection until 2030 in line with postponement of the statutory retirement age. However, they remain approximately constant after 2030, which reflects the current institutional set-up of the pension system. Although the revision mechanism is part of the pension system, it does not oblige the government to present an amendment to the retirement age to the Parliament for approval; it merely gives a recommendation. For this reason, the EC has rejected a proposal for application of this revision mechanism in the long-term projections. The projection thus works with retirement age as a fixed ceiling at 65 years from 2030 onwards.

The development of pension expenditure relative to GDP was relatively favourable in the past years, especially due to the macroeconomic developments. The initial value of expenditure in previous projections was 9.0% of GDP in 2013, whereas pension expenditure was 0.8 pp lower in 2016. Higher wage and salary growth, employment and participation rates, on the other hand, led to a dynamic growth in the revenue side of the system. This positively affected the balance of the system, which was −0.3% of GDP in 2016 (baseline projection year), while the balance continued to improve in 2017 and 2018.

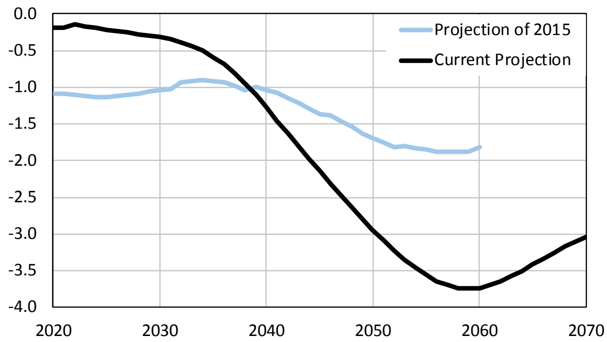
The trend of long-term pension projections is primarily determined by the demographic development and the statutory retirement age. It follows from these assumptions that pension expenditure in relation to GDP until 2030 should be basically stable at the level of the baseline year 2016 (Table 5.1). After 2030, however, the increase in retirement age will stop and the baby boomer generation of the 1970s will gradually retire. That will lead to a relatively dramatic expenditure increase to 11.7% of GDP just before 2060, followed by a decline to 10.9% of GDP at the end of the forecast period in 2070. The decline in expenditure-to-GDP ratio is again due to demographic factors, where people from less strong generations born in the 1990s will retire, replacing those of stronger generations.

The pension system's revenue-to-GDP remains constant over the projection period. That is based on the assumption of development of wages and salaries in the economy, which should, in the long term, develop in line with labour productivity. As a result, the share of the remuneration of the labour factor of production in GDP, from which the constant rate of pension insurance at 28% of gross wage or salary is paid, remains constant. The system's revenue thus reaches the level of the baseline year 2016 and is at 7.9% of GDP.

Considering the constant revenue, the resulting projection of the balance of the pension system (Chart 5.3) follows the course of pension expenditure. We expect that until 2030 this balance will be relatively stable at a level around −0.3% of GDP. Subsequently, the balance will deteriorate and fall almost to −4% of GDP around 2060; the deficit should start decreasing in the last decade of the projection. This is a significant deterioration compared to the previous projection (EC, 2015), where the balance fell just before the end of the projection to a minimum level of less than −2% of GDP.

Chart 5.3: Projection of Pension Account Balances

(in % of GDP)



Source: MF CR and the Ageing Working Group of the Economic Policy Committee.

As the method of modelling the pension expenditure remained unchanged since the last round of projections, the reasons for the pension system balance deterioration can be divided into two groups. The first group is the external factors (e.g., different demographic development), the second group is changes to the pension system (a different indexation formula and the retirement age ceiling).

While updates to the projection assumptions play a role in the dynamics of expenditure over time, favourable developments in the past years act against it. Although expenditure grows more dynamically in the new projection, it grows from a lower base and will end at virtually the same level in 2060 as it did in the previous projection (9.7% of GDP). The higher deficit is thus caused mainly by the systemic changes. The deterioration of the pension system balance in 2060 is mostly due to the retirement age ceiling (an impact of 1.6 pp), whereas the change in the indexation formula increases expenditure by approx. 0.3 pp. In other words, the absolute ceiling on the retirement age has led to an increase in pension expenditure, in current terms, by approx. CZK 75 billion, and the indexation formula change will increase expenditure by further approx. 15 billion CZK.

In the area of health care and long-term care, the situation is similar to the previous projections in terms of the dynamics of expenditure growth. For health care, the baseline scenario includes an increase by one fifth (from 5.4% of GDP in 2016 to 6.5% of GDP in 2070), for long-term care the increase is more than double (from 1.3% of GDP in 2016 to 2.9% of GDP in 2070). Compared to the previous projections, however, the difference is at the initial levels, namely at the level of long-term care, which is almost double compared to the 2015 Ageing Report (for details see MF CR, 2018a).

The reference scenario differs from the pure demographic scenario in several respects. In health care, the difference is higher income elasticity, with demand for health care services rising initially 10% faster than living standards, measured as GDP per capita. Furthermore, in relation to an increase in life expectancy, it is conversely expected that half of it will be spent in good health (as opposed to all increase spent in poor health in the demographic scenario). In the case of long-term care, the expectation of a higher growth of compensation of employees in social services is linked to labour productivity increases in the economy (instead of GDP growth per capita, which is lower).

Demographic impacts increase health care expenditure by 1.4 pp, higher income elasticity by another 0.3 pp, while the effect of good health in the extra life expectancy reduces the increase of expenditure in the reference scenario by 0.6 pp. For long-term care, the impact of demographic development is quantified at 1.4 pp, and higher compensation of employees at additional 0.3 pp. The effect of good health in half of the additional life expectancy in the projection outweighs the higher income elasticity, thus moderating the increase of expenditure slightly by 0.1 pp.

Finally, the last significant item of long-term expenditure, education, should grow from 3.2% of GDP in 2016 to 4% of GDP in 2070. This is basically the same as in the previous projections and, also, this is the highest growth in the EU. The increase is due to higher growth in compensation of employees in education in relation to the projected economic growth.

Total expenditure growth between 2016 and 2070 exceeds 6 pp, as shown in Table 5.1. Health care, long-term care and education together grow by 3.5 pp. However, these are baseline scenarios, and especially in health and long-term care most alternative (sensitivity) scenarios show more or less higher growth (see EC, 2018a). The only exceptions are scenarios that include an impact of healthier lifestyle.

Table 5.1: Age-related Expenditure Projection – Reference Scenarios
(in % of GDP)

	2016	2020	2030	2040	2050	2060	2070
Age-related expenditure	**18.1**	**18.3**	**19.5**	**21.1**	**23.4**	**25.1**	**24.3**
Pensions	8.2	8.1	8.2	9.2	10.8	11.6	10.9
Health-care	5.4	5.6	5.9	6.2	6.5	6.6	6.5
Long-term care	1.3	1.4	1.8	2.1	2.4	2.8	2.9
Education	3.2	3.2	3.7	3.6	3.7	4.1	4.0

Source: EC (2018a).

Box 2: New Demographic Projection of the CZSO

On 28 November 2018, the CZSO issued an updated demographic projection of the Czech population (CZSO, 2018). However, the baseline scenario of long-term projections of population age-related expenditure, also presented in this Convergence Programme, is based on Eurostat's projection published in the first half of 2017 (Eurostat, 2019). In addition to the date of their publication, which, however, due to the short interval, does not have a major impact on long-term trends, both projections partly differ both in methodology and in basic assumptions. Eurostat uses a uniform, consistent methodology for all countries, taking into account their mutual relationships as well as relationships between EU countries and the outside world. On the other hand, the CZSO takes more account of national specifics.

Table 5.2: Basic Assumptions of Demographic Projections

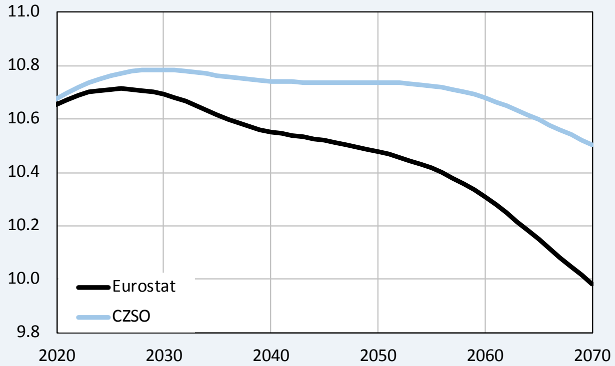
		2020	2030	2040	2050	2060	2070
Total fertility rate							
Eurostat	*children per woman*	1.68	1.74	1.76	1.78	1.80	1.82
CZSO	*children per woman*	1.70	1.72	1.73	1.74	1.74	1.74
Male life expectancy at birth							
Eurostat	*years*	76.8	78.6	80.3	82.0	83.5	84.9
CZSO	*years*	76.6	78.7	80.5	82.1	83.6	84.8
Female life expectancy at birth							
Eurostat	*years*	82.6	84.1	85.5	86.8	88.1	89.3
CZSO	*years*	82.4	84.0	85.5	86.7	87.9	88.9
Net migration							
Eurostat	*persons*	21 499	17 499	20 522	14 073	8 808	8 540
CZSO	*persons*	26 000	26 000	26 000	26 000	26 000	26 000

Note: Projections originally reach for Eurostat to 2080 and for CZSO to 2100. We present the data here just to 2070, which is the horizon of long-term projections for the evaluation of the fiscal impact of population ageing.
Source: EC (2017), CZSO (2018).

The basic assumptions of both demographic scenarios are compared in Table 5.2. Both institutions do not fundamentally differ in their expected life expectancy and total fertility within their medium variant of population projections. Significant impacts in terms of population size are attributed to a higher estimated net migration balance, but this is considered the least predictable variable.

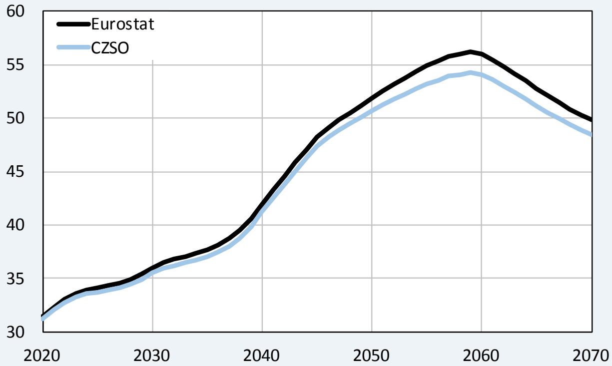
Both Eurostat and the CZSO expect a decline in the Czech population in the long term. The more positive assumptions of the CZSO are behind more stable development and a more moderate decline in the total number of persons in the last two decades of the considered horizon by 2070. As shown in Chart 5.4, the difference in the total number of people has increased over time, reaching 522,000 at the end of the horizon. However, the basic factor influencing the fiscal impacts of population ageing is the population structure with respect to the number of people in productive versus post-productive age. The demographic dependency ratio, which measures the number of people aged 65 and older to persons aged 15–64, is not very different, as confirmed by Chart 5.5. As a result, the CZSO projection shows a slightly lower dependency ratio, which is mainly due to the higher migration balance of persons in younger age cohorts.

Chart 5.4: Population
(mil. persons)



Source: EC (2017), CZSO (2018).

Chart 5.5: Old-age Dependency Ratio
(in %, ratio of persons aged 65+ to persons aged 15–64 years)



Source: EC (2017), CZSO (2018). MF CR calculations.

In order to assess the fiscal impacts of alternative development of demography, it is first necessary to reflect changes in the macroeconomic scenario. The Convergence Programme baseline scenario is based on projections calculated by the EC for EU countries in the Ageing Working Group based on Eurostat's demographic projections. The alternative scenario is based on the CZSO demographics and relies on the Ministry of Finance calculations using the same methodology for creating a macroeconomic framework.

With a view to ensuring the best comparability, the alternative scenario maintains parameters not directly related to demographic developments (e.g. developments in aggregate factor productivity, labour productivity, capital growth in relation to the hours worked, etc.) consistent with the baseline scenario. Also the unemployment rate remains the same at the long-term structural unemployment rate estimated for the Czech Republic as part of the EC projections. Differences from the baseline scenario result from a higher number of people of working age, which in turn increases the labour factor. The positive contribution of the labour market through the structure of the population is also illustrated by the higher participation rate (Table 5.3), which reflects higher proportion of people in more active cohorts. These factors, given the assumption of labour productivity developments, have a positive effect on faster GDP growth.

