Ministry of Finance
Czech Republic

Convergence Programme
of the Czech Republic

April 2018

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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
PAYG .... pay-as-you-go system
pp .... percentage point
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 2018 release, fiscal data to the 4 April 2018 release and survey of macroeconomic forecasts of the Czech Republic to the 18 April 2018 release. Notification of general government deficit and debt was approved by Eurostat on 23 April 2018.

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 have been consolidating since the great recession in 2009, culminating in 2017 with the best result in the history of the Czech Republic. The general government surplus of 1.6% of GDP was also reflected in the record high of the structural balance of 1.1% of GDP. In addition, for the first time, all three parts of the general government sector – not only local governments and social security funds, but also for the first time the central government – contributed to the surplus. The state budget, which posted a surplus of 0.2% of GDP in accrual terms for the first time, also contributed significantly. The prudent and sustainable management of the general government sector should be ensured by the fiscal responsibility laws approved in 2017.

The Convergence Programme of the Czech Republic for 2018–2021, 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 30 April 2018 and is consistent with the National Reform Programme of the Czech Republic (Government Office, 2018). The Convergence Programme has been prepared in line with the opinion of the Council's Economic and Financial Committee on the contents and format of stability and convergence programmes (EFC, 2016). The document was also presented, discussed and acknowledged in the relevant committees of the Chamber of Deputies and the Senate of the Parliament of the Czech Republic in April 2018. There have also been discussions with social partners. The opinion of the Council of the European Union on the Convergence Programme of the Czech Republic of April 2017 was acknowledged in June 2017 by a resolution of the competent Committee on European Affairs of the Chamber of Deputies, and in July 2017, it was discussed in the Senate which recommended the Government to take Council's conclusions into account.

The Convergence Programme of the Czech Republic is divided into seven interconnected chapters. The first chapter presents the intentions and objectives of the Government's fiscal policy, the basic elements of structural policies and the monetary policy framework of the Czech National Bank, whose implications for the macroeconomic and fiscal scenarios are covered in 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, 2018a). The favourable developments of our main trading partners as well as the positive situation within the Czech economy create the conditions for continued economic expansion in the Czech Republic. Gross domestic product growth reached 4.4% in 2017; for the years 2018 and 2019 we predict the economy to grow by 3.6% and 3.3%, respectively. The labour market situation, which shows symptoms of overheating, can be considered as the main barrier for a higher growth. We believe that the unemployment rate has already reached its bottom, and in the forecast horizon it should be around 2.3%. The inflation rate should remain close to the 2% inflation target of the Czech National Bank, despite the current inflationary trend in the national economy. In terms of external balance, positive aspects include the development of the current account balance, which should reach a surplus of 0.4% of GDP this year. It should remain positive until the end of the prediction horizon.

General government sector performance in 2017, forecast for 2018 as well as the Government's fiscal strategy for the years ahead are covered in Chapter 3. Its content is based on the results of the government deficit and debt notification, confirmed by Eurostat on 23 April 2018, and on the economic policy plans as of 4 April 2018 approved by the Government. For 2018, we anticipate a surplus of 1.5% of GDP, and its decrease to 1.1% of GDP in 2019. The structural balance should fall from a surplus of around 1% of GDP closer to balanced budget. The Czech Republic would therefore continue to fulfil its medium-term budgetary objective. The general government debt should reach just below the 30% of GDP at the end of the forecast period.

In Chapter 4, the macroeconomic and fiscal scenarios are validated through comparisons with forecasts of other public and private independent institutions including evaluation of macroeconomic forecast by a panel of independent experts. The baseline scenario is supplemented by a sensitivity analysis, which simulates the impact of different interest rate, lower economic growth of main economic partners and higher price of crude oil. An equally important part of this chapter is also the analysis of deviations of the current scenario from the previous Convergence Programme.

Chapter 5 looks at aspects of long-term sustainability. The chapter provides information on the state of the pension system and public health-care system in the Czech Republic and contains current expenditure projections of the systems most affected by ageing. The chapter also pays attention to the size and structure of the government guarantees.

Chapter 6 deals with qualitative aspects of revenue and expenditure in the general government sector. These aspects 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 act on conflicts of interest.

1 Overall Policy Framework and Objectives

Elections for the Chamber of Deputies of the Parliament of the Czech Republic were held on 20 and 21 October 2017. Based on the results of these elections, a minority government was formed by the ANO 2011 movement; however, it lost the vote of confidence in the Chamber of Deputies in January 2018. The outgoing government has prepared several major legislative proposals. Concerning investment activities, its aim is to maximize the utilization of the European Structural and Investment Funds.

After the end of the exchange rate commitment in April 2017, the monetary policy implemented by the Czech National Bank has returned to the standard interest rate regime. Since then, monetary policy rates have risen three times to the current 0.75% for the two-week repo rate. However, monetary conditions are heavily tightened by the strengthening exchange rate of the koruna.

1.1 Fiscal Policy

The ongoing second round of negotiations on the establishment of a new government was not yet concluded at the time of preparation of the Convergence Programme of the Czech Republic (CP). The current outgoing government has approved several measures that are predominantly of a social nature. It also aims at changes in the tax system. These, however, do not have a definitive form yet, and, therefore, are not reflected in the forecast; however, they are compared with the baseline scenario in subchapter 3.2.3.

In February 2017, new fiscal responsibility laws became effective; these laws create limits for the government's budgetary and fiscal policies. There has been a change in the setting of spending limits for the state budget and state fund budgets, which now have an explicitly defined limit – the medium-term budgetary objective. This 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 and the Chamber of Deputies, it must be set within the framework of medium-term budgetary objective. Compliance with the framework should be facilitated by new institutions – the National Budgetary Council and the Committee for Budgetary Forecasts. The members of the National Budgetary Council took office at the end of January 2018. However, the Committee for Budgetary Forecasts, whose members are approved by the government on proposal by the National Budgetary Council, was not selected as of the CP deadline. Nevertheless, the Committee should review macroeconomic and fiscal forecast for the purpose of compiling the state budget and state funds budgets already this year.

The revenue side is largely conditional on the development of relevant macroeconomic fundamentals, practically throughout the CP period. On the expenditure side, the government has approved several measures, particularly in relation to pensions, as well as higher fare discounts for selected population groups or increased funding for regional education. All this, along with the growing positive output gap, should reduce the structural surplus in 2019 to around 0.2% of GDP, which should remain at this level until the end of the CP forecast horizon (see Table 1.1).

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

	2019	2020	2021
General government balance	**1.1**	**1.0**	**0.9**
Structural balance	0.2	0.2	0.2
Primary structural balance	0.9	0.9	1.0

Source: MF CR.

1.2 Monetary Policy

The monetary policy of the Czech National Bank (CNB) 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. Actual inflation may therefore temporarily deviate from the inflation target, for example due to adjustments to indirect taxes, whose primary impacts are not usually reflected by the monetary policy—it only focuses on secondary effects.

In response to deflationary risks, the CNB used from November 2013 to April 2017 the exchange rate as an additional monetary policy instrument, with commitment not to allow the koruna to strengthen below 27 CZK/EUR. The total volume of foreign exchange interventions in its defence reached EUR 75.9 billion over the entire commitment period. Since the end of the exchange rate commitment, the CNB has increased the two-week repo rate three times (by 0.20 pp in August 2017, by 0.25 pp in November and by 0.25 pp to 0.75% in February 2018).

The average monthly exchange rate of the koruna versus the euro appreciated by 6.3% YoY to 25.4 CZK/EUR in March 2018. We expect the exchange rate to appreciate also in the coming year, although at a less dynamic pace. These expectations are similar to those of the latest CNB Inflation Report (2018b).

The joint document of the Ministry of Finance and the CNB “Assessment of the Fulfilment of the Maastricht Convergence Criteria and Degree of Economic Alignment of the Czech Republic with the Euro Area” approved by the Government in December 2017 (Resolution No. 894/2017) stated that neither economic (alignment of economic development, fiscal and banking sector issues or structural policies) nor the institutional situation in the euro area is sufficiently stabilized, thus not creating a favourable environment for the future adoption of the single European currency in the Czech Republic. In terms of own readiness for the adoption of euro, the issue of real and nominal economic convergence (see Chapter 2.4), long-term sustainability of public finance in connection with population ageing (see Chapter 5.2) or the issue of differences in the structure of the Czech economy vis-à-vis the Euro area have to be dealt with. With these unresolved problems and with the the loss of national monetary and exchange rate policy, the common monetary policy might not be effective enough and, at the same time, adequate space for the stabilization function 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 in 2018.

1.3 Structural Policies

The priorities and objectives of the Czech Republic in the area of structural policies are described in detail in the 2018 National Reform Programme of the Czech Republic (Government Office, 2018). The following in this subchapter is only a list of some of them focusing primarily on the potential to have a more significant impact on macroeconomic development and at the same time approved in this or the previous year.

In addition to the VAT reporting, electronic registration of sales is one of the most important measures in the field of fighting the tax evasion, where the selected business entities are obliged to register their sales through a permanent electronic connection. The drastic reduction of proportional cost deductions for entrepreneurs has reduced the existing fictitious reporting of employment as self-employment and has brought the rate of taxation of self-employed persons closer to that of employees. Finally, the Czech Republic continues to strive to introduce a comprehensive reverse charge mechanism, which would further significantly reduce value added tax evasion.

In order to introduce rigorously digitized tenders, reduce administrative burden and combat corruption, electronic procurement is being further developed. Compulsory electronic communication in public procurement between the contracting authority and the contractor will be extended to all contracting authorities during 2018.

Simpler conditions for starting construction and a considerable acceleration of the building permit proceedings have been brought by the amendment to the Building Act (Act No. 225/2017 Coll.), which introduced the concept of joint proceedings allowing simultaneously a structure to be placed, permitted and its environmental impact to be assessed. At the same time, the deadlines for reviewing land-use planning documentation were significantly reduced.

In the business environment, investment incentives were further strengthened. If an investor invests at least CZK 75 million in the Czech Republic and creates at least 20 new jobs, he or she and his/her family can obtain a long-term residence permit for two years.

The reform of the financing of regional education (Act No. 101/2017 Coll.) should eliminate relatively large salary differences between schools of the same type in different regions as well as improve the quality of teaching. The reform, among other things, provides funds for the division of classes into smaller groups for the teaching of certain subjects, and provides for a fairer calculation of the funds for non-teaching staff, and takes into account to a greater extent the obligations of schools as separate legal entities.

In the case of higher education, the funding of public higher education institutions has been modified, introducing the division into fixed and performance components. In this context, a new performance indicator has been introduced to reflect student success.

Equally important are measures to reconcile family life and work. In nursery schools a place for children from the age of 4 is guaranteed, and this age limit will be gradually reduced. In addition, the weekly paternity leave was introduced, along with the possibility to receive higher annuity of parental allowance for a shorter period. Last but not least, the tax deductions concerning children, child allowances and parental allowance for multiplets were increased.

2 Macroeconomic Outlook

The Czech economy is in the phase of a strong boom. In 2018 and 2019 we expect its above-average growth, driven solely by domestic demand. In the coming years, the dynamics of the economy and other key macroeconomic indicators should gradually slow down. The average inflation rate should be around the CNB's inflation target of 2%. The labour market shows signs of overheating with implications for further extensive economic growth. A record low number of job seekers relative to vacancies is reflected in wage development. The external position of the Czech economy in the form of net lending / borrowing abroad is in surplus.

2.1 World Economy and Technical Assumptions

In 2017, the pace of global economic growth rose to 3.6%. In both the US and the Eurozone, real GDP grew by 2.3% (the fastest growth in the euro area since 2007), while the Chinese economy has kept its dynamics thanks to the boost in export growth. A number of large emerging economies succeeded in overcoming the economic recession and returning to the trajectory of growth.

The real GDP in the EU grew by 2.4%, driven by domestic demand, particularly private consumption and investment. Household consumption was positively affected, in particular, by improving labour market situation, high levels of consumer confidence and low interest rates, while gross fixed capital formation was positively affected by global recovery and favourable financial conditions.

In the coming years, the world economy could grow slightly faster. We expect the EU GDP to increase by 2.4% in 2018 (compared to 2.3% in the EC's winter forecast, 2018a) and then slow down slightly to 2.0% in 2019 (in accordance with the EC, 2018a). Growth should continue to be driven in particular by final consumption expenditure of households, supported in the medium term by employment and wage growth. In some European economies, however, economic growth is likely to be dampened by persisting structural problems, notably by low labour productivity growth or high public sector indebtedness.

The dynamics of the export markets of the Czech economy should gradually decrease over the CP period with regard to the expected slowdown in the economic growth of our main trading partners and the development of their import demand.

In 2017, the average Brent crude oil price was about USD 54 per barrel. In 2018 and 2019 we expect a price of USD 65 per barrel (USD 68 per barrel forecast by the EC 2018a) and USD 61 per barrel (USD 64 per barrel forecast by the EC, 2018a), respectively. In the following years, the crude oil price could slightly decrease to USD 57 per barrel in 2021. The expected development in Brent crude oil prices over the CP period reflects the declining curve of futures prices. The change in oil prices is reflected mainly in the average inflation rate and, to a lesser extent, in consumption and investment. By contrast, the impact on public finances is negligible.

Based on the recent developments of the USD/EUR exchange rate, we have made a technical assumption of exchange rate stability at 1.23 USD/EUR for 2018–2021. Therefore, we anticipate the same USD/EUR exchange rate for 2017 and 2018 as the Commission in its winter forecast (2018a).

After the end of the CNB's exchange rate commitment in early April 2017, the koruna started to strengthen against the euro. We expect this trend to continue in the years to come, given the differential in labour productivity growth as well as interest rates relative to the euro area. However, the rate of appreciation of the koruna against the euro should gradually slow down from 4.7% in 2018 to 1.5% in 2020 and 2021 in the context of rising interest rates by the European Central Bank.

Taking into account the expected inflation development and the anticipated set-up of the CNB's monetary policy, we expect a gradual increase in long-term interest rates up to 2.9% in 2021.

Table 2.1: Assumptions of the Scenario

		2017	2018	2019	2020	2021
USD/EUR exchange rate	*annual average*	1.1	1.2	1.2	1.2	1.2
CZK/EUR exchange rate	*annual average*	26.3	25.1	24.7	24.3	23.9
Government bond yield to maturity 10Y	*in % p.a.*	1.0	1.9	2.2	2.6	2.9
PRIBOR 3M	*in % p.a.*	0.4	1.0	1.4	1.9	2.5
GDP EU	*real growth in %*	2.4	2.4	2.0	1.9	1.9
Oil prices (Brent)	*USD/barrel*	54.2	65.2	61.4	58.6	57.1

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

2.2 Actual Developments and Medium-term Scenario

2.2.1 Economic Growth and the Demand Side

Real GDP growth accelerated to 4.4% in 2017. The main factor was household consumption, which increased by 4.0% compared to 2016. It was supported by the dynamics of employment, wages and salaries, and a decline in savings rate, reflecting the labour market situation. Low interest rates and a high level of consumer confidence were also among the drivers of growth. The growth of real disposable income and further decreases in savings rate will positively affect the dynamics of final consumption expenditure of households in 2018 and 2019. In 2018, a number of discretionary changes in social area and in 2019 the planned changes in the pension system should be reflected favourably in the development of household consumption. In real terms, household consumption could thus increase by 4.3% in 2018, then slow down slightly to 4.1% in 2019. Due to the predicted wage bill and the expected inflation, household consumption growth should be between 2.5 and 3% in the following years.

The general government sector's real expenditure on final consumption could increase by about 2% per year over the CP period. Growth in the consumption of the general government sector will be strengthened by the development in compensation of employees accompanied by higher employment, as well as the dynamics of intermediate consumption and social transfers in kind (see Chapter 3).

Gross fixed capital formation increased by 5.4% in 2017, thanks to both the continued growth of private investment and the recovery of government investment activity. In connection with the start of the new 2014–2020 financial perspective and with regard to factors supporting private investment, such as gross operating surplus growth, eased monetary conditions and labour market development, gross fixed capital formation could increase by 5.7% in 2018. For 2019, especially as a result of lower general government investment, we predict a slowdown to 4.4%. We expect investment to grow by approx. 3% per year in 2020–2021. Private investment and general government investment should contribute positively to the dynamics of gross fixed capital formation throughout the CP period.

The contribution of net exports to the year-on-year increase in real GDP growth in 2017 reached 1.0 pp. Given the expected developments in the export markets (see Chapter 2.1) and the predicted growth in investment, which is the most import-intensive component of domestic demand, the external trade balance between 2018 and 2019 should have a slightly negative effect on economic growth; after that, the contribution of net exports to growth should be slightly positive.

With respect to the development of individual expenditure components of GDP, in 2018 and 2019 we expect real GDP to increase by 3.6% and 3.3%, respectively. In the following years, the economic growth could be around 2.5%.

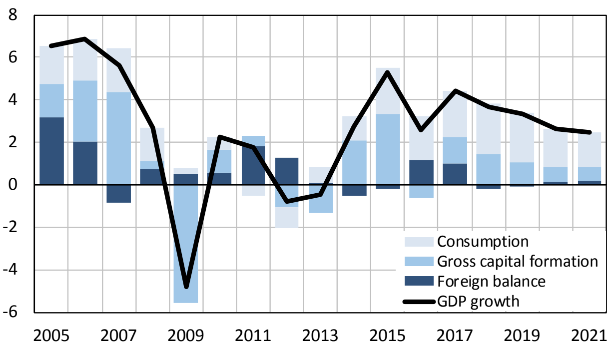
2.2.2 Potential Product and Position within the Business Cycle

After overcoming the recession in 2013, the growth of the potential product accelerated to 2.8% in 2016 and 2017, which is slightly higher than the long-term average growth of real gross value added since 1995 (2.7%). The most significant component was the increase in total factor productivity with a contribution of 2 pp. The capital stock shows a fairly stable contribution of around 0.5 pp. The population ageing, manifesting itself by the decline in the number of working-age people since 2009, has shrunk the dynamics of the potential product to a similar extent. On the other hand, the marked increase in participation rates more than offsets this decline. Due to shortening of the usual average working hours and approaching the standards of more advanced economies, the contribution of hours worked remains slightly negative.

With the predicted gradual decline in economic dynamics, potential product growth should be between 2.6% and 3.0% in the coming years. The structure of individual contributions should remain similar to that in previous years.

Chart 2.1: Decomposition of GDP Growth

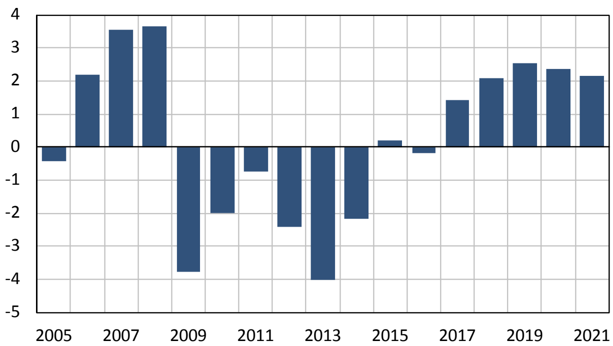
(growth in %, contributions to growth in percentage points)



Source: CZSO (2018a), MF CR (2018a). 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	2017	2017	2018	2019	2020	2021
		Level	Rate of change				
Real GDP	B1*g	4983	4.4	3.6	3.3	2.6	2.4
Nominal GDP	B1*g	5055	5.9	5.2	5.2	4.4	4.3
Components of real GDP							
Private consumption expenditure	P.3	2331	4.0	4.3	4.1	2.9	2.6
Government consumption expenditure	P.3	931	1.5	1.9	2.0	1.8	1.8
Gross fixed capital formation	P.51g	1256	5.4	5.7	4.4	3.0	2.8
Changes in inventories and net acquis. of valuables (% of GDP)	P.52+P.53	60	1.2	1.1	1.0	0.9	0.9
Exports of goods and services	P.6	4043	6.5	5.2	4.9	4.5	4.4
Imports of goods and services	P.7	3639	5.8	5.9	5.4	4.8	4.5
Contributions to real GDP growth							
Final domestic demand		-	3.5	3.9	3.4	2.5	2.3
Changes in inventories and net acquis. of valuables	P.52+P.53	-	-0.1	0.0	0.0	0.0	0.0
External balance of goods and services	B.11	-	1.0	-0.2	-0.1	0.1	0.2

Note: Real levels are in 2016 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 increase of the change in inventories and net acquisition of valuables is calculated from real values.
Source: CZSO (2018a), MF CR (2018a). MF CR calculations and forecast.

