Ministry of Finance
Czech Republic

Convergence Programme
of the Czech Republic

April 2017

Convergence Programme
of the Czech Republic

April 2017

Contents

List of Tables

Table Annex

List of Charts

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
ERM II	Exchange Rate Mechanism II
ESA 2010	European System of National and Regional Accounts from year 2010
EU, EU28	European Union containing 28 countries
EUR	euro currency code
GDP	gross domestic product
LFS	Labour Force Survey
MF CR	Ministry of Finance of the Czech Republic
PAYG	pay-as-you-go system
pp	percentage point
PPS	Purchasing Power Standard
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 31 March 2017 release, fiscal data to the 3 April 2017 release and survey of macroeconomic forecasts of the CR to the 13 April 2017 release. Notification of general government deficit and debt was approved by Eurostat on 24 April 2017.

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

Since the great recession in 2009, when real gross domestic product fell by 4.8% and the deficit of general government sector deepened to 5.5% of GDP, annual improvements of general government sector performance have been almost 0.9 pp. The successful consolidation trajectory was accomplished by the surplus of nearly CZK 28 billion (0.6% of GDP) in 2016. The record-breaking result of the general government sector performance was not due to the position of the economy in the economic cycle but it was primarily a result of structural improvement in public finances performance. The last year situation is emphasised by the decrease in amount of general government debt by CZK 81 billion to 37.2% of GDP, accompanied by the phenomenon of low yields which have been even negative for the bonds with maturity up to six years on the secondary market.

Prudent management and long-term sustainability of public finances should also be ensured through adoption of laws related to the budgetary responsibility. In this year, expenditure frameworks of the state budget and state funds are prepared on the basis of numeric fiscal rule compatible with the medium-term objective of the CR for the first time. The process of implementation of the Council Directive 2011/85/EU should thus be finalised and with that the fiscal framework should reach modern and up-to-date level.

The submitted update of the Convergence Programme of the CR for the period 2017–2020 was approved by the Government of the CR on 24 April 2017 and is consistent with the National Programme of Reforms of the CR. The Convergence Programme is fully in line with the rules defined in the updated Code of Conduct on the content and format of the Programmes of Stability and the Convergence Programmes. In April 2017, the document was also presented and discussed with the relevant committees of the Chamber of Deputies and the Senate of the CR and taken into account by both chambers. The Opinion of the Council of the EU has been taken into account in the relevant committee of the Chamber of Deputies and discussed by the Senate with the recommendation to the Government to take the Opinion of the Council into account.

The Convergence Programme of the CR is divided into seven interlinked chapters. Chapter 1 presents the aims and objectives of fiscal policy of the Czech Government, basic constituents of structural policies as well as the monetary policy framework.

The macroeconomic scenario of the Convergence Programme, stemming from the April Macroeconomic Forecast of the MF CR, is presented in detail in Chapter 2. In 2016, the one-off factors which were the cause of the strong growth in 2015 came to an end. As a result, the economy slowed its growth and real GDP for the entire year increased by 2.4%. A significant influence was a drop in investments co-financed from EU sources, which was a typical phenomenon in many EU member states using the programme financing. Inflation accelerated significantly at the end of 2016 and gradually exceeded the Czech National Bank's inflation target. The unemployment rate continued to decline and is currently the lowest in the EU.

The general government sector performance in 2016, forecast for 2017 as well as the Government's fiscal strategy in future years are the subject of Chapter 3. The Chapter is based on results of the Notification of government deficit and debt, confirmed by Eurostat on 24 April 2017, and on further developed economic and politic objectives of the Government known by the cut-off date for data sources.

For 2016, the surplus of the general government sector has been notified at 0.6% of the GDP and the government debt at 37.2% of the GDP. The forecast for 2017 anticipates a lower surplus of 0.4% of GDP and further decrease in surplus to 0.3% of GDP in the following year. The structural balance in the same period should remain more or less balanced. Thus the CR should continue to fulfil its medium-term budgetary objective.

In Chapter 4, the macroeconomic and fiscal scenarios are verified by comparisons with forecasts by other public and private independent institutions including evaluation of macroeconomic forecast by an independent experts' panel. Moreover, the scenario is supplemented by a sensitivity analysis which simulates the impact of alternative scenarios of economic development based on different interest rate, lower economic growth of main economic partners in the EU and higher crude oil price. An equally important part of this chapter is also an analysis of deviations of the current scenario from the scenario contained in the last year update of the Convergence Programme of the CR.

In Chapter 5, the aspects of long-term sustainability are described. The chapter informs on the state of the pension system and the public health insurance system. In the context of long-term sustainability, the chapter describes current pension projections and also pays attention to the size and structure of the general government guarantees.

Chapter 6 deals with qualitative aspects of revenue and expenditure in the general government sector. It is primarily about the description of intended and implemented changes in the tax system which should lead to prevention of tax evasion and to better tax collection. Moreover, measures to rationalise general government expenditure are presented.

The last chapter 7 deals with implemented or planned changes in the institutional environment of fiscal and budgetary policy, transparency of public finances and strengthening of their effectiveness. Implementation of measures related to budgetary responsibility rules, range and quality of published data or measures countering corruption are emphasised here.

1 Overall Policy Framework and Objectives

The aim of the Czech Government is to support and develop "socially and ecologically oriented market economy" (Government Policy Statement, 2014). Through long-term sustainable economic growth, the aim of the economic and political mix is to increase the competitiveness of economy and to strengthen social and regional cohesion in the CR. The priority is identification and implementation of pro-growth measures across the economy. The largest and most effective use of allocated resources from the 2014–2020 financial perspective is therefore becoming essential to meet the objectives set. As regards monetary policy, the CNB declared, from November 2013 to the beginning of April 2017, a one-sided exchange rate commitment after the possibilities of the traditional interest rate channel were essentially exhausted. Considering the future development being in line with the sustainable inflation target fulfilling in the monetary policy horizon, the regime of asymmetric commitment not to allow any strengthening of the exchange rate below 27 CZK/EUR was ended on 6 April 2017. The interest rates, however, have remained at the technical zero level.

1.1 Fiscal Policy

The main objective of the current government's budgetary strategy is a gradual consolidation at the level of the state budget in the cash concept (see subchapter 3.2). An accompanying attribute is a commitment not to increase tax burden in general (see subchapter 6.1). Although excise taxes on tobacco products have increased, the VAT rate on selected commodities has been reduced and tax burden of working families with children has been reduced repeatedly. On the revenue side, the main effort is to improve tax collection and to straighten the market environment instead of increasing statutory bases and rates of taxes. Since January 2016, electronic VAT reporting has been in effect, and electronic registration of sales was introduced in December 2016, which is going to be extended in further phases according to an announced schedule. According to preliminary evaluations, the results so far of implemented changes are successful and they allow the Government to fulfil its priorities on the expenditure side, mainly in the social area.

General government sector performance was in surplus in 2016, for the first time in the history (see subchapter 3.1.1). A positive balance should also be achieved in the following years (see subchapter 3.2); however, in particular due to proposed changes in the social area, we expect a slight decrease in the surplus to 0.3% of GDP in 2018. In the following years, general government sector performance should improve again, and we expect a surplus of 0.5% of GDP at the end of the outlook. However, it is necessary to emphasise that particular development after 2018 will be determined by the priorities of the government that will emerge from the parliamentary elections in autumn this year. The structural balance should also develop positively. It was 0.5% of GDP in 2016 and we estimate it should be at the level of 0.1% of GDP in 2017. After a slight deterioration in the structural balance by 0.1 pp in 2018, it should improve again gradually. The structural balance should be in slight surplus of 0.2% of GDP in 2020 (see Table 1.1). This comes with a decrease in the relative amount of the general government debt, which should be around 33%

of GDP at the end of the forecast horizon (for more information see subchapter 3.4).

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

	2018	2019	2020
General government balance	**0.3**	**0.5**	**0.5**
Structural balance	0.0	0.2	0.2
Primary structural balance	0.7	0.9	1.0

Source: MF CR.

The concept of structural balance is closely related to the institution of medium-term budgetary objective, which corresponds to −1% of GDP for the CR. It is undoubtedly a success that this objective has always been met in recent years. However, this success should not affect the efforts for consolidation at the state budget level in any way, although the CR fulfils its commitments under the preventive arm of the Stability and Growth Pact, specifically its medium-term budgetary objective. The problem of public finances in the CR is an imbalance in the finances of individual subsectors of the general government sector. The subsector of social security funds (health insurance companies) has essentially a balanced budget and does not have any debt. The subsector of local governments has constantly been in surplus in the recent years, with a record-breaking surplus of 0.9% of GDP in 2016. However, both subsectors achieve their results also under the influence of subsidies from the state budget (or state funds) and changes in the tax assignment in favour of local governments. According to the cash methodology, the state budget is, however, chronically deficient in most years, although with a diminishing trend in recent years. However, in the case of an active fiscal policy is needed in times of economic downturn, practically the entire burden of potential fiscal stimulus lies on the state budget. It is therefore necessary to manage public finances prudently and to create reserves in good times not as a whole but with regard to each subsector. The strategy of reducing deficits in individual state budget proposals at the time of economic growth is thus absolutely crucial.

Acts on budgetary responsibility entered into force in February 2017 (see subchapter 7.1.1). Besides a number of other things, there is a change in the way how the expenditure frameworks for the state budget and state funds are determined, as now there is an explicitly defined anchor – the medium-term budgetary objective. This ensures not only counter-cyclical impact of fiscal policy, but also long-term sustainability of public finances. Despite the very good condition of the general government sector in the CR, the adoption of a new fiscal framework represents institutional anchoring and a shift towards modern and functional public finances. The current government as well as future governments thus have clearly defined boundaries to fulfil their priorities, and in accordance with legislation, the results of the general government sector performance should not systematically violate the medium-term budgetary objective of the CR.

1.2   Monetary Policy

CNB's monetary policy has been carried out in the inflation targeting regime since 1998. Since 1 January 2010, the inflation target is defined as a YoY growth in the consumer price index of 2% with a tolerance band of ±1 pp. The CNB defined 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 but it only focuses on secondary manifestations.

In response to deflationary risks, the CNB started using, in November 2013, the exchange rate as an additional monetary policy instrument, through its commitment not to allow the koruna to strengthen below 27 CZK/EUR. The total volume of foreign exchange interventions to defend the commitment reached CZK 1,500 billion (EUR 56 billion) at the end of February 2017. Subsequently, on 6 April 2017, the CNB Bank Board decided to terminate the exchange rate commitment, as it identified future price development as compatible with the sustainable fulfillment of the 2% inflation target. Due to the weaker exchange rate of the koruna reflected in nominal values (consumer prices, unit labor costs) we estimate that the trend strengthening of the koruna will be rather gradual and in the middle period will be around 2.5% YoY. Moreover, this assumption is supported by the CNB Bank Board's statement that it is "...ready to use its instruments to mitigate potential excessive exchange rate fluctuations if needed." (CNB, 2017b). Interest rates have been left by the Bank Board at the technical zero level.

A joint document of the MF CR and the CNB "Assessment of the Fulfilment of the Maastricht Convergence Criteria and the Degree of Economic Alignment of the Czech Republic with the Euro Area", which the Government of the CR approved in December 2016, states that the fragile situation in the Euro area (low economic growth, political uncertainty) does not create a favourable environment for future adoption of the single European currency euro in the CR. In terms of own readiness for the adoption of euro, the issue of real economic convergence, long-term sustainability of public finances in connection with ageing of the population or the issue of differences in the structure of the Czech economy vis-à-vis the Euro area have to be dealt with. With this in mind, the Government, in accordance with the CR's Updated Euro-area Accession Strategy, has not yet determined the target date of Euro-area accession, and it will not seek to enter the ERM II mechanism in 2017.

1.3   Structural Policies

In its February 2014 Policy Statement, the Government undertook to promote an economic programme based on promotion of entrepreneurship, effective labour market, functional and transparent public administration, long-term sustainable pension system, investments in education, science and research, and social cohesion in society.

A number of measures and reforms have been adopted in this respect. The key measures in the field of fight against tax evasion and also of making the market environment fair (see subchapter 6.1.2) include the extension of the reverse charge mechanism, implementation of electronic VAT reporting and the electronic registration of sales. The selected business entities are obliged to register the revenues through a permanent electronic connection.

In the business environment, new stimuli for investment incentives have been introduced; the transparency of the public procurement process has been strengthened and its administrative burden has been reduced.

In the area of science, research and innovation, a few important things can be pointed out, in particular the stabilisation of financing and the mechanism of budgetary responsibility in science, research and innovation or the National Policy on Research, Development and Innovation for the years 2016–2020 (see MF CR, 2016a). In addition, a new system of efficient financing of research organisations has been proposed in accordance with the Methodology of Evaluation of Research Organisations and Evaluation of Programmes of Targeted Support for Research, Development and Innovations (Government Resolution No. 107/2017).