Table 5.3: Difference between the Alternative and Baseline Macroeconomic Scenario
(percentage points)

	2016	2020	2030	2040	2050	2060	2070
Labour productivity growth	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Real GDP growth	**0.0**	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**
Participation rate of males (aged 20–64)	**0.0**	**0.0**	**0.1**	**0.2**	**0.2**	**0.1**	**0.3**
Participation rate of females (aged 20–64)	**0.0**	**0.0**	**-0.1**	**0.0**	**0.2**	**0.0**	**0.3**
Total participation rate (aged 20–64)	**0.0**	**0.0**	**0.0**	**0.1**	**0.3**	**0.1**	**0.3**
Unemployment rate	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Population aged 65+ over total population	**0.0**	**-0.1**	**-0.2**	**-0.3**	**-0.3**	**-0.5**	**-0.4**

Note: Difference between the alternative projection and the baseline projection scenario depicted in Table A.7.
Source: EC (2017, 2018). MF CR calculations.

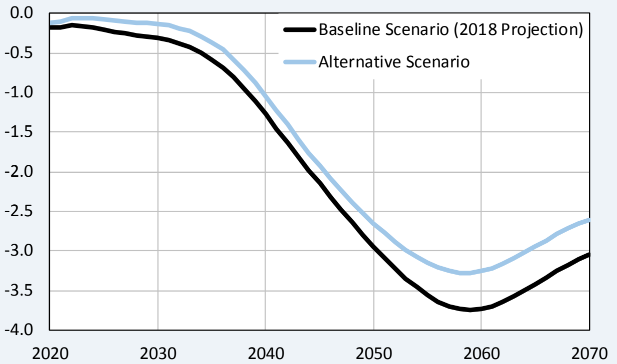
The impact of the different demographic and resulting macroeconomic scenarios on age-related expenditure is not very dramatic as a result. However, there are two conflicting effects in all expenditure components. The more optimistic projection of the CZSO leads to a higher absolute number of pensioners, recipients of health and long-term care, as well as students, which increases expenditure. However, the dominant factor in this scenario is a higher level of GDP, which reduces the ratio indicators. In addition, a positive income effect plays a role in health and long-term care, with higher income generating higher healthcare costs. The effects are virtually eliminated here, while the positive macroeconomic impacts outweigh the pension and education expenditure.

Table 5.4: Difference of the Alternative Scenario of Age-related Expenditures
(in % of GDP)

	2016	2020	2030	2040	2050	2060	2070
Age-related expenditure	**0.0**	**-0.1**	**-0.2**	**-0.2**	**-0.3**	**-0.5**	**-0.4**
Pensions	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.1
Health-care	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Long-term care	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Education	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2

Note: Difference between alternative projection and the baseline projection scenario depicted in Table 5.1.
Source: MF CR calculations and projection.

Chart 5.6: Pension Account Deficit Development according to MF Projections
(in % of GDP)



Source: Projection of MF CR and the Ageing Working Group of the Economic Policy Committee.

Pension expenditure is a determining factor for the development of the pension system balance in relation to GDP. Despite the fact that higher GDP is calculated in the alternative scenario, revenues do not play a role in this ratio indicator. In both scenarios, the revenue-to-GDP ratio is assumed to be constant over the entire projection horizon, taking into account the consistent long-term development of wages and salaries and GDP. The resulting balance is thus more favourable in the case of the alternative projection due to lower expenditure dynamics, in the range of 0.4–0.5% of GDP at the end of the projection horizon.

Although the demographic projections of Eurostat and the CZSO differ in population size, the decisive factor is the age structure. It is very probable that despite the potentially more positive results of the pension system balance as seen by the CZSO projection, a gradual decline in the balance to –3.3% of GDP (versus –3.7% of GDP in the baseline scenario) will occur in connection with the retirement of strong population years. Therefore, the conclusions for assessing long-term sustainability are virtually identical in both scenarios.

5.3 Sustainability Analysis

A sustainability analysis follows up on the long-term projections, which identifies the extent of any fiscal consolidation to ensure stability of public finance. So-called sustainability indicators are calculated, showing the scope of measures required for decreasing expenditure or increasing revenues as a percentage of GDP in order that they correspond to the required levels.

The EC publishes three standard sustainability indicators (see EC, 2019b). In general, the S1 indicator expresses the percentage of GDP by which it is necessary to improve the primary structural general government balance so that state debt amounts to 60% of GDP in 2030. This indicator is currently at −2.9% of GDP in the Czech Republic. The negative value documenting an increase in expenditure associated with population ageing until 2030 is "offset" mainly by a relatively low general government debt, supported by its reduction in the past years.

The S2 indicator specifies the amount of fiscal effort necessary for fulfilling the intertemporal budget constraint in an infinite horizon. According to the latest calculations, it stands at 4.1% of GDP. The value of this indicator is significantly influenced by the costs of population ageing, which, unlike in the horizon for the S1 indicator, outweigh the current positive situation of public finances.

The S0 indicator specifies possible fiscal or financial risks over a short period of time. The nature of S0 thus makes it different from indicators S1 and S2 because S0 quantifies risk. The S0 indicator level for the Czech Republic is currently 0.18, which is significantly below the critical limit of 0.43.

The Czech Republic is currently evaluated as a medium-risk country in the area of long-term sustainability of public finances. In particular, the future pressures on public finances due to demographic change need to be resolved to return to the low-risk band. This applies to all components of long-term projections, i.e. pensions, health and long-term care, as well as education.

Table 5.5: Sustainability Indicators S1 and S2 for the Czech Republic
(in % of GDP)

	S1	S2
Cost of Ageing	0.9	4.7
Initial budgetary position	-1.6	-0.5
Impact of current debt	-2.2	-
Total	**-2.9**	**4.1**

Source: EC (2019b).

5.4 General Government Guarantees

The long-term sustainability of public finances is complemented by the issue of guarantees provided by the general government sector to other entities. The guarantees represent increased general government expenditure at a time when debtors are unable to repay their obligations for which the guarantee has been provided. The volume of provided guarantees has been steadily decreasing in recent years. Their total amount was 0.2% of GDP at the end of 2018.

The majority share of guarantees in the general government sector is made up of guarantees provided by local governments of 0.1% of GDP. The most important of these is one to the Prague Public Transit Company to deferred repayments for the purchase of trams in the amount of CZK 5.3 billion. Other include guarantees provided by local governments for loans associated with housing needs (CZK 0.3 billion).

State guarantees have been steadily declining, especially because since 2001 funding for infrastructure development has not been addressed through the provided guarantees. In 2016, the rights of Czechoslovak Trade Bank's to the guarantee in the case of the takeover of the Investment and Post Bank were extinguished. Although only a fraction of the value of the guarantee has been paid so far (CZK 6.1 billion out of the total value of CZK 160 billion), the last litigation with a potential settlement of up to CZK 20 billion has not yet been concluded in this case.

In 2018, a state guarantee was provided to secure the CNB's loan to the International Monetary Fund from its foreign exchange reserves (Act No. 179/2018 Coll.) under a new contract. The previous contract between the two institutions ended in 2016. The promised credit facility is up to EUR 1.5 billion, but the amount of the guarantee depends on the loan drawing. The guarantee has not yet been used. In the case of the previous contract for securing the CNB's loan to the International Monetary Fund, the amount of drawdown in individual years was between CZK 0.4 and 2.2 billion. Due to the drawing of the loan in the past and the reliability of the borrower, this guarantee does not pose a risk to public finances.

6 Quality of Revenue and Expenditure of Public Finances

The fight against tax evasion remains one of the Czech Republic's main priorities in the tax area. Equally important priority is the reduction of administrative demands and the digitization of tax collection. This is the focus of the "MOJE daně" project (MY TAXES) or a proposal for a flat-rate tax. These two objectives correspond to the overall direction of tax policy at national and international levels.

In the area of rationalization of expenditures, the Central Procurement System of the state was further refined during 2018, with transactions exceeding CZK 4 billion. The transposition of the EU Council Directive on requirements for budgetary frameworks of member states should be completed this year by the adoption of a technical amendment to the Financial Control Act.

6.1 Tax Policy Outlook in Years 2019–2022

6.1.1 Upcoming Tax Changes

The Government has prepared an amendment to the Registration of Sales Act, reflecting the Constitutional Court's decision (Judgment No. 8/2018 Coll.) and practical needs (Chamber of Deputies Print No. 205). The amendment regulates the effectiveness of electronic registration of sales for the remaining part of entrepreneurs who originally fell into the phases 3 and 4 (i.e. freelancers, transport, agriculture, entrepreneurs in manufacturing, selected crafts, etc.). A lower rate of VAT is proposed as a compensatory measure for selected labour-intensive services and some other goods. A significant reduction in the rate will thus apply to hairdressing and barber shops, bicycle repair, shoe repair, clothing and textile adjustment and repair and draft beer sales, where it should drop from the current 21% to 10%. The proposal also foresees a further reduction in VAT in the sector of catering services and non-alcoholic beverages (in which rates have already fallen from 21% to 15% due to the start of the first phase of electronic registration of sales) also to 10%. Furthermore, the VAT rate for land and water regular passenger mass transport is changed from 15% to 10% (Act No. 6/2019 Coll.). The same rate cut will be applied from 1 January 2020 to heat and cold supplies (Act No. 80/2019 Coll.). For the smallest entrepreneurs, a simplified "paper" registration system is proposed. The registration regime reposes on issuing receipts from a notebook that the entrepreneur receives free of charge at the tax office. Once every three months, he will send a special form with information on the revenues and the receipts issued and cancelled to the tax office.

Act No. 80/2019 Coll. again increases the limit for the application of flat-rate costs for entrepreneurs for the tax year 2019. The maximum expenditure limit for which entrepreneurs do not have to follow actual costs has doubled to CZK 2 million. Furthermore, work began on a government proposal of a law, which will make it easier for small self-employed persons to pay duties and reduce the administrative burden of doing business. Entrepreneurs with an annual income up to CZK 1 million will be allowed to get rid of the obligation to keep accounts for tax purposes and to report income tax, social and health insurance on three different forms through a single lump sum payment. The flat-rate tax will be paid monthly by a single payment and will include the minimum social and health insurance bases for the year (i.e. the amounts already required to be paid by all taxpayers) and the tax amount. The total amount of this flat-rate payment should vary according to the development of the average wage. The measure is intended to lead to savings for the financial administration in addition to reducing the paperwork of entrepreneurs.

Furthermore, the Ministry of Finance has prepared a proposal amending some tax laws. In the area of income taxes, the way in which tax deductible technical provisions in the insurance sector are determined should change and the institute of exemption of dividend revenues should be extended. Adjustments to tax rates should apply to gambling tax and excise duties on alcohol and tobacco products. The abolition of the exemption of household boiler rooms from the gas tax should then partly contribute to efficient market mechanism in this area.

At present, intensive discussions and analyses are under way to introduce the so-called digital tax in the Czech Republic. A proposal for a Directive for a short-term solution to the taxation of digital services has been drafted within the EU, but a compromise proposal was not adopted in the end. The tax was to be levied at 3% of taxable income only on large business entities (with a worldwide turnover of over EUR 750 million and simultaneously a turnover of over EUR 50 million on taxable services within the EU) providing targeted digital advertising services, including services directly related to it.

6.1.2 Effectiveness of Taxation Collection and Digitization

The priority of the Ministry of Finance of the Czech Republic remains the digitization of tax administration and improving a taxpayer-friendly approach. Project "MOJE daně" is the flagship of gradual digitization of tax administration, substantial simplification and a taxpayer-friendly approach. The expected effective date is 2020. The project includes, among other things, the creation of the "MOJE daně" portal, a virtual tax office, which will offer taxpayers the possibility of pre-filled tax forms. They will include the basic data of the taxpayer, wage inputs from the employer or data from third parties (information from banks or pension funds) that are important for the final determination of tax liability. This will significantly simplify the electronic filing of tax declaration. An integral part of digitizing the tax administration is streamlining tax collection using software (analytical) tools. At the same time, higher integration of IT will reduce the burden on taxpayers from control activity.