The output gap, which reached almost –4% during recession in 2013, closed at the beginning of 2015. In 2017 it reached +1.4%. Over the CP period, it should remain positive between 2.1% and 2.5% of the potential product, with an estimated peak in 2019 and a gradual closing in the following years. This trajectory reflects the predicted rates of economic growth in relation to the expected dynamics of the potential product.

2.2.3 Prices

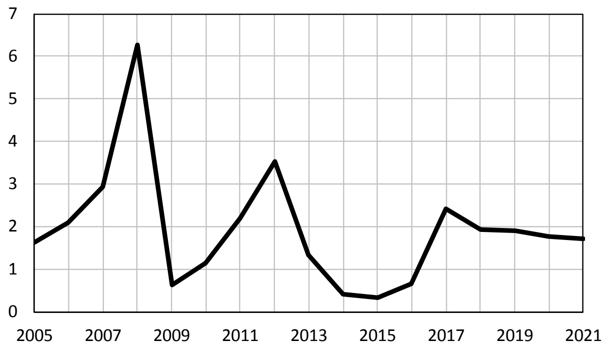
In 2017, the inflation rate, measured by the harmonized consumer price index, was 2.4%. Throughout 2017 year-on-year inflation was between 2% and 3%, but dropped below 2% at the start of 2018 due to a slowdown in food price growth. For the entire 2018, consumer prices should increase by an average of 1.9%. An important anti-inflationary factor will be the expected strong appreciation of the Czech koruna against the euro by 4.7%. Also food prices should lead to slower consumer price increase this year. More intense inflationary pressures, on the other hand, are created by the ongoing growth in unit labour costs and domestic demand in a positive output gap environment. Projected year-on-year rise in oil prices should also play its role.

In 2019, the pro-inflationary effect of several factors should be mitigated. We estimate that growth in unit labour costs will slow down, the USD price of crude oil should even fall. The output gap, however, will probably remain in clearly positive values. Anti-inflationary effect, although less significant than this year, can be expected from further strengthening of the Czech koruna. As a result, the inflation rate could remain at 1.9%. An anti-inflation risk for 2019 is the potential reclassification of some services and goods to the second reduced rate of value added tax.

In the following years, growth in the harmonized consumer price index could moderate slightly to 1.7% in 2021 in the context of oil price developments, the continued strengthening of the koruna, the position of the economy in the economic cycle and the lower growth in unit labour costs. Over the entire CP period, the administrative measures should have a slightly positive contribution to the inflation rate.

Chart 2.3: Harmonised Index of Consumer Prices

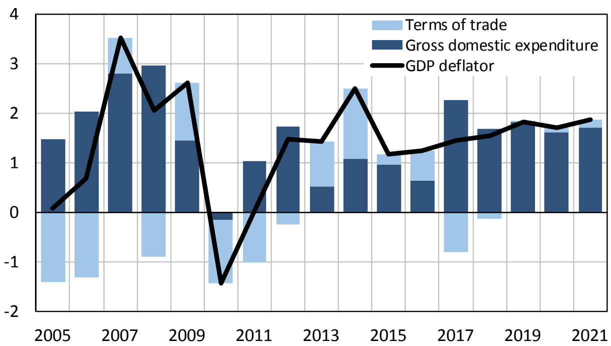
(YoY growth in %)



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

Chart 2.4: GDP Deflator

(YoY change in %, contributions in percentage points)



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

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

	2017	2017	2018	2019	2020	2021
	Level	*Rate of change*				
GDP deflator	**109.6**	**1.4**	**1.5**	**1.8**	**1.7**	**1.9**
Private consumption deflator	**108.7**	**2.5**	**2.2**	**2.0**	**1.8**	**1.8**
Harmonised index of consumer prices	**111.3**	**2.4**	**1.9**	**1.9**	**1.8**	**1.7**
Public consumption deflator	**113.1**	**4.0**	**3.0**	**3.8**	**2.4**	**2.5**
Investment deflator	**106.2**	**1.3**	**0.5**	**0.6**	**0.9**	**1.4**
Export price deflator (goods and services)	**104.7**	**-0.9**	**-3.2**	**-0.2**	**0.4**	**0.5**
Import price deflator (goods and services)	**103.7**	**0.1**	**-3.3**	**-0.2**	**0.3**	**0.3**
National consumer price index	**110.9**	**2.5**	**2.1**	**1.9**	**1.8**	**1.8**

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

2.2.4 Labour Market and Wages

The strong demand for labour at the record low unemployment rate was reflected in the dynamics of all key indicators. At the end of 2017, the unemployment rate fell to 2.4% (being 2.9% on average for the whole year), thus remaining by far the lowest across the EU. Despite a slight deceleration in employment growth to 1.6%, the annual increase in compensation of employees accelerated to 8.4%. Wage and salary increases were particularly noticeable in low- and middle-earning professions. The favourable economic condition of households thus significantly supported the growth of consumption.

The age structure of job seekers (more than a third is more than 50 years old), and the inadequate transport accessibility of some workplaces are reflected in the rapidly growing number of vacancies, which may exceed the number of unemployed people registered at labour offices in 2018. For these reasons, the potential for further growth in employment is significantly diminished, despite the companies' attempt to motivate job seekers with a range of cash and non-cash benefits. The unemployment rate could thus stagnate at around 2.3% over the CP period.

The increasing labour market tensions could be mitigated in the short term by the higher recruitment of foreign workers from EU and non-EU countries, although the positions offered, their remuneration and administrative obstacles limit this possibility. In 2018, employment could thus increase by 0.7%; in the following years it should almost stagnate.

Increased earnings and structural factors increase labour supply and, as a result, participation rates. The impact of temporarily higher population cohorts in age groups with a naturally high participation rates should wane over the CP period. On the contrary, a steadily positive contribution to economic activity could come from an increasing statutory, and therefore effective retirement age. These factors, together with the incentive effect of rising wages and salaries, could continue to outweigh the effect of the declining population of working age.

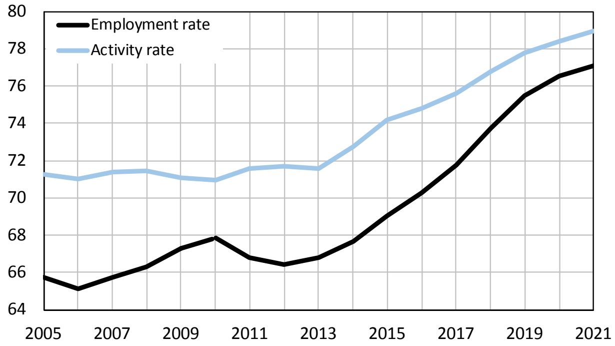
In 2018, wage and salary dynamics will be boosted by staff shortages as well as a significant year-on-year increase in minimum and guaranteed wages. However, the growth rate of real earnings will be dampened by the inflation rate just above the inflation target and by the relatively higher demand in the worse-paid professions. As a result of the expected slowdown in the economy and the associated weakening of labour demand, wage and salary dynamics should gradually slow down. The share of compensation of employees in GDP should not deviate from the long-term sustainable zone; in 2019–2021 it could range between 43% and 44%. Possible persistence or even acceleration of the growth rate of the average nominal wage over the entire CP period may pose a risk in terms of the competitiveness of the Czech economy.

Table 2.4: Employment and Compensation of Employees
(price levels in common prices, rate of change in %)

	ESA Code	2017	2017	2018	2019	2020	2021
		Level	*Rate of change*				
Employment, persons		**5330.7**	**1.6**	**0.7**	**0.2**	**0.2**	**0.1**
Employment, hours worked		**9.5**	**1.4**	**0.8**	**-0.2**	**0.0**	**0.0**
Unemployment rate (%)		**2.9**	**2.9**	**2.4**	**2.3**	**2.3**	**2.3**
Labour productivity, persons		**794.9**	**2.8**	**3.0**	**3.2**	**2.5**	**2.3**
Labour productivity, hours worked		**441.7**	**2.9**	**2.8**	**3.5**	**2.6**	**2.4**
Compensation of employees	D.1	**2089.9**	**8.4**	**7.7**	**6.5**	**5.5**	**5.4**
Compensation per employee		**460.2**	**6.7**	**7.0**	**6.3**	**5.3**	**5.3**

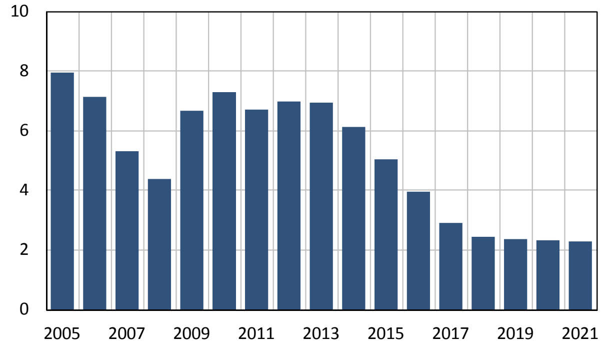
Note: Employment and compensations of employees are based on domestic concept of national accounts. Rate of unemployment is based on the methodology of the Labour Force Sample Survey. Labour productivity is calculated as real GDP (in 2016 prices) per employed person or worked hour.
Source: CZSO (2018a, 2018c). MF CR calculations and forecast.

Chart 2.5: Employment and Participation Rates
(in %)



Source: CZSO (2018c). MF CR calculations and forecast.

Chart 2.6: Unemployment Rate
(in %)



Source: CZSO (2018c). MF CR calculations and forecast.

2.3 External Transactions and Sectoral Balances

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

In 2017, the Czech economy recorded, for the fifth year in a row, a slight surplus of net lending/borrowing to non-residents, this time at 1.0% of GDP.

The surplus of goods and services decreased to 7.2% of GDP in 2017, with 4.8% of GDP accounting for the surplus of goods and 2.4% of GDP for the surplus of services. The slight decrease of the surplus was related to the development of the goods balance, which deteriorated year-on-year due to the strong domestic demand for imports (mainly of investment character); the deterioration of the terms of trade also played a role.

Conversely, the long-term deficit of primary incomes, which is mainly influenced by distributed incomes of businesses under foreign control, improved slightly to −5.6% of GDP. Also, the balance of current transfers was in a deficit of −1.1% of GDP. The balance of current transactions with non-residents thus reached a surplus of 0.5% of GDP, the first recorded surplus since 1993 (current account in the balance of payments methodology has been in surplus since 2014).

The capital transfers surplus reached only 0.6% of GDP due to the slow start of projects co-financed by EU funds from the 2014–2020 financial perspective.

Between 2018 and 2019, the net lending/borrowing surplus should be temporarily reduced to around 0.4% of GDP. The surplus of the goods balance should continue to decline, as a result of a moderate slowdown in export growth in the strengthening of the koruna's exchange rate and higher imports due to growth in domestic demand. Other balances should remain more or less stable. In the following years, the surplus of net lending/borrowing vis-à-vis non-residents should rise again to 1% of GDP due to a slowdown in growth of domestic demand.

In terms of sectoral balances, with the given trajectory of the general government surplus, the balance of the private sector should show a gradual reduction in deficits and be at a slight surplus at the end of the period.

Table 2.5: Sectoral Balances
(in % of GDP)

	ESA Code	2017	2018	2019	2020	2021
Net lending/borrowing vis-à-vis the rest of the world	B.9	**1.0**	**0.4**	**0.4**	**0.6**	**1.0**
Balance of goods and services		7.2	6.5	6.1	6.1	6.2
Balance of primary incomes and transfers		-6.7	-6.7	-6.5	-6.3	-6.1
Capital account		0.6	0.7	0.8	0.9	1.0
Net lending/borrowing of the private sector	B.9	**-0.6**	**-1.0**	**-0.7**	**-0.4**	**0.1**
Net lending/borrowing of general government	B.9	**1.6**	**1.5**	**1.1**	**1.0**	**0.9**
Statistical discrepancy		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Note: National Accounts Methodology. Net lending/borrowing of general government for 2017–2018 notification, years 2019–2021 outlook.
Source: CZSO (2018a). MF CR calculations and forecast.

2.4 Convergence

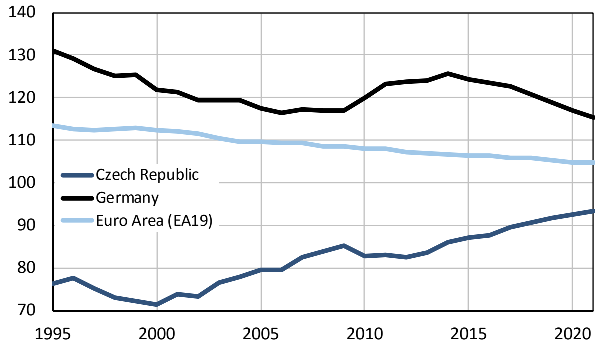
In 2017, the economic level of the Czech Republic, expressed as GDP per capita in current purchasing power parity, reached, according to preliminary estimates, approximately 90% of the economic level of the EU and 73% of the economic level of Germany. Thanks to strong economic growth in 2000–2008, the relative economic level of the CR in comparison with EU increased by 13 pp. Then the convergence process stopped in the period of recessions and low economic growth (see Chart 2.7). In 2009 to 2013, the economic level of the Czech Republic fluctuated between 82% and 85% of the EU average. The economic recovery in 2014 and strong economic growth in 2015 lead to restoration 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). A period of relative stability of the price level around 70% of the EU average followed in 2009 to 2012. Subsequently, the comparative price level decreased to 63% of the EU average due to weakening of the CZK/EUR exchange rate by monetary policy in 2014 and 2015, which helped improve price competitiveness of the Czech economy in that period. From 2017, when the exchange rate commitment was terminated, the Czech Republic's price level should again move closer to the EU average due to the appreciation of the exchange rate, although at a slower pace than before 2008.

Concerning average wage in the private sector, its convergence with the EU has temporarily stopped after 2008. Both in 2008 and 2017, it was roughly 45% of the average wage in the EU, fluctuating between 40% and 45% in this period. Between 2018 and 2021, however, the relative average wage of the private sector should start to move closer to the EU average in view of the expected dynamic wage growth and the appreciation of the koruna against the euro.

Chart 2.7: Relative Economic Level

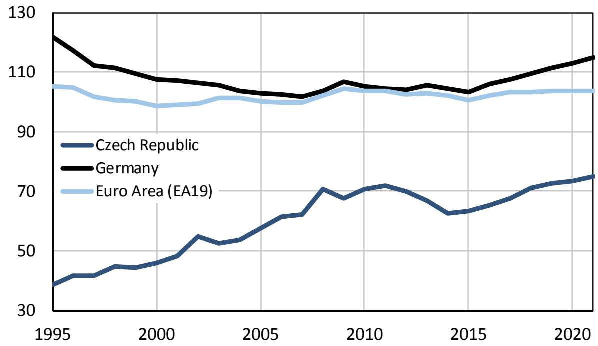
(EU=100, GDP in current purchasing power parities per capita)



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

Chart 2.8: Comparative Price Level

(EU=100, a ratio of GDP in purchasing power parity and GDP at exchange rate)



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

3 General Government Sector Development

In 2017, the general government sector of the Czech Republic achieved a surplus of 1.6% of GDP. At the same time, for the first time in the history of the Czech Republic, all subsectors contributed to the surplus. The positive balance was due to an increase in the tax revenue and social security contributions, which grew by almost CZK 130 billion year-on-year, as well as the low dynamics or even decrease in some items on the expenditure side. With the structural balance of 1.1% of GDP, the Czech Republic was also one of the EU Member States that definitely fulfil its medium-term budgetary objective and excel in overall fiscal discipline. We are predicting compliance with the medium-term budgetary objective over the entire CP period, also due to new fiscal rules.

3.1 Actual Development of the General Government

3.1.1 Development in Year 2017

According to data published by the Czech Statistical Office, in 2017 the general government sector reached a surplus of CZK 80.6 billion, i.e., 1.6% of GDP. The surplus has been achieved for the second consecutive year, and at the same time it was the highest surplus in the entire available time series (i.e. since 1995). In comparison with 2016, it is an improvement by 0.9 pp, and after adjustment for the business cycle and one-off or other temporary operations, it was an improvement by 0.2 pp.

In 2017 revenues increased by 6.5% year-on-year to 40.4% of GDP, with tax revenue including social security contributions being the determining factor for the dynamics. In comparison with 2016, these were higher by CZK 127.6 billion, which is historically the second highest year-on-year increase in absolute terms after the 2007 pre-crisis year. The composite tax quota increased by 0.6 pp to 35.2% of GDP due to the elasticities of tax revenues in relation to economic development and the increase in tax collection efficiency.

Revenue from indirect taxes increased by 7.3%. This year-on-year development was significantly facilitated by the value added tax rising by 9.5%, exceeding the nominal household consumption dynamics by 3 pp. This was in particular the consequence of the measures introduced since 2016, namely the VAT reporting (Act No. 360/2014 Coll.) and the electronic registration of sales (Act No. 112/2016 Coll.), with a quantified discretionary impact of CZK 14 billion in 2017. The collection was slightly negatively affected by the reduction in value added tax applicable to catering services from 21% to 15% (Act No. 113/2016 Coll.) as well as the reclassification of newspapers and magazines to the second reduced 10% rate (Act No. 33/2017 Coll.) with a total negative impact of CZK 1.1 billion. The measure allowing the Czech Television and Czech Radio to claim tax refunds to the same extent as for commercial stations (Act No. 170/2017 Coll.) also had a negative impact on tax revenues (an impact of CZK 0.3 billion).

The excise tax revenue increased by 3.1%, mainly driven by an increase in the tax rate on tobacco products (Act No. 315/2015 Coll.). Conversely, the excise tax on tobacco products was negatively influenced by the adoption of the anti-smoking law (Act No. 65/2017 Coll.), whose discretionary impact was approx. CZK 0.7 billion. Further negative impact on excise tax revenue, even higher by CZK 0.4 billion than in the previous case, namely on mineral oil tax, was caused by the tax return to primary agricultural producers who could claim back tax also for 2016 (Act No. 453/2016 Coll.).

Direct taxes grew at almost 8% pace mainly due to the high dynamics of personal income tax, whose collection was up 11.4% year-on-year. In addition to a strong wage growth in 2017 of 8.3%, this is also the result of electronic registration of sales with an impact of approx. CZK 3.3 billion (after taking into account a one-off tax credit offsetting acquisition of hardware and software for the electronic registration of sales). By contrast, some pro-family policy measures (e.g., higher tax advantage for the second and further children with a year-on-year impact of CZK 1.6 billion) or modification of conditions for the use of lump sum tax with an impact of CZK 1.8 billion (Act No. 170/2017 Coll.) had the contrary effect. Also, the personal income tax revenues were negatively affected by the exemption of service housing benefits for armed forces (an impact of approx. CZK 1 billion, Act No. 454/2016 Coll.) and an increase in the limit for pension and life insurance contributions deductible from the tax base (an impact of approx. CZK 1.4 billion, Act No. 377/2015 Coll.).

Corporate income tax revenue increased by 4.3% year-on-year, also reflecting a positive effect of electronic registration of sales (CZK 1.7 billion), although to a lesser extent than in the case of personal income tax or value-added tax.

The dynamics of social security contributions was determined by the growth of employment and, more importantly, of the average wage. A positive effect in the form of a YoY increase by approx. CZK 3.8 billion can be attributed to the electronic registration of sales. All these factors, together with an increase in payments for state-insured persons coverage by CZK 3 billion, account for a total of 8% year-on-year growth in social security contributions.

Concerning other revenues, property revenue decreased by almost CZK 7 billion year-on-year; this includes lower income from dividends from state-owned enterprises (e.g. Forests of the Czech Republic – CZK −2.3 billion) and other state-co-owned enterprises (e.g. CEZ a. s. – CZK −2.2 billion).