The government also actively promotes family policy by tax and benefit instruments to support working parents with children and those groups of people who, from a social point of view, require an increased level of social security. There has also been a loosening of the conditions for

providing material support for the creation of new jobs within the system of investment incentives.

The project of Initiative 202020 intends to help ensure a functioning and transparent public administration through aiming to further develop eGovernment in the CR. Its target is to improve the position of the CR in the area of electronics of state administration and to rank it among the first 20 states in the quality and extent of eGovernment use by the end of 2020. Transparency is further strengthened by the Open Data of Public Administration Project (see subchapter 7.2.1), in which increasingly more public administration entities take part in. Open data facilitate the use of freely available data concerning the public entities performance, designed, among other things, for machine processing.

The priorities and objectives of the CR in the area of structural policies are described in detail in the 2017 National Reform Programme of the CR (Government Office, 2017).

2 Macroeconomic Outlook

The macroeconomic scenario of the Convergence Programme of the CR is based on the MF CR's April Macroeconomic Forecast (2017a). Its verification by a panel of experts and comparison with other forecasts are presented in Chapter 4. The Czech economy is in a phase of stable dynamics of economic growth, and we expect real GDP growth by 2.5% in 2017. Economic growth should be driven primarily by domestic demand. Unlike in previous years, 2017 should be characterised by inflation slightly exceeding the CNB's 2% inflation target. In the labour market, the economic growth is reflected in a very low unemployment rate and a dynamic growth of employment. The external position of the Czech economy in the form of net lending / borrowing abroad stays in a slight surplus.

2.1 World Economy and Forecast Assumptions

In 2016, global economic growth slowed down again slightly, with different development in various regions. While GDP grew at a moderate pace in the USA and the Euro area, differences in economic development were substantially more marked among emerging economies. The Chinese economy saw strong economic growth, which was, however, largely stimulated by a number of fiscal measures. Some large emerging economies faced problems and economic recession (Brazil, Russia or Argentina).

GDP grew by 1.9% in EU28 in 2016. Economic growth was driven mainly by private consumption, supported by the improving labour market situation, low energy prices and low interest rates. On the contrary, net exports dampened economic growth moderately with the export and import growth having slowed down.

We expect EU28 GDP to increase by 1.8% in 2017 (in accordance with the Winter Forecast of the EC, 2017a), and we expect an economic growth of 1.9% in 2018 (versus 1.8% in the EC Winter Forecast, 2017a). Growth should continue to be driven in particular by household consumption expenditure, supported by employment and wage growth. However, in a number of European economies, economic growth will be dampened by persisting structural problems, weakening competitiveness and high government and private indebtedness. Moreover, economic developments will be marked by increased uncertainty in connection with the United Kingdom's decision to withdraw from the EU.

The export market dynamics of the Czech economy should exceed slightly the 3% level. This is less than what would correspond to the relation of the GDP of partner countries and their imports observed in the past. We expect the current lower intensity of the global foreign trade (including within the EU) to persist also in the medium term.

In 2016, the average Brent crude oil price was approx. 44 USD/barrel, with its decline in 2014 to 2016 surpassing all expectations. In the horizon of the CP scenario, we expect the price to remain under 57 USD/barrel. Therefore, we anticipate the same price for 2017 and 2018 as the EC did in its Winter Forecast (2017a).

Based on the recent developments of the USD/EUR exchange rate, we have made a technical assumption of exchange rate stability at 1.05 USD/EUR for 2017–2020. Compared to the assumptions of the EC Winter Forecast, which expected an exchange rate of 1.07 for both 2017 and 2018, it is therefore a scenario with a slightly stronger dollar to euro exchange rate.

After the termination of the exchange rate commitment to euro at the beginning of April 2017 (see Chapter 1.2), the tendency to strengthening of koruna rate should gradually prevail due to strong fundamentals of the Czech economy. While doing so, short-term fluctuations of the rate in both directions cannot be ruled out due to speculative operations in the forex market. Considering the statement of the Bank Board of the CNB on the possible mitigation of excessive exchange rate volatility and the low positive difference of the labour productivity to the Euro area in 2017, the assumption of average moderate strengthening of the koruna exchange rate has been accepted for 2017. Consequently we expect acceleration of the koruna to euro exchange rate appreciation to approx. 2.5% in the medium term, as the Czech economy fundamentals decisive for the exchange rate development will improve.

With regard to the projected monetary policy stance and development of inflation expectations, we expect a gradual increase in long-term interest rates up to 2.3% in 2020.

Table 2.1: Assumptions of the Scenario

		2016	2017	2018	2019	2020
USD/EUR exchange rate	*annual average*	1.11	1.05	1.05	1.05	1.05
CZK/EUR exchange rate	*annual average*	27.0	26.9	26.3	25.6	25.0
Government bond yield to maturity 10Y	*in % p.a.*	0.4	0.9	1.5	2.0	2.3
PRIBOR 3M	*in % p.a.*	0.3	0.3	0.4	0.5	0.7
GDP EU28	*real growth in %*	1.9	1.8	1.9	1.7	1.8
Oil prices (Brent)	*USD/barrel*	43.6	56.3	56.8	56.4	56.6

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

2.2 Actual Developments and Medium-term Scenario

2.2.1 Economic Growth and the Demand Side

Real GDP growth slowed down to 2.4% in 2016. The main pro-growth factor was household consumption, which increased by 2.9% in real terms compared to 2015. Private consumption growth was supported by a dynamic increase in employment and wages and last but not least by a very low inflation for most of the year. As a result of accelerating consumer prices growth, real growth in household consumption should slow down to 2.4% in 2017. With regard to a number of discretionary changes in the social expenditure and also in the tax relief for families with children (see Chapter 3.2), which will probably be approved before the elections to the Chamber of Deputies of the Parliament in autumn, we expect an acceleration in household consumption growth to 2.7% in 2018. In the following years, given the forecast for wage bill growth and predicted development of inflation, consumption growth should only slightly exceed 2%.

Real growth in general government expenditure on final consumption should, in the CP horizon, slightly slow down from 1.7% in 2017 to 1.4% in 2019–20. General government consumption growth should mainly be due to the developments in compensation of employees and to a lesser extent to the dynamics of intermediate consumption and social transfers in kind (for details see Chapter 3).

The possibility of use of EU funds from the 2007–2013 programming period until the end of 2015 was behind an exceptionally strong growth in investments in 2015, thus also influencing the dynamics of gross fixed capital formation in 2016. With a decline in investment of the general government sector and a slight growth in private investment, total investment in 2016 decreased by 3.7%. In connection with the start of the new 2014–2020 financial perspective and with regard to factors supporting growth in private investment (gross operating surplus growth, eased monetary conditions, labour market developments), gross fixed capital formation could increase by 3.8% this year. In the following years, we expect investments to grow at approx. 3%.

The contribution of net exports to the YoY real GDP growth in 2016 was 1.1 pp, almost evenly spread between the balance of goods and balance of services. Considering the expected developments of export markets (Chapter 2.1) and the predicted growth in investment, which is the most import-intensive component of domestic demand, the balance of foreign trade should support economic growth in the following years to a much lesser extent than in 2016.

With regard to the GDP components above we expect that real GDP growth could be around 2.5% in 2017 and 2018, and the economy should grow at a slightly slower pace in the years after.

2.2.2 Potential Product and Position within the Business Cycle

After overcoming the 2013 recession, the potential product growth accelerated to 2.1% in 2016. The most significant factor in the last year was an increase in total factor productivity with a contribution of 1.4 pp. Capital stock has been showing a steady contribution of 0.5 pp in recent years despite a high volatility of gross fixed capital formation. Since 2010, ageing of the population has been manifested by a decrease in the number of working-age population (15–64 years), which detracted 0.4 pp from the potential product growth. However, this decrease has been more than offset by a dramatic increase in the participation rate with a contribution of 0.7 pp. 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.

In the following years, the potential product growth should range between 2.2% and 2.4% with a stable economic dynamics. The structure of individual contributions should remain similar to that in 2016.

The output gap, which reached almost –4% in terms of potential product at the recession trough in 2013, closed at the beginning of 2015. In the CP horizon, it should remain in a slightly positive territory below 1%, which is in line with the EC Winter Forecast (2017a).

Chart 2.1: Decomposition of GDP Growth
(growth in %, contributions to growth in percentage points)
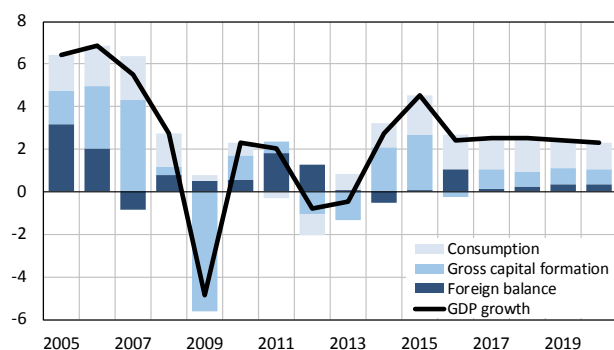
Source: CZSO (2017a), MF CR (2017a). MF CR calculations.

Chart 2.2: Output Gap
(in % of potential product)
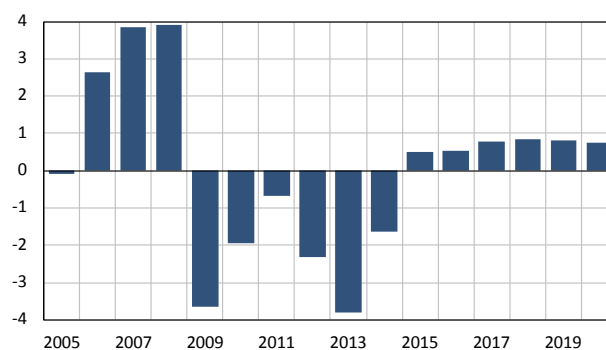
Source: MF CR calculations.

Table 2.2: Economic Output
(level in CZK billion, increases in %, contributions to growth in percentage points)

	ESA Code	2016 Level	2016	2017	2018	2019	2020
			Rate of change				
Real GDP	B1*g	**4665**	**2.4**	**2.5**	**2.5**	**2.4**	**2.3**
Nominal GDP	B1*g	**4715**	**3.5**	**3.7**	**4.4**	**4.3**	**4.3**
Components of real GDP							
Private consumption expenditure	P.3	**2202**	**2.9**	**2.4**	**2.7**	**2.2**	**2.1**
Government consumption expenditure	P.3	**900**	**1.2**	**1.7**	**1.5**	**1.4**	**1.4**
Gross fixed capital formation	P.51g	**1154**	**-3.7**	**3.8**	**3.0**	**3.0**	**3.0**
Changes in inventories and net acquis. of valuables (% of GDP)	P.52+P.53	**82**	**1.7**	**1.6**	**1.4**	**1.4**	**1.3**
Exports of goods and services	P.6	**3940**	**4.3**	**3.0**	**4.1**	**4.3**	**4.3**
Imports of goods and services	P.7	**3612**	**3.2**	**3.1**	**4.1**	**4.1**	**4.2**
Contributions to real GDP growth							
Final domestic demand	-		**0.6**	**2.4**	**2.3**	**2.1**	**2.0**
Changes in inventories and net acquis. of valuables	P.52+P.53	-	**0.7**	**0.0**	**0.0**	**0.0**	**0.0**
External balance of goods and services	B.11	-	**1.1**	**0.2**	**0.2**	**0.4**	**0.3**

Note: Real levels are in 2015 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 also calculated from real values.
Source: CZSO (2017a), MF CR (2017a).

2.2.3 Prices

The inflation rate measured by the harmonised consumer price index reached 0.7% in 2016. For most of the year, YoY inflation did not exceed 1%; however, at its end it accelerated above 2% and this trend continued at the beginning of 2017. The acceleration of YoY inflation was mainly due to price developments in the food and non-alcoholic beverages and transportation categories (where the increase in crude oil price was reflected) and to a lesser extent in the food services and accommodation category, where a number of entities used the introduction of electronic registration of sales to increase prices.

The YoY inflation should oscillate near 2.5% in the first three quarters of 2017, and it should slow down in the fourth quarter mainly due to the base effect. The main factors of price development will probably have pro-inflationary effect in 2017 because we expect, in comparison with 2016, higher crude oil prices, continued growth in unit labour costs as well as in domestic demand and a slightly positive output gap. Based on the CNB's previous statements (in detail see Chapter 1.2), we expect that after the termination of the exchange rate commitment the moderate pace of strengthening of the koruna to euro will be maintained; therefore, the exchange rate should have a limited impact on this year's inflation. The average inflation rate should thus reach 2.4%.

Following the disappearance of one-off factors from the fourth quarter of 2016 and the beginning of 2017, the inflation rate should decrease to 1.8% in 2018. The expected moderate strengthening of the koruna will have an anti-inflationary effect, and the influence of other main factors should be neutral (crude oil price) or pro-inflationary. The harmonised consumer price index growth should prevail at a level similar to 2018 also in the following years of the CP horizon.