6.1.3 International Co-operation against Tax Evasion

Also, the Czech Republic has been seeking to introduce reverse charge mechanism that would substantially reduce the remaining VAT evasion. The path to this has been opened by the unanimous approval by the Council of the EU on 2 October 2018 in Luxembourg, following a number of years of efforts by the Czech Republic. The flat-rate mechanism may apply to all taxable transactions for goods and services for individual transactions above EUR 17,500 (approx. CZK 450,000). On 16 January 2019, the Czech Republic sent a request to the EC, which would submit it to the Council of the EU for approval under the set rules. After the approval of the application, a legislative process will be launched in the Czech Republic with expected force of law from 1 July 2020.

Another important tool to combat international tax evasion is the ever-increasing international exchange of information on tax matters. The main measures that were implemented in 2018 are the transposition of the DAC5 Directive, implemented by an amendment to the Tax Code (Act No. 94/2018 Coll.). Based on this, the tax administrator's access to certain data and documents obtained and held by obliged entities (lawyers, notaries, tax advisors, etc.) under the legal regulation of measures against money laundering and terrorist financing is newly ensured.

Currently, the new range of information that has been included in the automatic information exchange regime is a summary of information on tax optimization schemes posing risk in terms of tax avoidance (under DAC5). The means of protecting national income tax bases in this case is a form of special reporting obligation on individual elements of optimization schemes and their users. This reporting obligation will apply primarily to so-called intermediaries (especially tax advisors, lawyers, accountants and other entities involved in the creation and application of tax optimization schemes in practice) who will be obliged to report to the tax authorities the prescribed information on these schemes. In the event that an intermediary applies a professional secrecy exemption, the reporting obligation passes directly to the taxpayer concerned by the scheme. The relevant national legislation is currently under preparation.

In the first half of 2019, the EU Directive against tax avoidance was transposed into the Czech law (Act No. 80/2019 Coll.), which should prevent unfair practices in this area, especially for multinational corporate entities. The Directive sets out five tax avoidance measures: deductibility of interest limitation, exit taxation, a general anti-abuse rule, controlled foreign company rules and rules to tackle hybrid mismatches. All these measures apply only to legal entities.

6.2 Rationalisation of General Government Expenditure

6.2.1 Act on Management and Control of Public Finances

Completion of the transposition of Council Directive 2011/85/EU, largely implemented by the adoption of Act No. 23/2017 Coll., on fiscal responsibility rules, and Act No. 25/2017 Coll., on the collection of selected data for public finance monitoring and control, requires the amendment to Act No. 320/2001 Coll., on financial control in public administration and on amendment to certain acts (the Financial Control Act), as amended. In 2016, the Ministry of Finance submitted to the Chamber of Deputies of the Parliament of the Czech Republic a draft act on the management and control of public finances, which should have not only completed the full transposition of the Directive into the Czech legal order, but also created a simple and transparent system of public finance control, which would clearly establish the responsibility of specific persons for the approval and control of public expenditure. However, this draft act was rejected by the Senate of the Parliament of the Czech Republic in August 2017, and its veto was subsequently not overridden by the absolute majority of all deputies. For this reason, the Ministry of Finance of the Czech Republic has prepared a draft amendment of a technical nature (Chamber of Deputies Print No. 261), which extends the range of entities (these are voluntary associations of municipalities and their publicly co-funded organizations and the Railway Infrastructure Administration) defined under the term "public authority" in accordance with the requirements of the Directive, while the system itself remains unchanged. The effect of this amendment is proposed from 1 January 2020.

6.2.2 Central Procurement of the State

Pursuant to Government Resolution No. 924/2014, purchase of specific commodities through a system of central procurement of the state has been implemented since 2016. Based on the knowledge of the structure of expenditure of selected departments and conducted analyses of good practice in the area of central procurement in five EU countries, Government Resolution No. 289/2015 stipulated a list of commodities for standardisation for the purposes of central procurement. Consequently, Government Resolution No. 913/2015 approved a central procurement framework schedule for 2016–2020. Additionally, Government Resolution No. 24/2016 approved the minimum requirements for the operation of ministerial centralized procurement systems and a list of commodities (electricity, telecommunications, office technology, cars, etc.) that are obligatorily purchased by a central contracting authority within these systems. Of the total number of 25 central state administration bodies, 16 of them currently have the obligation to establish a ministerial centralized procurement. In August 2018, the Ministry of Finance submitted to the Government already the second Report on the Evaluation of Centralized Procurement and Central Procurement System of the State for 2017 (MF CR, 2019b). In 2017, a total volume of CZK 4.2 billion was carried out in the framework of the centralized procurement departmental systems. More than two-thirds of this financial volume consisted of commodities for which the obligation to purchase under the centralized procurement system is set by Government Resolution No. 24/2016. The remaining third consisted of commodities, which are commissioned by individual ministries on a voluntary basis. As a result of centralized procurement, savings of CZK 0.7 billion are estimated in 2017. In 2014–2017, total savings of CZK 2.8 billion were realized.

In 2018, the Ministry of Finance of the Czech Republic also prepared technical standards for selected commodities intended for central procurement of the state (cars, office supplies and cleaning services) the binding nature of which is further regulated in the interpretative opinion on the rules of central procurement of the state, prepared by the Ministry of Finance of the Czech Republic in cooperation with the supra-ministerial coordination group based on Government Resolution No. 520/2018. Its aim is to refine and unambiguously regulate the procedures, rules and obligations of central procurement of the state and follow-up activities related to its implementation.

6.2.3 Property of the Czech Republic

The amendment to the Act on the Property of the Czech Republic and her Representation in Legal Matters (implemented by Act No. 51/2016 Coll.) contributes to the more efficient administration of state property. This amendment has allowed the gradual concentration of selected state property with the Office for Government Representation in Property Affairs. An efficient instrument to increase the effectiveness of the use of public funds is the Central Registry of Administrative Buildings, whose administrator and operator is the Office. The system records all state-owned administrative buildings and is helpful for optimizing the occupancy of buildings which the state institution rents to non-public entities. In 2017, there were 66 transfers of state authorities from private lease to state-owned buildings, which resulted in savings of CZK 15.4 million on paid rent and also reduced operating and maintenance expenses. The realized dislocation plans since 2015 save over CZK 122 million per year on rent and another more than CZK 35 million for operation and maintenance. The system is also used to identify unnecessary property that is subsequently intended for sale.

The Chamber of Deputies of the Parliament of the Czech Republic is discussing the amendment to Act No. 219/2000 Coll., on the Property of the Czech Republic and her Representation in Legal Matters, as amended (Chamber of Deputies Print No. 406), which governs the exercise of claims for damages where, for these purposes, the state organizational units are regarded as separate legal entities, i.e. that their property is not linked to the state budget. As a result, it will be possible to recover damages from their workers as well as from third parties that would have been hired by the state organizational units.

6.3 Composition of General Government Expenditure

In 2009–2017, with the exception of 2012, the general government expenditure in relation to GDP decreased (by 0.7 pp on average). In absolute terms, total expenditure increased by about 1.6% per year on average in this period. The largest average contribution to growth had expenditure in the Social Affairs (0.6 pp) and Health (0.5 pp) sections. In 2017, the general government expenditure increased by CZK 83.1 billion YoY, but in 2016 the comparative level of expenditure decreased by CZK 33.9 billion as a result of the transition to the new financial perspective. More than 70% of the YoY growth was driven by expenditures in Health and Education sections (in particular, compensation of employees in both sections), and in the Social Affairs section, due to the growth of cash social benefits in the Age group. A YoY decrease in expenditure was only achieved in the General Public Service section as a result of a decreasing in interest expenditure on the general government debt management.

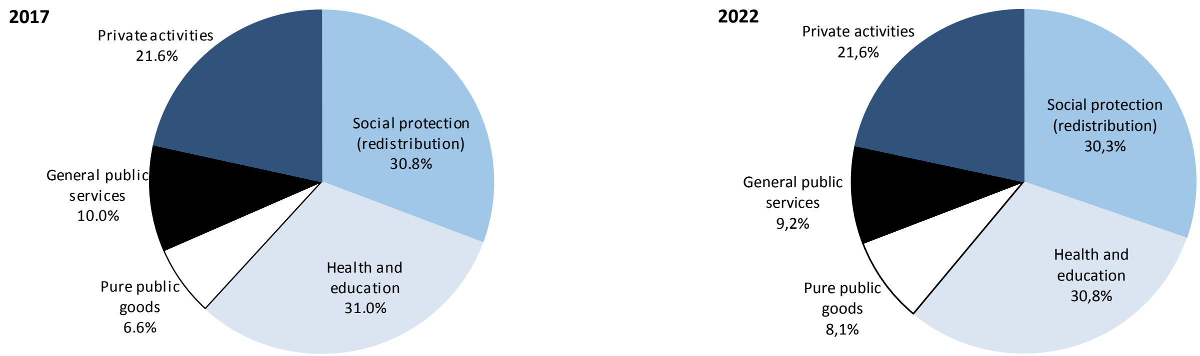
Between 2020 and 2022, we expect an increase in general government expenditure both in absolute terms and in relation to GDP. In 2022, expenditure should increase by 2.8 pp compared to 2017; we expect an increase in expenditure in all sections except for the General Public Service. The largest increase is expected in the Social Affairs section (by 0.7 pp), mainly as a result of the increase in pension expenditure (the Age group), similar increase is foreseen in expenditure in the Defence section (by 0.6 pp to 1.4% of GDP in 2022) in line with the approved Long-term Defence Outlook 2035 (Government Resolution No. 187/2019) [1]. We also estimate a significant increase in expenditure in the Education (by 0.4 pp) and Health (by 0.4 pp) sections.

[1] The forecast does not contradict the approved Long-Term Defence Outlook 2035. It works only with a different, accrual methodology and a different coverage. The 1.4% of GDP commitment for defence in the cash methodology is included in the state budget medium-term outlook for 2021.

In absolute terms, we expect, in the years of the outlook, an average YoY dynamics of general government expenditure growth of approx. 4.7%, and we anticipate that the largest average contribution to growth will be reported by expenditure in the Social Affairs, Health, Education and Economic Affairs sections.

Chart 6.1 captures the structure of expenditure by functions in relation to total general government expenditure in 2017 and its expected structure in 2022. We expect that at the end of the forecast period, almost half of total general government expenditure will be spent on social security and health care for the population (i.e. 20.5% of GDP, representing an increase in this share compared to 2017 by 1.0 pp).

Chart 6.1: Structure of General Government Expenditure, Divided by Function
(in % of total expenditure)



Note: The category "Pure public goods" includes "Defence" and "Public Order and Security". The category "Private activities" is a sum of "Economic Affairs", "Environmental Protection", "Housing and Community Amenities", and "Recreation, Culture and Religion". For details about the division see ECB (2009).
Source: CZSO (2019d). MF CR calculations and forecast.

7 Changes in the Institutional Framework of Fiscal Policy

High-quality and reliable institutional framework of fiscal and budgetary policy is a basic prerequisite for healthy and sustainable public finances. In this context, the fiscal responsibility laws were adopted at the beginning of 2017, whereby, for the first time, the expenditure frameworks for the state budget and state fund budgets compatible with the medium-term budgetary objective were prepared, looking at public debt and ensuring the solvency of local governments. The Czech Fiscal Council and the Committee on Budgetary Forecasts have also been set up under the law. In the area of transparency, several major amendments to the legislation have been prepared, both in the area of the budgetary procedure and in the control of the economic management of the units within the general government sector.

7.1 Fiscal Responsibility

Act No. 23/2017 Coll., on fiscal responsibility rules, and Act No. 24/2017 Coll., amending certain laws in connection with the adoption of the fiscal responsibility rules, entered into effect on 21 February 2017. The provision on remediation to ensure at least the specified minimum repayments of a debt incurred by a local government became effective on 1 January 2018, leaving room for local government budgets to adjust the debt repayment instalments. Together with these laws, Act No. 25/2017 Coll., on the collection of selected data for the purposes of monitoring and managing public finances, as amended by Act No. 183/2017 Coll., which supplemented the transposition of EU law in the field of budgetary framework requirements to include the component of reporting.