General government sector expenditure grew by 4.2% YoY, but due to a faster nominal GDP growth, they declined by 0.6 pp to 38.8% of GDP. Within these, the final consumption of general government sector increased by 5.4%, the pace of which was mainly determined by compensation of employees. More than 10% growth in compensation was due to both salary increases from November 2016 and salary scales adjustments in several segments of the general government sector from July/November 2017. The cumulative impact of compensation of employees to the general government expenditure thus amounted to more than CZK 40 billion. Another component of government final consumption, social transfers in kind, grew by nearly 4% due to increased healthcare system spending. On the other hand, intermediate consumption grew very slightly (by 1.3%).

Cash social benefits reflected several discretionary changes, such as the full utilization of the new possibility of setting the statutory indexation of pensions up to 2.7% instead of 1.3% according to the strict indexation formula (Act No. 212/2016 Coll.). The fiscal effect of this measure was approx. CZK 5.6 billion. An increase in expenditure by CZK 1.3 billion was also associated with an increase in the care allowance by 10% on the basis of Act No. 189/2016 Coll., which was already increased in 2016 but with a fiscal impact also in 2017. Total social security benefits in cash increased by 2.8%.

For the third consecutive year, interest expenditure fell by more than 10%. In 2017 it was almost 14%, which represented a year-on-year absolute savings of CZK 6 billion. The interest payments reached pre-2007 level.

Nominal investment expenditure of the general government sector grew by 8.6% year-on-year in 2017. The sources of funding were both national sources (growth of 7.2%) and EU funds (growth of 15.4%). National sources accounted for around 70% of the investment activity.

3.1.2 Development in Year 2018

We expect for 2018 the general government sector with a surplus of 1.5% of GDP, of which the surplus of local government budgets should account for almost two thirds. In terms of the structural balance, there should be a slight decline in the surplus by 0.3 pp to 0.8% of GDP.

In 2018, general government revenue should see similar year-on-year growth as in 2017 (6.4%) to 40.9% of GDP, and, similarly to 2017, tax revenues, including social security contributions, should dominate with a growth of 6.1%. A more efficient tax collection as a result of the introduction of effective measures against tax avoidance (see below) should be reflected in the growth of the composite tax quota by 0.3 pp to 35.5% of GDP.

For indirect tax revenues, we predict a slower year-on-year growth of 3.8% for 2018, driven in particular by the value added tax. Its expected autonomous growth corresponds to the growth in nominal household consumption and a relevant share of government consumption of around 6%. Measures to combat tax evasion should now have a lower discretionary effect. For VAT reporting, we expect a year-on-year increase in value added tax revenue of CZK 3 billion; due to electronic registration of sales CZK 1 billion increase in revenue is estimated. The corrected estimate of the impact of the latter measure results from the postponed start of the third and fourth phases of electronic registration of sales based on the decision of the Constitutional Court (for details, see Chapter 6.1). Higher value added tax revenue from the increase in the tax rate on tobacco products (CZK 0.3 billion) is likely to be fully offset by the expected lower consumption of tobacco in connection with the so-called anti-smoking law (Act No. 65/2017 Coll.). Measures that negatively affect value added tax revenues include the additional impact of some measures already introduced in 2017 allowing Czech Television and Czech Radio to claim tax refunds to the same extent as commercial stations and the reclassification of newspapers and magazines from 15% to 10% tax rate, with a cumulative budgetary impact of CZK 0.4 billion.

The year 2018 is the last year of the three-year plan when the rate of excise duty on tobacco products is increased (Act No. 315/2015 Coll.). The expected positive effect on the year-on-year excise tax revenue growth is CZK 1.4 billion. A slightly positive growth is also expected due to the commencement of the second period of excise tax refund on diesel fuel consumed in agricultural primary production by livestock producers (Act No. 453/2016 Coll.). Introduction of three tax rates depending on livestock production intensity, applicable between 1 July 2017 and 31 December 2018, should mitigate the YoY negative effect on revenues by CZK 0.1 billion compared to 2017. These positive impacts of the above mentioned discretionary measures should be countered by the aforementioned Act on the Health Protection from the Harmful Effects of Addictive Substances, effective from the end of May 2017, whose full effect will not be seen until 2018 due to the anticipated decrease in the consumption of tobacco products. The excise tax revenue should thus fall by 0.8%.

The dynamics of direct taxes should slow down due to corporate income tax, yet we expect an overall tax revenue growth of 6.8%. This is due to the expected growth in personal income tax of more than 12%. Similarly to 2017, growth in wages and salaries (7.7%) should have a positive impact, as well as a change in their distribution after increasing the minimum and guaranteed wages, taking into account the method of tax calculation. Similarly, the impact of the electronic registration of sales is expected, but it should be significantly smaller compared to 2017 due to the postponed start of its third and fourth phases. As regards pro-family policies, Act No. 200/2017 Coll. was adopted, which, among other things, changes laws in the area of income tax. With effect from 1 January 2018, tax credit for the first child increased by CZK 150 per month, which should lead to a drop in personal income tax by CZK 2.1 billion in 2018. Other measures negatively influencing tax revenue include introduction of new sickness insurance allowances, in particular long-term care allowance (Act No. 310/2017 Coll., effective from 1 June 2018) with an impact of CZK 0.2 billion.

Similar factors to those applicable to personal income tax will influence the developments of social security contributions; in addition, increased payments for state-insured persons will amount to approx. CZK 3.5 billion in 2018. The increase in social security contributions is predicted at 7.7% after taking into account the discretionary measures. The positive impact of the electronic registration of sales is expected to amount to CZK 0.6 billion. Introduction of new sickness insurance allowances, in addition to the aforementioned long-term care allowance, and also paternity leave (Act No. 148/2017 Coll.), for which we expect a total effect of approx. CZK 0.7 billion, should have a contrary effect on the social security contributions in 2018.

As noted above, corporate income tax is expected to slow significantly in year-on-year terms in 2018. We expect higher wage costs to be reflected in company profits, while at the same time the dynamics of nominal GDP should moderate. Among the discretionary measures, we can mention again the electronic registration of sales with a planned positive impact of CZK 0.3 billion.

In line with the expected gradual acceleration of the implementation of projects funded from European sources, we expect in 2018 an increase both in current and investment subsidies from EU funds utilised in the 2014–2020 programming period.

General government expenditure should increase by 6.8% compared to 2017 and reach 39.4% of GDP, which is a year-on-year increase of 0.6 pp.

Compared to 2017, we expect a moderate slowdown in the growth of government final consumption expenditure this year, which should be up 5% year-on-year. Similarly to last year, this growth should be mainly due to the strong dynamics of compensation of employees (7.5%), reflecting a 10% increase in the tariffs of practically all employees in the general government sector (15% for teachers), which occurred already in 2017. Since January 2018, healthcare wage tariffs have also risen by 10%. All these measures should mean a total year-on-year increase in compensation of employees in 2018 by about CZK 31 billion. The net impact on the balance is, however, significantly lower due to the fact that a large part of the increased volume of wages and salaries at the same time represents higher general government revenue in the form of personal income tax and social security contributions, leaving aside higher consumption tax revenues as a secondary effect.

In addition to compensation of employees, social transfers in kind should also increase. The primary reason for their expected 4.5% increase is the prognosis of healthcare system revenue, which will to some extent be reflected in expenditure adjustment. The year-on-year increase in social transfers in kind will also be influenced by the discretionary measures of CZK 0.7 billion as a result of higher disability benefits (Act No. 301/2017 Coll.) and of 0.4 billion CZK in connection with reduction in protective limits for co-payments for drugs for children under 18 years and pensioners (Act No. 290/2017 Coll.).

We predict that intermediate consumption will accelerate to 3.5% compared to 2017 due to higher real consumption, but also due to the expected inflation rate.

The growth rate of cash social benefits should accelerate significantly to almost 6% year-on-year, reflecting both the social measures already approved in 2017 and the projected macroeconomic developments. The most important item is pension benefits. As a result of the rise in the price level and the substantial real wage growth in recent years, pensions are indexed by 4%, which will require additional expenditure of approx. CZK 17 billion. Part of this increase (approximately CZK 2.5 billion) is due to a change in the indexation formula (Act No. 203/2017 Coll.), which, since 2018, is the sum of consumer price index or pensioner cost of living index growth (whichever is higher) and one half of real wage growth, instead of one third (see also subchapter 5.1).

Other measures adopted aim to support people with disabilities, both by increasing the benefits and providing them to a wider range of applicants and by supporting their employment (Acts No. 301/2017 Coll., No. 93/2017 Coll. and No. 327/2017 Coll.). The target group is also persons who are long-term ill or caring for the long-term ill (Acts No. 259/2017 Coll. and No. 310/2017 Coll.). Last but not least, the state aims to support families with children, by increasing social benefits, supporting the return of mothers to the labour market or introducing paternity leave (Acts No. 148/2017 Coll. and No. 200/2017 Coll.). The discretionary increase in expenditure on these social measures (excluding the above-mentioned effects in the pension area) is predicted to be CZK 9.7 billion. Of this, the most significant influence is expected for pro-family policy measures (about CZK 5 billion) and the measures related to the adjustments in the area of sickness insurance (CZK 3 billion). Cash social benefits also include payments for state-insured persons, which should be up CZK 3.5 billion in 2018 year-on-year.

Investments in fixed capital began to grow again after a significant fall in 2016. The forecast predicts for 2018 a further acceleration of investment spending to almost 15%, financed more than in the last year by funds from the 2014–2020 financial perspective.

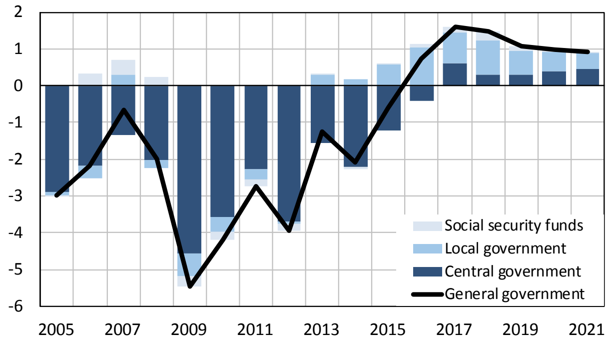
Considering the expected development of the Czech monetary policy, we expect a gradual increase in interest rates, which should reverse the current trend of decreasing interest costs. In 2018, we expect them to increase by almost 4%, but their ratio to GDP should remain at the level of 2017 (0.7% of GDP).

As part of other expenditure, we expect a negative discretionary impact in 2018 amounting to approximately CZK 3.3 billion, in connection with the introduction of a 75% discount on the fare in buses and trains for pupils, students under 26 and senior citizens over 65 (Government Resolution No. 206/2018).

3.2 Medium-term Budgetary Outlook

The current fiscal policy setting which serves as the basis for the outlook, is mainly based on state budget and state funds expenditures, which, combined with revenue forecasts, simply speaking, must not exceed the medium-term budgetary objective. For the years 2018 and 2019, Act No. 23/2017 Coll. allows these expenses to be increased by 0.5 and 0.25% of GDP, respectively. The approved state budget and state funds expenditures in the state budget medium-term outlook were set so that the total state budget deficit in the years 2018 to 2020 is not higher than the budgeted deficit for 2017.

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



Note: Years 2017–2018 notification, years 2019–2021 outlook.
Source: CZSO (2018b). MF CR calculations and forecast.

In the case of local governments, we expect continued surplus, albeit with a decreasing trend as a result of expected higher current and capital expenditures. The balance of social security funds is based in particular on the predicted growth in wages and salaries in the economy which is a key determining factor of the future growth in revenues. Given the declining dynamics (see Chapter 2.2.4), we expect surpluses in the sub-sector of health insurance companies to decrease. The other components of the general government sector should report moderate surpluses on average.

3.2.1 Expected Development of Revenue

The revenue of the general government sector will be affected primarily by the favourable macroeconomic developments in the forecast period. There will be far fewer discretionary revenue measures compared to previous years. We expect an average increase in general government sector revenue of 4.3%, of which tax revenues (including social security contributions) should increase by 4.5%.

In the years of the outlook, we predict that the personal income tax revenue will grow at an average rate of 6%; however, the dynamics should slow down slightly. The growth rates in individual years are influenced mainly by the expected wage bill development in the economy while taking into account wage distribution and the method of tax calculation. The prediction is burdened by the decision of the Constitutional Court (see Chapter 6.1) concerning the two last phases of the electronic registration of sales. Their launch requires legislative changes, which are being prepared. The deadline for launching the last two phases of electronic registration of sales is thus not yet known. Long-term care allowance, which was approved with effect from 1 June 2018, affects both 2018 and 2019; the year-on-year impact in 2019 is estimated at around CZK 0.2 billion.

Social security contributions should also develop in line with the increase in wage bill in the economy and higher payments for state-insured persons by approx. CZK 3.5 billion annually until 2020 (Act No. 297/2017 Coll.). For 2021 payments for state-insured persons, we have the technical assumption of a similar growth in absolute terms. The average rate of social security contributions should be 5.7% over the forecast period. As part of the discretionary measures, the aforementioned long-term care allowance, which is estimated to have an impact of CZK 0.4 billion, affects negatively the revenue of the social and health insurance systems.

Corporate income tax revenue should grow on average by 2.2%. The development is determined by the rate of net operating surplus in the forecast period, which rather slows down as the share in GDP of compensation of employees grows in the prediction.

Consumption taxation is determined almost exclusively by the autonomous development of macroeconomic fundamentals in the forecast period. As regards value added tax revenues, we predict an average growth by 4.9%. The revenues correspond to the growth in nominal household consumption and a part of relevant government consumption. The revenue on excise taxes should slightly increase in the entire forecast period, by around 0.8%, with its dynamic decreasing over time. This is because in 2019, there will be a unification of the refund of excise tax on diesel fuel for all activities in primary agricultural production (Act No. 453/2016 Coll.). Starting this third phase should reduce the initial negative impact of this measure on revenue by CZK 0.6 billion.

As regards other revenue, for 2019–2021 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 Development of Expenditure

In 2019–2021, we estimate an average YoY increase in general government expenditure to 4.7%. In relation to GDP, spending should increase by 0.1 pp to 39.5% of GDP in 2019 and then remain at that level until the end of the forecast period.

In 2019, we expect a significant increase in the area of cash social benefits which reflects the proposed measures and, in terms of public finances, less favourable autonomous development. The most significant item of growth in social expenditure is an increase in the volume of funds for pension benefits. As a result of the expected inflation rate around the CNB's inflation target and, in recent years, the higher real wage growth, we expect the pension indexation to be around 5% in 2019, followed by statutory indexation between 3–4% in the years after that. The proposed amendment to the pension insurance scheme approved by the government (Chamber of Deputies Print No. 120), which increases the flat-rate component of pensions from 9% to 10% of the average wage and adds CZK 1 000 to persons aged over 85 years (for more details, see Chapter 5.1), would increase pension expenditure by about CZK 14 billion in 2019 compared to the autonomous scenario. The balance in 2019 is also negatively affected by the introduction of the long-term care allowance in the amount of CZK 0.6 billion. The development of cash social benefits also reflects, in the ESA 2010 methodology, higher payments for state-insured persons by CZK 3.5 billion per year until 2021. As a result of the autonomous development and the aforementioned discretionary measures, the growth in cash social benefits should accelerate to 6.8% in 2019, followed by a decrease in the growth rate to a value slightly below 4% annually.

General government final consumption expenditure will be driven, in the years of the outlook, by increasing expenditure on compensation of employees, social transfers in kind and, to a lesser degree, by intermediate consumption. In 2019, we expect a strong acceleration in the growth of compensation of employees expenditure to around 9%, mainly due to the increase in salaries in the education system, both by raising salary scales and by reforming regional education. However, the issue of wage growth will only be negotiated by the government and, therefore, this is not an approved issue yet. The impact on the balance is, of course, again lower due to higher tax revenues through higher revenue and consumption. As a result of the relatively rapid salary growth in recent years and the expected moderation in the average wage growth in the economy, we expect growth in compensation of employees to be around 5% per annum over the forecast period.

The growth in social transfers in kind should slow down to approx. 3.5% in 2019. We predict a similar growth also in the remaining years of the forecast period, based primarily on the assumption of a future, fundamentally stable inflationary trend and a slowing pace in the volume of wages and salaries in the economy. At the same time, in view of the actual results in the balance of social security fund subsector due mainly to the higher dynamics of the revenue side, we expect larger surpluses at the beginning of the forecast period. Relatively stable expenditure growth should thus gradually lead to a balanced finances of health insurance companies, which corresponds to the long-term average of their balances.

The intermediate consumption growth rate should be 3% in the years of the outlook. The expected moderate slowdown in the dynamics compared to the expected 3.5% rate in 2018 is mainly caused by a predicted lower inflation rate, which should oscillate close under 2% in 2019–2021 (for more details, see Subchapter 2.2.3).

Table 3.1: A Structure of Discretionary Measures in 2018–2021
(year-on-year discretional change, in CZK billion)

	2018	2019	2020	2021
Revenue Discretioanry Measures	**21.3**	**4.0**	**0.3**	**0.4**
Personal income tax	2.6	0.7	0.1	0.1
Corporate income tax	0.3	-	-	-
Social security contributions	11.6	2.6	0.3	0.3
Value added tax	3.6	-	-	-
Consumption taxes	0.8	0.6	-	-
Other revenue measures	2.5	0.1	-0.1	-0.0
Expenditure Discretionary Measures	**-65.3**	**-21.0**	**-0.9**	**-1.0**
Cash social benefits	-11.5	-14.5	0.1	-
Compensation to employees	-31.0	-9.0	-1.0	-1.0
Health care	-13.0	-	-	-
Other expenditure measures	-9.8	2.5	-	-
Total	**-44.0**	**-17.0**	**-0.6**	**-0.6**
% of GDP	-0.8	-0.3	-0.0	-0.0

Source: MF CR calculations and forecast.

As regards fixed capital investment, we predict a stable dynamics in the first two years of the outlook. In 1919 and 2020, we expect an increase in investment co-financed from EU funds of 10% annually. This dynamics still leaves room for acceleration of implementation of these projects towards the end of the 2014–2020 financial perspective, i.e. between 2021 and 2023. For 2021, in line with the approaching end of the financial perspective, we expect a slight acceleration of EU-co-financed investments to 14%. National investments should, to a certain extent, follow the development of investments co-financed from the EU, which was also evident at the end of the previous financial perspective in 2014 and 2015. Financial resources from EU funds should complement national resources mainly in the areas of investment into infrastructure, science and research, and employment.

Interest expenditure in the forecast years increases on average by CZK 3.5 billion annually, in line with the assumptions of monetary policy and interest rate developments. In relative terms, interest expenditure should oscillate around 0.8% of GDP throughout the outlook. For more details, see Subchapter 3.4.

3.2.3 Comparison of Intentions with the Forecast Scenario

Table 3.2 presents a comparison of the baseline scenario of the fiscal prediction comprising autonomous development and the impact of, at least by government, approved measures, with quantified impact of plans whose final form is not yet definitive.

In terms of budgetary impacts, the prediction already includes the most important measures recently adopted by the government in the baseline scenario. The first such measure is the change in the pension system, which increases the level of retirement benefits for persons over 85 and increases the basic amount of all pensions to 10% of the average wage (for more details see Chapter 5). Also included were measures approved by the government on 27 March 2018, namely adherence to the schedule of the reform of regional education funding (with a projected impact of around 0.2% of GDP since 2019), and increased fare discounts for seniors over 65 and students under 26 years of age to 75% (with the expected impact of 0.1% of GDP spread over 2018 and 2019).

The government also prepares several changes in the tax area. A complex proposal of amendment of tax laws is currently in the external comment procedure and its final form is thus not definitive. However, it brings a number of changes to income taxes, value added tax, excise taxes, gambling taxes, the Tax Code, the Customs Act, etc. However, the overall budgetary impact should be negligible. Nevertheless, the public budget balance would be positively affected by a proposal (also in the comment procedure) to reintroduce the third and fourth phases of the electronic registration of sales, which should, however, be accompanied by a reclassification of selected services to the reduced value added tax rate. The net positive impact of these two measures on revenue should be around 0.1% of GDP.