Chart 2.3: Harmonised Index of Consumer Prices
(y-o-y growth in %)
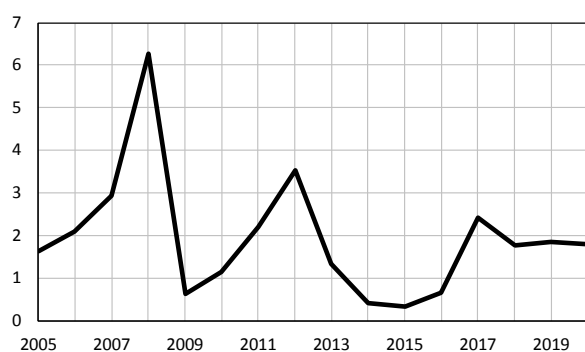
Source: Eurostat (2017a). MF CR calculations.

Chart 2.4: GDP Deflator
(y-o-y change in %, contributions in percentage points)
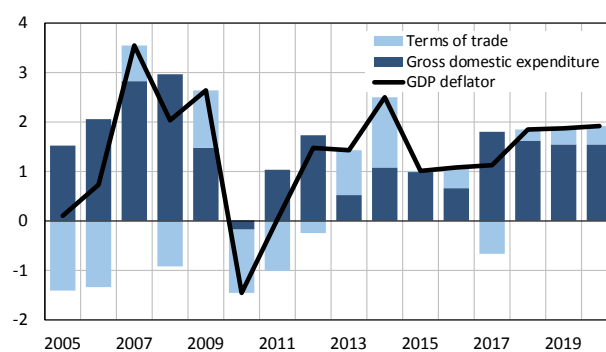
Source: CZSO (2017a). MF CR calculations.

Table 2.3: Prices of Goods and Services

(indices 2010=100, rate of change in %)

	2016 Level	2016	2017	2018	2019	2020
				Rate of change		
GDP deflator	**107.7**	**1.1**	**1.1**	**1.8**	**1.9**	**1.9**
Private consumption deflator	**105.9**	**0.6**	**2.4**	**1.7**	**1.8**	**1.8**
Harmonised index of consumer prices	**108.7**	**0.7**	**2.4**	**1.8**	**1.8**	**1.8**
Public consumption deflator	**110.4**	**1.7**	**2.2**	**2.2**	**1.5**	**1.6**
Investment deflator	**104.5**	**0.4**	**1.2**	**1.5**	**1.5**	**1.5**
Export price deflator (goods and services)	**104.0**	**-3.8**	**-0.1**	**-0.9**	**0.2**	**0.8**
Import price deflator (goods and services)	**102.4**	**-4.7**	**0.8**	**-1.2**	**-0.2**	**0.3**

Source: CZSO (2017a), Eurostat (2017a). MF CR calculations.

2.2.4 Labour Market and Wages

The dynamic development of all main labour market indicators in 2016 outperformed the real performance of the economy. Employment growth reached 1.8% in 2016 (the fastest pace since 2008) and an unemployment rate of 4% was the lowest in the entire EU. Growth of compensations of employees, apparent in particular in low-income sectors, further accelerated to 5.9% at the level of national economy. A very good economic situation of households supported domestic demand growth.

Favourable economic developments will continue to be reflected in high demand for labour force. Companies are trying to expand their employee benefit programmes, improve workplace transport accessibility and deepen cooperation with schools. Wage increases should also motivate some people in pre-retirement and retirement age to work. The employment growth rate should slow down to 1.1% in 2017, which can still be considered a very good dynamics.

However, the employment rate should grow much slower in the subsequent years. Increasing frictions manifested in unsatisfied demand for manual workers and technical experts are significantly hampering room for further dynamic development of the labour market. Moreover, structural barriers slow down arrival of need-

ed workers from abroad. Despite the current record low, the unemployment rate could slightly decrease, in the CP horizon, at an approximately constant rate to 3.1% in 2020, which can be considered a value very close to full employment.

An increasing supply in the labour market is reflected in an increase in the participation rate. In the following years, the economic activity rate will be positively influenced by structural and demographic factors. In addition to increasing statutory retirement age, the population weights of age groups with naturally high participation rate are increasing. These influences will more than offset the impact of a decrease in the working age population (15–64 years). The participation rate increase will be also supported by the motivational effect of increasing earnings especially in the elderly and non-working parents.

Lack of workers and an increase in the minimum wage at the beginning of this year represent pressures on the wage bill growth, which should reach up to 5.7% in 2017. The dynamics of real wages and salaries will slow down considerably as a result of the end of a very low inflation rate period. The share of compensation of employees in nominal GDP should, in the CP horizon, slightly rise to long-term sustainable 41.8%.

Chart 2.5: Employment and Participation Rates

(in %)
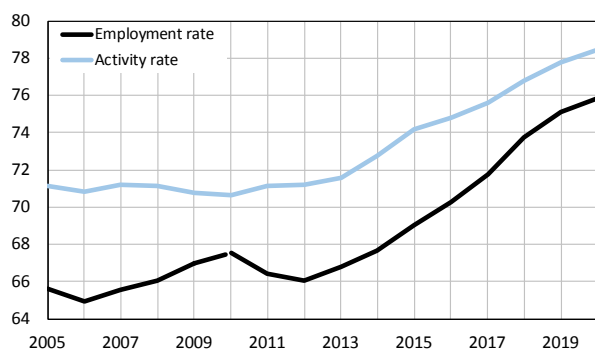
Source: CZSO (2017c). MF CR calculations.

Chart 2.6: Unemployment Rate

(in %)
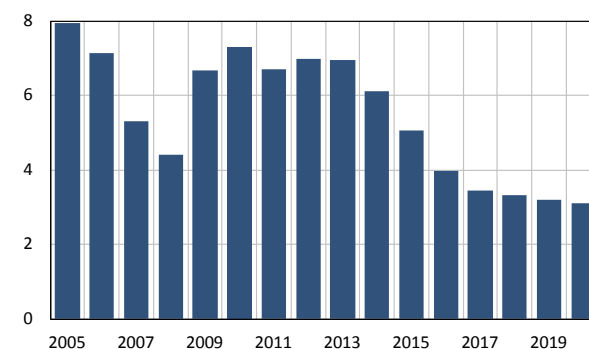
Source: CZSO (2017c). MF CR calculations.

Table 2.4: Employment and Compensation of Employees

(price levels in common prices, rate of change in %)

	ESA Code	2016 Level	2016	2017	2018	2019	2020
					Rate of change		
Employment, persons		5273	1.8	1.1	0.3	0.3	0.3
Employment, hours worked		9.3	2.6	1.3	0.1	0.0	0.2
Unemployment rate (%)		4.0	4.0	3.4	3.3	3.2	3.1
Labour productivity, persons		793	0.6	1.5	2.2	2.1	2.0
Labour productivity, hours worked		441	-0.2	1.3	2.4	2.3	2.1
Compensation of employees	D.1	1923	5.9	5.7	4.8	4.5	4.2
Compensation per employee		427	3.9	4.4	4.4	4.1	3.9

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 2015 prices) per employed person or worked hour.
Source: CZSO (2017a, 2017c). MF CR calculations.

2.3 External Transactions and Sectoral Balances

This part has been prepared using the national accounts methodology, which allows – based on the relationship between investment and savings – the surplus or deficit in economic relations vis-à-vis the rest of the world to be completely divided among individual economic sectors. The difference from the analogous and commonly used balance of payments methodology lies, for example, in the method of processing data sources or classifying certain items.

In 2016, the Czech economy recorded positive net lending to / borrowing from non-residents of 0.8%. Surplus has been achieved regularly since 2013, and the CR is thus a net exporter of capital.

The surplus of goods and services reached a record high of 7.4% of GDP in 2016, with 5.3% of GDP accounting for the surplus of goods and 2.1% of GDP for the surplus of services. The long-term deficit balance of primary incomes, which is mainly influenced by distributed incomes of businesses under foreign control, improved slightly to −5.9% of GDP. Also, the balance of current transfers was a deficit of −1.2% of GDP. For the first time since 1993, the current account balance reached a surplus of 0.3% of GDP (current account in the methodology of balance of payments has been in surplus since 2014).

The surplus of capital transfers reached 0.5% of GDP. Compared to 2015, it was deterioration by more than 2.5 pp due to the end of project funding from the EU funds within the 2007–2013 financial perspective.

In 2017, the surplus of net lending/borrowing should temporarily decrease to approx. 0.3% of GDP mainly due to a lower surplus in the balance of goods, where the YoY increase in crude oil price and higher imports following the restoration of growth in import-intensive investments should be reflected. Other balances should remain more or less stable. In the coming years, the balance of net lending to / borrowing from non-residents in relation to GDP should return to a slightly increasing trend while maintaining the structure of results of individual balances.

In terms of sectoral balances, the balance of the private sector should show a slightly increasing positive balance with the given trajectory of the ratio of general government surplus to GDP.

Table 2.5: Sectoral Balances

(in % of GDP)

	ESA Code	2016	2017	2018	2019	2020
Net lending/borrowing vis-à-vis the rest of the world	B.9	**0.8**	**0.3**	**0.6**	**1.2**	**1.9**
Balance of goods and services		7.4	6.6	6.8	7.2	7.6
Balance of primary incomes and transfers		-7.1	-7.0	-7.0	-6.9	-6.7
Capital account		0.5	0.7	0.8	0.9	1.0
Net lending/borrowing of the private sector	B.9	**0.3**	**-0.1**	**0.4**	**0.8**	**1.4**
Net lending/borrowing of general government	B.9	**0.6**	**0.4**	**0.3**	**0.5**	**0.5**
Statistical discrepancy		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Note: National Accounts Methodology. Net lending/borrowing of general government for 2016–2017 notification, years 2018–2020 outlook.
Source: CZSO (2017a). MF CR calculations.

2.4 Convergence

The economic level of the CR, expressed as GDP per capita at the current purchasing power parity, reached, according to preliminary estimates, approx. 25,500 PPS in 2016, which corresponded to 88% of the economic level of EU28 or 69% of the economic level of Germany. Thanks to strong economic growth in 2000–2008, the relative economic level of the CR in comparison with EU28 increased by 13 pp. However, the convergence process stopped in the subsequent period of recessions and low economic growth (see Chart 2.7). In 2008 to 2013, the economic level of the CR fluctuated between 83% and 85% of the EU28 average. The economic recovery in 2014 and strong growth in the following year led to restoration of the convergence process which should also continue at a moderate pace in the following years.

The CR's comparative price level had been increasing almost continuously from 1995 to 2008, when it reached 71% of the EU28 average (Chart 2.8). A period of relative stability of the price level around 70% of the EU28 average followed in 2009 to 2012. Subsequently, the comparative price level decreased to 63% of the EU28 average due to weakening of the CZK/EUR exchange rate in 2014 and 2015, which helped to improve price competitiveness of the Czech economy in that period. In the coming years, the CR's price level should again start approaching the EU28 average due to slight strengthening of the exchange rate after discontinuation of the exchange rate commitment, but at a slower pace than before 2008.

Chart 2.7: GDP per Capita
(in current prchasing power parities, EU28=100)

Source: CZSO (2017a), Eurostat (2017a). MF CR calculations.

Chart 2.8: Comparative Price Level of GDP
(EU28=100)
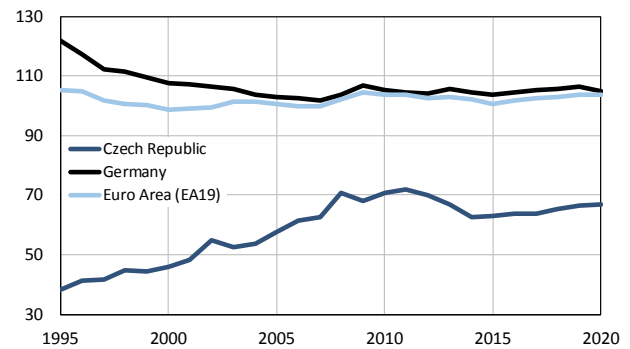
Source: : CZSO (2017a), Eurostat (2017a). MF CR calculations.

3 General Government Sector Development

Last year, the general government sector in the CR recorded the best result ever, a surplus of 0.6% of GDP. It is the first surplus of the entire sector in the history of the CR. The surplus was mainly due to an increase in tax revenue and social security contributions, which increased YoY by more than CZK 90 billion, as well as low dynamics or even decrease in some items on the expenditure side, for example a further drop in interest costs. The CR continues to be one of the EU Member States that fulfil their medium-term budgetary objective. We predict the medium-term budgetary objective to be fulfilled over the entire CP horizon. The fiscal discipline is supported by the adoption of a new fiscal framework, which is fully in line with the medium-term budgetary objective.