The Czech Fiscal Council was established under Act No. 23/2017 Coll. In cooperation with the Council, the Ministry of Finance set up a methodology for setting one-off and other temporary measures, which are one of the areas entering the process of deriving binding expenditure frameworks of the state budget and state fund budgets (Lang et al., 2018). A binding methodology for deriving expenditure ceilings for the State budget and State funds (MF CR and CFC, 2018) was also published. It includes both cyclical adjustment procedures and the identification of one-off and other temporary measures as well as the transition from accrual to cash methodology. The Ministry of Finance acts in accordance with this methodology in the determination of the expenditure ceilings and the Czech Fiscal Council then assesses compliance with the rules specified by law and agreed methodology. This year's methodology update (MF CR and CFC, 2019) has refined the specific value of the structural balance on which the expenditure ceilings are based to a medium-term budgetary objective, but to no less than −1% of GDP. This aspect is becoming increasingly important, especially after tightening the medium-term budgetary objective to −0.75% of GDP (see Box 3).

In addition, methodological compendia were published on the prediction of health insurance revenues (MF CR, 2018c), as well as on long-term pension projections (MF CR, 2018d) and expenditure on health and long-term care and education (MF CR, 2018e). The latter are not methodologies used in the Ageing Report, but national methodology, although heavily influenced by the work of the European Commission and the Organization for Economic Cooperation and Development. Act No. 23/2017 Coll. also stipulates an obligation to assess the probability of fulfilment of forecasts used for purposes of preparing the state budget, budgets of the state funds and health insurance companies and their medium-term outlooks by an independent Committee on Budgetary Forecasts. It started to evaluate the Ministry of Finance's forecasts in July 2018 to ensure that budget planning is based on the most likely or prudent macroeconomic and fiscal scenario. The Committee has a total of 11 members representing independent institutions that prepare economic forecasts themselves. The members of the Committee are from the financial sector, including the CNB, representatives of the social partners and academia.

Box 3: Medium-Term Budgetary Objective in the European Framework and Its Value for the Czech Republic for 2020–2022

Each EU Member State has its medium-term budgetary objective under the Stability and Growth Pact. It is expressed as a minimum structural balance and reflects both the normal volatility of public revenue and expenditure, as well as the level of debt and the country's future liabilities. Compliance with the medium-term budgetary objectives should allow Member States to maintain a sufficient reserve against the 3% GDP deficit reference value during normal cyclical fluctuations in the economy, to gradually improve the sustainability of public finances while leaving room for automatic stabilization mechanisms.

The medium-term budgetary objective is set every three years after the update of the Ageing Report or when structural reform is implemented with a significant impact on fiscal sustainability. The method of its calculation is determined by the implementation document of the Economic and Financial Committee of the Council (EU) on the Stability and Growth Pact (EFC, 2017), the minimum value must not be less than −0.5% of GDP for the signatory States to the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (primarily Title III) or −1.0% of GDP, if the country has low debt and sustainable public finances and for countries participating in the Exchange Rate Mechanism II. At the same time, the minimum value may be tightened in all EU countries with regard to:

a) the size of contingent and unconditional liabilities, i.e.: (i) a budgetary position that would stabilize the debt-to-GDP ratio at 60% of GDP in the long term; (ii) a fiscal effort to cover 33% of the current value of the projected growth in age-related expenditure; (iii) efforts for an acceptable debt reduction for countries whose government debt exceeds 60% of GDP;

b) the minimum benchmark to ensure that the general government deficit respects the 3% of GDP reference value under normal cyclical fluctuations.

In line with the EC review (2019c), a minimum medium-term budgetary objective for EU Member States was updated in February 2019. The update is based on a long-term macroeconomic and budgetary projection from the Ageing Report 2018 (EC, 2018a), general government debt developments with outlook for 2020 and major macroeconomic indicators from the EC's autumn economic forecast (2018b). Ten countries should adjust their medium-term budgetary objective (besides the Czech Republic they are Belgium, Bulgaria, Croatia, Estonia, Hungary, Italy, Luxembourg, Romania and the United Kingdom). For the Czech Republic, the minimum medium-term budgetary objective was tightened by 0.75 pp. As the Czech Republic set the medium-term budgetary objective at −1.00% of GDP in 2017–2019 (see Table 7.1), the actual tightening is 0.25 pp compared to the previous period. The tightening reflected the rise in ageing costs primarily due to a change in the projection of demographic development and changes in the pension system (a different indexation formula and, above all, the retirement age ceiling).

Table 7.1: Comparison of the Medium-Term Budgetary Objective and its Components between 2017–2019 and 2020–2022
(in % of GDP)

	2017–2019	2020–2022
Minimum Medium-Term Budgetary Objective*	**-1.50**	**-0.75**
a) Implicit Liabilities and Debt	-1.42	-0.53
Balance stabilising government debt ratio at 60% of GDP	-2.22	-2.07
Supplementary debt reduction effort for countries with government debt above 60% of GDP	0.00	0.00
Costs of ageing (33%)	0.80	1.55
b) Minimum benchmark ensuring government deficit under 3% of GDP under normal cyclical conditions	-1.70	-1.50
Medium-Term Budgetary Objective Commitment of the Czech Republic	**-1.00**	**-0.75**

*Note: *After the calculation, the Medium-Term Budgetary Objective value is rounded down to value scaled by 0.25 pp.*
Source: EC (2019c). Adjustment of MF CR.

The extent of deviation from the medium-term budgetary objective will be assessed by the EC on the basis of −0.75% of GDP irrespective of the adjustment made by the Czech Republic or national legislation. Act No. 23/2017 Coll. on fiscal responsibility rules, allows for a minimum structural balance of −1.00% of GDP, leaving exact derivation of expenditure frameworks to implementing legislation, similar to the Council of the EU and European Parliament's regulations codifying the rules of the Stability and Growth Pact. Therefore, a binding methodology for deriving medium-term expenditure frameworks of the State budget and State funds (MF CR and CFC, 2019) has been updated to reflect explicitly the application of the common European methodology for setting the MTO.

7.2 Increasing Transparency and Effectiveness of Public Finances

7.2.1 Open Data of Public Administration

Open data of public administration have been defined in the Czech law since 1 January 2017, when an amendment to Act No. 298/2016 Coll., amending Act No. 106/1999 Coll., on free access to information, as amended, became effective; the list of information published as open data is further specified in Government Regulation No. 425/2016 Coll.. Open data is published in the national open data catalogue, administered by the Ministry of the Interior. At present, 25 entities (the Office of the Government of the Czech Republic, 6 ministries, the Supreme Audit Office and another 5 offices, 4 regions, 8 cities and municipalities) provide almost 130,000 data sets to the national open data catalogue. In 1 January 2019, Government Regulation No. 184/2018 Coll. extending Government Regulation No. 425/2016 Coll. to include other sets of information published as open data, entered into force.

The Ministry of Finance has been publishing open data since 2015, when it launched the first ministerial open data catalogue in the Czech Republic. To date, 53 data sets have been published in the catalogue. Last year, subordinate organizations were involved in the publication process, and the General Financial Directorate and thus the Customs Administration of the Czech Republic also have their data sets in the ministerial catalogue. Currently open data include, for example, the Central Register of Administrative Buildings, the Central Register of Subsidies, an overview of controls related to the electronic registration of sales, an overview of operating costs, an overview of paid invoices, and a list of valid and invalid contracts.

The Ministry of Finance's open data project also focuses on the presentation of information. In addition to Monitor, the primary information portal which provides data on budgetary and accounting information from all levels of state administration and local government, the "Supervizor" application was created. It visualizes the invoices for 2015–2018 for nine organizations (including six ministries – finance, regional development, defence, transport, environment and justice). In addition, the application "ZkoumejPřezkum" was created, which shows the results of economic management review (now for the years 2013 and 2014), whether the local government has complied with all legal regulations that it is obliged to abide in its management. Since 2017, the application "CityVizor" has been available within the same project, which is a platform for the visualization of economic data of local governments. The Ministry of Finance also offers source codes for all its applications under open licences.

7.2.2 Financial Statements for the Czech Republic

The consolidated financial statements for the Czech Republic were first compiled in 2016 (for the accounting period of 2015) and contained more than CZK 7,000 entities. In particular, the inclusion of publicly co-funded organizations in the consolidation of the state increased the number of entities in the following year. Thus, in 2018, consolidated financial statements for the Czech Republic were compiled for the accounting period 2017, including more than 18,000 entities. Compared to the previous accounting period (year 2016), another 35 consolidated units of the state were included, especially commercial corporations. As a result, it is possible for the first time to make an adequate comparison between two periods, because in the 2017 accounting period the Czech Republic consolidation group was defined according to the same rules as in 2016. The state accounting consolidation process includes, in particular, municipalities, regions, voluntary associations of municipalities, regional councils of cohesion regions, state funds, state organizational units, public allowance organizations, state-owned enterprises, public research institutions, health insurance companies and significant commercial corporations controlled by the state or local governments. Compared to the general government sector, for example public universities are not included. By compiling the consolidated financial statements for the Czech Republic, information was obtained on the overall financial situation and performance of the state administration, local government or state-owned enterprises, which should also serve as a supporting element in strengthening financial and budgetary planning within the rationalization of public funds management and in the development of management and control systems of public administration.

7.2.3 Conflicts of Interest Act

In connection with the effect of Act No. 14/2017 Coll., amending Act No. 159/2006 Coll., on conflicts of interest, as amended, and other related laws, the original text has been clarified and sanctions for offences defined by the Conflicts of Interest Act have been tightened. A register of property reports has been established, which is administered by the Ministry of Justice (in the case of judges it is the Supreme Court), where public officials submit property reports, whose form was also modified by the amendment. The records are kept electronically and the first report must be made by public officials when they take office. Property reports of public officials registered by the Ministry of Justice are publicly and freely accessible; reports administered by the Supreme Court are not public. On 1 July 2018, Act No. 112/2018 Coll., Amending Act No. 159/2006 Coll., on conflict of interest, as amended, entered into effect, on which public universities, Academy of Sciences of the Czech Republic, Grant Agency of the Czech Republic and Technology Agency of the Czech Republic also submit property reports into the register.

7.2.4 Supreme Audit Office Act

In December 2018, the Government of the Czech Republic approved a draft Act amending Act No. 166/1993 Coll., on the Supreme Audit Office, as amended (Chamber of Deputies Print No. 360). The draft Act will be an implementing act, as a concurrent discussion and approval of the constitutional act amending Constitutional Act No. 1/1993 Coll., the Constitution of the Czech Republic, as amended, is envisaged. It will lay down the constitutional framework for the extension of the Supreme Audit Office's powers. The aim of the amendment is to extend the scope of entities audited to include the local governments, health insurance companies, public universities, legal entities with majority owned or controlled by the state or a local government, etc. In parallel with the Government's proposal, an amendment to the Supreme Audit Office Act (Chamber of Deputies Print No. 230) was passed in the first reading in the Chamber of Deputies of the Parliament of the Czech Republic, which, unlike the Government's proposal, involves a smaller extension of the audited entities (in the case of local governments they would include only regions, statutory cities and the City of Prague).

7.2.5 Budgetary Rules Act

The parliamentary amendment to the Budgetary Rules Act and to the Act on the Budgetary Rules of Local Government Budgets (Chamber of Deputies Print No. 319) changes the conditions for grant applicants. According to the proposal, if the applicant is a legal entity, it has the obligation to identify the beneficial owner of the applicant for public support. This will be identified by the grant provider and, in the event that it is not possible to identify it on the basis of the register of the beneficial owners of the applicant, it will not be possible to provide public support. The requirement to register beneficial owners is then linked to the amendment to Act No. 304/2013 Coll., on public registers of legal and natural entities, as amended (Chamber of Deputies Print No. 318).

7.2.6 Act on the Abolition of the National Property Fund

On 1 January 2019, Act No. 308/2018 Coll., amending Act No. 178/2005 Coll., on the abolition of the National Property Fund became effective, which enabled the transfer of privatization funds to the state budget. The state budget will then finance all government expenditures that were originally financed separately or from multiple sources, which contributed to their non-transparency. Thus, only the funds needed to finance the foreseen expenditure of a privatization nature will remain on the special privatization accounts. There is also the possibility of transferring funds from state budget resources to special privatization accounts in order to avoid possible insolvency of these special accounts.

References

Act No. 92/1991 Coll., on the Conditions of Transfer of State Property to Other Persons, as amended.

Act No. 218/2000 Coll., on Budgetary Rules and of Amendment of Some Relevant Acts (Budgetary Rules), as amended.

Act No. 219/2000 Coll., on the Property of the Czech Republic and her Acting in Legal Relationships.