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

	2018	2019	2020	2021
Total revenue	**40.9**	**40.6**	**40.5**	**40.4**
Total revenue with proposed measures	40.9	40.7	40.6	40.5
Cumulative proposed revenue measures	-	0.1	0.1	0.1
Total expenditure	**39.4**	**39.5**	**39.5**	**39.5**
Total expenditure with proposed measures	39.4	39.5	39.5	39.5
Cumulative proposed expenditure measures	-	-	-	-
General government balance without proposed measures (baseline)	**1.5**	**1.1**	**1.0**	**0.9**
General government balance with proposed measures	1.5	1.1	1.1	1.0
Total cumulative proposed measures	-	0.1	0.1	0.1

Note: Intentions of Fiscal Policy reflect proposed measures which are currently discussed (usually in commentary procedure) and do not have definitive form, they are not yet approved by the government. Discretionary measures are represented cumulatively, thus containing effect of changes in previous years.
Source: MF CR calculations and forecast.

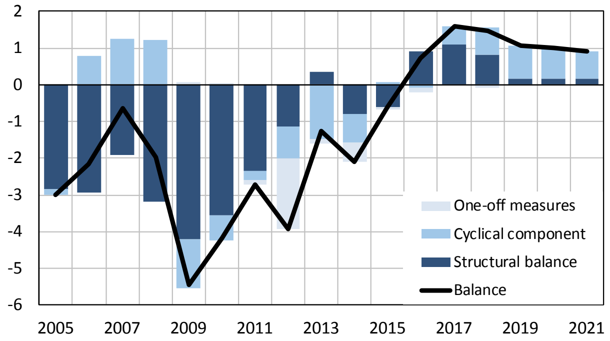
3.3 Structural Balance and Fiscal Stance

3.3.1 Cyclical Component and Structural Balance

In 2017, the structural balance reached a surplus of 1.1% of GDP, and it should decrease to 0.8% of GDP in 2018. We expect a structural surplus of 0.2% of GDP in 2019–2021. Interest expenditure in relation to GDP should be broadly stable throughout the forecast period. The primary structural balance should, accordingly, remain around 1% of GDP.

In 2017 there was no one-off revenue or expenditure. The only included measure for 2018 is the one-off expenditure for the realization of the Czech Export Bank guarantee for the Adularya power plant in Turkey in the amount of CZK 4.7 billion. We do not expect any one-off measures in 2019–2021.

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



Source: CZSO (2018b). MF CR calculations and forecast.

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 economic cycle. As shown in Chart 2.2, the Czech economy seems to be still in the period of increasing positive output gap which is expected to gradually close from 2020. The cyclical component should reach 0.7% of GDP in 2018, then, in 2019–2021, we expect it to decline from 0.9% of GDP in 2019 to below 0.8% of GDP at the end of the period.

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

Positive fiscal effort in 2017, as shown in Table 3.3, was associated mainly with an increase in tax revenue. Higher social expenditure, a continued rise in wage and salary expenditure and also a rise in investment activity are the main causes of the expansionary fiscal policy of the general government sector in 2018 and 2019. We expect fiscal policy to be neutral in 2020 and 2021.

A look at fiscal effort and the structural balance in 2019–2021 is complemented by the Stability and Growth Pact's expenditure rule, which stipulates that the growth of adjusted real expenditure of general government sector should be in line with the average growth of potential output (2.5% for the Czech Republic, according to EC, 2018a). The Czech Republic should achieve better structural balances than the medium-term budgetary objective over the forecast period. In this case, the growth rate of real adjusted expenditure may exceed the potential product. The dynamics of the real adjusted expenditure (Table 3.3) fulfils the provisions of the Stability and Growth Pact's expenditure rule in all years, even without including any adjustment.

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

		2017	2018	2019	2020	2021
General government balance	*% of GDP*	**1.6**	**1.5**	**1.1**	**1.0**	**0.9**
Structural balance	*% of GDP*	**1.1**	**0.8**	**0.2**	**0.2**	**0.2**
Fiscal effort	*pp of GDP*	0.2	-0.3	-0.7	0.0	0.0
Adjusted real expenditures	*growth in %*	-	-	**2.4**	**2.5**	**2.2**

Note: Adjusted real expenditures are the general government expenditures adjusted for the gross fixed capital formation, investment expenditure volatility, interest expenditure, transfers from the EU (current international co-operation and investment subsidies), change in the unemployment benefits and discretionary revenue measures.
Source: CZSO (2018b). MF CR calculations and forecast.

3.4 General Government Debt, Strategy and Stability of the State Debt

In 2018, we expect general government debt at 32.9% of GDP, down 1.7 pp from 2017. It will be determined by state debt decrease in relative terms and a decrease in the local government debt (in absolute and relative terms) in connection with their expected surplus finances.

The relative debt ratio of the general government sector has been significantly improving recently and we expect this trend to continue with the predicted surplus of the general government sector performance. Since 2013, general government debt has fallen by more than 10 pp, which today ranks the Czech Republic's public finances among the least indebted ones in the EU. This creates a fiscal space in the event 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 provision created by government debt financing against the 55% of GDP ceiling. For the year 2017, the value of this adjusted debt reached 34.6% of GDP.

We also predict a decrease in debt-to-GDP ratio in the years 2019–2021, in total by approx. 3 pp down to 29.9% (for year-on-year decreases, see Table 3.4). The development in the absolute general government sector debt is co-determined by planned or expected performance of the state budget and the balances of local governments.

Contributions of interest expenditure to change in the debt-to-GDP ratio should be at 0.8% of GDP in 2019–2021. Their growth by 0.1 pp compared to 2017 is due to maturities of major issuance of government bonds with negative interest yield and their replacement by bonds with higher yield to maturity. In 2015–2017, the Czech Republic regularly achieved negative yields to maturity in auctions of medium-term and long-term government bonds with shorter maturity and also in auctions of treasury bills. As a result of these issues, additional state budget revenues of CZK 2.4 billion were collected by the end of 2017. The share of state debt which is not associated with any interest expenditure expressed in the cash methodology, but, conversely, leads to collection of additional cash revenue, increased to 15.2% of the overall state debt at the end of 2017. The Czech Republic is still successful in international comparison (see MF CR, 2017b) in achieving low yields of government bonds in all maturity segments. This is mainly due to the positive perception of the Czech Republic's fiscal discipline on financial markets, highlighted by international institutions and rating agencies. The valued budgetary stability is a basic prerequisite for resilience to external shocks. Another factor contributing to lower yields to maturity is related to the lower supply of government bonds in the primary market due to the cash performance of the state budget in recent years. It is precisely due to the above factors that in the years ahead, we expect only a modest increase in interest rates on government bonds.

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. However, if such revenues are realised and are used to finance general government sector expenditure, this should have a positive effect on further slowdown in debt growth.

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 listed shares), the net financial debt was at 19.6% of GDP at the end of 2017. If necessary, the amount of potential liquidity for debt repayments would then be about 15.0% of GDP. Its development was influenced both by the general government surplus and the decrease of the relative amount of the general government debt.

The highest share in the general government debt is represented by central government (see Table 3.4). In 2018, the value of the debt is expected to be CZK 1,739 billion, which is approx. a 96% share in the total government debt. The local government debt represents the remaining 4% of the total debt; for 2018, we predict its amount as CZK 79 billion. Its value should gradually decrease in 2019–2021 due to an expected surplus performance of this subsector and the effect of Act No. 23/2017 Coll., on fiscal responsibility rules, which stipulates for local governments a minimum amount of principal repayment above the prudent level of use of liabilities (see MF CR, 2016). The subsector of social security funds has been showing negligible debts for a long period of time.

Since most of the central government debt is state debt, it is necessary to focus on its 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. However, 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, 2017b), 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 2018–2021 fulfil strategic objectives announced for the medium term.

Table 3.4: General Government Debt by Sub-sectors

(in % of GDP)

	ESA Code	2016	2017	2018	2019	2020	2021
General government	S.13	**36,8**	**34,6**	**32,9**	**31,6**	**30,7**	**29,9**
Central government	S.1311	35,9	34,3	32,7	31,5	30,8	30,0
Local government	S.1313	1,9	1,7	1,5	1,3	1,2	1,0
Social security funds	S.1314	0,0	0,0	0,0	0,0	0,0	0,0
Net financial debt [1]		23,9	19,6	17,2	15,3	13,6	12,1
Public sector institutions debt acc. to Act No. 23/2017 Coll., art. 13 [2]		**36,7**	**34,6**	**32,9**	**31,6**	**30,7**	**29,9**

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 (2018b). 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)

		2016	2017	2018	2019	2020	2021
Refinancing							
Average maturity	*years*	**5.1**	**5.0**	**5.5**	**5.9**	**6.0**	**6.0**
Debt due within 1 year	*% of debt*	**14.3**	**18.5**	**17.8**	**13.5**	**13.0**	**12.4**
State Debt's Interest							
Debt with interest fixation within 1 year	*% of debt*	**29.6**	**33.5**	**33.9**	**30.7**	**30.1**	**30.8**
Fixed interest long-term debt due within 1 year	*% of debt*	11.0	15.5	14.4	6.8	8.5	9.4
Variable interest long-term debt	*% of debt*	15.9	12.7	13.8	18.4	17.7	17.5
Monetary instruments	*% of debt*	0.3	2.7	3.0	2.9	2.8	2.8
Effect of derivative operations	*% of debt*	2.5	2.6	2.7	2.6	1.1	1.1
Foreign Currency Exposition							
Foreign-currency exposition of the state debt[1)]	*% of debt*	**11.5**	**10.9**	**7.7**	**7.5**	**7.3**	**7.3**
EUR exposition	*% of debt*	11.1	10.6	7.4	7.2	6.9	6.9

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 Previous Update and Sensitivity Analysis

4.1 Comparison with Previous Convergence Programme Update

4.1.1 Macroeconomic Scenario

The economic activity grew much faster in 2017 compared to the April 2017 CP scenario. On the domestic demand side, the largest deviations were noticed in the household expenditure on final consumption and in the gross fixed capital formation. Moreover, economic growth was much more favourably reflected in the development of the labour market, which saw a more marked increase in employment, decrease in unemployment and higher growth of wages. The strong economic boom has therefore also been reflected in macroeconomic development for the years 2018 and 2019. The largest quantitative change was again seen in household consumption and investment, which we expect to grow more dynamically in both years (see Subchapter 2.2.1).

The global economic recovery has also led to an increase in the forecast of economic growth of the main trading partners as well as the EU. The stronger global economic growth, together with the prolongation of the agreement of the Organization of the Petroleum Exporting Countries and some other states on oil drilling cuts was also reflected in the expectations about oil price development (see Subchapter 2.1).

The adjustment of the predicted inflation rate (Subchapter 2.2.3) in 2018 and 2019 reflects the strong growth in unit labour costs, the dynamics of domestic demand in a situation of a positive output gap, higher but slightly decreasing expected oil prices and a stronger koruna exchange rate against both the euro and the US dollar.

On the labour market, deviations from 2017 scenario, such as a more pronounced drop in unemployment and higher employment growth, are also reflected in the CP forecast years. However, the resources for higher employment growth and room for further decline in unemployment rate are probably already significantly limited (see Subchapter 2.2.4).

In terms of external balance characteristics, the observed net lending / borrowing balance showed a change in trajectory. In particular, this is due to the growth of domestic demand, particularly import-intensive investment activity, and a stronger exchange rate of the koruna (see Subchapter 2.3).

In view of the above, the forecast of the GDP and other fiscally important macroeconomic indicators is more favourable than the prediction in the previous CP.

4.1.2 Fiscal Scenario

As regards the general government balance, as already described in Chapter 3, there was a significant improvement compared to the previous CP. In 2017, the improvement took place particularly on the side of revenue, which grew by 6.5% in comparison of the expectations of 4.0%, while in the ratio to the GDP it decreased by 0.2 pp. The difference of forecasts since 2018 is thus caused not only by different macroeconomic development (see Subchapter 4.1.1) but also by different 2017 base, which influences the forecast for the following years.

Excise taxes shall experience markedly lower fluctuations in the whole horizon and also lower dynamics in the future, compared to the last CP. The fluctuation rate is particularly affected by the update of discretionary measures' impact. The value added tax has seen significantly stronger growth, as the revenue increased by 9.5% (expected growth was 4.9%), which is caused by different rate of growth of consumption of households and relevant part of final government consumption. While in the last year we expected the base to grow slightly above 4.5% in 2017 and 2018, the current scenario operates with the growth about 6%, especially due to the effect of year 2017. The income tax revenue increased by 8.0% (compared to the 4.5% estimate). The difference was caused to the greatest extent by different development of the personal income tax, whose revenue should increase by approx. 12% in 2017 and 2018 on average, while in the last year we expected the dynamics about half for the period. The difference stems not only from different rate of growth of wages and salaries in the economy, but also from the change in the wages and salaries' distribution due to growth of the minimum and guaranteed wage. Social security contributions revenue grew by 8.6% (in comparison to 5.9% in the last CP), which, after taking into account the increase of payments for the state-insured persons (increase is the same in both CP scenarios), reflects the different development of wages and salaries. For 2019 and 2020, the dynamics of tax revenue is quite similar to the last year scenario (difference approx. 0.4 pp), the more distinct difference apparent for social security contributions is explicable by the macroeconomic base.

On the expenditure side, one of the causes of its lower growth was the development of intermediate consumption in 2017; the rate of growth being by more than 2 pp lower in comparison with last year assumptions. As for the prediction and outlook, we presume the growth around 3%, which is similar as the last year scenario. On the other hand, more pronounced growth in 2017 and beyond is apparent for the compensation of employees. Year 2017 was affected by three wage increases in the government sector, while only the first increase (in effect since November 2016) was known in April 2017. Years 2018 and 2019 are naturally updated in the current scenario by new facts. Social transfers in kind develop similarly in both scenarios. Expenditure forecast is also influenced by lower than expected growth of gross fixed capital formation. The 2017 scenario had taken into account more marked rise in projects co-financed by EU funds, which didn't materialized. On the other hand, investment financed purely from national resources grew faster. Taking into account conditions of EU funds drawing, the dynamics for 2018 has been increased for both domestic and EU funds co-financed investments. Years of the forecast reflect adjustment of growth especially of domestic investments particularly due to the base effect.

As for the cash social benefits, the difference between both scenarios is notable in 2019, which reflects two factors. The first one is higher expected indexation of pensions due to the development of relevant macroeconomic indicators, the second reason is the additional discretionary measure approved at the beginning of 2018. For 2020, there is also higher expected indexation than in the last year scenario. The last CP anticipated the indexation about 2.7% for both years, which was approx. 1–2 pp. lower than the current CP scenario.

Higher surpluses of the general government sector as well as both higher levels and faster growth of GDP are the main factors of faster reduction in general government debt in relative terms.

Table 4.1: Change in the Indicators of the Scenario

		April 2017 CP				April 2018 CP			
		2017	2018	2019	2020	2017	2018	2019	2020
External Assumptions									
GDP growth in EU28	*%*	**1.8**	**1.9**	**1.7**	**1.8**	**2.4**	**2.4**	**2.0**	**1.9**
Prices of oil (Brent)	*USD/barrel*	**56.3**	**56.8**	**56.4**	**56.6**	**54.2**	**65.2**	**61.4**	**58.6**
Exchange rate USD/EUR	*USD/EUR*	**1.05**	**1.05**	**1.05**	**1.05**	**1.13**	**1.23**	**1.23**	**1.23**
Exchange rate CZK/EUR	*CZK/EUR*	**26.9**	**26.3**	**25.6**	**25.0**	**26.3**	**25.1**	**24.7**	**24.3**
Real Values									
GDP	*change in %*	**2.5**	**2.5**	**2.4**	**2.3**	**4.4**	**3.6**	**3.3**	**2.6**
Households consumption	*change in %*	2.4	2.7	2.2	2.1	4.0	4.3	4.1	2.9
Government consumption	*change in %*	1.7	1.5	1.4	1.4	1.5	1.9	2.0	1.8
Gross fixed capital formation	*change in %*	3.8	3.0	3.0	3.0	5.4	5.7	4.4	3.0
Contribution of final domestic demand	*p.p.*	2.4	2.3	2.1	2.0	3.5	3.9	3.4	2.5
Contribution of foreign trade	*p.p.*	0.2	0.2	0.4	0.3	1.0	-0.2	-0.1	0.1
Output gap	*%*	**0.8**	**0.8**	**0.8**	**0.8**	**1.4**	**2.1**	**2.5**	**2.4**
Others									
Nominal GDP	*CZK bn.*	**4889**	**5103**	**5322**	**5550**	**5055**	**5320**	**5596**	**5840**
Harmonised index of consumer prices	*change in %*	**2.4**	**1.8**	**1.8**	**1.8**	**2.4**	**1.9**	**1.9**	**1.8**
GDP deflator	*change in %*	**1.1**	**1.8**	**1.9**	**1.9**	**1.4**	**1.5**	**1.8**	**1.7**
Employment	*change in %*	**1.1**	**0.3**	**0.3**	**0.3**	**1.6**	**0.7**	**0.2**	**0.2**
Unemployment rate	*%*	**3.4**	**3.3**	**3.2**	**3.1**	**2.9**	**2.4**	**2.3**	**2.3**
Wages and salaries	*change in %*	**5.7**	**4.8**	**4.5**	**4.2**	**8.3**	**7.7**	**6.5**	**5.5**
Balance of goods and services	*% of GDP*	**6.6**	**6.8**	**7.2**	**7.6**	**7.2**	**6.5**	**6.1**	**6.1**
Net lending/borrowing	*% of GDP*	**0.3**	**0.6**	**1.2**	**1.9**	**1.0**	**0.4**	**0.4**	**0.6**
General Government									
General government revenue	*% of GDP*	**40.6**	**40.6**	**40.4**	**40.1**	**40.4**	**40.9**	**40.6**	**40.5**
Taxes on production and imports	*change in %*	2.2	3.7	2.8	2.5	7.3	3.8	3.2	3.3
Current taxes on income, wealth etc.	*change in %*	4.4	5.0	4.6	4.4	7.9	6.8	5.1	3.9
Social security contributions	*change in %*	5.4	5.1	4.6	4.3	8.0	7.7	6.3	5.4
General government expenditure	*% of GDP*	**40.2**	**40.3**	**39.9**	**39.6**	**38.8**	**39.4**	**39.5**	**39.5**
Compensation of employees	*change in %*	5.2	5.5	3.5	3.5	10.2	7.5	9.0	5.0
Intermediate consumption	*change in %*	3.4	3.0	3.0	3.0	1.3	3.5	3.0	3.0
Social transfers in kind	*change in %*	4.1	4.0	3.5	3.5	3.9	4.5	3.5	3.5
Social transfers other than in kind	*change in %*	3.0	5.5	3.3	3.2	2.8	5.9	6.8	3.8
Gross fixed capital formation	*change in %*	14.9	4.9	5.8	6.6	8.6	14.9	6.9	6.9
General government balance	*% of GDP*	**0.4**	**0.3**	**0.5**	**0.5**	**1.6**	**1.5**	**1.1**	**1.0**
General government debt	*% of GDP*	**36.0**	**35.3**	**34.3**	**32.7**	**34.6**	**32.9**	**31.6**	**30.7**

Source: CNB (2018a), CZSO (2018a), EIA (2018), Eurostat (2018), MF CR (2017a).

4.2 Sensitivity Analysis

Sensitivity analysis is a product of a dynamic stochastic general equilibrium model as developed by the MF CR. Alternative scenarios focus on some current issues of possible future developments. The first scenario shows an impact of worse than expected EU growth on the Czech economy; it reflects the high dependence of the Czech economy on the foreign environment. The next scenario assesses a possible sudden increase in the current very low interest rates. Finally, the last analysis concerns the uncertainty about the future evolution of crude oil prices, and discusses a situation of its sharp rise. The CP forecast as described in the Chapters 2 and 3 serves as benchmark for the evaluation of these plausible alternative developments. In these scenarios, we simulate impact of assumptions divergent from those included in the baseline scenario. The various shocks are assumed to always take place in the first quarter of 2019.