3.1 Actual Development of the General Government

3.1.1 Development in Year 2016

According to data published by the CZSO, the general government sector performance in 2016 reached a surplus of almost CZK 28 billion, i.e. 0.6% of GDP. In comparison with 2015, it is an improvement by 1.2 pp, after adjustment for the business cycle and one-off or other temporary operations 1.1 pp. This means that the surplus performance of the general government sector is not of cyclical or one-off nature, but it is a direct influence of government measures.

In 2016, total revenues increased only by 1.1%, due to a large decrease in accrual-based subsidies from the EU funds (more than 75%). As a result of transition to a new financial perspective for co-funding from the EU funds was associated, on the expenditure side, with a decrease in investments and part of current expenditure. If we only considered tax revenues and social security contributions, the increase of revenue would be 5.8%, in absolute terms by more than CZK 90 billion. Over the last years, larger increases were only recorded in 2015 and 2007. However, in the pre-crisis period, the CR achieved enormous economic growth (in 2007 by 5.5%), which is completely incomparable in its dynamics with the current real GDP development. The compound tax burden increased from 34.2% of GDP to 35.0% of GDP, which was mainly due to more rigorous tax revenue collection.

Indirect tax revenue rose by 5.4%. It was significantly influenced by revenue from the VAT, which increased by 6.2% and thus surpassed the dynamics of nominal household consumption at a relatively fast pace. The increased VAT revenue growth can be explained by the introduction of VAT reporting (an Amendment No. 360/2014 Coll.), which enables to pair individual input and output transactions in two different entities, thus effectively eliminating fraudulent invoices including carousel fraud (see Subchapter 6.1.2). Its budgetary impact for 2016 surpassed the original expectations. The start of electronic registration of sales had also partial impact on tax revenues.

As regards excise taxes, the revenue increased by 2.5% mainly due to real household consumption growth and higher tobacco products rates in the context of their harmonisation within EU (an Amendment No. 315/2015

Coll.). The measure increased the revenues YoY by approx. CZK 3.3 billion.

Direct tax revenue rose by 6% in comparison with 2015, mainly due to personal income tax, whose revenue increased by 9.4%. Its development was driven not only by a relatively large increase in wages and salaries in 2016, but also by a change in the distribution of wages and salaries after an increase in minimum and guaranteed wage (Government regulation No. 233/2015 Coll.) by 7.6% and introduction of the first phase of electronic registration of sales (Act No. 112/2016 Coll.) in the food services and accommodation sector. However, the direct effect is limited due to only a month of applicability in December 2016.

Corporate income tax increased by 2.9%; discretionary measures were negligible. The smaller increase in the tax was mainly due to a small increase in the net operating surplus, whose dynamics, probably due to lower investments with the end of the EU 2007–2013 financial perspective, slowed down YoY to one third of its value in 2015.

Social security contributions rose by 6.1%, which is more than CZK 40 billion in absolute terms. Similarly to personal income tax, the dynamics was largely due to an increase in compensation to employees in 2016 by approximately 5.9%. Another influence was a slight increase in state payment for state insured persons by approx. CZK 1.6 billion, termination of the second pension pillar with an impact of CZK 0.9 billion, and, to a limited extent, electronic registration of sales introduced in part of the economy since December 2016.

The transition between the financial perspectives also influenced general government expenditure, which decreased by 1.8%, in relative terms by 2.2 pp, to 39.9% of GDP. Nominal investments decreased by almost 33%. The drop was caused by a high level of expenditure co-financed from the EU funds in 2015 and a slow transition to the new 2014–2020 programming period. Given the methodology, the influence on the balance is only limited; however, it is not without influence on the economic development and levels of general government sector revenue and expenditure observed separately. As regards investment expenditure funded solely with funds of Czech

public budgets, the 2015 level was, according to ESA 2010 rules, also influenced by a one-off inclusion of financial leasing of supersonic aircraft amounting to almost CZK 10 billion. If we abstract from this influence, purely Czech investment would increase YoY by approx. 3.5%.

Total nominal general government expenditure on final consumption slowed down its dynamics YoY to 3.9%. The strongest influences included compensation to employees, which increased by 5.6% (approx. by CZK 21 billion), the most significant increase in recent years. There was an increase in the salaries in public administration, an increase in the salaries of judges and public prosecutors, an increase in the contribution to the Cultural and Social Needs Fund by 0.5 pp, increase in salaries of medicine doctors and other. Social transfers in kind increase by 4.2% YoY. A change in the Reimbursement Decree (with YoY impact CZK 5 billion), which determines these expenditures, had a decisive influence. In addition to the above two items, there was also an increase in intermediate consumption, which is, after compensation to employees, the second largest part of general government expenditure on final consumption. It, however, only increased by 2.6%, which was influenced by overall very low price level growth in the economy and virtually real stagnation caused by the decline in the EU-co-financed expenditure.

Despite several discretionary measures, expenditure on cash social benefits increased only by 2.4%. Those measures included e.g. an extraordinary retirement contribution (Act No. 381/2015 Coll.) of CZK 1,200, paid in February 2016. The one-off measure increased the expenditure by CZK 3.5 billion. Furthermore, the negative YoY impact of CZK 0.8 billion had an increase in care allowance by 10% (an Amendment No. 189/2016 Coll.), introduced in August 2016.

The YoY decrease in the total general government expenditure is also due to a decrease in interest costs by almost 9%. Their lower level is associated with a decrease in the overall general government debt by CZK 81.4 billion (1.9 pp) to 37.2% of GDP and a low level of the yield curve coupled with a positive perception of a stable macroeconomic environment, Czech fiscal policy and, last but not least, the time-limited CNB's exchange rate commitment (see also Chapter 3.4).

Total government transfers and subsidies remained approximately at the same level as in 2015.

3.1.2 Development in Year 2017

For 2017, we expect the general government sector performance to remain in surplus amounting to 0.4% of GDP. In terms of structural balance, there should be a slight surplus with a fiscal stimulus (a YoY structural balance change) of 0.4 pp. This is to a large extent also due to the expected increase in investment expenditure after the drop in last year; the forecast scenario envisages start of projects from the 2014–2020 financial perspective as well as an increase in investment from purely Czech sources. In total, we expect an increase in general government investment expenditure by almost 15%.

General government revenues should increase by 4.0% in 2017. The determining component of revenue dynamics should be again tax revenues including social security contributions, which will increase by 4.0%, in absolute terms CZK 66 billion, leading to total tax burden at 35.1% of GDP.

Indirect taxes should increase by 2.2%, which is, in the light of the last year, a relatively low value, but this development is primarily due to a decrease in excise tax revenue by 1.1%. There should be a decrease due to return of excise tax on mineral oils for agricultural primary producers (an Amendment No. 453/2016 Coll.), with an estimated YoY impact of CZK 1.9 billion. The measure of the so-called anti-smoking law will have the YoY negative impact of CZK 1.1 billion on revenue (Act No. 65/2017 Coll.). An increase in the rates on tobacco products will act in the opposite direction in the same amount (an Amendment No. 315/2015 Coll.). Measures regarding excise taxes on tobacco products thus basically offset each other with their effects. As regards the VAT revenue, we predict an increase of almost 5%, where, in addition to a significant increase in nominal household consumption, the revenue should be increased by measures launched against tax evasion and sales reductions with an effect of approx. CZK 7 billion. These are effects of electronic registration of sales (Act No. 112/2016 Coll.) on the VAT and other benefits of introducing VAT reporting (an Amendment No. 360/2014 Coll.) in the last year. Conversely, reduction in the VAT rate from 21% to 15% for restaurant services (an Amendment 113/2016 Coll.) should have a negative YoY fiscal impact of CZK 0.5 billion from 2017. The aim of introducing of the measure has been a removal of the discrepancy in different rates for meals in the restaurants and in stores. Shift of newspapers and magazines from the 15% to the 10% rate (an Amendment No. 33/2017 Coll.), that came into force on 1 March 2017 also has impact approx. by CZK 0.4 billion on decreasing VAT revenue. Measures enabling the Czech Television or the Czech Radio to claim tax refunds to the same extent as commercial stations (Chamber of Deputies Print No. 873) will also have the negative YoY impact of CZK 0.3 billion on the collection of this tax.

We expect a 4.4% increase in direct taxes. Similarly to the last year, the main contributor to the growth should be revenue from personal income tax, which should increase by 6.0%. An expected increase in the wage bill by 5.7% as well as both phases of electronic registration of sales with expected YoY impact of CZK 3.4 billion (with the one-off tax credit compensating purchase of hardware and software equipment for electronic registration of sales already included). Conversely, an opposite effect will be caused by some measures of the newly approved tax package (Chamber of Deputies Print No. 873) such as higher tax allowances for the second and any additional child with the impact of CZK 1.6 billion from 2017 or adjusting the conditions for using flat tax with the YoY impact of CZK 1.8 billion

in 2017. Personal income tax revenue will be also decreased by the exemption from taxes on service allowance and allowance for housing of armed forces (an Amendment No. 454/2016 Coll.) with the expected impact of CZK 1 billion in 2017. The tax revenue will also be negatively influenced by an increase in the limit of contributions for pension and life insurance deductible from the tax base (Act No. 377/2015 Coll.) with the impact of CZK 1.4 billion from 2017.

Social security contributions are, in addition to solid wage and salary growth in the economy, also accompanied by positive discretionary effects of electronic registration of sales (increase by approx. CZK 3.8 billion) and further increase in state payments for state insured persons (Government Resolution No. 181/2016 Coll.) in the amount of CZK 3.6 billion.

Corporate income tax should grow at a pace similar to the previous year, i.e. by 2.8%. The positive effect of electronic registration of sales will also manifest itself here (in the expected YoY amount CZK 1.7 billion), albeit to a lesser extent than in the case of personal income tax or VAT.

Capital transfers on the revenue side should, according to the forecast, increase by more than 33%, mainly due to an increase in subsidies for projects co-financed from the EU funds. The high relative change is due to a lower base of 2016. Current transfers remain very close to the 2016 level.

General government expenditure should increase by 4.4% compared to 2016 and reach 40.2% of GDP, which is a YoY increase by 0.3 pp.

Compared to 2016, expenditure on general government final consumption should slightly slow down to 3.8%; similarly to the previous year, compensation to employees has the highest dynamics (5.2%). Salaries should be increased or are being increased in various areas of the general government sector. Social transfers in kind will probably grow at a slower pace compared to the last year (4.1%), again as a result of increased healthcare expenditure. Compared to 2016, intermediate consumption should accelerate to 3.4% due to higher real consumption (e.g. purchases in medical facilities included in the general government sector) but also due to a significantly higher inflation.

Cash social benefits should increase by 3% in 2017, which reflects a possibility of an increase in statutory indexation of pensions up to 2.7% utilised by the Government to a full extent for 2017 (see also part 5.1.1). The impact of this change compared to the standard indexation formula is almost CZK 6 billion. Furthermore, the forecast includes a 10% increase in care allowance (an Amendment No. 189/2016 Coll.), which assumes a further increase of expenditure by CZK 1.3 billion.

Interest costs should further decrease, by 5.7%, as a result of continued favourable situation in the given segment of financial markets and interest in Czech bonds boosted by expectation of relatively moderate and gradual strengthening of the Czech koruna's exchange rate.

Total subsidies and transfers should increase by 5.6% and they should reflect an increase in state contributions to renewable energy resources.

3.2 Medium-term Budgetary Outlook

The current fiscal policy setting which serves as a basis for the forecast, is mainly given by the state budget balances, approved by the Government in the context of the medium-term expenditure framework for 2017–2019, i.e. a deficit of CZK 50 billion for 2018 and CZK 30 billion in 2019. The trend set by the current government should be completed by a balanced budget in 2020.

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

Note: Years 2016–2017 notification, years 2018–2020 outlook.
Source: CZSO (2017b). MF CR calculations.

We expect a continued surplus of local government budgets, albeit with a decreasing trend due to higher realised capital expenditure. Other components of the general government sector (except the state budget and state funds) should have essentially balanced performance. From 2017, medium-term expenditure frameworks for the state budget and state funds are set according to the national expenditure fiscal rule compatible with the medium-term budgetary objective. A strategy to reduce state budget (and state funds) deficit, approved in the past, is fully consistent with this rule. A derivation of medium-term expenditure frameworks is included in the Budgetary Strategy of Public Sector Units of the CR, whose annex is, starting from this year, also the CP.

3.2.1 Expected Development of Revenue
The development of general government revenue will be, in the years of the outlook, influenced mainly by higher effectiveness of tax collection thanks to more efficient prevention of tax evasion and favourable development of the macroeconomic environment. The forecast also takes into account risks associated with the political cycle both on the revenue and, more importantly, on the expenditure

sides (see Subchapter 3.2.2). We expect an average increase in general government revenue of 3.9%, from which average growth rate in tax revenues (including social security contributions) is 4.1%.