Act No. 320/2001 Coll., on Financial Control in Public Administration and on Amendment to Certain Acts (Act on Financial Control), as amended.

Act No. 315/2015 Coll., amending the Act No. 353/2003 Coll., on Excise Taxes, as amended.

Act No. 51/2016 Coll., amending the Act No. 219/2000 Coll., on the Property of the Czech Republic and her Representation in Legal Matters, as amended and some other Acts.

Act No. 112/2016 Coll., on Registration of Sales, as amended.

Act No. 212/2016 Coll., amending Act No. 155/1995 Coll., on Pension Insurance, as Amended, and Other Related Acts.

Act No. 298/2016 Coll., Amending Certain Acts in Relation to the Adoption of the Confidence Services Act for Electronic Transactions, Act No. 106/1999 Coll., On Free Access to Information, as amended, and Act No. 121/2000 Coll., On Copyright, on Rights Related to Copyright and on Amendments to Certain Acts (Copyright Act), as amended.

Act No. 453/2016 Coll., amending Act No. 353/2003 Coll., on Excise Taxes, as amended.

Act No. 454/2016 Coll., amending Act No. 353/2003 Coll., on Income Taxes, as amended.

Act No. 14/2017 Coll., Amending Act No. 159/2006 Coll., on Conflict of Interest, as amended, and Other Related Acts.

Act No. 23/2017 Coll., on Fiscal Responsibility Rules.

Act No. 24/2017 Coll., amending some Acts in Relation with the Adoption of Fiscal Responsibility Legislation.

Act No. 25/2017 Coll., on the Collection of Selected Data for Public Finance Monitoring and Control, as amended.

Act No. 65/2017 Coll., on the Health Protection from the Harmful Effects of Addictive Substances, as amended.

Act No. 148/2017 Coll., amending Act No. 187/2006 Coll., on Sickness Insurance, as Amended, and Other Related Acts.

Act No. 170/2017 Coll., amending Certain Tax Laws.

Act No. 183/2017 Coll., amending Some Acts in Relation with the adoption of the Act on Liability for Offenses and Proceedings and the Act on Certain Offenses, as amended.

Act No. 200/2017 Coll., amending Act No. 117/1995 Coll., on State Social Support, as Amended, and Other Related Acts.

Act No. 203/2017 Coll., amending Act No. 155/1995 Coll., on Pension Insurance, as Amended, and Other Related Acts.

Act No. 261/2017 Coll., Amending Act No. 497/1997 Coll., on Civil Aviation and on Change and Amendment of Act No. 455/1991 Coll., on Trade Business (Trade Act), as Amended, as Amended, and Some Other Acts.

Act No. 290/2017 Coll., amending Act No. 48/1997 Coll., on Public Health Insurance and amending and supplementing Certain Related Acts, as Amended, and Other Related Acts.

Act No. 297/2017 Coll., amending Act No. 592/1992 Coll., on Public Health Insurance Premiums, as amended.

Act No. 301/2017 Coll., amending Act No. 329/2011 Coll., on Provision of Benefits to People with Disabilities and amending Related Acts, as amended.

Act No. 310/2017 Coll., amending Act No. 187/2006 Coll., on Sickness Insurance, as Amended, and Other Related Acts.

Act No. 94/2018 Coll., amending Act No. 280/2009 Coll., the Tax Code, as Amended, and Other Related Acts.

Act No. 112/2018 Coll., amending Act No. 159/2006 Coll., on the Conflict of Interests, as amended.

Act No. 179/2018 Coll., on the Provision of a State Guarantee of the Czech Republic for Securing the Czech National Bank Loan to the International Monetary Fund.

Act No. 191/2018 Coll., amending Act No. 155/1995 Coll., on Pension Insurance, as amended.

Act No. 308/2018 Coll., Amending Act No. 178/2005 Coll., On the Abolition of the National Property Fund of the Czech Republic and on the Competence of the Ministry of Finance in the Privatization of the Property of the Czech Republic (Act On the Abolition of the National Property Fund), as Amended, and Some Other Related Acts.

Act No. 336/2018 Coll., on State Budget of the Czech Republic for 2019.

Act No. 6/2019 Coll., Amending Act No. 235/2004 Coll., On Value-Added Tax, as amended.

Act No. 32/2019 Coll., Amending Act No. 262/2006 Coll., the Labour Code, as amended, and Some Other Acts.

Act No. 47/2019 Coll., Amending Act No. 108/2006 Coll., On Social Services, as amended.

Act No. 80/2019 Coll., Amending Certain Tax Acts and and Some Other Acts.

Chamber of Deputies Print No. 205/0, Government Draft of Act amending Act No. 112/2016 Coll., on Registration of Sales, as amended and Act No. 235/2004 Coll., on Value-Added Tax, as amended.

Chamber of Deputies Print No. 230/0, Deputies Lukáš Černohorský, Tomáš Martínek, Jakub Michálek, Ivan Bartoš and others' Draft of Act amending Act No. 166/1993 Coll., on the Supreme Audit Office, as amended.

Chamber of Deputies Print No. 261/0, Government Draft of Act amending Act No. 320/2001 Coll., on Financial Control in Public Administration and on Amendment to Certain Acts (Act on Financial Control), as amended.

Chamber of Deputies Print No. 318/0, Deputies Jakub Michálek, Lukáš Kolářík, František Kopřiva, Mikuláš Ferjenčík and others' Draft of Act amending Act No. 304/2013 Coll., on Public Registers of Legal and Natural Persons, as amended.

Chamber of Deputies Print No. 319/0, Deputies Jakub Michálek, Lukáš Kolářík, František Kopřiva, Mikuláš Ferjenčík and others' Draft of Act amending Act No. 218/2000 Coll., on Budgetary Rules and on Amendments to Certain Related Acts (Budgetary Rules), as amended, and Act No. 250/2000 Coll., on Budgetary Rules of Territorial Budgets, as amended.

Chamber of Deputies Print No. 360/0, Government Draft of Act amending Act No. 166/1993 Coll., on the Supreme Audit Office, as amended and Other Related Acts.

Chamber of Deputies Print No. 406/0, Deputies Jakub Michálek, Ivan Bartoš, Mikuláš Peksa, Radek Holomčík and others' Draft of Act amending Act No. 219/2000 Coll., on the Property of the Czech Republic and her Acting in Legal Relationships and Act No. 82/1998 Coll., on Liability for Damage Caused in the Exercise of Public Power by Decision or Incorrect Official Procedure.

CNB (2019a): Time Series Database. Prague, Czech National Bank, March 2019 [cit. 28. 3. 2019], <http://www.cnb.cz/docs/ARADY/HTML/index_en.htm>.

CNB (2019b): Inflation Report – I/2018. Prague, Czech National Bank, February 2019, ISSN 1804-2465 (on-line). [cit. 16. 4. 2019], <https://www.cnb.cz/en/monetary-policy/inflation-reports/Inflation-Report-I-2019/>.

Council Directive (EU) 2011/85 of 8 November 2011 on Requirements for Budgetary Frameworks of the Member States.

Council Directive (EU) 2016/1164 of 12 July 2016 Laying Down Rules against Tax Avoidance Practices that Directly affect the Functioning of the Internal Market.

Council of the EU (2018): Council Recommendation of 13 July 8 on the 2018 National Reform Programme of the Czech Republic and delivering a Council opinion on the 2018 Convergence Programme of the Czech Republic. Council of the European Union, 13 July 2018, Official Journal of the EU, 10 September 8, C series, no. 320, p. 03 [cit. 29. 3. 2019], <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018H0910(03)&from=EN>.

Council Regulation (EC) No. 1466/97 of 7 July 1997 on the Strengthening of the Surveillance of Budgetary Positions and the Surveillance and Coordination of Economic Policies.

CZSO (2018): Population Projections of the Czech Republic – 2018–2100. Prague, Czech Statistical Office, 28. 11. 2018 [cit. 27. 3. 2019], <https://www.czso.cz/csu/czso/projekce-obyvatelstva-ceske-republiky-2018-2100>. *In Czech only.* Basic charts in English at: <https://www.czso.cz/csu/czso/population_projection_charts_up_to_2100>.

CZSO (2019a): Gross Domestic Product – Time Series. Prague, Czech Statistical Office, 2. 4. 2019 [cit. 2. 4. 2019], <https://www.czso.cz/csu/czso/hdp_ts>.

CZSO (2019b): General Government Sector, Government Deficit and Debt. Prague, Czech Statistical Office, 3. 3. 2019 [cit. 4. 4. 2019], <http://apl.czso.cz/pll/rocenka/rocenka.indexnu_gov?mylang=EN>.

CZSO (2019c): Labour Force Sample Survey. Prague, Czech Statistical Office, 4. 2. 2019 [cit. 27. 3. 2019], <https://www.czso.cz/csu/czso/employment_unemployment_ekon>.

CZSO (2019d): Government Expenditure by Function (COFOG). Prague, Czech Statistical Office, 2. 1. 2019 [cit. 27. 3. 2019], <http://apl.czso.cz/pll/rocenka/rocenkavyber.gov_c?mylang=EN>.

EC (2014): The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies. In: European Economy No. 8, Brussels, European Commission, Directorate-General for Economic and Financial Affairs, November 2014, ISBN 978-92-79-35351-2 (on-line). [cit. 31. 3. 2019], <http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee8_en.pdf>.

EC (2015): The 2015 Ageing Report: Economic and budgetary projections for the 28 EU Member States (2013-2060), In: European Economy No. 3. Brussels, European Commission, Directorate-General for Economic and Financial Affairs, May 2015, ISBN 978-92-79-44746-4 (on-line). [cit. 29. 3. 2019], <http://ec.europa.eu/economy_finance/publications/european_economy/2015/pdf/ee3_en.pdf>.

EC (2017): The 2018 Ageing Report: Underlying Assumptions and Projection Methodologies. European Economy Institutional Paper 065. Brussels, European Commission, Directorate-General for Economic and Financial Affairs, November 2017, ISBN 978-92-79-64714-7 (on-line). [cit. 29. 3. 2019], <https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-underlying-assumptions-and-projection-methodologies_en>.

EC (2018a): The 2018 Ageing Report: Economic and Budgetary Projections for the 28 EU Member States (2016-2070), European Economy Institutional Paper 079. Brussels, European Commission, Directorate-General for Economic and Financial Affairs, May 2018, ISBN 978-92-79-77460-7 (on-line). [cit. 29.03.2019], <https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf>.

EC (2018b): European Economic Forecast, Autumn 2018, European Economy Institutional Paper 089. Brussels, European Commission, Directorate-General for Economic and Financial Affairs, November 2018, ISBN 978-92-79-77470-6 (on-line). [cit. 15.03.2019], <https://ec.europa.eu/info/sites/info/files/economy-finance/ip089_en_0.pdf>.

EC (2019a): European Economic Forecast: Winter 2019 (Interim), European Economy Institutional Paper 096. Brussels, European Commission, Directorate-General for Economic and Financial Affairs, February 2019, ISBN 978-92-79-98843-1 (on-line). [cit. 27. 3. 2019], <https://ec.europa.eu/info/sites/info/files/economy-finance/ip096_en.pdf>.

EC (2019b): Fiscal Sustainability Report 2018, European Economy Institutional Paper 094, Brussels, European Commission, January 2019, ISBN 978-92-79-98830-1 (on-line). [cit. 20. 3. 2019], <https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_1.pdf>.

EC (2019c): The 2019 Update of the Minimum Medium Term Objectives. Brussels, European Commission, 29 January 2019, Note for the EFC.

ECB (2009): ECB Monthly Bulletin. Frankfurt am Main, European Central Bank, April 2009, ISSN 1725-2822 (on-line). [cit. 29. 3. 2019], <http://www.ecb.int/pub/pdf/mobu/mb200904en.pdf>.

EFC (2017): Specifications on the Implementation of the Stability and Growth Pact and Guidelines on the Format and Content of Stability and Convergence Programmes. Brussels, EFC, 15. 5. 2017 [cit. 4. 4. 2019], <http://data.consilium.europa.eu/doc/document/ST-9344-2017-INIT/en/pdf>.

EIA (2019): Spot Prices for Crude Oil and Petroleum Products. Washington, DC, U.S. Energy Information Administration, 27. 3. 2019 [cit. 27. 3. 2019], <http://www.eia.gov/dnav/pet/pet_pri_spt_s1_a.htm>.