4.2.1 Slower Growth of GDP in the EU in 2019

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 lower GDP growth in the EU by 2 pp; this value corresponds to the standard deviation of EU GDP growth between years 2002 and 2017.

At the first stage, the decline of the foreign demand for Czech products would negatively affect net exports. Subsequent pressure on currency depreciation would increase price of imported goods and in turn lessen the decrease of net exports. The adverse effect of the shock on the foreign trade balance would result in lower than expected real GDP growth by 0.6 pp. The decrease of export, which diminishes profitability of domestic firms, would in turn reduce the firms' interest in investment activities. Investment growth would slow down by 0.1 pp. Lower output of companies would also negatively affect their demand for labour which would lead to lower nominal wage growth. Negative income effect in the form of relatively lower wages and capital returns would contract consumption growth by approximately 0.1 pp. Finally, the decline in wage growth and capital returns would create disinflationary pressures of 0.1 pp.

The slowdown in aggregate demand growth would lessen revenue from tax collection and worsen general government balance. The decrease of general government surpluses would then be reflected in a slower drop of the debt-to-GDP ratio.

4.2.2 Rise in the Domestic Interest Rate

The dynamic model in this alternative scenario simulates the additional tightening of monetary policy by 1.2 pp above the baseline scenario. The value of 1.2 pp corresponds to the standard deviation of the short-term interest rate in the period from the year 2002 to 2017.

The more restrictive monetary policy would have a negative effect on the Czech economic development. Subsequent appreciation pressure for the Czech currency would raise the price of export; foreign demand for the Czech products would drop in consequence. On the contrary, imported goods would become relatively cheaper. Sizeable import intensity of exports characteristic for the Czech economy explains the tendency of import to shrink in accordance with the decline of export. The outcome of these tendencies would result in a slight decrease of the import growth between 0.1 and 0.2 pp.

Lower wage growth following the downsizing tendencies of firms would negatively influence consumption of households. Moreover, the higher interest rate motivates individuals to increase savings and postpone their consumption to future. Altogether, the restrictive monetary policy would slow down the consumption growth by 0.2 pp.

Profitability of companies would decrease due to the decline in both domestic and foreign demand. Companies would respond to the decrease in profit and to the more expensive credit by lowering their demand for investment by 0.2 pp. This fall of aggregate demand would aggravate the unemployment rate relatively to the benchmark scenario by 0.3 pp which in turn would foster the reduction of the wage growth.

Given the negative impact of the higher interest rate on investment, consumption and export, the resulting impact on GDP growth would also be negative (0.6 pp). The slowdown in the economic growth would lead to disinflationary pressures of 0.1 pp.

The decline of household income and corporate profit would generate lower tax revenue causing decline of general government surplus. This shrinkage of the surplus including the elevation of debt service costs would reduce the decline of the debt quota.

4.2.3 Higher Oil Prices

The presented scenario builds on an assumption of 50 percent upward shock in average oil price for the year 2019 (92.1 USD/barrel versus 61.4 USD/barrel).

Higher oil prices are reflected in the increase of import prices as well as in the prices of inputs. Companies facing more expansive energy costs would consequently increase prices of their final products. Inflation would in turn increase by approximately 1 pp. Higher price levels would result in lower domestic demand. The slowdown in the demand for domestic and foreign goods would be reflected in the fall of consumption up to 0.3 pp.

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

The government sector balance would be relatively worse off due to the associated lower tax collection. The effect on the general government spending would be negligible.

Table 4.2: Basic Macroeconomic Indicators – Sensitivity Scenarios

		2018	2019	2020	2021
Baseline Scenario					
Gross domestic product	*Y-o-Y in %*	**3.6**	**3.3**	**2.6**	**2.4**
Private consumption	*Y-o-Y in %*	4.3	4.1	2.9	2.6
Gross fixed capital formation	*Y-o-Y in %*	5.7	4.4	3.0	2.8
Exports of goods and services	*Y-o-Y in %*	5.2	4.9	4.5	4.4
Imports of goods and services	*Y-o-Y in %*	5.9	5.4	4.8	4.5
Harmonised index of consumer prices	*Y-o-Y in %*	**1.9**	**1.9**	**1.8**	**1.7**
Unemployment rate	*in %*	**2.4**	**2.3**	**2.3**	**2.3**
General government balance	*% of GDP*	**1.5**	**1.1**	**1.0**	**0.9**
Gross government debt	*% of GDP*	**32.9**	**31.6**	**30.7**	**29.9**
Alternative Scenario I - Lower GDP Growth in EU in 2019					
Gross domestic product	*Y-o-Y in %*	**3.6**	**2.7**	**2.5**	**2.4**
Private consumption	*Y-o-Y in %*	4.3	4.0	2.8	2.5
Gross fixed capital formation	*Y-o-Y in %*	5.7	4.3	2.9	2.8
Exports of goods and services	*Y-o-Y in %*	5.2	3.1	4.2	4.4
Imports of goods and services	*Y-o-Y in %*	5.9	4.5	4.4	4.5
Harmonised index of consumer prices	*Y-o-Y in %*	**1.9**	**1.8**	**1.7**	**1.7**
Unemployment rate	*in %*	**2.4**	**2.8**	**2.5**	**2.3**
General government balance	*% of GDP*	**1.5**	**1.0**	**0.9**	**0.9**
Gross government debt	*% of GDP*	**32.9**	**31.7**	**30.9**	**30.1**
Alternative Scenario II - Higher interest rates					
Gross domestic product	*Y-o-Y in %*	**3.6**	**3.1**	**2.5**	**2.4**
Private consumption	*Y-o-Y in %*	4.3	4.0	2.7	2.4
Gross fixed capital formation	*Y-o-Y in %*	5.7	4.2	2.8	2.7
Exports of goods and services	*Y-o-Y in %*	5.2	4.6	4.4	4.4
Imports of goods and services	*Y-o-Y in %*	5.9	5.3	4.6	4.4
Harmonised index of consumer prices	*Y-o-Y in %*	**1.9**	**1.8**	**1.7**	**1.7**
Unemployment rate	*in %*	**2.4**	**2.7**	**2.6**	**2.3**
General government balance	*% of GDP*	**1.5**	**0.8**	**0.8**	**0.8**
Gross government debt	*% of GDP*	**32.9**	**31.8**	**31.2**	**30.4**
Alternative Scenario III - Higher oil prices					
Gross domestic product	*Y-o-Y in %*	**3.6**	**3.2**	**2.3**	**2.2**
Private consumption	*Y-o-Y in %*	4.3	4.0	2.7	2.2
Gross fixed capital formation	*Y-o-Y in %*	5.7	4.1	2.4	2.3
Exports of goods and services	*Y-o-Y in %*	5.2	4.5	4.1	4.1
Imports of goods and services	*Y-o-Y in %*	5.9	5.0	4.4	4.1
Harmonised index of consumer prices	*Y-o-Y in %*	**1.9**	**2.9**	**2.4**	**2.1**
Unemployment rate	*in %*	**2.4**	**2.4**	**2.4**	**2.3**
General government balance	*% of GDP*	**1.5**	**0.9**	**0.8**	**0.7**
Gross government debt	*% of GDP*	**32.9**	**31.7**	**31.0**	**30.4**

Note: Different values in the text and in the table are caused by the rounding of values to one decimal place.
Source: CZSO (2018a), EIA (2018), Eurostat (2018), MF CR calculations.

4.3 Verification of the Macroeconomic Scenario by Other Institutions' Forecasts

Macroeconomic scenario of the CP has also been compared with forecasts of relevant institutions. The survey was conducted in April 2018 and its results are based on forecasts of 16 domestic institutions, together with the latest forecasts of the EC (2018a) and the IMF (2018). However, the whole CP timeframe is at least for some indicators covered by forecasts of only 9 institutions.

Key trends of the macroeconomic scenario of the CP 2017 are consistent with the average of forecasts of other institutions. The real GDP should increase by 3.5% in this year, while in the following years the growth could decelerate to 3.0% in 2019 and to about 2.5% in 2020 and 2021. The growth of the Czech economy should be driven solely by the domestic demand, composed by both consumption (of households and government) and gross fixed capital formation.

The inflation rate should proceed close to 2% in the whole horizon of the CP. The appreciation in exchange rate shall have counter-inflationary effect on the consumer price development, while the growth in the domestic demand and the dynamics of wages and salaries should act pro-inflationary.

The labour market situation shall reflect the favourable economic development. The unemployment rate should remain at very low levels markedly below the 3% border, while the employment shall continue to increase. Wages and salaries shall grow this year by nearly 8% and the next year by 6%; the growth expected by the institutions for 2020 and 2021 shall be around 5%.

Individual respondents of the survey from the ranks of institutions independent on the government were also asked to evaluate the CP macroeconomic scenario on a scale of conservative–realistic–optimistic. Of the 13 institutions addressed (3 out of 16 survey respondents are government-dependent institutions) 10 institutions evaluated the macroeconomic scenario, of which 7 institutions deem it as realistic, 1 institution as rather conservative and 2 institutions as optimistic. Based on the external evaluation of government-independent experts, it is possible to consider the CP macroeconomic scenario as realistic.

Table 4.3: Verification of the Convergence Programme Scenario by Other Institutions' Forecasts

		Avearage of Forecasts				April 2018 CP			
		2018	2019	2020	2021	2018	2019	2020	2021
Growth in Real Terms									
Gross domestic product	*% growth, s.p.*	**3.5**	**3.0**	**2.6**	**2.5**	**3.6**	**3.3**	**2.6**	**2.4**
Households consumption	*% growth, s.p.*	4.2	3.7	2.6	2.6	4.3	4.1	2.9	2.6
Government consumption	*% growth, s.p.*	2.3	2.0	1.9	1.8	1.9	2.0	1.8	1.8
Gross fixed capital formation	*% growth, s.p.*	5.8	4.0	3.6	3.4	5.7	4.4	3.0	2.8
National consumer price index (aop)	*in %*	**2.1**	**2.0**	**1.9**	**1.9**	**2.1**	**1.9**	**1.8**	**1.8**
GDP deflator	*% growth*	**1.9**	**1.8**	**0.8**	**0.9**	**1.5**	**1.8**	**1.7**	**1.9**
Employment (LFS)	*% growth*	**0.9**	**0.4**	**0.5**	**0.5**	**0.7**	**0.2**	**0.2**	**0.1**
Unemployment rate (LFS)	*average in %*	**2.5**	**2.5**	**2.7**	**2.7**	**2.4**	**2.3**	**2.3**	**2.3**
Wages and salaries	*% growth, c.p.*	**7.8**	**5.8**	**4.7**	**5.3**	**7.7**	**6.5**	**5.5**	**5.4**

Note: LFS stands for the Labour Force Survey.
Source: MF CR (2018a, 2018b).

5 Sustainability of Public Finances

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 ageing of the population is not a matter of a distant future, but it is already evident today. The number of seniors is growing faster than the number of children and the number of working-age people has been decreasing since 2009 (CZSO, 2017a). This creates pressure on future expenditure of social security systems, and hence a need to reform these systems. Parametric adjustments to the pay-as-you-go pension system take place quite often in the Czech Republic. However, a wider political consensus has not yet been found for a comprehensive reform of the pension system. 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 The Government's Strategy and Executed Reforms

5.1.1 Status Quo of the Public Pay-as-you-go Pension Scheme

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 / 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 will increase until it reaches 65 years around 2030. The law envisages the Ministry of Labour and Social Affairs' periodical reporting, every five years, on the pension system to the Government. The report will 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 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 is 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, eventually).

On 27 February 2018, the government has adopted so far the latest amendment to the pay-as-you-go pension system (Chamber of Deputies Print No. 120) with effect from September 2018. The proposal changes the flat-rate component of all types of pensions from 9% of the average wage to 10%. This increase will concern both newly granted pensions and already paid pensions, with the increase of the flat-rate component going beyond the standard indexation. The second change is that for people aged 85 and above, the pension benefit will be increased by CZK 1,000 per month. The estimated impact of both adjustments for the year 2019 is approximately CZK 14 billion.

In the area of early old-age retirements, several penalty rates apply, which progressively reduce the resulting pension benefit throughout the period of its provision. Up to 360 days before the statutory retirement age, there is a decrease by 0.9%; between the 361st to the 720th day before reaching the retirement age, there is a decrease by 1.2%, and, finally, for periods exceeding 720 days (until the statutory retirement age), the decrease is by 1.5%. The earnings-related part of old-age pension subsequently decreases by these values 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 will not be subsequently reduced for the years when the pre-retirement benefits are drawn. At the end of 2017, there were only 2,676 persons that 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 Development in the Healthcare System

The relatively rapid growth of health care expenditure results in a decline in the reserves of health insurance companies (i.e. the ratio of health insurance company's balance accounts to total health care expenditure). This adverse effect reduces the resilience of the public health insurance system to negative shocks, such as a significant slowdown in economic growth. In connection with the ageing of the population, the risks of the current public health insurance system are not negligible in terms of sustainability in the medium and long term. It is clear that measures will have to be implemented to address its available resources, including the structure of funding sources, as well as the financial requirements in the individual health care segments.

As regards resources of healthcare financing, since 1 January 2018 the assessment base for payments for state-insured persons has increased to CZK 7,177 (Government Regulation No. 140/2017 Coll.). In the years 2019 and 2020, this assessment base will increase to CZK 7,540 and CZK 7,903 per calendar month, respectively (Act No. 297/2017 Coll.). This will lead to regular year-on-year increases 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. 286/2017 Coll.), as of 1 January 2018 the monthly health insurance contributions for persons without taxable income also increased to CZK 1,647. However, the impact of this increase is negligible within the overall system resources.

From 1 January 2018, health insurance contributions are redistributed among health insurance companies according to pharmacy-based cost groups, the so-called PCG model (Act No. 145/2017 Coll.). The aim is to achieve a fairer redistribution of health insurance contributions among health insurance companies by taking into account very costly insured persons with chronic illnesses. Combined with preventive programs, we can subsequently expect the cost of care for this patient group to be reduced.

In the inpatient care segment, the DRG Restart project continues; it is scheduled to be completed in 2021. As part of the project, a network of reference health care facilities for acute inpatient care was established; on its basis, a pilot cost assessment of hospitalization cases, and then an estimate for the entire segment of acute inpatient care was carried out. Between 2018 and 2019, further data will be collected to verify the reliability of the pilot valuation, and methodological and legislative standards for the entry of the patient classification system for acute inpatient care (CZ-DRG) into reimbursements will be prepared. 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 Impact of a Population Ageing

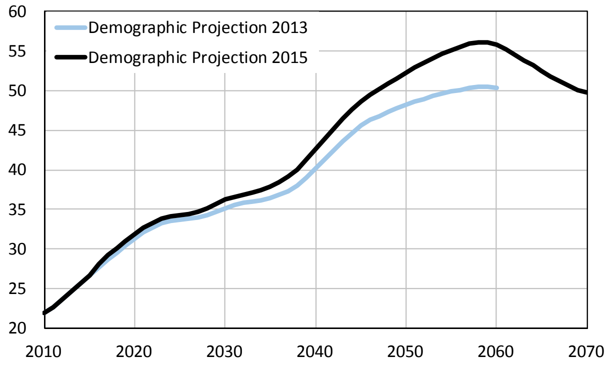
The results of impacts of population ageing are based on long-term projections carried out in cooperation with the Ageing Working Group at the EU Council's Economic Policy Committee. The analyses are based on assumptions about demographic development and a methodologically consistent macroeconomic framework for EU countries and Norway (EC, 2017a). The projections, therefore, do not reflect the current medium-term macroeconomic and fiscal outlook of the Czech Republic. The 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. The projection thus reflects all approved changes in the pension system with effect from 1 January 2018 (Act No. 203/2017 Coll.).

The new demographic projection foresees a relatively large decline in the population of the Czech Republic in the long term. The dependency ratio measured as the ratio of people aged over 65 to the working age population (15–64 years) should almost double by 2060 and reach approximately 56% (see Chart 5.1). That is, 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 forecast horizon.

Chart 5.1: Old-age Dependency Ratio

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



Source: EC (2014), EC (2017a).

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.

The participation rates for age cohorts above 54 years are increasing in the projection until 2030 in line with the statutory retirement age increase. However, they remain approximately constant after 2030, which reflects the institutional set-up of the pension system. A revision mechanism is, as described above, included in the pension system. However, it does not oblige the government to present an amendment to the retirement age to the Parliament for approval; it is only a recommendation. For this reason, the EC has rejected a proposal for application of this revision mechanism in 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 has been relatively favourable in the recent years, especially due to the macroeconomic development. 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 influenced the balance of the system, which was −0.3% of GDP in 2016 (baseline year of projections), and almost balanced in 2017.

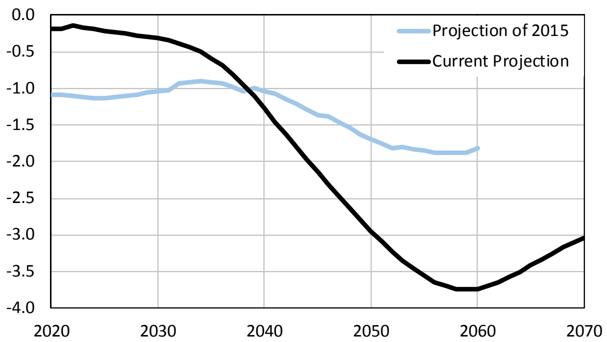
The trend of long-term pension projections is primarily determined by the demographic development and the statutory retirement age. It follows from these assumptions that pension expenditure until 2030 should be (in relation to GDP) basically stable at the level of the value of the baseline year 2016 (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 decrease 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 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 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 pension system balance (Chart 5.2) 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 5.2: 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 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 assumptions (e.g., different demographic development) are the first group, while changes to the pension system (different indexation formula and the retirement age ceiling) form the second group.

While updates to the assumptions play a role in the dynamics of expenditure over time, favourable development in the past years act against it. In comparison with the base value in the last projection around 9% of GDP, pension expenditure decreased to 8.2% of GDP in 2016. 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. According to calculations of the MF CR, 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 involves an increase by 20% (from baseline of 5.4% of GDP in 2016 to 6.5% of GDP in 2070), and for long-term care the increase is 116% (from 1.3% of GDP in 2016 to 2.9% of GDP in 2070). However, the difference from the previous projections is in base levels, namely at the level of long-term care, which is almost double to that in the 2015 Ageing Report. The explanation for this change is shown in Box 1.

The reference scenario differs from the pure demographic scenario in several respects. In health care, the difference is in higher income elasticity, with demand for health care services rising initially 10% faster than living standards, measured as GDP per capita. Furthermore, half of the life expectancy increase is assumed to be spent in good health. Moreover, in the case of long-term care, there is the assumption in the reference scenario that the growth of compensation of employees in social services is linked to labour productivity increases (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 previous projections.

Total expenditure increase between 2016 and 2070 exceeds 6 pp, as shown in Table 5.1. However, these are baseline scenarios; most alternative (sensitivity) scenarios show a more or less higher hike. The only exceptions are scenarios that include the impact of a healthier lifestyle in both health care and long-term care.

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

	2016	2020	2030	2040	2050	2060	2070
Age-related expenditure	**18.1**	**18.3**	**19.6**	**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: MF CR calculations and forecast.

Box 1: Expenditure on long-term care in the System of Health Accounts 2011

Since 2013, a new methodology of the System of Health Accounts 2011 (SHA 2011) has been used to describe the structure of expenditure on health care and long-term care, replacing the original SHA 1.0 methodology. The year 2013 was also the starting point for the previous long-term projections of public expenditure related to population ageing (pensions, health care and long-term care, and education), which are carried out at regular three-year intervals. In the case of projections of public expenditure on health and long-term care, Member States provide relevant data and calculations are carried out by the EC according to the agreed methodology. **In the previous long-term projections**, the data for year 2012 was used, i.e. **data reported using the original SHA 1.0 methodology.** Total public expenditure on long-term care was CZK 30.2 billion (about 0.7% of GDP) according to SHA 1.0 in 2012. **If the new SHA 2011 methodology were to be applied for 2012**, it would **increase public expenditure by about CZK 23 billion to CZK 52.9 billion (1.3% of GDP)** compared to the original methodology. It would be an increase in expenditure about CZK 18.2 billion for the state and local government budgets and an increase in expenditure about CZK 4.6 billion for the health insurance companies.