In the years of the outlook, we expect that the personal income tax revenue will grow at an average rate of 5.2%; however, the dynamics will slow down slightly. The growth rates in individual years are influenced mainly by the forecast of wage bill developments in the economy while taking into account wage distribution and the method of tax calculation, but also distribution of discretionary measures. In 2018 and 2019, introduction of electronic registration of sales (Act No. 112/2016 Coll.) will have a positive effect on personal income tax collection, increasing income tax revenue by CZK 3.3 billion in 2018 and further CZK 0.5 billion in 2019. The aforementioned impacts already include a one-off credit for taxpayers of electronic registration of sales, which should compensate for the initial cost. The volume of predicted discretions is influenced by involvement of other entities in electronic registration of sales. Freelancers and persons conducting business in transport or agriculture will join the system in March 2018. The law will become effective for selected crafts and other manufacturing activities in June 2018.

A set of measures amending laws in the area of income taxes is currently in the legislative process. One of them is a planned increase in tax deduction for the first child by CZK 150 monthly compared to the current state. As a result of this measure, personal income tax revenue would decrease by CZK 2.1 billion in 2018. Other measures negatively influencing personal income tax revenue include introduction of new sickness insurance allowances, in particular long-term care allowance (Chamber of Deputies Print No. 1029) with an impact approx. CZK 0.3 billion from 2018.

As regards social security contributions, we expect developments in line with the increase in wage bill in the economy and higher state payments for state insured persons by approx. CZK 3.5 billion annually until 2020. The average social security contributions growth is predicted at 4.6% in the years of the outlook after taking into account discretionary measures. It should grow also due to an increase in the tax assessment base for entrepreneurs as a result of introduction of electronic registration of sales. We expect discretionary measures for social and health insurance, in connection with the Act on Registration of Sales coming into effect and with gradual involvement of additional entities, at approx. CZK 2.2 billion in 2018 and further CZK 0.5 billion in 2019. Introduction of new sickness insurance allowances, namely the aforementioned long-term care allowance and also paternity leave (Chamber of Deputies Print No. 821), for which we expect an effect of CZK 1.1 billion in total, act on the social and health insurance system revenue in the opposite direction in 2018.

Corporate income tax revenue should grow on average by 4.2%, accelerating in the forecast horizon. This trajectory is determined by acceleration of gross operating surplus, which primarily derives from a stable nominal GDP growth in the years of the outlook and gradual slowdown in the wage bill growth. We expect there will be an increase in revenue of this tax as a result of introduction of electronic registration of sales, amounting to, in YoY terms, CZK 1 billion in 2018 and CZK 0.2 billion in 2019.

As regards VAT revenues, we predict an average growth by 4.4% in the years of the outlook. Autonomous development corresponds with an increase in nominal household consumption and part of relevant consumption of general government, which we predict at 4% on average in the years of the outlook. Key measures to combat tax evasion will also have a positive effect. We expect VAT reporting to increase VAT revenue by CZK 3 billion YoY in 2018. The expected effect of the Act on Registration of Sales is estimated at CZK 2.7 billion in 2018 and additional CZK 0.6 billion in 2019. An increase in tobacco tax rate will also contribute to higher collection (CZK 0.3 billion). Measures with a negative effect on VAT collection in 2018 with a cumulative fiscal impact of CZK 0.4 billion include a measure enabling the Czech Television and the Czech Radio claim tax refunds to the same extent as commercial stations (Chamber of Deputies Print No. 873) and shift of newspapers and magazines from the 15% to the 10% rate (amendment No. 33/2017 Coll.).

Excise tax revenue reflects mainly the effects of discretionary measures and slowing growth rate of real household consumption, which should gradually decrease from 2.7% in 2018 to 2.1% in 2020. The slowing excise tax revenue growth at the end of the outlook is also due to termination of increase in tax burden on tobacco products (Act No. 315/2015 Coll.). In line with EU legislation (Council Directive 2011/64/EU), the tax rate on tobacco products increased in connection with a three-year plan increasing excise tax rates on tobacco products. The last year of the already approved increase is 2018, when the expected effect on YoY excise tax revenue growth is CZK 1.4 billion. Consumption tax collection increase compared to 2017 will also be due to commencement of the second period of excise tax refund on diesel consumed in agricultural primary production and for livestock producers, so-called green diesel (amendment No. 453/2016 Coll.). Introduction of three tax rates depending on livestock production intensity, which is planned from 1 July 2017 to 31 December 2018, should decrease, compared to 2017, a negative YoY effect on revenues by CZK 0.5 billion in 2018, and by additional CZK 1 billion in 2019. We predict a moderate negative effect on excise tax revenue of CZK 0.3 billion in 2018 in connection with adoption of a so-called anti-smoking law (on Health Protection from the Harmful Effects of Addictive Substances, Act No. 65/2017 Coll.), whose coming into effect should reduce tobacco products consumption.

As regards other revenue items, for 2018–2020 we expect growth in investment subsidies in line with gradual increase in implementation of projects from the EU funds in the 2014–2020 programming period.

Table 3.1: Impact of Measures Fighting Tax Evasions
(year-on-year discretional change, in CZK billion)

	2017	2018	2019	2020
Electronic evidence of sales	**13.4**	**9.2**	**1.8**	**-**
Personal income tax	3.4	3.3	0.5	-
Corporate income tax	1.7	1.0	0.2	-
Social security contributions	3.8	2.2	0.5	-
Value added tax	4.5	2.7	0.6	-
VAT reporting	**2.0**	**3.0**	**-**	**-**
Value added tax	2.0	3.0	-	-
Total	**15.4**	**12.2**	**1.8**	**-**

Source: MF CR.

3.2.2 Expected Development of Expenditure

In 2018–2020, we estimate an average YoY increase in general government expenditure to 3.8%. In relation to GDP, 2018 expenditure should increase by 0.2 pp to 40.3% of GDP, and for the following two years of the outlook we predict their slight decrease to 39.6% of GDP.

In 2018, 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 cash social benefits is an increase in the volume of pensions. As a result of an increase in the price level and, in the past years, a solid real wage growth, the expected indexation increases to 3.4%, which would mean the average monthly old-age pension is by CZK 408 higher. In addition, a proposed adjustment to the indexation formula (Chamber of Deputies Print No. 912, for more detail see subchapter 5.1) would increase the expenditure on pensions, compared to the autonomous scenario, by approx. CZK 3 billion annually, with a cumulative increase of approx. CZK 9 billion in 2020. A set of social benefits to support selected groups of citizens is currently in the legislative process. One aims to support socially vulnerable groups of citizens by making social housing available (Chamber of Deputies Print No. 1065). Another measure is a support for people with disabilities, by increasing the benefits and providing them to a wider range of applicants as well as by supporting their employment (Chamber of Deputies Print No. 935 and amendment No. 93/2017). Another supported target group is persons who are long-term ill or who care for long-term ill (Chamber of Deputies Print No. 1029 and Government Resolution No. 152/2017). Last but not least, the state aims to support families with children, by increasing the benefits, supporting the return of mothers to the labour market or introducing paternity leave (Chamber of Deputies Print No. 854 and 821). Discretionary growth in expenditure in the case of introduction of the aforementioned measures in the social area is calculated as approx. CZK 13 billion in 2018 in total. The development of cash social benefits also reflects, in the ESA 2010 methodology, higher payments for state insured persons approx. by CZK 3.5 billion annually until 2020. As a result of the autonomous development and the aforementioned discretionary measures,

the growth in cash social benefits should accelerate to 5.5% in 2018, followed by a decrease in the growth rate to a value slightly exceeding 3% annually.

General government final consumption will be driven, in the years of the outlook, mainly by increasing expenditure on compensation to employees and social transfers in kind, to a lesser extent by intermediate consumption. In 2018, we expect a similar dynamics of growth in the volume of expenditure on compensation to employees as in previous two years, i.e. around 5.5%. The issue of salary growth is currently being discussed at the government level, and it is thus not an approved growth for 2018. The net impact on the balance is then in any case significantly lower due to the fact that a large part of the increased volume of compensation to employees at the same time represents higher general government revenue in the form of personal income tax and social security contributions, leaving aside consumption taxes as a secondary effect. As a result of a relatively rapid growth in state employee salaries (compared to the business sector) in the past two years, we expect that the growth will slow down to approx. 3.5% in the outlook horizon.

In 2018, we expect social transfer in kind to grow at a similar rate as in the previous years (approx. 4 %). Discretionary measure amounting to CZK 0.4 billion concerning a reduction in protective limits for excess payments for medicines for children under 18 and for pensioners (Chamber of Deputies Print No. 1017) will contribute to the increase. In the remaining years of the outlook, we anticipate a slight slowdown in the growth rate at an average 3.5%. The predicted development is primarily based, after taking into account higher payments for state insured persons, on the assumption of future inflation development and slowing salary and wage growth rate in the economy, which in turn means declining dynamics of collection of funds for health insurance. Given a relatively balanced performance of the subsector of social security funds, we therefore also expect a moderate slowdown in the dynamics of its expenditure.

Intermediate consumption growth rate should be 3% in the years of the outlook. The expected moderate slowdown in the dynamics compared to the expected 3.4% rate in 2017 is mainly caused by a predicted lower infla-

tion rate, which should oscillate close under 2% in 2018–2020 (for details see Subchapter 2.2.3).

As regards gross fixed capital formation, we predict a stable dynamics in the years of the outlook. Starting from 2018, we expect an increase in investment co-financed from EU funds of 10% annually. This dynamics still leaves room for some acceleration in the pace of realisation of the projects towards the end of the 2014–2020 financial perspective, i.e. between 2021 and 2023. The growing dynamics of national investment of 4.5% on average reflects a risk of higher demands on public budgets due to a law on social housing, which is currently being considered. Financial resources from the EU funds should com-

plement national resources mainly in the areas of investment in infrastructure, science, research and employment.

By refinancing of earlier issues of bonds with higher interest rates, we expect a decrease in interest costs of service of the general government debt of 5.2% still in 2018. Also with regard to the expected development of monetary policy of the CR we predict a gradual growth in rates which will lead to a slight increase in interest expenditure in the years of the outlook. In relative terms, interest expenditure should oscillate around 0.8% of GDP throughout the outlook. Subchapter 3.4 deals with these issues in detail.

Table 3.2: Structure of Discretionary Measures in 2017–2020
(year-on-year discretional change, in CZK billion)

	2017	2018	2019	2020
Revenue Discretioanry Measures	**13.9**	**11.9**	**3.4**	**0.9**
Personal income tax	0.2	1.5	0.6	-
Corporate income tax	1.4	1.0	0.2	-
Social security contributions	11.7	2.1	0.9	-
Value added tax	6.0	5.6	0.6	-
Consumption taxes	-1.9	1.6	1.0	-
Other revenue measures	-3.5	0.1	0.1	0.9
Expenditure Discretionary Measures	**-42.5**	**-21.9**	**-8.4**	**-4.6**
Cash social benefits	-3.6	-16.7	-2.2	-2.9
Compensation to employees	-21.8	-3.5	-1.0	-
Health care	-10.1	-0.4	-	-
Other expenditure measures	-7.0	-1.2	-5.2	-1.7
Total	**-28.6**	**-10.0**	**-5.0**	**-3.7**
% of GDP	-0.6	-0.2	-0.1	-0.1

Source: MF CR.

Table 3.3: Impact of Social Measures on the General Government Balance
(year-on-year discretional change, in CZK billion)

	2017	2018	2019	2020
Revenue	**-1.6**	**-3.5**	**-**	**-**
Family policy	-1.6	-2.1	-	-
Sickness benefits	-	-1.4	-	-
Expenditure	**-3.6**	**-16.7**	**-2.2**	**-2.9**
Family policy	-	-5.7	0.3	0.1
Sickness benefits	-0.1	-3.9	-	-
Pension insurance benefits	-2.2	-3.6	-2.5	-3.0
Other social security benefits	-1.3	-3.6	-	-
Total	**-5.2**	**-20.3**	**-2.2**	**-2.9**

Source: MF CR.

3.2.3 Comparison of Intentions with a No-policy-change Scenario

The intentions of the economic policy in comparison with the autonomous scenario, that is, a scenario taking into account only the current state and the trend of the current government's economic policy are presented in Table 3.4.

On the revenue side, measures for more effective tax collection, in particular extension of electronic registra-

tion of sales in further phases according to an announced schedule, are being implemented. These measures are already included in the autonomous scenario with unchanged policies. We also consider measures for tax support of families with children as part of the autonomous scenario with unchanged politics, because the current government has been increasing tax deductions for children for the third consecutive year as part of its priorities. However, new measures are

introduced on the expenditure side having at the same time a relatively small effect on revenues (with a cumulative effect of less than CZK 3 billion in the forecast horizon). These include amendments in the area of social benefits, including proposals for parametric changes to the pension system. Although the Government has made discretionary adjustments to indexation of pension insurance benefits basically every year, an amendment is being considered that would change the indexation formula (for details see Chapter 5). In the area of social benefits (except pensions), the current Government has made discretionary adjustments very rarely; any increases were mainly due to autonomous development. For this reason, we consider these measures as non-autonomous change with a significant budgetary impact of almost CZK 17 billion in 2018 and additional CZK 2–3 billion in the years of the outlook.