Eurostat (2019): Eurostat Database. Luxembourg, Eurostat, 29. 3. 2019 [cit. 29. 3. 2019], <http://ec.europa.eu/eurostat>.

Government Office (2019): National Reform Programme of the Czech Republic 2019. Prague, Office of the Government of the Czech Republic, April 2019.

IMF (2019): World Economic Outlook: Growth Slowdown, Precarious Recovery. Washington, DC, International Monetary Fund, April 2019 [cit. 11.4. 2019], ISBN 978-1-49830-611-9 (on-line). <https://www.imf.org/~/media/Files/Publications/WEO/2019/April/English/text.ashx>.

Judgment No. 8/2018 Coll., Constitutional Court Judgment No. Pl. CC 26/16 of December 12, 2017 on the Proposal of a Group of Deputies of the Chamber of Deputies of the Parliament of the Czech Republic to repeal certain provisions of Act No. 112/2016 Coll., on Registration of Sales.

Lang, L., Marval, J., Nepožitková, M. (2018): One-off and Temporary Measures. Information Paper 2018. Prague, Ministry of Finance of the CR, December 2018, ISBN 978-80-7586-004-0 (on-line). [cit. 1. 4. 2019],

<https://www.mfcr.cz/assets/cs/media/Odborne-vyzkumy_Studie_2018-12_Jednorazove-a-prechodne-operace.pdf>. *In Czech only.*

MF CR (2016): Fiscal Outlook of the Czech Republic. Prague, Ministry of Finance of the CR, November 2016, ISSN 1804-7998 (on-line). [cit. 3. 4. 2019], <https://www.mfcr.cz/assets/en/media/Fiscal-Outlook-of-the-Czech-Republic-November-2016.pdf>.

MF CR (2018a): Convergence Programme of the CR (April 2018). Prague, Ministry of Finance of the CR, April 2018, ISSN 2570-5687 (on-line) [cit. 4. 4. 2019], <https://www.mfcr.cz/assets/en/media/Convergence-Programme-of-the-Czech-Republic-April-2018.pdf>.

MF CR (2018b): The Czech Republic Funding and Debt Management Strategy 2019. Prague, Ministry of Finance of the CR, December 2018, ISSN 2336-2278 (on-line) [cit. 3. 4. 2019], <http://www.mfcr.cz/assets/en/media/The-Czech-Republic-Funding-and-Debt-Management-Strategy-for-2019.pdf>.

MF CR (2018c): Forecast of Public Health Insurance Revenues. Methodological Compendium. Prague, Ministry of Finance of the CR, October 2018 (translated February 2019), ISBN 978-80-7586-023-1 (on-line). [cit. 3. 4. 2019], <https://www.mfcr.cz/assets/en/media/Forecast-of-Public-Health-Insurance-Revenues.pdf>.

MF CR (2018d): The Methodology of Pension Projections. Methodological Compendium. Prague, Ministry of Finance of the CR, December 2018, ISBN 978-80-7586-021-7 (on-line). [cit. 3. 4. 2019], <https://www.mfcr.cz/assets/en/media/The-Methodology-of-Pension-Projections.pdf>.

MF CR (2018e): The Methodology of Health Care, Long-term Care and Education Projections. Methodological Compendium. Prague, Ministry of Finance of the CR, December 2018, ISBN 978-80-7586-020-0 (on-line). [cit. 3. 4. 2019], <https://www.mfcr.cz/assets/en/media/2018-12-The-Methodology-of-Health-Care-Long-term-Care-and-Education-Projections.pdf>.

MF CR (2018f): Fiscal Outlook of the Czech Republic. Prague, Ministry of Finance of the CR, November 2018, ISSN 2570-5695 (on-line). [cit. 16. 4. 2019], <https://www.mfcr.cz/assets/en/media/Fiscal-Outlook-of-the-Czech-Republic-November-2018.pdf>.

MF CR (2019a): Macroeconomic Forecast of the CR. Prague, Ministry of Finance of the CR, April 2019, ISSN 2533-5588 (on-line). [cit. 9. 4. 2019], <http://www.mfcr.cz/assets/en/media/Macroeconomic-Forecast-April-2019.pdf>.

MF CR (2019b): Report on the Evaluation of Central State Procurement Systems for 2017. Prague, Ministry of Finance of the CR, 2019. [cit. 3. 4. 2019], <https://www.mfcr.cz/assets/cs/media/Zprava_2017_Zprava-o-hodnoceni-CNS-a-RSCZ.pdf>. *In Czech only.*

MF CR, CNB (2018): Assessment of the Fulfilment of the Maastricht Convergence Criteria and Degree of Economic Alignment of the Czech Republic with the Euro Area (2018). Prague, Ministry of Finance of the CR and Czech National Bank, December 2018, ISSN 2533-5219 (on-line). [cit. 28. 3. 2019], <https://www.mfcr.cz/assets/en/media/Assessment-of-the-Fulfilment-of-the-Maastricht-Convergence-Criteria-and-the-Degree-of-Economic-Alignment-of-the-Czech-Republic-with-the-Euro-Area-2018_v02.pdf>.

MF CR and CFC (2018): Methodology of Deriving Expenditure Frameworks of the State Budget and State Funds – 1st edition. Prague Ministry of Finance of the CR and the Czech Fiscal Council, April 2018 (translated June 2018), ISBN 978-80-7586-006-4 (on-line). [cit. 3. 4. 2019], <https://www.mfcr.cz/assets/en/media/Methodology-of-Deriving-Expenditure-Frameworks-of-the-State-Budget-and-State-Funds.pdf>.

MF CR and CFC (2019): Methodology of Deriving Expenditure Frameworks of the State Budget and State Funds – 2nd updated edition. Prague, Ministry of Finance of the CR and the Czech Fiscal Council, April 2019, ISBN 978-80-7586-028-6 (on-line). [cit. 17. 4. 2019], <https://www.mfcr.cz/assets/cs/media/Metodika_2019-04-09_Metodika-odvozeni-vydajovych-ramcu-statniho-rozpoctu-a-statnich-fondu-v02.pdf>. *In Czech only.*

Regulation No. 425/2016 Coll. of the Government of the Czech Republic on the List of Information published as Open Data.

Regulation No. 184/2018 Coll. of the Government of the Czech Republic amending the Regulation No. 425/2016 Coll. of the Government of the Czech Republic on the List of Information published as Open Data.

Regulation No. 273/2018 Coll. of the Government of the Czech Republic amending the Regulation No. 567/2006 Coll. of the Government of the Czech Republic, on the Minimum Wage, on Least Guaranteed Wages, on Determining the Difficult Work Environment and on the Level of Wage Supplement for Work in Difficult Work Environment, as amended.

Resolution No. 924 of the Government of the Czech Republic of 12 November 2014, on Information on fulfilment the task set by the Policy Statement of the Government in regards of the introduction of central state procurement.

Resolution No. 289 of the Government of the Czech Republic of 22 April 2015, on the list of Commodities Dedicated for Standardisation and the rules for Central Procurement.

Resolution No. 913 of the Government of the Czech Republic of 9 November 2015, on Information on the State of Preparations for the Central Procurement and on the proposal of the Central Procurement Schedule for the years 2016-2020.

Resolution No. 24 of the Government of the Czech Republic of 18 January 2016 on Central Procurement Systems following the Rules for the Central Procurement.

Resolution No. 206 of the Government of the Czech Republic of 27 March 2018 on the Introduction of a New Fare Discount on Trains and Buses for Seniors, Children, Pupils and Students.

Resolution No. 520 of the Government of the Czech Republic of 15 August 2018 on the Evaluation of Central State Procurement and Resort Systems of Central Procurement for 2017.

Resolution No. 834 of the Government of the Czech Republic of 12 December 2018, on Assessment of the Fulfilment of the Maastricht Convergence Criteria and the Degree of Economic Alignment of the Czech Republic with the Euro Area.

Resolution No. 187 of the Government of the Czech Republic of 18 March 2019, on the Long-Term Defence Outlook 2035.

Resolution No. 223 of the Government of the Czech Republic of 1 April 2019, on the Draft of Act amending Act No. 155/1995 Coll., on Pension Insurance, as amended.

Table Annex

Table A.1a: Macroeconomic Prospects

(levels in CZK billions, growth in %, contributions to growth in percentage points)

	ESA Code	2018	2018	2019	2020	2021	2022
		Level	*Rate of change*				
Real GDP	B1*g	5193	2.9	2.4	2.4	2.3	2.2
Nominal GDP	B1*g	5304	5.1	5.5	4.4	4.3	4.2
Components of real GDP							
Private consumption expenditure	P.3	2469	3.2	2.9	2.8	2.5	2.1
Government consumption expenditure	P.3	1004	3.7	2.2	1.9	1.9	1.9
Gross fixed capital formation	P.51g	1382	10.5	3.1	2.7	2.6	2.9
Changes in inventories and net acquis. of valuables (% of GDP)	P.52+P.53	-4	-0.1	-0.1	-0.1	-0.1	-0.1
Exports of goods and services	P.6	4206	4.5	3.4	3.5	3.3	3.2
Imports of goods and services	P.7	3864	6.0	4.0	3.7	3.4	3.5
Contributions to real GDP growth							
Final domestic demand		-	4.8	2.7	2.4	2.3	2.1
Changes in inventories and net acquis. of valuables	P.52+P.53	-	-1.2	0.0	0.0	0.0	0.0
External balance of goods and services	B.11	-	-0.7	-0.3	0.0	0.1	0.0

Note: Real levels are in 2017 prices. Changes in inventories and net acquisition of valuables on the sixth row express change in inventories as a per cent of GDP in current prices. The contribution of the change in inventories and net acquisition of valuables is calculated from real values.
Source: CZSO (2019a), MF CR (2019a). MF CR calculations and forecast.

Table A.1b: Price Developments

(indices 2010=100, growth in %)

	2018	2018	2019	2020	2021	2022
	Level	*Rate of change*				
GDP deflator	112.0	2.1	3.0	1.9	1.9	2.0
Private consumption deflator	111.4	2.6	2.6	1.7	1.8	1.8
Harmonised index of consumer prices	113.5	2.0	2.1	1.5	1.7	1.7
Public consumption deflator	118.2	5.0	4.2	2.3	2.3	2.3
Investment deflator	107.7	0.7	2.3	1.2	1.4	1.7
Export price deflator (goods and services)	104.5	-0.6	1.4	0.0	0.0	0.2
Import price deflator (goods and services)	103.8	-0.3	1.1	-0.4	-0.2	-0.1

Source: CZSO (2019a), Eurostat (2019). MF CR calculations and forecast.

Table A.1c: Labour Market Developments

(growth in %)

	ESA Code	2018	2018	2019	2020	2021	2022
		Level	*Rate of change*				
Employment (thous. of persons)		5429.7	1.6	0.4	0.2	0.1	0.0
Employment (bn. hours worked)		9.8	2.0	0.8	0.4	0.3	0.1
Unemployment rate (%)		2.2	2.2	2.2	2.2	2.3	2.3
Labour productivity (thous. CZK/person)		956.5	1.3	2.0	2.3	2.2	2.1
Labour productivity (CZK/hours)		532.2	0.9	1.6	2.0	2.0	2.1
Compensation of employees (bn. CZK)	D.1	2287.8	9.5	7.5	5.9	5.5	5.0
Compensation per employee (thous. CZK/person)		490.8	7.6	6.9	5.7	5.3	5.0

Note: Employment and compensation of employees are based on domestic concept of national accounts. Unemployment rate is based on the Labour Force Survey methodology. Labour productivity is calculated as real GDP (in 2017 prices) per employed person or hour worked.
Source: CZSO (2019a, 2019c). MF CR calculations and forecast.

Table A.1d: Sectoral Balances

(in % of GDP)

	ESA Code	2018	2019	2020	2021	2022
Net lending/borrowing vis-à-vis the rest of the world	B.9	**1.0**	**1.0**	**1.2**	**1.5**	**1.6**
Balance of goods and services		6.2	6.0	6.0	6.1	6.1
Balance of primary incomes and transfers		-6.1	-6.0	-6.0	-5.9	-5.8
Capital account		1.1	1.2	1.3	1.4	1.5
Net lending/borrowing of the private sector	B.9	**0.1**	**0.7**	**1.4**	**1.8**	**2.1**
Net lending/borrowing of general government	B.9	**0.9**	**0.3**	**-0.2**	**-0.3**	**-0.5**
Statistical discrepancy		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Note: Data from national accounts. Net lending/borrowing of the general government for 2018–2019 based on notification, for 2020–2022 outlook.
Source: CZSO (2019b). MF CR calculations and forecast.