Public expenditure on long-term care is defined by the EC (2017b) as the sum of public expenditure on long-term health (code HC.3) and social (code HCR.1) care. **Long-term health care** (HC.3) according to SHA 2011 includes:

- **inpatient long-term care**, which includes services provided in hospitals, long-term care hospitals, nursing homes, retirement homes, homes for people with disabilities, etc.;
- **day cases of long-term care** provided in day-care hospitals, day-care centres, etc.;
- **outpatient long-term care** not reported in the Czech Republic; and
- **home-based long-term care**, including personal assistance and nursing care.

Table 5.2: Comparison of methodologies for reporting of expenditure on long-term care by financing schemes
(in CZK billion, in % of GDP)

	SHA code		2012 SHA 1.0	2012 SHA 2011	2015 SHA 2011
Total	HF TOT	*CZK bn.*	**30.2**	**53.0**	**61.2**
		% of GDP	0.7	1.3	1.3
Government scheme and compulsory contributory health care financing scheme	HF.1	*CZK bn.*	**30.2**	**52.9**	**61.1**
		% of GDP	0.7	1.3	1.3
Government scheme	HF.1.1	*CZK bn.*	21.5	39.7	46.9
		% of GDP	0.5	1.0	1.0
Compulsory contributory health care financing scheme	HF.1.2	*CZK bn.*	8.6	13.2	14.2
		% of GDP	0.2	0.3	0.3
Household out-of-pocket payment	HF.3	*CZK bn.*	**0.1**	**0.1**	**0.1**

Note: In the System of Health Accounts 2011 the government scheme is defined as a type of financing care through which long-term care services are provided to citizens and paid by central government or local government. The mode of participation is automatic for all citizens in this scheme and the funding source for care are primarily taxes. Expenditure reported by SHA 1.0 methodology also includes cash benefits (approx. CZK 19 billion) based on the Eurostat ESSPROS database. Such an approach accords with the EC's approach in long-term projections.
Source: CZSO (2017b), OECD (2018), Eurostat (2018). MF CR calculations.

Long-term social care (HCR.1) includes expenditure on:

- **social services** which include the so-called "assistance services" defined by Act No. 108/2006 Coll., on social services, as amended; and
- **cash benefits on long-term social care**, which include mobility allowance, a special aid allowance, and part of the expenditure on care allowance.

In terms of the type of long-term care provided, the transition to the SHA 2011 methodology was reflected in a significant increase in the expenditure on long-term inpatient care (about CZK 22 billion) and long-term day care (about CZK 1.4 billion), where the coverage of the expenditure was extended to include selected social services facilities (e.g. day-care and week-care hospitals). In the SHA 2011 methodology, expenditure on long-term social care (which includes cash benefits) is now also explicitly reported. Expenditure on cash benefits was included in total long-term care expenditure in the past projections. The difference of about CZK 4.5 billion in cash benefits between the two methodologies is due to a different data base. In the previous projections, these costs were obtained from the Eurostat ESSPROS database, which, however, has a different coverage of expenditure than the System of Health Accounts.

Table 5.3: Comparison of methodologies for reporting of expenditure on long-term care by functions
(in CZK billion)

	SHA code	2012 SHA 1.0	2012 SHA 2011	2015 SHA 2011
Total	HC.3+HC.R.1	**30.2**	**52.9**	**61.1**
Long-term care (health)	HC.3	**11.2**	**37.0**	**42.5**
Inpatient long-term care	HC.3.1	9.1	30.8	34.9
Day cases of long-term care	HC.3.2	0.0	1.4	1.7
Outpatient long-term care	HC.3.3	-	-	-
Home-based long-term care	HC.3.4	2.1	4.8	6.0
Long-term care (social)	HC.R.1	**-**	**15.9**	**18.6**
Cash benefits		19.0	14.5	16.8

Note: Expenditure on long-term social care is not reported in SHA 1.0.In previous projections, only cash benefits were available based on data from the Eurostat ESSPROS database.
Source: CZSO (2017b), OECD (2018), Eurostat (2018). MF CR calculations.

In the previous long-term projections, based on data in the original SHA 1.0 methodology, total public expenditure on long-term care increased by 78%, according to the baseline scenario, i.e. from 0.8% of GDP in 2016 to 1.4% of GDP in 2060 (i.e. by 0.6 pp). When applying the SHA 2011 methodology and assuming the same macroeconomic and demographic assumptions, the same scenario would lead to public expenditure growth of 98% from 1.3% of GDP in 2016 to 2.7% of GDP in 2060 (i.e. by 1.3 pp).

Table 5.4: Comparison of methodologies for projection of expenditure on long-term care
(in % of GDP)

	2016	2020	2030	2040	2050	2060	2070
2015 Ageing Report							
SHA 1.0 methodology	0.8	0.9	1.0	1.2	1.2	1.4	-
SHA 2011 methodology	1.3	1.5	1.9	2.2	2.4	2.7	-
2018 Ageing Report							
SHA 2011 methodology	1.3	1.4	1.8	2.1	2.4	2.8	2.9

Source: EC (2018c). MF CR calculations.

In the current long-term projections (starting in 2016), the increase of public expenditure on long-term care is estimated at about 105%, from 1.3% of GDP in 2016 to 2.8% of GDP in 2060 (or about 116% to 2.9% of GDP in 2070) under the baseline scenario. When comparing past projections with data according to the SHA 1.0 methodology and current projections, expenditure increases by 0.8 pp in the years 2016–2060. According to EC calculations, this difference is significantly influenced by the methodological change in the reporting of expenditure on long-term care (contribution of 0.3 pp), change in expected GDP growth (contribution of 0.3 pp), change in coverage of long-term care recipients (contribution of 0.3 pp) and a change in the expenditure profile (contribution of −0.2 pp). If, in the last round of projections, the expenditure had been reported in the SHA 2011 methodology, the change in expenditure growth in 2016–2060 would be only 0.1 pp.

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 ratio of expenditure or increasing ratio of revenue to GDP in order that they correspond to the required levels.

The European Commission publishes three standard sustainability indicators (see EC, 2016). In general, the S1 indicator expresses the percentage of GDP by which it is necessary to improve the primary structural balance of the general government so that general government debt amounts to 60% of GDP in 2030. This indicator for the Czech Republic is currently at −3.1% of GDP (an improvement from −1.2% of GDP in the last year's CP, MF CR 2017a). 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 on an infinite horizon. According to recent calculations by the EC (2018b), it is at 1.7% of GDP (an improvement from 2.9% of GDP in CP 2017).

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 around 0.19, which is significantly below the critical limit of 0.43.

The Czech Republic is currently evaluated as a low-risk country in the area of long-term sustainability of public finances. However, caution should be exercised in relation to this evaluation for at least two reasons. The first reason is the very favourable current state of public finances, while the component related to population ageing deteriorates the indicators. The second reason is the data base. The last EC evaluation (2018b) is still based on previous long-term projections that were more favourable for the Czech Republic.

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

	S1	S2
Cost of Ageing	0.6	2.2
Initial budgetary position	-1.6	-0.5
Impact of current debt	-2.1	
Total	**-3.1**	**1.7**

Source: EC (2017b).

5.4 General Government Sector Guarantees

In terms of long-term sustainability of public finance, it is necessary to focus, in addition to impacts of population ageing, also on the state of provided guarantees of 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 at the end of 2017 was 0.2% of GDP, which represents a negligible risk for Czech public finances.

The majority share of guarantees in the general government sector is made up of guarantees provided by local governments of 0.2% 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 6.1 billion. Other include guarantees provided by local governments for loans associated with housing needs (CZK 0.4 billion).

State guarantees have been steadily decreasing especially because financing of infrastructure development has been addressed by loans from the European Investment Bank since 2001, which are directly reflected in the general government debt. Until 2016, when Czechoslovak Trade Bank's claims in the issue ceased to exist, the majority was made up of the guarantee for the banking sector, namely in the case of the takeover of Investment and Post Bank by the Czechoslovak Trade Bank. Although only a fraction of the value of the guarantee has been paid so far (CZK 6.1 billion), the last litigation with a potential settlement of up to CZK 20 billion has not yet been concluded in this case.

While no new state guarantee was granted in 2017, a new agreement is expected to be concluded this year to secure a CNB's loan for the International Monetary Fund from its foreign reserves. The previous contract was terminated in 2016. The guarantee, laid down in a draft law, is currently submitted to the Chamber of Deputies (Chamber of Deputies Print No. 66). The promised credit facility should be EUR 1.5 billion, but the amount of the guaranteed amount depends on the loan drawing. In the case of the previous agreement for securing the CNB's loan to the International Monetary Fund, the drawing ranged between CZK 0.4 billion and CZK 2.2 billion in individual years. Due to the drawing of the loan in the past and the reliability of the borrower, this guarantee does not pose a significant risk to public finances.

6 Quality of Public Finances' Revenue and Expenditure

One of the main priorities of the outgoing government is to fight against tax evasion and to increase tax collection effectiveness. The key benefit for introducing related measures is not only their positive impact on tax revenue without the need to increase statutory rates or extend tax bases, but also straightening of the market environment. The main priorities of the Czech Republic include the overall simplification of the tax system. A new law on income tax is also currently in the process of preparation. As part of the rationalization of expenditure, an amendment to the Act on the Registry of Contracts was adopted. It has removed some of the contentious points from the original text, which threatened the market activities of the entities concerned. At the end of 2017, an evaluation report on the Central Procurement System was also prepared, confirming the considerable savings of current costs that this system brings.

6.1 Tax Policy Outlook for 2018–2021

6.1.1 Measures against Tax Evasion

Tax evasion has long been identified as a serious problem for the efficient functioning of market mechanisms. The magnitude of the problem was also indicated by the so-called "value-added tax gap", which in the past was about 20% in the Czech Republic (EC, 2018d). The key measures to reduce this gap include VAT reporting, electronic registration of sales and the reverse charge mechanism.

The institution of VAT reporting targets frauds with unjustifiably claimed excessive tax deductions. Since 1 January 2016, VAT payers have a statutory duty to provide, in the electronic form, the tax administrator with tax document information defined by the law. In its first year, the VAT reporting increased the revenue from value added tax for public budgets by CZK 13.7 billion and by another CZK 8.0 billion in 2017, which exceeded the original expectations. For 2018, we expect additional discretionary impact of CZK 3.0 billion.

The main objective of the Act on Registration of Sales (Act No. 112/2016 Coll.) is to prevent concealment of taxable income. The first phase of electronic registration of sales was launched in December 2016 and it applied to food services and accommodation services. The second phase commenced in March 2017, and applied to retail and wholesale. An amendment to Act No. 586/1992 Coll., on income taxes, was adopted in connection with introduction of electronic registration of sales. It introduced a one-off tax deduction from income tax of CZK 5,000 for entrepreneurs who became obliged to record sales in the given year. In 2017, after the launch of the first two phases, the measure brought over CZK 5 billion in value added tax revenue to the public budgets and again exceeded the original budgetary expectations. The motivation of the public to engage in electronic registration of sales was supported by receipt lottery.

In March 2018, the Ministry of Finance submitted a draft amendment to the Electronic Registration of Sales Act to external comment procedure. The draft responds to the Constitutional Court's decision (ref. Pl. CC 26/16) and previous application practice, requiring a law rather than a decree to specify who is obliged to register sales and to what extent. The draft regulates the start of the 3rd and 4th phases of registration of sales, which should be triggered simultaneously after a three-month time limit for preparation after the law enters into force. However, the exact date will depend on the length of the legislative process. As part of launching the third phase, the obligation to register sales should include persons doing business in transport or agriculture and independent professionals (physicians, lawyers, accountants, etc.). The fourth phase should apply to selected crafts and other manufacturing activities (e.g. manufacture of textiles and garments, processing and production of wood, paper, plastic or metal; repair and installation of machinery and equipment).

Also, the Czech Republic has been consistently seeking to introduce reverse charge mechanism that would substantially reduce further value added tax evasion. The reverse charge mechanism shifts the obligation to declare and pay tax from the supplier to the customer, and it is an efficient tool to combat carousel fraud.

6.1.2 International Co-operation against Tax Evasion

In the EU internal market, it is also necessary to fight against tax evasion at international level. The current strategy is based on deepening international exchange of information in tax matters. Following the transposition of Council Directive (EU) 2015/2376, the automatic exchange of information on Member States' tax rulings and advance pricing arrangements (Act No. 92/2017 Coll.) has been in place since April 2017. From September 2017, the transposition of Council Directive (EU) 2016/881 introduced an obligation for large multinationals to report on selected indicators for each tax jurisdiction in which they operate (Act No. 305/2017 Coll.). Subsequently, this information is subject to automatic exchange of information between tax administrations and serves to identify possible discrepancies in transfer pricing. Currently, EU Council is finalizing another amendment to Council Directive (EU) 2011/16, which extends the automatic exchange of information to include tax optimization schemes. The aim of the proposal is to prevent aggressive tax planning through a special reporting obligation. This reporting obligation will also apply to intermediaries, such as tax advisers, lawyers, accountants, and other entities that will be required to notify tax authorities of tax optimization schemes.

The Czech Republic should also transpose Council Directive (EU) 2016/1164 laying down rules against tax avoidance practices that directly affect the functioning of the internal market. The measure should prevent practices of mainly transnational corporations that avoid their tax obligations. The proposed text is in the so-called "tax package" and currently it is in the comment procedure.

6.1.3 Tax Administration Simplification

At present, intensive work is underway on the overall digitization of tax administration, which is being implemented gradually and is also one of the main priorities in the field of taxation. In June 2016, the MF CR presented the project *MOJE daně* (MY Taxes; MOJE standing for Modern and Simple in Czech), which aims to substantially simplify the entire tax system in the Czech Republic. The prepared recodification of income taxes is to bring substantial simplification of income taxes, overall reduction in administration and abolition of mandatory employer reporting for individual employees.

The "*MOJE daně*" project includes several important institutes that will allow easier tax compliance for most tax entities. The tax kiosk (a "virtual tax office") will offer taxpayers the possibility of pre-filled tax forms with taxpayer data and wage entries from the employer or data from third parties (such as banks or pension funds) that are important for the final tax assessment. The self-assessment institute will, for example, allow only the disputed part of the excess VAT deduction to be seized. The implementation of the "*MOJE daně*" project is planned for 2020 at the earliest.

In the future, the Integrated Tax and Social security contribution Management System is also planned. The project will enable the taxpayers to transfer insurance funds to a single account of the Financial Administration, which will bring savings to taxpayers and the tax and social security contribution administration.

6.1.4 Reducing Labour Taxation

Better tax collection and rigorous fight against tax evasion have created room for further reduction in the tax burden of selected population groups also in 2018. In support of families with children, the tax benefit for the first child was increased by 150 CZK per month. From July 2017, entrepreneurs using the proportional cost deductions may also enjoy child tax benefit or discount for the spouse. With the rise in the minimum wage, there was also an increase in the discount for the child's pre-school placement by CZK 1,200.

6.1.5 Tax Changes for Entrepreneurs

In January 2018, there was a reduction in the limit for employing the proportional cost deductions for entrepreneurs. The maximum expenditure limit for which entrepreneurs do not have to follow actual costs has decreased from CZK 2 million to CZK 1 million. The measure has reduced the benefits of reporting of employment as self-employment and brought the level of taxation on self-employed persons closer to the taxation of employees. From April 2018, entrepreneurs are affected by the amendment to the Income Taxes Act (Act No. 170/2017 Coll.), which allows them to amortize tangible assets more simply and regulates other changes leading to a reduction in the overall tax system complexity.

6.2 Tax Assignment

The latest amendment to Act No. 243/2000 Coll., on the tax assignment (Act No. 260/2017 Coll.), with effect from 1 January 2018, increased the VAT revenue share for municipalities from 21.40% to 23.58% at the expense of the state budget revenue. The impact of this change is estimated at CZK 9.1 billion for 2018. The act also regulated the way in which shared taxes are distributed among municipalities according to several criteria as well as adjusted the weightings of these criteria, namely according to the size of the municipality, the number of inhabitants, and the number of children and pupils. Currently, there is no amendment to the tax assignment under discussion.

6.3 Rationalisation of General Government Expenditure

6.3.1 Management and Control of Public Finances

Finalising the transposition of Council Regulation 2011/85 requires an 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 would have not only completed the full transposition of the Directive into the Czech legal order, but also would create 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 prepared an amendment of a technical nature, which extends the scope of entities defined as a public administration body, leaving the system itself unchanged. The effect of this amendment is proposed from 1 January 2020.

6.3.2 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 started in 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 had the obligation to establish a ministerial centralized procurement in 2016. In November 2017, the Ministry of Finance submitted to the Government the first Report on the Evaluation of Centralized Procurement and Central Procurement System of the State for 2016 (MF CR, 2017c). According to the report, savings achieved as a result of the centralized procurement reached more than CZK 0.8 billion in 2016. The most successful commodities in terms of quantified savings are electricity, cars and gaseous fuels.

6.3.3 Registry of Contracts Act

The Registry of Contracts Act entered into effect on 1 July 2016 (Act No. 340/2015 Coll.), aiming to increase transparency in the management of financial resources of the public sector, reduce potential for corruption and, ultimately, contribute to cost reduction in goods and services purchasing. The law obliges state institutions, local governments, state-owned enterprises, legal entities with majority ownership by the state or a local government and other public institutions to publish, in an information system of contract registry, newly concluded contracts exceeding CZK 50 thousand excl. VAT, within 30 days of their conclusion. From 1 July 2017, the effect of contracts is conditional upon their publication in the registry, and where a contract is not published through the register within 3 months of its conclusion, it is considered cancelled *ab initio*. Due to the threat to the competitiveness of state-owned enterprises, the Chamber of Deputies of the Parliament of the Czech Republic approved on 22 February 2017 an amendment to the law granting state-owned enterprises, the national enterprise *Budějovický Budvar*, commercial and industrial companies with majority ownership of the state or a local government and public authorities, an exemption from the obligation to publish contracts with private businesses that would harm these entities in a competitive environment by disclosing a business strategy or business secret. However, the Senate of the Czech Parliament returned this amendment to the Chamber of Deputies of the Parliament of the Czech Republic, which subsequently rejected the draft. On 19 May 2017, a parliamentary draft amendment (which was published under Act No. 249/2017 Coll.) was submitted instead, which contains more systemic adjustments, i.e. not exemptions for individual companies. With effect from 18 August 2017, the obliged entities established for the purpose of meeting industrial, commercial or research, development or testing requirements do not have to publish contracts concluded in the ordinary course of business within the scope of their objects of business. In addition, the law includes changes in the case of public service media, public higher education institutions and public research institutions.

6.3.4 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 buildings and is helpful for optimizing the occupancy of buildings which the state institution rents to non-public entities. This results in significant savings on rental and operation of buildings (in 2016 the savings were about CZK 0.5 billion). The system is also used to identify unnecessary property that will be subsequently intended for sale.