Other approved measures concern a change in the way of regional schools financing with an estimated impact of CZK 3.5 billion with effect from 2019, and a Career Code for teachers with currently quantified impact from CZK 0.4 billion in 2017 to CZK 2 billion in 2019. Another risk for public finances in the medium-term horizon is the law on social housing, currently under consideration, which would increase expenditure by approx. CZK 4 billion annually from 2020. Finally, we expect the increase in wage bill in the government sector to have a similar dynamics to the last two years; we consider the impacts both on expenditure and revenue as part of the autonomous scenario with unchanged policies. The table below clearly shows that the aforementioned measures have a significant impact on public finances with cumulative effect of approx. −0.6% of GDP at the end of the outlook horizon.

Table 3.4: Comparison of the No-policy-change Scenario with the Intentions of Fiscal Policy
(in % of GDP)

	2017	2018	2019	2020
Total revenue	**40.6**	**40.6**	**40.4**	**40.1**
Total revenue at unchanged policies	40.6	40.6	40.4	40.1
Cumulative discretionary revenue measures	0.0	-0.0	-0.0	-0.0
Total expenditure	**40.2**	**40.3**	**39.9**	**39.6**
Total expenditure at unchanged policies	40.2	40.0	39.4	39.0
Cumulative discretionary expenditure measures	0.0	0.4	0.5	0.6
General government balance with discretionary measures	**0.4**	**0.3**	**0.5**	**0.5**
General government balance without discretionary measures	0.4	0.6	1.0	1.1
Total cumulative discretionary measures	-0.0	-0.4	-0.5	-0.6

Note: No-policy-change scenario does not consider any subsequent government influences, i.e. it takes into account the current legal state and reflects the state of the economic policy of the government. The baseline scenario with discretionary measures takes into account also the prepared measures which are discussed and reflected in the fiscal outlook. Discretionary measures in 2017–2020 are represented cumulatively, thus containing effect of changes in previous years.
Source: MF CR.

3.3 Structural Balance and Fiscal Stance

3.3.1 Cyclical Component and Structural Balance

In 2016, the structural balance reached a surplus of 0.5% of GDP, and it should decrease to 0.1% of GDP in 2017. In 2018, we expect another slight decrease in the structural balance to a balanced value. In 2019, we expect a slight improvement in the structural balance to a surplus of 0.2% of GDP, and it should remain at the same value also in 2020. Interest expenditure should be very slightly decreasing in the entire forecast horizon from 0.9% of GDP in 2017 to 0.8% of GDP in 2020. We expect that the primary structural balance will continue to be in surplus while each year it will change similarly to the overall structural balance.

The most significant one-off revenue in 2016 was revenue from auction sales of new frequency bands to mobile operators of CZK 2.6 billion. On the expenditure side, in 2016 there was a one-off pension increase of CZK 3.5 billion and subsidies for farmers affected by draught of CZK 1.2 billion.

Chart 3.2: General Government Balance
(in % of GDP)
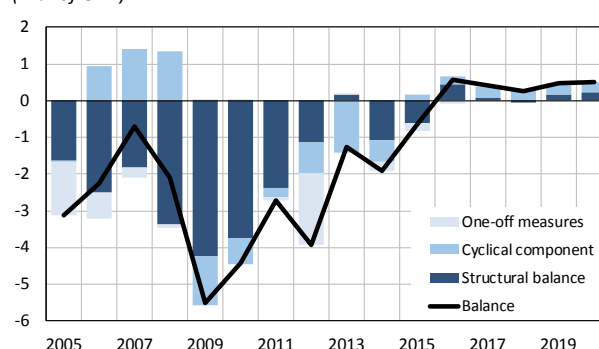
Source: CZSO (2017b). MF CR calculations.

Chart 3.2 shows the general government balance development taking into account the effect of items which show sensitivity to the position of the economy in the economic cycle. Since the second half of 2013, the gradual recovery of the economy has brought about closure of the negative output gap (see Chart 2.2), which was

completed in 2015. For 2017–2020, we expect a stagnation of a slightly positive output gap around 0.8% of potential GDP. As a result, the cyclical component of the balance should stabilise at 0.3% of GDP.

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

The values of the structural balance and fiscal effort in 2016–2020 are shown in Table 3.5. Positive fiscal effort in 2016 was associated mainly with an increase in tax revenue. More dynamic government consumption, higher social expenditure (mainly in 2018) and a gradual increase in investment activities are the main causes of more expansionary fiscal policy of the government in 2017 and 2018. In 2019 and 2020, we anticipate again slightly positive fiscal effort with, conversely, lower growth rates of the aforementioned expenditure items, except investment.

A look at the fiscal effort and the structural balance in 2018–2020 is complemented by the Stability and Growth Pact's expenditure rule, which stipulates that the growth in adjusted general government real expenditure should be in line with the potential output growth (1.8% for the CR). CR should, in the whole forecast horizon, reach better values of structural balance than is the medium-term budgetary objective. In that case, the rate of growth of adjusted real expenditures can exceed the growth of the potential output growth. With regard to that, the dynamics of adjusted real expenditures (Table 3.5) fulfils the expenditure rule of the Stability and Growth Pact.

Table 3.5: Structural Balance, Fiscal Effort and Adjusted Real Expenditures Growth
(in % of GDP, pp of GDP, growth in %)

		2016	2017	2018	2019	2020
General government balance	*% of GDP*	0.6	0.4	0.3	0.5	0.5
Structural balance	*% of GDP*	0.5	0.1	0.0	0.2	0.2
Fiscal effort	*pp of GDP*	1.1	-0.4	-0.1	0.2	0.1
Adjusted real expenditures	*growth in %*	-	-	2.4	0.2	1.3

Source: CZSO (2017b). MF CR calculations.

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

In 2017, we expect general government debt at 36.0% of GDP, which is a decrease of 1.2 pp in comparison with 2016. This will be determined by state debt decrease in relative terms and a decrease in the local government debt in connection with their expected surplus performance.

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. A decline in the debt-to-GDP ratio was recorded in 2014 for the first time since 2007. Overall, the general government debt decreased in relative terms by 7.7 pp between 2013 and 2016. The CR is still one of the relatively least indebted countries in the EU. The debt-to-GDP ratio is at a safe distance both from the debt reference value stipulated by the Maastricht convergence criteria and the Stability and Growth Pact and the national debt rule limit.

We also predict a decrease in debt-to-GDP ratio in the years 2018–2020, in total by approx. 3.3 pp down to 32.7% (for YoY decreases see Table 3.6). The developments of the absolute amount of the general government sector debt are determined mainly by planned performance of the state budget and the expected state debt developments.

Contributions of interest expenditure to change in the debt-to-GDP ratio should stabilise at 0.8% of GDP in 2018–2020. The decrease in the relative level of interest expenditure is due to a concurrence of a decrease in government bond yield to historic lows, with associated refinancing for lower interest rates, and debt reduction in absolute terms. Record-breaking low yields on government bonds in all maturity segments were achieved, among other things, thanks to positive perception of the CR's fiscal discipline on financial markets, emphasised by international institutions and rating agencies. The valued budgetary stability is a basic prerequisite for resilience to external shocks. Another effect on interest rate reduction is a surplus of free liquidity on interbank markets due to expansionary monetary policies of the CNB and the ECB, and the time-bound exchange rate commitment regime (see part 1.2). The latter factor of lower interest expenditure is related to a lower supply of government bonds on the primary market due to cash surplus of the state budget and to effective management of available financial assets.

As a result of these factors, since September 2015, the CR has 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. Additional net revenues of CZK 1.2 billion were collected for the State Treasury by the end of 2016. 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 12% of the overall state debt at the end of 2016.

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 will be used to finance government 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 in exchange-listed companies), the net financial debt was at 25.9% of GDP at the end of 2016. If necessary, the amount of liquidity for debt repayments would then be 11.3% of GDP. Its developments would be influenced by surplus performance of the general government sector on one side, and a decrease in the total relative gross debt level.

The highest share in the general government debt is held by the subsector of central government institutions (see Table 3.6). In 2017, the value of the debt is expected to be CZK 1719.2 billion, which is approx. a 95% share in the total government debt. The local government debt represents the remaining approx. 5% of the total debt; for 2017, we predict its amount as CZK 86.1 billion. Its value should gradually decrease in 2018–2020 due to an expected surplus performance of this subsector and in connection with the Act No. 23/2017 Coll., on fiscal responsibility rules, which stipulates for local govern-

ments a minimum amount of principal repayment above the prudent level of use of liabilities (see MF CR, 2016a). 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 stabilisation and management were particularly important in the period of above-average volatility on foreign financial markets associated with the debt crisis. However, they continue to contribute to a prudent approach to debt sustainability and increase the country's transparency on the government bond market. Moreover, the Czech Republic Funding and Debt Management Strategy (MF CR, 2016b) currently takes into account the possibility of using the time-bound situation on the primary market to obtain additional revenues for the state budget by issuing government bonds with negative yields. In designing a medium-term state debt management strategy, emphasis is placed on the refinancing, interest rate and monetary risks as the most important sources of uncertainty in its management. The basic indicators for assessing the sub-risks, which are managed by the strategy, are given in Table 3.7.

The values of individual indicators for 2017–2020 fulfil the set strategic objectives announced for the medium term.

Table 3.6: General Government Debt by Sub-sectors
(in % of GDP)

	ESA Code	2015	2016	2017	2018	2019	2020
General government	S.13	**40.3**	**37.2**	**36.0**	**35.3**	**34.3**	**32.7**
Central government	S.1311	38.2	36.4	35.2	34.6	33.6	32.1
Local government	S.1313	2.4	1.9	1.8	1.6	1.5	1.4
Social security funds	S.1314	0.0	0.0	0.0	0.0	0.0	0.0
Net financial debt [1]		27.4	24.1	22.8	21.6	20.2	18.9
General government debt according to Act No. 23/2017 Coll., art. 13 [2]		**39.9**	**37.2**	**36.0**	**35.3**	**34.3**	**32.7**

1) Net financial debt is the difference between gross debt and liquid financial assets (monetary gold, Special Drawing Rights, currency and deposits, securities other than shares (consolidated at market value), shares and other equity quoted in stock exchange).
2) General government 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 (2017b). MF CR calculations.

Table 3.7: The State Debt's Refinancing, Interest and Debt Denominated in Foreign Currency
(in % of debt, average maturity in years)

		2015	2016	2017	2018	2019	2020
Refinancing							
Average maturity	*years*	**5.1**	**5.1**	**5.3**	**5.7**	**6.0**	**6.0**
Debt due within 1 year	*% of debt*	**16.4**	**14.3**	**16.0**	**13.9**	**13.6**	**12.9**
State Debt's Interest							
Debt with interest fixation within 1 year	*% of debt*	**33.7**	**29.6**	**32.2**	**33.3**	**31.2**	**31.0**
Fixed interest long-term debt due within 1 year	*% of debt*	6.3	11.0	15.2	13.8	10.0	11.5
Variable interest long-term debt	*% of debt*	19.9	15.9	14.2	16.5	18.3	18.1
Monetary instruments	*% of debt*	5.2	0.3	0.3	0.3	0.3	0.3
Effect of derivative operations	*% of debt*	2.4	2.5	2.6	2.7	2.6	1.1
Foreign Currency Exposition							
Foreign-currency exposition of the state debt [1]	*% of debt*	**10.9**	**11.5**	**11.7**	**11.3**	**11.7**	**11.7**
EUR exposition	*% of debt*	9.8	11.1	11.3	11.0	11.3	11.3

Note: The state debt here represents debt generated by the state budget financing. Data are in the national methodology.
1) State debt denominated in foreign currencies adjusted for collateral and assets.
Source: MF CR.

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 slightly slower in 2016 compared to the May 2016 CP scenario. On the side of domestic demand, the largest deviation was in gross fixed capital formation (see Chapter 2.2.1); however, with regard to high import intensity of investment, this forecast deviation was offset in the final result by a slower growth in import and by a higher contribution of foreign trade balance. Economic growth was much more favourably reflected in the developments of the labour market, which saw a more marked increase in employment and decrease in unemployment.

The estimate of the macroeconomic development for 2017 and 2018 remains very stable. The greatest quantitative change concerns the fixed capital investment, whose dynamics in 2017 will favourably reflect a lower (in comparison with the last CP scenario) comparison base of 2016.

There was an upward adjustment to the expected developments of crude oil price, which started increasing again after termination of the November 2016 Organization of Petroleum Exporting Countries cartel agreement to limit oil production.

In the last two months of 2016 and at the beginning of 2017, consumer prices growth was restored above the CNB's inflation target. Inflation accelerated, in addition to fuel prices, also due to higher prices of food. We therefore expect a higher price level growth in 2017 (see Chapter 2.2.3).