Table A.2a: General Government Budgetary Prospects

(level in CZK billion, others in % of GDP)

	ESA Code	2018	2018	2019	2020	2021	2022
		Level	*In % of GDP*				
Net lending (+)/borrowing (-) (B.9) by sub-sectors							
General government	S.13	**47**	**0.9**	**0.3**	**-0.2**	**-0.3**	**-0.5**
Central government	S.1311	12	0.2	-0.4	-0.6	-0.6	-0.7
State government	S.1312	-	-	-	-	-	-
Local government	S.1313	19	0.4	0.4	0.3	0.2	0.1
Social security funds	S.1314	16	0.3	0.3	0.1	0.1	0.0
General government (S.13)							
Total revenue	TR	**2211**	**41.7**	**41.5**	**41.3**	**41.2**	**41.2**
Total expenditure	TE	**2163**	**40.8**	**41.2**	**41.5**	**41.6**	**41.7**
Net lending (+)/borrowing (-)	B.9	**47**	**0.9**	**0.3**	**-0.2**	**-0.3**	**-0.5**
Interest expenditure	D.41	40	0.8	0.8	0.8	0.8	0.7
Primary balance		88	1.7	1.1	0.6	0.4	0.2
One-off and other temporary measures		**-4**	**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**
Components of revenues							
Total taxes		**1076**	**20.3**	**20.2**	**20.0**	**19.9**	**19.8**
Taxes on production and imports	D.2	658	12.4	12.2	11.9	11.7	11.6
Current taxes on income, wealth etc.	D.5	417	7.9	8.0	8.1	8.1	8.2
Capital taxes	D.91	0	0.0	0.0	0.0	0.0	0.0
Social security contributions	D.61	**834**	**15.7**	**15.9**	**16.0**	**16.2**	**16.3**
Property income	D.4	**35**	**0.7**	**0.6**	**0.5**	**0.5**	**0.5**
Other		**266**	**5.0**	**4.9**	**4.7**	**4.7**	**4.7**
Total revenue	TR	**2211**	**41.7**	**41.5**	**41.3**	**41.2**	**41.2**
p.m.: Tax burden		**1909**	**36.0**	**36.1**	**36.0**	**36.1**	**36.1**
Components of expenditures							
Compensation of employees + Intermediate consumption	D.1+P.2	**846**	**15.9**	**16.2**	**16.3**	**16.4**	**16.5**
Compensation of employees	D.1	521	9.8	10.2	10.4	10.6	10.8
Intermediate consumption	P.2	325	6.1	5.9	5.9	5.8	5.7
Social payments		**791**	**14.9**	**15.2**	**15.4**	**15.4**	**15.3**
of which: Unemployment benefits [1)]		12	0.2	0.2	0.2	0.2	0.2
Social transfers in kind supplied via market producers	D.632	163	3.1	3.1	3.1	3.1	3.1
Social transfers other than in kind	D.62	629	11.9	12.0	12.3	12.3	12.2
Interest expenditure	D.41	**40**	**0.8**	**0.8**	**0.8**	**0.8**	**0.7**
Subsidies	D.3	**121**	**2.3**	**2.2**	**2.2**	**2.1**	**2.1**
Gross fixed capital formation	P.51g	**218**	**4.1**	**4.1**	**4.2**	**4.3**	**4.6**
Capital transfers	D.9	**34**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
Other		**113**	**2.1**	**2.1**	**2.0**	**2.0**	**2.0**
Total expenditures	TE	**2163**	**40.8**	**41.2**	**41.5**	**41.6**	**41.7**
p.m.: Government consumption (nominal)	P.3	**1054**	**19.9**	**20.1**	**20.1**	**20.1**	**20.1**

Note: Years 2018–2019 notification. Years 2020–2022 outlook.

1) Includes cash benefits (D.621 and D.624) and transfers in kind (D.631) related to unemployment benefits.

Source: CZSO (2019b). MF CR calculations and forecast.

Table A.2b: No-policy Change Projections

(level in CZK billion, others in % of GDP)

	2018	2018	2019	2020	2021	2022
	Level	*In % of GDP*				
Total revenue at unchanged policies	**2211**	**41.7**	**41.5**	**41.3**	**41.2**	**41.2**
Total expenditure at unchanged policies	**2163**	**40.8**	**41.2**	**41.5**	**41.6**	**41.7**

Note: Total revenue and expenditure at unchanged policies are equal to total revenue and expenditure of the general government. Alternative scenario of revenue and expenditure is described in Subchapter 3.2.3.

Source: MF CR.

Table A.2c: Amounts to Be Excluded from the Expenditure Benchmark

(level in CZK billion, others in % of GDP)

	2018	2018	2019	2020	2021	2022
	Level			*In % of GDP*		
Expenditure on EU programmes fully matched by EU funds revenue	**59**	**1.1**	**1.1**	**1.1**	**1.1**	**1.2**
Non-investment expenditure	18	0.3	0.4	0.3	0.3	0.3
Investment expenditure	41	0.8	0.7	0.8	0.8	0.9
Cyclical unemployment benefit expenditure	**-1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Effect of discretionary revenue measures (year-on-year changes)	**18**	**0.3**	**0.2**	**0.0**	**0.0**	**0.0**
Revenue increases mandated by law	**-**	**-**	**-**	**-**	**-**	**-**

Note: Revenue increases mandated by law can be defined as revenue increases that occur automatically to offset corresponding increases in specified expenditures (such as an automatic increase of social security contributions in reaction to a surge in social security expenditure).
Source: MF CR.

Table A.3: General Government Expenditure by Function

(in % of GDP)

	Code	2017	2022
General public services	1	**3.9**	**3.8**
Defence	2	**0.8**	**1.4**
Public order and safety	3	**1.8**	**1.9**
Economic affairs	4	**5.7**	**6.0**
Environmental protection	5	**0.8**	**0.9**
Housing and community amenities	6	**0.6**	**0.7**
Health	7	**7.5**	**7.8**
Recreation, culture and religion	8	**1.3**	**1.4**
Education	9	**4.6**	**5.0**
Social protection	10	**12.0**	**12.6**
Total expenditure	TE	**38.9**	**41.7**

Note: Year 2022 outlook.
Source: CZSO (2019d), MF CR (2019a). MF CR calculations and forecast.

Table A.4: General Government Debt Developments

(in % of GDP, average maturity in years, contributions in % of debt)

	ESA Code	2018	2019	2020	2021	2022
General government gross debt		**32.7**	**31.5**	**30.8**	**30.2**	**29.7**
Change in gross debt ratio		**-2.0**	**-1.2**	**-0.7**	**-0.6**	**-0.5**
Contributions to changes in gross debt						
Primary balance		**1.7**	**1.1**	**0.6**	**0.4**	**0.2**
Interest expenditure	D.41	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-0.7**
Stock-flow adjustment		**0.6**	**0.8**	**0.4**	**0.3**	**0.2**
Difference between cash and accruals		**0.4**	**0.0**	**0.0**	**0.0**	**0.0**
Net accumulation of financial assets		**0.2**	**0.8**	**0.4**	**0.3**	**0.2**
Privatisation proceeds		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Valuation effects and other		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
p.m.: Implicit interest rate on debt		**-2.3**	**-2.4**	**-2.5**	**-2.5**	**-2.4**
Liquid financial assets		**15.0**	**15.0**	**14.8**	**14.6**	**14.2**
Net financial debt [1)]		**17.7**	**16.5**	**16.0**	**15.6**	**15.5**
Debt amortization (existing bonds) since the end of the previous year [2)]		**4.8**	**4.3**	**3.2**	**2.9**	**2.6**
Foreign-currency exposition of the state debt [2), 3)]		**3.2**	**3.0**	**2.9**	**2.8**	**2.7**
Average maturity [2)]		**5.4**	**5.8**	**5.9**	**6.0**	**6.0**

1) Net financial debt is a difference between gross debt and liquid financial assets (monetary gold, Special Drawing Rights, currency and deposits, securities other than shares (consolidated at market value), shares and other equity quoted in stock exchange).
2) Figures only for the state debt. The state debt represents a debt generated by the state budget financing.
3) The foreign-currency exposure of the state debt is debt denominated in foreign currency, which is exposed in term of foreign-currency Exchange rate movement after being adjusted for the foreign-currency exposure of state financial assets.
Source: CZSO (2019b). State debt data MF CR. MF CR calculations and forecast.

Table A.5: Cyclical Developments

(growth in %, output gap in % of potential GDP, contributions in percentage points, other in % of GDP)

	ESA Code	2018	2019	2020	2021	2022
Real GDP growth (%)		**2.9**	**2.4**	**2.4**	**2.3**	**2.2**
Net lending of general government	B.9	**0.9**	**0.3**	**-0.2**	**-0.3**	**-0.5**
Interest expenditure	D.41	**0.8**	**0.8**	**0.8**	**0.8**	**0.7**
One-off and other temporary measures		**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**
One-offs on the revenue side		0.0	0.0	0.0	0.0	0.0
One-offs on the expenditure side		0.1	0.0	0.0	0.0	0.0
Potential GDP growth (%)		**2.9**	**2.9**	**2.8**	**2.7**	**2.6**
contribution of labour		0.3	0.2	0.1	0.1	0.0
contribution of capital		0.6	0.8	0.7	0.7	0.7
total factor productivity		1.9	2.0	2.0	1.9	2.0
Output gap		**1.7**	**1.2**	**0.8**	**0.5**	**0.1**
Cyclical budgetary component		**0.6**	**0.4**	**0.3**	**0.2**	**0.0**
Cyclically-adjusted balance		**0.3**	**-0.1**	**-0.5**	**-0.5**	**-0.5**
Cyclically-adjusted primary balance		**1.0**	**0.6**	**0.3**	**0.2**	**0.2**
Structural balance		**0.4**	**-0.1**	**-0.5**	**-0.5**	**-0.5**

Note: Years 2018–2019 notification. Years 2020–2022 outlook.
Source: CZSO (2019b). MF CR calculations and forecast.

Table A.6: Divergence from Previous Update

(GDP growth in %, general government balance and debt in % of GDP, differences in pp)

	ESA Code	2018	2019	2020	2021	2022
Real GDP growth (%)						
Previous update		**3.6**	**3.3**	**2.6**	**2.4**	**-**
Current update		**2.9**	**2.4**	**2.4**	**2.3**	**2.2**
Difference		-0.7	-0.9	-0.2	-0.1	-
General government net lending (% of GDP)						
Previous update	B.9	**1.5**	**1.1**	**1.0**	**0.9**	**-**
Current update	B.9	**0.9**	**0.3**	**-0.2**	**-0.3**	**-0.5**
Difference		-0.6	-0.7	-1.2	-1.3	-
General government gross debt (% of GDP)						
Previous update		**32.9**	**31.6**	**30.7**	**29.9**	**-**
Current update		**32.7**	**31.5**	**30.8**	**30.2**	**29.7**
Difference		-0.1	-0.1	0.1	0.3	-

Source: MF CR (2018a, 2019a). MF CR calculations and forecast.