6.4 Composition of General Government Expenditure

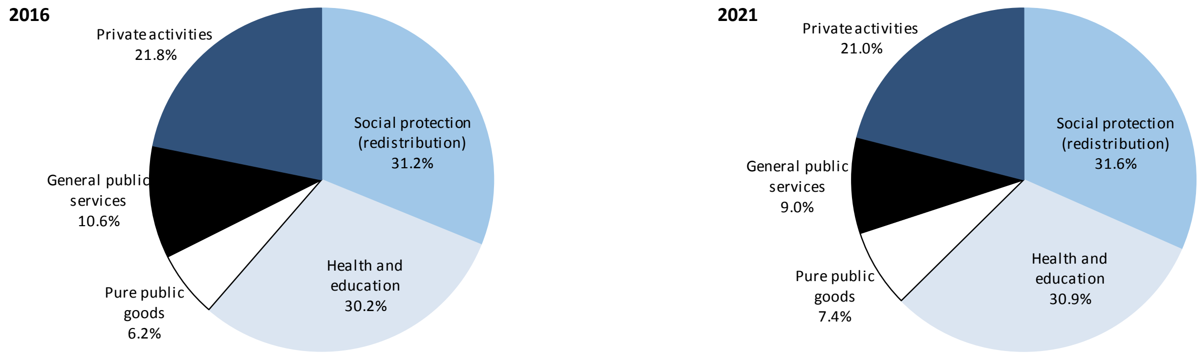
In 2009–2015 (except 2012), the total general government expenditure in relation to GDP showed a downward trend. During this period, overall general government expenditure, despite a decreasing trend relative to GDP, increased in absolute terms, on average by about 1.7% per year. The largest average contribution to expenditure growth was expenditure in the Social Affairs (0.6 pp) and Health (0.4 pp) sections. In 2016 there was a year-on-year decline in total general government sector, both in relative terms (by 2.3 pp) and in absolute terms (by CZK 33.9 billion). This decline was mainly due to a reduction in gross fixed capital formation (compared to a high benchmark in 2015), namely in the sections Economic Affairs (Transport group), Environmental Protection and Education. In the years 2019–2021, we expect the general government expenditure to increase in absolute terms, although it should remain stable in relation to GDP. In 2021, compared to 2016, expenditure should increase by 0.1 pp, with expected increase in half of the sections. The largest increase is expected in the Defence section by 0.6 pp to 1.4% of GDP in 2021. This increase is in line with the approved Long-term Defence Outlook 2030 (Government Resolution No. 466/2015). A significant increase in expenditure is also expected in sections Education (0.3 pp) and Social Affairs (0.2 pp), which is mainly due to the increase in pension expenditures (Age group).

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 2016 and its expected structure in 2021. The forecast shows, in the given period, a decrease in expenditure in the General Public Service and Private Activities categories for the benefit of the Health and Education, Pure Public Goods, and Social Affairs categories. We expect that at the end of the forecast period, more than half of total general government expenditure will be spent on social security and health care for the population (i.e. 20.0% of GDP), representing an increase in this share relative to 2016 by about 0.3 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 (2018d). MF CR calculations and forecast.

7 Changes in Institutional Framework of Public Finances

High-quality and reliable institutional framework of fiscal and budgetary policy is a basic prerequisite for healthy and sustainable public finances. In this context, therefore, 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 for the first time in 2017. The National Budgetary Council and the Committee for Budgetary Forecasts have also been set up under the law. Besides the fiscal rule for the majority of central government institutions, the laws also strengthened the budgetary discipline of local governments, whose importance, proportionality and consistency with the constitutional order of the Czech Republic was confirmed by the Constitutional Court in March 2018.

7.1 Fiscal Responsibility and Government Finance Statistics

7.1.1 Fiscal Responsibility Regulations

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

In March 2017, most senators filed a complaint to the Constitutional Court concerning the provisions relating to the new fiscal rules of local governments due to state interference into municipalities' rights to self-government and financial management. The Constitutional Court has rejected the notion that the amendment to the laws on fiscal responsibility of local governments would be contrary to the right to be an owner and manager (Pl. CC 6/17): *"Local governments are therefore limited by their status as public-law corporations when they manage their own assets and create their own budgets. ... In other words, the contested provisions do not empty or de facto eliminate the constitutionally guaranteed right of local governments to have and manage their own property according to their own budget as part of the right to self-government."* The Constitutional Court has also recognized the legitimacy of the objective of the relevant legislation in the form of long-term sustainability of public finances: "*Ensuring healthy and sustainable public finances creates a space for free decision making on the implementation of budgetary and fiscal policies and thus allows to spend in the future the funds of local governments on areas whose development is necessary and beneficial. It cannot be forgotten that the ability of the Czech Republic to meet its international obligations even in the context of a downturn in the economic cycle (recession) is guaranteed by sustainable sound public finances.*" At the same time, it was acknowledged in the reasoning that the legal regulation in the Czech Republic belongs to the most moderate ones in the whole Europe.

Pursuant to Act No. 23/2017 Coll., the National Budgetary Council (hereinafter the "Council") was established. The Council is an independent expert body in the field of fiscal rules and budgetary policy evaluation. Its members were appointed on 25 January 2018. In cooperation with the Council, the MF CR set up a methodology for setting one-off and temporary measures, which are one of the areas entering in the process of deriving binding expenditure frameworks of the state budget and state fund budgets. In addition, the methods used for the cyclical adjustment of the general government sector balance and the calculation of expenditure frameworks were discussed with the members of the Council, and the Council agreed.

Act No. 23/2017 Coll. also stipulates an obligation to assess the probability of fulfilment of predictions 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 for Budgetary Forecasts. The committee will evaluate MF CR forecasts from 2018, especially in terms of probability of their fulfilment, and in terms of the requirement of Council Directive (EU) 2011/85 to make budgetary planning based on the most probable or prudent macroeconomic scenario. Its members should include the representatives of institutions independent of the government who prepare their own economic forecasts. Before the Committee for Budgetary Forecasts actually starts to carry out its activities, its role is performed by an expert panel composed of experts from national institutions independent of the government focusing on the prediction of the developments in the national economy. Since 2016, they have been explicitly evaluating the macroeconomic predictions of MF CR serving as an input for the creation of convergence programmes, proposals for the state budget and the budgets of the state funds.

On 1 January 2018, the amendment to the budgetary rules, as amended by Act No. 367/2017 Coll., became effective. The amendment regulates the process of providing subsidies and recoverable financial assistance from the state budget. The reason for the amendment was above all the judgment of the Supreme Administrative Court (No. 9 Ads 83/2014-46), which found the original procedure to be inconsistent with the applicable legislation because it excluded the application of the Administrative Procedure Code and judicial review of the decision from the grant provision process. A regulation has therefore been adopted that respects the Administrative Procedure Code; it contains reasoned and necessary derogations from the general regulation of the administrative procedure. The regulation thus ensures rational decision-making on grants and, on the other hand, the right of applicants to a fair trial. In practice, full-scale application of the Administrative Procedure Code would entail a considerable time-consuming process and a substantial increase in the administrative burden on grant providers. For that reason, a system of single-instance administrative proceedings has been introduced. An applicant for a grant or a repayable financial assistance cannot therefore appeal a decision terminating the administrative proceedings. Revision of the proceedings is also excluded. However, it is possible for the MF CR to review the case if the claimant seeks the annulment of the decision before an administrative court.

7.1.2 Government Finance Statistics

Starting in 2018, Act No. 25/2017 Coll. on collection of selected data for the purposes of monitoring and management of public finances, as amended by Act No. 183/2017 Coll., will enter into effect. It will provide the Ministry of Finance with monthly or quarterly data on the cash-based management of the general government units for which the Ministry of Finance has so far had no necessary data sources. This concerns the following groups of units:

- public higher education institutions;
- public research institutions;
- other units in the central government subsector (e.g. Czech Export Bank, Czech Television, Czech Radio, Financial Market Guarantee System, the Support and Guarantee Farming and Forestry Fund and the Railway Infrastructure Administration);
- public hospitals with a legal form other than a publicly co-funded organization included in the subsector of local government.

State allowance organizations which submitted data on their cash management in 2017 on the basis of accounting legislation (Decree No. 410/2009 Coll. on the implementation of Accounting Act for certain selected accounting entities) now have this obligation under Act No. 25/2017 Coll.

In addition to data on revenue and expenditure, the units concerned also submit annual data on guarantees provided and annual data on public-private partnership projects under this Act. They will have this obligation for the first time in 2018. From 2014, this information (although only for some selected entities) was originally collected on a quarterly basis under the above mentioned responsibility legislation.

The structure of the individual statements is regulated by Decree No. 272/2017 Coll. on implementation of certain provisions of the Act on the collection of selected data for the purposes of monitoring and management of public finances. It also sets a limit of CZK 400 million of average annual costs over the last two years as a criterion for determining the periodicity of submitting a statement of cash revenues and expenditures. On the basis of its assessment, the central government institutions submit the statement in question monthly (if their average annual costs are at least CZK 400 million) or quarterly (if their average annual costs are less than CZK 400 million). Local government institutions submit it only quarterly.

The obtained data serve, among other things, as a source of information, which the MF CR has to publish on its website pursuant to Act No. 23/2017 Coll. (pursuant to Council Directive (EU) 2011/85).

Table 7.1: Fulfilment of the data requirements of Act No. 23/2017 Coll. by the MF CR

Public sector	
List of general government institutions	A
List of public corporations	A
Fiscal data	
Statement of sources and uses of cash	
Budgetary organisations and state funds	M
Central semi-budgetary organisations	M
Public universities	M
Public research institutions	M
Other units in central government subsector	M
Municipalities, regions, VAM and RCCR	Q
Hospitals other than semi-budgetary organisations	Q
Public health insurance companies	Q
Revenue and expense transactions, balance	
Local semi-budgetary organisations	Q
Other units in local government subsector	Q
Other units in social security funds subsector	M
Cash flow and balance of public health insurance comp.	M
Tax expenditures	
Report on the impact of tax expenditures on revenues	A
Contingent liabilities and other information	
General government guarantees	A
Non-performing loans	A
Liabilities of public corporations' operations	A
Liabilities of public-private partnership	A
Shares and other equities	
Shares and other equities held by government sector	A

Note: VAM – voluntary associations of municipalities, RCCR – regional councils of cohesion regions, A – annual periodicity, Q – quarterly periodicity, M – monthly periodicity.
Source: MF CR.

7.2 Increasing Transparency and Effectiveness of Public Finances

7.2.1 Open Data of Public Administration

The Ministry of Finance started publishing open data in 2015, when it launched the first ministerial open catalogue of open data in the Czech Republic. Within the catalogue, 50 datasets have been published to date, including, for example, the Central Register of Administrative Buildings, an overview of operating costs, an overview of paid invoices, or a list of valid and invalid contracts. In the recent past, the Central Register of Subsidies (IS CEDR III) and a complete set of data from the Administrative Register of Economic Entities have been added among the data sets.

In the open data project of the Ministry of Finance, there was also an ongoing effort to present information through visualizations. The plan was launched by the application "*Supervizor*" for invoice visualization, which is currently being used by ten organizations (including six ministries – MF CR, regional development, defence, transport, environment and justice), and the application "*ZkoumejPřezkum*", which shows the results of the economic management review. In 2017, the application "*CityVizor*", a platform for visualizing the economic data of local government sector, was developed within the open data project. The Ministry of Finance also offers source codes for all its applications under open licences.

The Ministry of Finance provides open data also through the Treasury Monitor Portal, which, using the web analytics tool and data catalogue, provides free access to budgetary and accounting information at all levels of state administration and local government, publishes the financial statements of the state organizational units and enables data analysis using reporting tools.

7.2.2 Financial statements for the Czech Republic

For the accounting period 2016, the consolidated financial statements for the Czech Republic were compiled in 2017. This involved a consolidation unit with more than 18,000 entities, which is 11,000 units more than in the accounting period of 2015. The state accounting consolidation process includes, in particular, municipalities, regions, voluntary associations of municipalities, regional councils of cohesion regions, state funds, state organizational units, allowance organizations, state-owned enterprises, public research institutions, health insurance companies and significant commercial corporations controlled by the state or a local government. 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 governments 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 Amendment to the Conflict of Interest Act

On 1 September 2017, Act No. 14/2017 Coll., amending Act No. 159/2006 Coll., on Conflict of Interest, as amended, and other related Acts, became effective. The act clarifies the original text and tightens the sanctions for offences defined in the Conflicts of Interest Act. The act also establishes a central registration office managed by the Ministry of Justice, where public officials submit a report on property, 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. Among the public officials defined by the act are now also judges and state prosecutors. In their case, however, the Supreme Court is the registration authority. 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.

Provisions that restrict the ownership of private entities by selected public officials who may not own or co-own a TV or radio broadcaster or periodical press are in effect from 9 February 2017. Furthermore, all companies in which a public official (defined by law) has more than a 25% share must not compete for public contracts and apply for subsidies and investment incentives.

References

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

Act No. 586/1992 Coll., on Income Taxes, as amended.

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

Act No. 243/2000 Coll., on the Tax Assignment of the Revenues of Some Taxes to Local Governments and Some State Funds (Act on Tax Assignment), as amended.

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. 108/2006 Coll., on Social Services, as amended.

Act No. 360/2014 Coll., amending the Act No. 235/2004 Coll., on Value-Added Tax, as amended, and other relevant Acts, as amended.

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

Act No. 340/2015 Coll., on Specific Conditions of Effectiveness of some Contracts, of Publication of these Contracts and on the Registry of Contracts (Act on the Registry of Contracts), as amended.

Act No. 377/2015 Coll., amending some Acts in Relation with the Legislation of the Act on Pension Savings Termination, 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. 113/2016 Coll., amending Some Acts in Relation to the Approval of the Act on Registration of Sales.

Act No. 189/2016 Coll., amending Act No. 108/2006 Coll., on Social Services, as amended, Act No. 292/2013 Coll., on Special Judiciary Proceedings, as amended by Act No. 87/2015 Coll., and Act No. 372/2011 Coll., on Health Services and Conditions for Their Provision (Health Services Act), as amended.

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

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. 33/2017 Coll., amending Act No. 235/2004 Coll., on Value Added Tax, as amended.

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

Act No. 92/2017 Coll., amending Act No. 164/2013 Coll., on International Co-operation in Tax Administration and on the Amendment of Other Related Acts, as amended, and Act No. 105/2016 Coll. amending Certain Acts in the Field of International Co-operation in Tax Administration and Repealing Act No. 330/2014 Coll., on the Exchange of Information on Financial Accounts with the United States for the Purpose of Tax Administration.

Act No. 93/2017 Coll., amending the Act No. 435/2004 Coll., on Employment, as amended, the Act No. 251/2005 Coll., on Labour Inspection and the Act No. 262/2006 Coll., the Labour Code, as amended.

Act No. 101/2017 Coll., Amending Act No. 561/2004 Coll., on Pre-school, Basic, Secondary, Higher Vocational and other Education (Education Act), as amended.

Act No. 145/2017 Coll., Amending Act No. 592/1992 Coll., on Public Health Insurance Premiums, 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. 225/2017 Coll., amending Act No. 183/2006 Coll., On Spatial Planning and Building Regulations (Building Act), as amended, and Other Related Acts.

Act No. 249/2017 Coll., amending Act No. 340/2015 Coll., On the Special Conditions for the Effectiveness of Certain Contracts, the Publishing of these Contracts and on the Register of Treaties (Act on the Register of Treaties), as amended by Act No. 298/2016 Coll.

Act No. 259/2017 Coll., amending Act No. 589/1992 Coll., on Social Security and State Employment Policy Contributions, as Amended, and Other Related Acts.

Act No. 260/2017 Coll., amending Act No. 243/2000 Coll., on Tax Assignment, as Amended.

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. 305/2017 Coll., amending Act No. 164/2013 Coll., on International Co-operation in Tax Administration and on Amendment of Other 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. 327/2017 Coll., amending Act No. 435/2004 Coll., on Employment, as Amended, and Act No. 251/2005 Coll., on Labour Inspection, as Amended by Act No. 93/2017 Coll.

Act No. 367/2017 Coll., amending Act No. 218/2000 Coll., on Budgetary Rules and on Amendments to Certain Related Acts (Budgetary Rules), as amended, and Other Related Acts.

Act No. 474/2017 Coll., on State Budget of the Czech Republic for 2018.

Chamber of Deputies Print No. 66/0, Government Draft of Act on the Provision of a State Guarantee of the Czech Republic for Securing the Czech National Bank Loan to the International Monetary Fund.

Chamber of Deputies Print No. 120/0, Government Draft of Act on Pension Insurance.

CNB (2018a): Time Series Database. Prague, Czech National Bank, March 2018 [cit. 28. 3. 2018], <http://www.cnb.cz/docs/ARADY/HTML/index_en.htm>.

CNB (2018b): Inflation Report – I/2018. Prague, Czech National Bank, February 2018 [cit. 6. 4. 2018], <http://www.cnb.cz/en/monetary_policy/inflation_reports/2018/2018_I/index.html>.

Constitutional Court Decision 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.

Constitutional Court decision No. Pl. CC 6/17 of 20 February 2018 on the Proposal of a Group of Senators of the Senate of the Parliament of the Czech Republic, on the Repeal of Certain Provisions of Act No. 23/2017 Coll., on Fiscal Responsibility Rules, Certain Provisions of Act No. 243/2000 Coll. tax, as amended by Act No. 24/2017 Coll. and Certain Provisions of Act No. 250/2000 Coll., on Budgetary Rules of Territorial Budgets, as amended by Act No. 24/2017 Coll.

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

Council of the EU (2017): Council Recommendation of 11 July 2017 on the National Reform Programme 2017 of the Czech Republic and delivering a Council opinion on the Convergence Programme of the Czech Republic, 2017. Council of the European Union, 11 July 2017, Official Journal of the EU, 9 August 2017, C series, no. 261, p. 03 [cit. 30. 3. 2018], <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2017:261:FULL&from=EN>.

CZSO (2017a): Population Development in the Czech Republic 2016, Prague, Czech Statistical Office, October 2017, ISBN 978-80-250-2785-1, [cit. 23. 3. 2018], <https://www.czso.cz/csu/czso/vyvoj-obyvatelstva-ceske-republiky-2016>, *In Czech only*.

CZSO (2017b): Results of the Health Accounts of the Czech Republic in 2010 to 2015 (Revised), Prague, Czech Statistical Office, 13. 11. 2017 [cit. 23. 3. 2018], <https://www.czso.cz/csu/czso/vysledky-zdravotnickych-uctu-cr-2010-2015-revize>, *In Czech only*.

CZSO (2018a): Gross Domestic Product – Time Series. Prague, Czech Statistical Office, 3. 4. 2018 [cit. 3. 4. 2018], <https://www.czso.cz/csu/czso/hdp_ts>.

CZSO (2018b): General Government Sector, Government Deficit and Debt. Prague, Czech Statistical Office, 4. 4. 2018 [cit. 4. 4. 2018], <http://apl.czso.cz/pll/rocenka/rocenka.indexnu_gov?mylang=EN>.

CZSO (2018c): Labour Force Sample Survey. Prague, Czech Statistical Office, 2. 2. 2018 [cit. 27. 3. 2018], <https://www.czso.cz/csu/czso/employment_unemployment_ekon>.

CZSO (2018d): Government Expenditure by Function (COFOG). Prague, Czech Statistical Office, 29. 12. 2017 [cit. 27. 3. 2018], <http://apl.czso.cz/pll/rocenka/rocenkavyber.gov_c?mylang=EN>.

Decree No. 410/2009 Coll. on the Implementation of Certain Provisions of the Act No. 563/1991 Coll., on Accounting, as amended, for Certain Selected Accounting Entities.

Decree No. 272/2017 Coll., on Implementation of Certain Provisions of the Act on the Collection of Selected Data for Public Finance Monitoring and Control.

EC (2014): The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies. Brussels, European Commission, Directorate-General for Economic and Financial Affairs, November 2014, European Economy No. 8 [cit. 31. 3. 2018], <http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee8_en.pdf>.

EC (2016): Fiscal Sustainability Report 2015. Brussels, European Commission, Institutional paper 018, January 2016, [cit. 20. 3. 2018], <http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip018_en.pdf>.

EC (2017a): The 2018 Ageing Report: Underlying Assumptions and Projection Methodologies, Brussels, European Commission, Institutional Paper 065, November 2017, [cit. 29. 3. 2018], <https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-underlying-assumptions-and-projection-methodologies_en>.

EC (2017b): Health and Long-Term Care Expenditure Projections: Availability/Collection of Data. Brussels, European Commission, Directorate General Economic and Financial Affairs, March 2017.

EC (2018a): European economic forecast: Winter 2018 (Interim). Brussels, European Commission, February 2018 [cit. 27. 3. 2018], <https://ec.europa.eu/info/sites/info/files/economy-finance/ip073_en.pdf>.