Deviations from 2016 scenarios will be reflected on the labour market (sharper decline in unemployment and faster employment growth) in the following years too, but with decreasing intensity. Resources for higher employment growth and a room for further decline in unemployment will be significantly limited.

With regard to the above facts, the forecast of developments of GDP as a whole is roughly comparable to the forecast 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. This improvement took place in 2016 both on the side of revenue, which was CZK 29.6 billion higher than expected at the level of the general government sector, as well as on the side of expenditure, which was, on the contrary, CZK 25.5 billion lower than expected. For 2017, we expect in comparison with the previous CP that the general government revenue will be CZK 27.6 billion higher and the general government expenditure, conversely, CZK 18.7 billion lower. The developments will be similar in the following years. This is, of course, due not only to slightly different macroeconomic developments, but, more importantly, by a completely different 2016 base, which then influences the forecast for the following years.

Income tax revenue growth in 2016 was CZK 13.7 billion higher than expected, and a stronger growth was also reflected in social security contributions, where the difference from estimates in 2016 was CZK 11.3 billion. Excise tax revenue was higher by CZK 8.3 billion. VAT revenue had been predicted almost exactly.

On the expenditure side, one of the causes of its decrease is the development of intermediate consumption, which was, in 2016, CZK 3.8 billion lower than expected. There have also been favourable developments in the case of interest expenditure, which was, in 2016, CZK 3.3 billion lower than estimated by the last CP. This was caused by the development of the state debt, which decreased by approx. CZK 60 billion in absolute terms, and also by lower than expected yield to maturity of government bonds issued in 2016. The impact on the expenditure prediction was also influenced by later start of operational programmes from the 2014–2020 financial perspective, which delayed mainly the commencement of investment expenditure co-financed from the EU.

The surplus of the general government sector, cash surplus of the state budget in the last year, decrease in the state debt and local government debt in absolute terms as well as higher levels 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

		May 2016 CP			April 2017 CP		
		2016	**2017**	**2018**	**2016**	**2017**	**2018**
External Assumptions							
GDP growth in EU28	%	1.7	1.9	2.0	1.9	1.8	1.9
Prices of oil (Brent)	USD/barrel	40.9	47.4	51.4	43.6	56.3	56.8
Exchange rate USD/EUR	USD/EUR	1.10	1.10	1.10	1.11	1.05	1.05
Exchange rate CZK/EUR	CZK/EUR	27.0	26.9	26.2	27.0	26.9	26.3
Real Values							
GDP	change in %	2.5	2.6	2.4	2.4	2.5	2.5
Households consumption	change in %	3.1	2.7	2.4	2.9	2.4	2.7
Government consumption	change in %	2.1	1.6	1.4	1.2	1.7	1.5
Gross fixed capital formation	change in %	0.6	3.0	3.1	-3.7	3.8	3.0
Contribution of final domestic demand	p.p.	2.1	2.4	2.2	0.6	2.4	2.3
Contribution of foreign trade	p.p.	0.2	0.2	0.3	1.1	0.2	0.2
Output gap	%	0.4	1.0	1.1	0.5	0.8	0.8
Others							
Nominal GDP	CZK bn.	4629	4812	5009	4715	4889	5103
Harmonised index of consumer prices	change in %	0.6	1.5	1.8	0.7	2.4	1.8
GDP deflator	change in %	1.0	1.3	1.6	1.1	1.1	1.8
Employment	change in %	0.5	0.1	0.1	1.8	1.1	0.3
Unemployment rate	%	4.4	4.3	4.2	4.0	3.4	3.3
Balance of goods and services	% of GDP	6.8	6.7	6.9	7.4	6.6	6.8
Net lending/borrowing	% of GDP	-0.4	-0.3	0.0	0.8	0.3	0.6
General Government							
General government balance	% of GDP	-0.6	-0.5	-0.5	0.6	0.4	0.3
General government debt	% of GDP	41.1	40.7	40.2	37.2	36.0	35.3

Source: CNB (2017a), CZSO (2017a), EIA (2017), Eurostat (2017a), MF CR (2016a).

4.2 Sensitivity Analysis

The sensitivity analysis is calculated by means of a dynamic stochastic general equilibrium model developed by the MF CR. Alternative scenarios focus on some current issues of possible future developments. Due to the high degree of openness and dependence of the Czech economy on the external environment, the first scenario shows the significance of the impacts of worse than the expected dynamics of growth in the EU on the domestic economy. Another alternative scenario assesses a possible sudden increase in the current very low interest rates. The last analysis responds to uncertainty about the future developments of crude oil prices, and analyses a situation of its sharp rise. All the alternative scenarios are derived from the baseline CP scenario described in Chapters 2 and 3. In alternative scenarios, we expect different developments from the baseline scenario always starting from the second quarter of 2017.

4.2.1 Slower Growth of GDP in the EU in 2017

The first scenario is based on an assumption that GDP growth in the EU will be approx. 2 pp lower in 2017 compared to the baseline scenario. This difference corresponds to the amount of standard deviation of growth for the 2000–2016 period.

Considering the significant interconnections between the Czech economy and the EU, this scenario would impact negatively on the real growth in the Czech Republic primarily through exports, more than 80% of which are directed to EU countries. Lower foreign demand would lead to a decrease in export activity and a deterioration of the current account balance; however, this would be partially compensated by lower imports. A worse result for foreign trade would be negatively reflected in the real GDP growth, which would grow slower by 0.6 pp in 2017 and by approx. 0.4 pp in 2018.

Lower exports would negatively influence investment activities of companies. Gross fixed capital formation would slow down, compared to the baseline scenario, by 1.1 pp in 2017 and by 1.4 pp in 2018. The overall corporate output would also be lower, which would put pressure on a slowdown in the growth rate of wages and a slowdown of the unemployment rate decrease. This effect would be strongest in 2017.

The greater uncertainty on the labour market would also be reflected in household consumption, which would see a decline in the expected growth rate by approx. 0.6 pp. In addition to the aforementioned effect of a slower wage growth, consumption would also be negatively affected

by slight depreciation of the koruna exchange rate, which makes imports of consumer goods more expensive.

Effects on inflation would be approx. 0.2 pp as there are two conflicting effects: (i) lower output of the Czech economy would lead to weaker wage pressures, which would act in the direction of decreasing the inflation rate; (ii) on the other hand, worsening current account of the balance of payments would put pressure on depreciation of Czech koruna, which would then cause more expensive imported inputs for companies and consumer goods for households. Depreciation would then partly offset the decrease in exports, which would, however, not reverse the resulting effect, and prices would thus increase by 1.6% versus 1.8% in the baseline scenario in 2018.

The general government balance would be influenced by a lower income tax collection. Together with an increase in the expenditure side by a larger volume of social benefits, the surplus of the general government balance would decrease by 0.3 pp in the first two years of the outlook. Lower surpluses would then lead to a slower debt reduction, approximately by 0.6 pp in the last year of the monitored period.

4.2.2 Rise in the Domestic Interest Rate

The second scenario assumes that the domestic interest rate will be higher by 1.5 pp in 2017, which also corresponds to the standard deviation of its rate from the 2000–2016 mean value.

A higher interest rate would lead to a decline in domestic demand. Investment would then grow approx. 0.1 pp slower due to higher cost due to higher rates for corporate loans. The household consumption growth rate would also decrease as higher corporate cost would be passed to them through lower wage growth. Higher interest rates could lead to an increase in the share of savings at the expense of consumption by higher-income individuals. In contrast, consumption would be influenced favourably by slightly lower domestic price levels. That would, with regard to delays in the monetary policy horizon of four to six quarters, grow approx. 0.3 pp slower. As a result, household consumption would slow down the growth by 0.1–0.2 pp in the years of the outlook.

This scenario would also have negative consequences on foreign trade, through the effect of moderate appreciation of the koruna, and a subsequent slight decrease in the export volume. On the other hand, a slightly stronger exchange rate of the koruna would, through impact on the prices of imports, to some extent dampen the decline in consumption.

In total, the aforementioned effects would be reflected in a slower GDP growth, approximately by 0.3–0.4 pp, and concomitant relatively higher unemployment.

Similarly, albeit to a lesser extent, to the case of slower GDP growth in the EU, general government sector reve-

nue would be influenced by lower tax collection from both corporations and individuals. General government expenditure would increase with higher unemployment. Again, surpluses lower by 0.1–0.2 pp would subsequently be reflected in a slower debt reduction which would also be influenced by higher interest rates. As a result, the debt would reach 33.1% of GDP at the end of the outlook, i.e. by 0.4 pp more than expected in the baseline scenario.

4.2.3 Higher Oil Prices

The last considered scenario shows possible impacts of a different development of crude oil prices compared to the baseline scenario. We assume in this scenario that the current crude oil price would rise sharply by 30% during 2017.[1] The average crude oil price would thus end at the level of USD 73.2/barrel in 2017 (versus USD 56.3/barrel anticipated in the baseline scenario). For 2018 and 2019, we expect YoY crude oil prices growth at the level of the baseline scenario. A higher crude oil price would be reflected mainly in higher import prices as shown in Table 4.3. A higher crude oil price would also be reflected in a slower export market growth. Therefore, we at the same time expect weakening of foreign demand approximated by lower growth in the EU by approx. 0.1 pp in 2017.

The effects of both aforementioned shocks, i.e. higher crude oil prices and lower foreign demand growth, would negatively affect the Czech economy. The primary effect of higher crude oil price would be the increase in import prices which would be reflected in a direct decrease in the volume of imports with a slightly positive impact on net exports. Subsequently, however, the volume of exports would also decrease due to higher export prices and lower foreign demand. Household consumption growth would be approx. 0.1 pp lower due to relatively higher prices of foreign and domestic goods, and investment in fixed capital would grow 0.2–0.5 pp slower in 2017–2019. The overall impact on the real GDP growth would then range between –0.1 to –0.3 pp.

Negative changes in the economy would lead to lower expected corporate output, which could lead to pressures on wage reduction and approx. 0.1 pp higher unemployment rate than in the baseline scenario. The price level growth would, in this case, be positively influenced (in direction of its higher growth) by higher prices of import inputs; conversely, a decrease or slower growth in wages would have a negative impact. As a result, the inflation rate would be 0.4 pp lower than in the baseline scenario.

The effects on the government sector balance and, thus, the debt would be rather insignificant.

---

[1] Technically, we expect in the scenario that in each year of the outlook (starting from 2017), the crude oil price will be 30% higher compared to the baseline scenario.

Table 4.2: Basic Macroeconomic Indicators – Sensitivity Scenarios

		2016	2017	2018	2019
Baseline Scenario					
Gross domestic product	*Y-o-Y in %*	**2.4**	**2.5**	**2.5**	**2.4**
Private consumption	*Y-o-Y in %*	2.9	2.4	2.7	2.2
Gross fixed capital formation	*Y-o-Y in %*	-3.7	3.8	3.0	3.0
Exports of goods and services	*Y-o-Y in %*	4.3	3.0	4.1	4.3
Imports of goods and services	*Y-o-Y in %*	3.2	3.1	4.1	4.1
Harmonised index of consumer prices	*Y-o-Y in %*	**0.7**	**2.4**	**1.8**	**1.8**
Unemployment rate	*in %*	**4.0**	**3.4**	**3.3**	**3.2**
General government balance	*% of GDP*	**0.6**	**0.4**	**0.3**	**0.5**
Gross government debt	*% of GDP*	**37.2**	**36.0**	**35.3**	**34.3**
Alternative Scenario I - Lower GDP Growth in EU in 2017					
Gross domestic product	*Y-o-Y in %*	**2.4**	**1.9**	**2.1**	**2.4**
Private consumption	*Y-o-Y in %*	2.9	1.8	1.9	1.8
Gross fixed capital formation	*Y-o-Y in %*	-3.7	2.7	1.6	2.5
Exports of goods and services	*Y-o-Y in %*	4.3	1.4	2.6	4.1
Imports of goods and services	*Y-o-Y in %*	3.2	1.4	2.1	3.6
Harmonised index of consumer prices	*Y-o-Y in %*	**0.7**	**2.2**	**1.6**	**1.8**
Unemployment rate	*in %*	**4.0**	**3.9**	**3.5**	**3.2**
General government balance	*% of GDP*	**0.6**	**0.1**	**0.0**	**0.4**
Gross government debt	*% of GDP*	**37.2**	**36.3**	**35.9**	**34.9**
Alternative Scenario II - Higher interest rates					
Gross domestic product	*Y-o-Y in %*	**2.4**	**2.2**	**2.1**	**2.4**
Private consumption	*Y-o-Y in %*	2.9	2.3	2.4	2.0
Gross fixed capital formation	*Y-o-Y in %*	-3.7	3.7	3.0	3.2
Exports of goods and services	*Y-o-Y in %*	4.3	2.8	3.9	4.2
Imports of goods and services	*Y-o-Y in %*	3.2	3.2	4.3	4.2
Harmonised index of consumer prices	*Y-o-Y in %*	**0.7**	**2.1**	**1.5**	**1.7**
Unemployment rate	*in %*	**4.0**	**3.7**	**3.6**	**3.2**
General government balance	*% of GDP*	**0.6**	**0.3**	**0.1**	**0.4**
Gross government debt	*% of GDP*	**37.2**	**36.1**	**35.6**	**34.6**
Alternative Scenario III - Higher oil prices					
Gross domestic product	*Y-o-Y in %*	**2.4**	**2.4**	**2.2**	**2.2**
Private consumption	*Y-o-Y in %*	2.9	2.3	2.6	2.1
Gross fixed capital formation	*Y-o-Y in %*	-3.7	3.6	2.5	2.5
Exports of goods and services	*Y-o-Y in %*	4.3	2.6	3.8	4.1
Imports of goods and services	*Y-o-Y in %*	3.2	2.7	4.0	4.0
Harmonised index of consumer prices	*Y-o-Y in %*	**0.7**	**2.8**	**2.1**	**2.1**
Unemployment rate	*in %*	**4.0**	**3.5**	**3.4**	**3.3**
General government balance	*% of GDP*	**0.6**	**0.4**	**0.3**	**0.5**
Gross government debt	*% of GDP*	**37.2**	**36.0**	**35.3**	**34.3**