Table A.7: Long-term Sustainability of Public Finances
(expenditures and revenues in % of GDP, growth and rates in %)

	2016	2020	2030	2040	2050	2060	2070
Total expenditure	39.9	41.2	42.4	43.9	46.8	49.6	50.0
of which: **Age-related expenditures**	18.1	18.3	19.5	21.1	23.4	25.1	24.3
Pension expenditure	8.2	8.1	8.2	9.2	10.8	11.6	10.9
Social security pensions	8.2	8.1	8.2	9.2	10.8	11.6	10.9
Old-age and early pensions	6.8	6.7	6.8	7.7	9.4	10.2	9.5
Other pensions	1.4	1.4	1.4	1.5	1.5	1.5	1.5
Occupational pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health care	5.4	5.6	5.9	6.2	6.5	6.6	6.5
Long-term care	1.3	1.4	1.8	2.1	2.4	2.8	2.9
Education expenditure	3.2	3.2	3.7	3.6	3.7	4.1	4.0
Other age-related expenditures	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenditure	0.9	0.8	0.6	0.5	1.1	2.2	3.4
Total revenue	40.7	42.2	42.5	42.5	42.5	42.5	42.5
of which: **Property income**	0.8	0.5	0.5	0.5	0.5	0.5	0.5
of which: **Pension contributions**	7.9	7.9	7.9	7.9	7.9	7.9	7.9
Pension reserve fund assets	0.5	0.0	0.0	0.0	0.0	0.0	0.0
of which: **Consolidated public pension fund assets**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Systemic Pension Reforms							
Social contributions diverted to mandatory private scheme	-	-	-	-	-	-	-
Pension expenditure paid by mandatory private scheme	-	-	-	-	-	-	-
Assumptions							
Labour productivity growth	1.1	2.0	2.0	1.9	1.7	1.6	1.5
Real GDP growth	2.4	1.6	1.8	1.1	1.1	1.5	1.4
Participation rate of males (aged 20–64)	87.7	87.9	87.0	85.6	86.8	87.5	86.4
Participation rate of females (aged 20–64)	72.0	72.9	73.7	71.8	72.7	74.3	73.0
Total participation rate (aged 20–64)	80.0	80.5	80.4	78.8	79.8	81.0	79.8
Unemployment rate	4.0	3.2	4.2	4.2	4.2	4.2	4.2
Population aged 65+ over total population	18.6	20.3	22.6	25.7	29.1	30.4	28.3

Note: Macroeconomic assumptions are based on long-term projections of the EC and can differ from the medium-term macroeconomic scenario presented in Chapter 2.
Source: EC (2017a, 2018c). MF CR calculations.

Table A.7a: Contingent Liabilities
(in % of GDP)

	2018	2019
General government sector guarantees	**0.2**	**0.1**
of which: Linked to the financial sector	0.0	0.0

Source: MF CR.

Table A.8: Basic Assumptions
(interest rates and growth in %)

	2018	2019	2020	2021	2022
Short-term interest rate (CZ) (annual average)	1.2	2.1	2.3	2.3	2.3
Long-term interest rate (CZ) (annual average)	2.0	2.2	2.4	2.4	2.4
Nominal effective exchange rate (2010=100)	109.3	109.7	111.6	113.7	115.8
Exchange rate CZK/EUR (annual average)	25.6	25.5	25.1	24.6	24.2
World excluding EU, GDP growth	3.9	3.8	3.8	3.9	4.0
EU28 GDP growth	1.9	1.3	1.6	1.8	2.0
Growth of relevant foreign markets	4.0	2.9	3.0	3.2	3.4
World import volumes, excluding EU	4.8	3.9	3.6	3.4	3.4
Oil prices (Brent, USD/barrel)	71.4	66.0	64.7	62.9	61.6

Source: CNB (2019a), EIA (2019), Eurostat (2019a). MF CR calculations and forecast.

Glossary of Terms

Accrual methodology means that economic transactions are recorded at the time an economic value is created, transformed or cancelled or when receivables and liabilities increase or decrease, regardless of when the transaction will be paid (unlike the cash principle, which is the basis of, for example, the state budget).

Balance of payments captures economic transactions between residents and non-residents for a given territory in a certain period of time. The basic structure of the balance of payments is based on the methodology of the International Monetary Fund and includes the current, capital and financial accounts (including changes in foreign-exchange reserves).

Capital transfers include acquisition or loss of an asset without equivalent consideration. They may be made in cash or in kind. **Capital transfer in cash** is defined as cash transfer without expected consideration from the unit which received the transfer. **Capital transfer in kind** is based on the transfer of ownership of an asset (other than inventory and cash) or decommitment by a creditor for which no consideration, assumption of debt, etc. was received.

Comparative price level is the ratio of the GDP at market exchange rate to the GDP in purchasing power parity.

Consumer price index is one of the indexes measuring the price level. It is constructed on the basis of regular monitoring of the prices of selected goods and services (so-called representatives) in the consumption basket of households. Each representative has a certain weight. The consumption basket is divided into 12 categories (e.g. food and non-alcoholic beverages; alcoholic beverages, tobacco; clothing and footwear; housing, water, electricity and fuel; etc.). **Harmonised index of consumer prices** is calculated in EU countries according to uniform and legally binding procedures, which (unlike national indexes) allows for comparability of this indicator among countries.

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

The **debt rule of the national fiscal framework** activates legally defined measures if the relative government debt ratio (minus the cash reserve of government debt financing) exceeds 55% of GDP. These measures set out the conditions for the preparation of budget drafts for individual segments of the general government sector (state budget, budgets of the state funds, health insurance plans of health insurance companies and budgets of local governments) and other public institutions limit new liabilities leading to an increase in the general government debt with a maturity of more than 1 year.

Dependency rate (demographic) is the ratio of the senior-age population (over 64 years old) to the working-age population – it thus does not reflect retirement age extending. **Dependency rate according to the applicable legislation** is the ratio of the retirement-age population according to the applicable legislation to the number of other inhabitants over 14 years of age. **Effective dependency rate** refers to the ratio of the number of old-age pensions paid to the number of employees.

Discretionary measures represent direct interventions of executive or legislative authorities in general government revenue and expenditure.

The **expenditure rule of the national fiscal framework** serves as the basis for the preparation of the draft of the state budget and the budgets of state funds. The rule derives the maximum amount of government sector expenditure from the structural part of the government sector revenue increased by 1% of GDP. This increase represents the established medium-term budgetary objective of the Czech Republic. The rule is supplemented by an automatic correction mechanism reflecting in retrospective the gap between the actual level of expenditure and the expenditure prescribed by the rule, and is accompanied by precisely defined escape clauses under Act No. 23/2017 Coll., on fiscal responsibility rules.

The **expenditure rule of the Stability and Growth Pact** limits the growth of adjusted real expenditure of general government sector adjusted by discretionary revenue measures (so-called adjusted expenditure), thus the given member state shall reach the medium-term budgetary objective and would follow it henceforward. The adjusted expenditure of countries which meet their medium-term budgetary objective shall grow at most by the average rate of growth of the potential output calculated in 10-year horizon containing 5 past years, the current year and 4 following years. The average rate of the potential output growth is updated annually, based on the Spring European Economic Forecast with the validity period for the following year. For countries which have not yet reached their medium-term budgetary objective, the highest acceptable rate of adjusted expenditure growth is lower than the average growth of the potential output. The difference between the two rates is referred to as the convergence margin, which reflects the fiscal effort required for the gradual achievement of the medium-term budgetary objective.

Fiscal effort is a YoY change in the structural balance indicating expansive of restrictive fiscal policy in a given year.

Fiscal sustainability indicators, proceeding from long-term projections based on demographic and macroeconomic assumptions by the Eurostat and the EC, highlight potential problems in the sustainability of public finances and the extent of the necessary changes. The EC uses three main indicators, S0, S1 and S2. **Indicator S0** is a composite indicator consisting of 28 macro-financial and fiscal indicators and is to detect fiscal risks for the short-term horizon (coming year). **Indicator S1** indicates by how many percent of GDP the primary structural balance must be improved from that year (usually from the year following the EC prediction horizon) for a period of time (usually 5 years) to make the general government sector debt reach 60% of GDP in 2030. **Indicator S2** indicates by how many percent of GDP the primary structural balance must be permanently (from the given year) improved to make the general government debt remain stable in an infinite time horizon (i.e. the condition of intertemporal government budget constraint is fulfilled that the current value of primary balances is equal to the current general government debt).

The **general government sector** is defined by internationally harmonised rules at the EU level. In the Czech Republic, 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 the quantification of fiscal indicators submitted by each EU member state twice a year to the EC under Council Regulation (EC) No. 479/2009 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 the data for the past four years and MF CR adds the prediction for the current year. The notification contains both a basic set of notification tables, including key indicators such as balance and debt, with an explanation of the transition from the balance in the national methodology to the accrual balance and contributions to the change in debt, as well as a number of supplementary questionnaires, such as the guarantee table.

Government final consumption expenditure includes government payments which are subsequently used for consumption of individuals in the household sector (mainly reimbursement of health care by health insurance companies for services provided by medical facilities) or are consumed by the entire society (such as expenditure on army, police, judiciary, state administration, etc.). General government services, provided for consumption to the entire society, are usually valued at the level of own costs for a given service because they do not pass through a market which would value them. For the above reasons, consumption consists mainly of intermediate consumption (i.e. goods and services, excluding fixed assets consumed in the production of other goods or services), compensation to employees (wages and salaries including the part of social security contributions paid by employers), social transfers in kind to households (in particular payments by health facilities outside the general government sector) or consumption of the fixed capital. The value calculated is not the entire value of these transactions but only the value associated with the production valued at own costs. The costs associated with the production of activities which pass a market fully or partly and for which the general government sector receives payment are excluded from its consumption.

Gross fixed capital formation represents the investment activities of units. Fixed capital is represented just by assets used in production for more than one year. It also includes for example military equipment, expenditure on research and development, etc.

Gross domestic product (GDP) is the monetary expression of the total value of goods and services newly created in a given period in a given territory. **Real GDP** is the gross domestic product, expressed in the prices of the reference year. This transformation enables, in analysing GDP (or other variables), to eliminate the impact of price changes over time and to focus only on the changes in physical volume. **Gross value added** represents the difference between the value of production and intermediate consumption (production consumed in the production of other goods or services).

Inflation is a sustained growth in the general price level, i.e., internal currency depreciation. The price level is measured using price indices, such as the consumer price index or the harmonised index of consumer prices. The most commonly mentioned **year-on-year inflation rate** is the relative change in the consumer price index compared to the same month of the previous year. The **average inflation rate** is the relative change in the average of the consumer price index in the last 12 months compared to the average of the consumer price index in the previous 12 months. Inflation rates are expressed as a percentage. By **administrative measures on consumer prices** are meant state measures that directly affect the price level. They include the effect of changes in indirect taxes (value added tax, excise and energy taxes) and regulated prices (e.g. electricity, gas, heat, water and sewerage, public urban transport).

Long-term interest rates are measured on the basis of yields of long-term government bonds or comparable securities until maturity in percent per year. Bonds with residual maturity ranging from 8 to 12 years (the use of these limits is fully based on the conditions of the Czech government bond market, which were set based on the periodicity of Czech government bond issues) are classified as representative. From this set, a combination of bonds whose average residual maturity is closest to the 10-year limit is then generated.

Medium-Term Budgetary Objective is expressed in the structural balance of general government sector and should ensure the sustainability of public finance of the given country. It reflects both the growth potential of the country and its level of indebtedness. Compliance with the medium-term objectives should allow Member States to maintain sufficient reserves of −3% of the GDP against the reference value of the balance of general government sector during common cyclical fluctuations, to secure the progressive steps towards sustainability and ensure space for any necessary budgetary operations. The procedure for its calculation is determined by the Code of Conduct (EFC, 2017). For the Czech Republic it currently corresponds to the level of structural balance of −0.75% of GDP and is revised every three years.

One-off and other temporary measures are revenue or expenditure measures that only have a temporary impact on the general government balance and often stem from events outside the direct control of executive or legislative authorities (e.g. flood relief expenditure).

Output gap is the difference between real and potential output measured in percent of potential output. It serves to identify the position of the economy in the cycle.

Potential output is the level of economic output in the “full” utilisation of available resources. Full utilisation of resources is meant here rather as optimal and balanced, which does not lead to pressures such as changes in the inflation dynamics, etc.

PRIBOR 3M is the reference value for the interest rate indicating the average rate, for which banks can borrow on the market for interbank deposits with a maturity of three months.

Using the **purchasing power parity** method, comparison of the economic performance of individual countries within the EU is carried out in Purchasing Power Standards, which is an artificial currency unit that expresses a quantity of goods that can be purchased on average for 1 euro in the EU after currency conversion for countries using a different currency unit than the euro.

Social benefits in cash are social benefits (e.g., pension insurance benefits, state social security benefits) paid to households from the general government sector.

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

Total fertility rate is defined as the number of live-born children per 1 woman, if her fertility throughout her entire reproductive period remained the same as in that year.

Unemployment (Labour Force Sample Survey) corresponds to the number of persons who simultaneously met three conditions in the reference period (reference week): they were not employed, actively sought work and were ready to take up work within 14 days at the latest. **Unemployment rate** expresses the ratio of the number of the unemployed and the labour force. A person unemployed for more than 12 months is considered **long-term unemployed**.

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