EC (2018b): Debt Sustainability Monitor 2017. Brussels, European Commission, Institutional paper 071, January 2018, ISBN 978-92-79-77452-2, [cit. 20. 3. 2018], <https://ec.europa.eu/info/sites/info/files/economy-finance/ip071_en.pdf>.

EC (2018c): The 2018 Ageing Report. Brussels, European Commission, Directorate-General for Economic and Financial Affairs*, May 2018, in preparation*.

EC (2018d): Country Report Czech Republic 2018. Brussels, European Commission, 7. 3. 2018 [cit. 29. 3. 2018] <https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-czech-republic-en.pdf>.

ECB (2009): ECB Monthly Bulletin. Frankfurt am Main, European Central Bank, April 2009 [cit. 4. 4. 2018], <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. 2018], <http://data.consilium.europa.eu/doc/document/ST-9344-2017-INIT/en/pdf>.

EIA (2018): Spot Prices for Crude Oil and Petroleum Products. Washington, DC, U.S. Energy Information Administration, 28. 3. 2018 [cit. 28. 3. 2018], <http://www.eia.gov/dnav/pet/pet_pri_spt_s1_a.htm>.

Eurostat (2018): Eurostat Database. Luxembourg, Eurostat, 29. 3. 2018 [cit. 29. 3. 2018], <http://ec.europa.eu/eurostat>.

Government Office (2018): National Reform Programme of the Czech Republic 2018. Prague, Office of the Government of the Czech Republic, April 2018.

IMF (2018): World Economic Outlook: Cyclical Upswing, Structural Change. Washington, DC, International Monetary Fund, April 2018 [cit. 17.4. 2018], <http://www.imf.org/en/Publications/WEO/Issues/2018/03/20/~/media/Files/Publications/WEO/2018/April/text.ashx>.

MF CR (2016): Fiscal Outlook of the Czech Republic. Prague, Ministry of Finance of the CR, November 2016 [cit. 4. 4. 2018], <https://www.mfcr.cz/assets/en/media/Fiscal-Outlook-of-the-Czech-Republic-November-2016.pdf>.

MF CR (2017a): Convergence Programme of the CR (April 2017). Prague, Ministry of Finance of the CR, April 2017 [cit. 4. 4. 2018], <https://www.mfcr.cz/assets/en/media/Convergence-Programme-of-the-Czech-Republic-April-2017.pdf>.

MF CR (2017b): The Czech Republic Funding and Debt Management Strategy 2018. Prague, Ministry of Finance of the CR, December 2017 [cit. 4. 4. 2018], <http://www.mfcr.cz/assets/en/media/The-Czech-Republic-Funding-and-Debt-Management-Strategy-for-2018.pdf>.

MF CR (2017c): Report on the Evaluation of Central State Procurement Systems for 2016. Prague, Ministry of Finance of the CR, 2018. *In Czech only.*

MF CR (2018a): Macroeconomic Forecast of the CR. Prague, Ministry of Finance of the CR, April 2018 [cit. 11. 4. 2018], <http://www.mfcr.cz/assets/en/media/Macroeconomic-Forecast-April-2018.pdf>.

MF CR (2018b): Survey of Macroeconomic Forecasts of the CR (45. Colloquium for the period 2018–2021). Prague, Ministry of Finance of the CR, April 2018 [cit. 18. 4. 2018], <http://www.mfcr.cz/assets/en/media/Survey-of-macroeconomic-forecasts-April-2018.pdf>.

MF CR, CNB (2017): Assessment of the Fulfilment of the Maastricht Convergence Criteria and Degree of Economic Alignment of the Czech Republic with the Euro Area (2017). Prague, Ministry of Finance of the CR and Czech National Bank, December 2017 [cit. 28. 3. 2018], <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-2017.pdf>.

OECD (2018): OECD Database – Health and Long-Term Care Expenditure. Paris, Organization for Economic Co-operation and Development, March 2018, [cit. 20. 3. 2018] <http://stats.oecd.org>.

Regulation No. 140/2017 Coll. of the Government of the Czech Republic Establishing the Assessment Base for a Person for whom the Payer of the Public Health Insurance is the State.

Regulation No. 286/2017 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. 466 of the Government of the Czech Republic of 15 June 2015, on the Long-Term Defence Outlook 2030.

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. 894 of the Government of the Czech Republic of 22 December 2017, 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. 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.

Table Annex

Table A.1a: Macroeconomic Prospects

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

	ESA Code	2017	2017	2018	2019	2020	2021
		Level	*Rate of change*				
Real GDP	B1*g	**4983**	**4.4**	**3.6**	**3.3**	**2.6**	**2.4**
Nominal GDP	B1*g	**5055**	**5.9**	**5.2**	**5.2**	**4.4**	**4.3**
Components of real GDP							
Private consumption expenditure	P.3	**2331**	**4.0**	**4.3**	**4.1**	**2.9**	**2.6**
Government consumption expenditure	P.3	**931**	**1.5**	**1.9**	**2.0**	**1.8**	**1.8**
Gross fixed capital formation	P.51g	**1256**	**5.4**	**5.7**	**4.4**	**3.0**	**2.8**
Changes in inventories and net acquis. of valuables (% of GDP)	P.52+P.53	**60**	**1.2**	**1.1**	**1.0**	**0.9**	**0.9**
Exports of goods and services	P.6	**4043**	**6.5**	**5.2**	**4.9**	**4.5**	**4.4**
Imports of goods and services	P.7	**3639**	**5.8**	**5.9**	**5.4**	**4.8**	**4.5**
Contributions to real GDP growth							
Final domestic demand		-	**3.5**	**3.9**	**3.4**	**2.5**	**2.3**
Changes in inventories and net acquis. of valuables	P.52+P.53	-	**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**
External balance of goods and services	B.11	-	**1.0**	**-0.2**	**-0.1**	**0.1**	**0.2**

Note: Real levels are stated in 2016 prices. Change in inventories and net acquisition of valuables on the row 6 expresses a share of change in inventories on GDP in current prices. Increase in change in the stock of inventories and net acquisition of valuables is calculated from real figures.
Source: CZSO (2018a), MF CR (2018a). MF CR calculations and forecast.

Table A.1b: Price Developments

(indices 2010=100, growth in %)

	2017	2017	2018	2019	2020	2021
	Level	*Rate of change*				
GDP deflator	**109.6**	**1.4**	**1.5**	**1.8**	**1.7**	**1.9**
Private consumption deflator	**108.7**	**2.5**	**2.2**	**2.0**	**1.8**	**1.8**
Harmonised index of consumer prices	**111.3**	**2.4**	**1.9**	**1.9**	**1.8**	**1.7**
Public consumption deflator	**113.1**	**4.0**	**3.0**	**3.8**	**2.4**	**2.5**
Investment deflator	**106.2**	**1.3**	**0.5**	**0.6**	**0.9**	**1.4**
Export price deflator (goods and services)	**104.7**	**-0.9**	**-3.2**	**-0.2**	**0.4**	**0.5**
Import price deflator (goods and services)	**103.7**	**0.1**	**-3.3**	**-0.2**	**0.3**	**0.3**

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

Table A.1c: Labour Market Developments

(growth in %)

	ESA Code	2017	2017	2018	2019	2020	2021
		Level	*Rate of change*				
Employment, persons		**5330.7**	**1.6**	**0.7**	**0.2**	**0.2**	**0.1**
Employment, hours worked		**9.5**	**1.4**	**0.8**	**-0.2**	**0.0**	**0.0**
Unemployment rate (%)		**2.9**	**2.9**	**2.4**	**2.3**	**2.3**	**2.3**
Labour productivity, persons		**794.9**	**2.8**	**3.0**	**3.2**	**2.5**	**2.3**
Labour productivity, hours worked		**441.7**	**2.9**	**2.8**	**3.5**	**2.6**	**2.4**
Compensation of employees	D.1	**2089.9**	**8.4**	**7.7**	**6.5**	**5.5**	**5.4**
Compensation per employee		**460.2**	**6.7**	**7.0**	**6.3**	**5.3**	**5.3**

Note: Employment is based on domestic concept of national accounts. Rate of unemployment is based on the methodology of the Labour Force Survey. Labour productivity is calculated as real GDP (in 2016 prices) per employed person or worked hour.
Source: CZSO (2018a, 2018c). MF CR calculations and forecast.

Table A.1d: Sectoral Balances

(in % of GDP)

	ESA Code	2017	2018	2019	2020	2021
Net lending/borrowing vis-à-vis the rest of the world	B.9	**1.0**	**0.4**	**0.4**	**0.6**	**1.0**
Balance of goods and services		7.2	6.5	6.1	6.1	6.2
Balance of primary incomes and transfers		-6.7	-6.7	-6.5	-6.3	-6.1
Capital account		0.6	0.7	0.8	0.9	1.0
Net lending/borrowing of the private sector	B.9	**-0.6**	**-1.0**	**-0.7**	**-0.4**	**0.1**
Net lending/borrowing of general government	B.9	**1.6**	**1.5**	**1.1**	**1.0**	**0.9**
Statistical discrepancy		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Note: Data from national accounts. Net lending/borrowing of general government for 2017–2018 based on notification, for 2019–2021 outlook.
Source: CZSO (2018b). MF CR calculations and forecast.

Table A.2a: General Government Budgetary Prospects
(level in CZK billion, others in % of GDP)

	ESA Code	2017	2017	2018	2019	2020	2021
		Level	*In % of GDP*				
Net lending (+)/borrowing (-) (B.9) by sub-sectors							
General government	S.13	**81**	**1.6**	**1.5**	**1.1**	**1.0**	**0.9**
Central government	S.1311	30	0.6	0.3	0.3	0.4	0.5
State government	S.1312	-	-	-	-	-	-
Local government	S.1313	42	0.8	0.9	0.6	0.5	0.4
Social security funds	S.1314	8	0.2	0.3	0.1	0.1	0.0
General government (S.13)							
Total revenue	TR	**2042**	**40.4**	**40.9**	**40.6**	**40.5**	**40.4**
Total expenditure	TE	**1962**	**38.8**	**39.4**	**39.5**	**39.5**	**39.5**
Net lending (+)/borrowing (-)	B.9	**81**	**1.6**	**1.5**	**1.1**	**1.0**	**0.9**
Interest expenditure	D.41	38	0.7	0.7	0.8	0.8	0.8
Primary balance		118	2.3	2.2	1.8	1.8	1.7
One-off and other temporary measures		**0**	**0.0**	**-0.1**	**0.0**	**0.0**	**0.0**
Components of revenues							
Total taxes		**1019**	**20.2**	**20.1**	**19.9**	**19.7**	**19.5**
Taxes on production and imports	D.2	629	12.5	12.3	12.0	11.9	11.8
Current taxes on income, wealth etc.	D.5	390	7.7	7.8	7.8	7.8	7.8
Capital taxes	D.91	0	0.0	0.0	0.0	0.0	0.0
Social security contributions	D.61	**760**	**15.0**	**15.4**	**15.5**	**15.7**	**15.9**
Property income	D.4	**31**	**0.6**	**0.6**	**0.5**	**0.5**	**0.5**
Other		**233**	**4.6**	**4.8**	**4.6**	**4.6**	**4.5**
Total revenue	TR	**2042**	**40.4**	**40.9**	**40.6**	**40.5**	**40.4**
p.m.: Tax burden		**1779**	**35.2**	**35.5**	**35.4**	**35.4**	**35.4**
Components of expenditures							
Compensation of employees + Intermediate consumption	D.1+P.2	**757**	**15.0**	**15.1**	**15.3**	**15.3**	**15.3**
Compensation of employees	D.1	462	9.1	9.3	9.7	9.7	9.8
Intermediate consumption	P.2	295	5.8	5.7	5.6	5.6	5.5
Social payments		**751**	**14.9**	**14.9**	**15.0**	**15.0**	**14.9**
of which: Unemployment benefits [1)]		15	0.3	0.2	0.2	0.2	0.2
Social transfers in kind supplied via market producers	D.632	154	3.0	3.0	3.0	2.9	2.9
Social transfers other than in kind	D.62	597	11.8	11.9	12.1	12.0	11.9
Interest expenditure	D.41	**38**	**0.7**	**0.7**	**0.8**	**0.8**	**0.8**
Subsidies	D.3	**111**	**2.2**	**2.2**	**2.1**	**2.1**	**2.1**
Gross fixed capital formation	P.51g	**169**	**3.3**	**3.6**	**3.7**	**3.8**	**3.9**
Capital transfers	D.9	**27**	**0.5**	**0.6**	**0.6**	**0.6**	**0.6**
Other		**109**	**2.2**	**2.3**	**2.0**	**2.0**	**1.9**
Total expenditures	TE	**1962**	**38.8**	**39.4**	**39.5**	**39.5**	**39.5**
p.m.: Government consumption (nominal)	P.3	**969**	**19.2**	**19.1**	**19.2**	**19.2**	**19.2**

Note: Years 2017–2018 notification. Years 2019–2021 outlook.
1) Includes cash benefits (D.621 and D.624) and transfers in kind (D.631) related to unemployment benefits.
Source: CZSO (2018b). MF CR calculations and forecast.

Table A.2b: No-policy Change Projections
(level in CZK billion, others in % of GDP)

	2017	2017	2018	2019	2020	2021
	Level	*In % of GDP*				
Total revenue at unchanged policies	**2042**	**40.4**	**40.9**	**40.6**	**40.5**	**40.4**
Total expenditure at unchanged policies	**1962**	**38.8**	**39.3**	**39.2**	**39.2**	**39.2**

Note: Measures approved in 2018 on pension insurance and increased fare discounts for selected population groups are excluded.
Source: MF CR.

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

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

	2017	2017	2018	2019	2020	2021
	Level			*In % of GDP*		
Expenditure on EU programmes fully matched by EU funds revenue	**38**	**0.7**	**1.0**	**1.0**	**1.0**	**1.1**
Non-investment expenditure	12	0.2	0.3	0.3	0.3	0.3
Investment expenditure	26	0.5	0.7	0.7	0.7	0.8
Cyclical unemployment benefit expenditure	**0**	**0.0**	**-0.1**	**0.0**	**0.0**	**0.0**
Effect of discretionary revenue measures (year-on-year changes)	**24**	**0.5**	**0.4**	**0.1**	**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	2016	2021
General public services	1	**4.2**	**3.6**
Defence	2	**0.7**	**1.4**
Public order and safety	3	**1.7**	**1.6**
Economic affairs	4	**6.0**	**5.6**
Environmental protection	5	**0.7**	**0.7**
Housing and community amenities	6	**0.6**	**0.7**
Health	7	**7.4**	**7.5**
Recreation, culture and religion	8	**1.3**	**1.3**
Education	9	**4.5**	**4.7**
Social protection	10	**12.3**	**12.5**
Total expenditure	TE	**39.4**	**39.5**

Note: Year 2021 outlook.
Source: CZSO (2018d), MF CR (2018a). 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	2017	2018	2019	2020	2021
General government gross debt		**34.6**	**32.9**	**31.6**	**30.7**	**29.9**
Change in gross debt ratio		**-2.2**	**-1.7**	**-1.2**	**-0.9**	**-0.8**
Contributions to changes in gross debt						
Primary balance		**2.3**	**2.2**	**1.8**	**1.8**	**1.7**
Interest expenditure	D.41	**0.7**	**0.7**	**0.8**	**0.8**	**0.8**
Stock-flow adjustment		**1.5**	**1.5**	**1.4**	**1.4**	**1.4**
Difference between cash and accruals		-0.6	0.0	0.0	0.0	0.0
Net accumulation of financial assets		2.3	1.5	1.4	1.4	1.4
Privatisation proceeds		0.0	0.0	0.0	0.0	0.0
Valuation effects and other		-0.2	0.0	0.0	0.0	0.0
p.m.: Implicit interest rate on debt		**2.2**	**2.2**	**2.4**	**2.6**	**2.7**
Liquid financial assets		**15.0**	**15.7**	**16.3**	**17.1**	**17.7**
Net financial debt 1)		**19.6**	**17.2**	**15.3**	**13.6**	**12.1**
Debt amortization (existing bonds) since the end of the previous year 2)		**4.4**	**4.8**	**4.4**	**3.1**	**2.9**
Foreign-currency exposition of the state debt 2), 3)		**3.5**	**2.4**	**2.3**	**2.2**	**2.1**
Average maturity 2)		**5.0**	**5.5**	**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 (2018b). 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	2017	2018	2019	2020	2021
Real GDP growth (%)		**4.4**	**3.6**	**3.3**	**2.6**	**2.4**
Net lending of general government	B.9	**1.6**	**1.5**	**1.1**	**1.0**	**0.9**
Interest expenditure	D.41	**0.7**	**0.7**	**0.8**	**0.8**	**0.8**
One-off and other temporary measures		**0.0**	**-0.1**	**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		0.0	0.1	0.0	0.0	0.0
Potential GDP growth (%)		**2.8**	**3.0**	**2.9**	**2.8**	**2.6**
contribution of labour		0.1	0.1	0.0	0.0	0.0
contribution of capital		0.5	0.6	0.6	0.6	0.7
total factor productivity		2.2	2.3	2.2	2.1	2.0
Output gap		**1.4**	**2.1**	**2.5**	**2.4**	**2.2**
Cyclical budgetary component		**0.5**	**0.7**	**0.9**	**0.8**	**0.8**
Cyclically-adjusted balance		**1.1**	**0.7**	**0.2**	**0.2**	**0.2**
Cyclically-adjusted primary balance		**1.8**	**1.5**	**0.9**	**0.9**	**1.0**
Structural balance		**1.1**	**0.8**	**0.2**	**0.2**	**0.2**

Note: Years 2017–2018 notification. Years 2019–2021 outlook.
Source: CZSO (2018b). 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	2017	2018	2019	2020	2021
Real GDP growth (%)						
Previous update		**2.5**	**2.5**	**2.4**	**2.3**	**-**
Current update		**4.4**	**3.6**	**3.3**	**2.6**	**2.4**
Difference		1.9	1.1	0.9	0.3	-
General government net lending (% of GDP)						
Previous update	B.9	**0.4**	**0.3**	**0.5**	**0.5**	**-**
Current update	B.9	**1.6**	**1.5**	**1.1**	**1.0**	**0.9**
Difference		1.2	1.2	0.6	0.5	-
General government gross debt (% of GDP)						
Previous update		**36.0**	**35.3**	**34.3**	**32.7**	**-**
Current update		**34.6**	**32.9**	**31.6**	**30.7**	**29.9**
Difference		-1.4	-2.4	-2.7	-2.0	-

Source: MF CR (2017a, 2018a). 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)

	2017	2018
General government sector guarantees	**0.2**	**0.0**
of which: Linked to the financial sector	0.0	0.0

Source: MF CR.

Table A.8: Basic Assumptions

(interest rates and growth in %)

	2017	2018	2019	2020	2021
Short-term interest rate (CZ) (annual average)	**0.4**	**1.0**	**1.4**	**1.9**	**2.5**
Long-term interest rate (CZ) (annual average)	**1.0**	**1.9**	**2.2**	**2.6**	**2.9**
Nominal effective exchange rate (2010=100)	**105.4**	**111.5**	**113.7**	**115.5**	**117.2**
Exchange rate CZK/EUR (annual average)	**26.3**	**25.1**	**24.7**	**24.3**	**23.9**
World excluding EU, GDP growth	**3.8**	**4.1**	**4.1**	**4.2**	**4.2**
EU GDP growth	**2.4**	**2.4**	**2.0**	**1.9**	**1.9**
Growth of relevant foreign markets	**5.6**	**5.1**	**4.4**	**3.8**	**3.5**
World import volumes, excluding EU	**4.2**	**4.1**	**4.1**	**4.3**	**4.4**
Oil prices (Brent, USD/barrel)	**54.2**	**65.2**	**61.4**	**58.6**	**57.1**

Source: CNB (2018a), EIA (2018), Eurostat (2018a). 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.

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 limit new debt-increasing liabilities of the general government sector 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 −1% 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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