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

Table 4.3: Assumptions of Alternative Scenario of Higher Oil Prices

		2016	2017	2018	2019
Baseline					
Deflator of imports	*average 2010=100*	**102.4**	**103.2**	**101.9**	**101.6**
	growth in %	-4.7	0.8	-1.2	-0.2
Crude oil Brent	*USD/barrel*	**43.6**	**56.3**	**56.8**	**56.4**
Alternative Scenario III - Higher oil prices					
Deflator of imports	*average 2010=100*	**102.4**	**104.9**	**103.9**	**103.8**
	growth in %	-4.7	2.5	-0.9	-0.1
Crude oil Brent	*USD/barrel*	**43.6**	**73.2**	**73.9**	**73.3**

Source: CZSO (2017a), EIA (2017), 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 other relevant institutions. The survey was conducted in April 2017 and its results are based on forecasts of 19 domestic institutions, together with the latest forecasts of the EC (2017a). However, the whole CP timeframe is at least for some indicators covered by forecasts of only 11 institutions.

Key trends of the macroeconomic scenario of the CP 2017 are consistent with the average of forecasts of other institutions. The growth of the Czech economy, which could reach around 2.6% in 2017–2020, should be driven by the domestic demand, composed by both consumption (of households and government) and gross fixed capital formation. The contribution of net exports to the GDP growth should stay positive in the whole horizon of the CP.

The inflation rate should accelerate to 2.4% this year, to which will contribute the increase in oil price. In the following years, when the counter-inflationary effect of appreciation in exchange rate shall affect the consumer price development, the average rate of inflation should reach approx. 2%.

Economic growth should have a positive impact on the labour market. The unemployment rate should gradually decrease to 3.6% in 2018 and should persist at that level also in following years. The employment shall grow in this year and the next year, while in 2019–2020 should more or less persist on the level of year 2018. In comparison to the average of other institutions' forecasts, the CP scenario expects slightly more favourable development on the labour market.

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 16 institutions addressed (3 out of 19 survey respondents are government-dependent institutions) 8 institutions evaluated the macroeconomic scenario, of which 7 institutions deem it as realistic and 1 institution as conservative. Based on the external evaluation of government-independent experts, it is possible to consider the CP macroeconomic scenario as realistic.

Table 4.4: Verification of the Convergence Programme Scenario by Other Institutions' Forecasts

	Avearage of Forecasts				April 2017 CP			
	2017	2018	2019	2020	2017	2018	2019	2020
Growth in Real Terms								
Gross domestic product	**2.6**	**2.7**	**2.6**	**2.4**	**2.5**	**2.5**	**2.4**	**2.3**
Households consumption	2.7	2.6	2.6	2.4	2.4	2.7	2.2	2.1
Government consumption	1.9	1.8	1.8	1.8	1.7	1.5	1.4	1.4
Gross fixed capital formation	2.8	3.3	3.6	3.8	3.8	3.0	3.0	3.0
National consumer price index (aop)	**2.4**	**2.0**	**1.9**	**1.9**	**2.4**	**1.7**	**1.8**	**1.8**
GDP deflator (growth)	**1.4**	**1.8**	**1.7**	**1.8**	**1.1**	**1.8**	**1.9**	**1.9**
Employment (LFS)	**0.7**	**0.3**	**0.1**	**0.0**	**1.1**	**0.3**	**0.3**	**0.3**
Unemployment rate (LFS, level in %)	**3.7**	**3.6**	**3.6**	**3.6**	**3.4**	**3.3**	**3.2**	**3.1**

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

5 Sustainability of Public Finances

Long-term sustainability has consistently been one of several significant challenges for Czech public finances. The most serious risk lies in the projected demographic development, which will, in the next decades, probably significantly increase the ratio of people of retirement age to the economically active population. This creates pressure on future expenditure of social security systems, and hence a need to reform these systems. Parametric adjustments to the PAYG pension system take place quite often in the CR. A comprehensive reform of the pension system has been discussed for a long time, but there has never been broader political agreement on how exactly the result should look like. Moreover, reforms are necessary not only in the area of pensions but also in other parts of the social system, such as healthcare, 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

In response to a ruling of the Constitutional Court published under No. 135/2010 Coll., which found some provisions in the Act on Pension Insurance stipulating the calculation of the pension claim (in particular the section on reduction thresholds) unconstitutional, a set of parametric changes to the pension system was adopted with effect from 30 September 2011 (for details see MF CR, 2012). This includes a budget-neutral adjustment to the reduction thresholds in pension calculation, postponement of the statutory retirement age without a fixed upper limit, and removal of advantages for women with children (that is, the same retirement age will be applied to all persons born in a given year). In September 2016, the Government approved (Government Resolution No. 796) introduction of a ceiling for retirement age at 65 years and its regular review according to the most recent demographic projections. The bill of the amendment is now being considered in the Parliament of the CR (Chamber of Deputies Print No. 912).

The overall increase in pensions paid out (regular indexation) was originally limited to one third of the consumer price index growth and one third of real wage growth for 2013 to 2015. However, the Government prepared an amendment to Act No. 155/1995 Coll. (Act No. 183/2014 Coll.) shortening the applicability of the reduced indexation by one year and applying an extraordinary indexation of 1.8% in 2015 (calculated for the average old-age pension). The indexation formula for 2016 was again the sum of full consumer price growth and one third of real wage growth, however, an extraordinary benefit of CZK 1,200 was paid in February 2016. On 17 February 2016, the Government approved (Government Resolution No. 146) a change in the pension indexation system, which partly restores discretion of the Government. The Government thereby responded to then very low inflation rates and subsequently low indexation. If a situation occurred that an increase in the average pension would not reach 2.7% under the standard indexation formula, government would be authorised to increase the percentage assessment of pensions by a government regulation up to the value corresponding to an overall indexation of 2.7%. If the indexation value equals or exceeds 2.7%, government would not be authorised to use discretion. This adjustment should

have an impact of 0.2 pp with regard to current assumptions on the consumer price index and real wages in long-term projections of the Ageing and Sustainability Working Group at the Economic Policy Committee (EPC/AWG), that is, the level of pension expenditure would be 9.9% of GDP in 2060. The Government decided to take advantage of this possibility and approved indexation by 2.7% for 2017 (instead of 1.3% implied by standard indexation formula).

Another measure changing the pension indexation system was added during consideration of Chamber of Deputies Print No. 912 at the recommendation of the Expert Committee on Pension Reform. The standard indexation formula should change to a sum of growth of either the consumer price index, or the pensioner cost of living index, whichever is higher, and one half of real wage growth. Compared to the current assumptions of long-term projections, this adjustment will have an impact of at least 0.25% of GDP at the end of the projection horizon in 2060.

In the area of early old-age retirements, several penalty rates apply, which progressively reduce the resulting allowance 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 days before reaching the statutory 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% of calculation basis. The percentage assessment 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. Until the end of 2016, only 1,746 persons had used the possibility of pre-retirement, with an average benefit of CZK 9,593. In terms of sustainability of the pension system, this measure has a completely negligible effect.

5.1.2 Termination of the Pension Savings Pillar

The pension savings scheme was abolished with effect from 1 January 2016, and the entire process of its phasing out was lasting until the end of 2016 (Act No. 376/2015 Coll.).

5.1.3 Changes in the Healthcare System

The overall balance of the public health insurance system is planned as essentially balanced. However, without the implementation of systemic measures, which would address, in addition to the unfavourable demographic projection, financial demands on the system and its available resources, the current setting of the public health insurance system is unsustainable in the long run. A rapid growth in reimbursements to healthcare providers (by CZK 10 billion on average, almost driven by public health care expenditure in 2014–2016) does not allow for sufficient increases in health insurance companies reserves for the event of a negative shock reflected in the healthcare system (e.g., a marked slowdown in economic growth), which reduces the resilience of the public health insurance system.

As regards sources of healthcare financing, the Government approved, with effect from 1 January 2019, a medium-term measure introducing stable YoY increases of state payments for state insured persons in 2019 and 2020 (Chamber of Deputies Print No. 1018). The purpose of this measure is 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. For 2018, the assessment base will be stipulated by the relevant government regulation at CZK 7,177 (i.e. a monthly payment of CZK 969). For 2019 and 2020, the bill explicitly sets

out an assessment base of CZK 7,540 (i.e. a monthly payment of CZK 1,018) and CZK 7,903 (i.e. a monthly payment of CZK 1,067) for calendar month, respectively. In 2018–2020, there will thus be regular YoY increases in state payments for state insured persons by approx. CZK 3.5 billion.

With effect from 1 January 2018, bill amendment to Act No. 592/1992 Coll., approved by the Chamber of Deputies of the Parliament of the Czech Republic (Chamber of Deputies Print No. 715), plans to adjust the current model of re-distribution of insurance contributions to public health insurance. The aim of the change is to take into account above-standard costly insured persons with chronic illnesses, thus achieving fairer re-distribution of insurance contributions among insurance companies. Insured persons' demographic indicators (age and gender) will thus be supplemented by an indicator of average annual consumption of certain drugs by the insured person included in a pharmacy-based cost group (PCG model).

In the segment of inpatient care, implementation of the DRG Restart project continues. A reference network of hospital was established in 2016 within the project, which will provide the DRG system with representative economic data. Introduction of payments for case-based lump-sum amounts (DRG reimbursement system) will lead to a redesign of the system of reimbursement of acute inpatient care, which will enable comparison of relative cost of cases using a certain number of clinically and economically defined groups according to cases of acute hospitalisation. The reimbursement method change should lead to higher effectiveness of inpatient care funding as this reimbursement system will reflect real prices of operations.

5.2 Fiscal Impact of a Population Ageing

The quantification of impacts of population ageing is based on long-term projections carried out in cooperation with the Ageing Working Group at the EU Council's Economic Policy Committee. Development analyses are based on assumptions about demographic development and a methodologically consistent macroeconomic framework for EU countries and Norway (EC, 2014). The projections, therefore, do not reflect the current medium-term macroeconomic and fiscal outlook of the CR. The projections are carried out under the assumption of unchanged policies; therefore, they give information about a system that is legislatively underpinned at the time of projection creation, taking into account common practice where discretion is allowed by law. Long-term analyses do not aim to predict specific values but they only show the trends and dynamics in the long run. The current projections end in 2060.
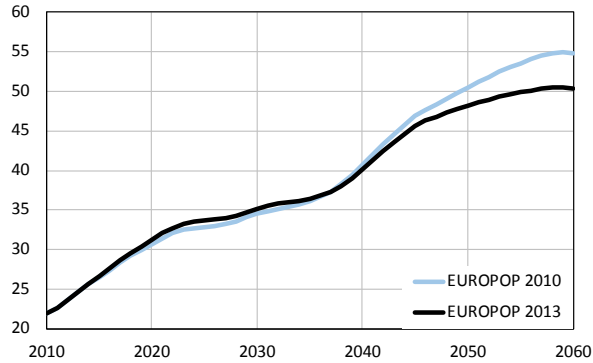
The long-term projections were updated for the last time in autumn 2014 in connection with the 2015 Ageing Report (EC, 2015). The next projection update will be made in autumn 2017. Demographic and macroeconomic assumptions are currently being finalised.

From the current perspective, the most problematic appears to be the area of health care expenditure from the public health insurance system (see Table A.7). This is estimated to increase from the starting level of 5.7% of GDP in 2013 to 6.7% of GDP in 2060. The long-term care expenditure (0.7% of GDP in 2013) rises the fastest, with its volume likely to double. In volume terms, however, this constitutes a small expenditure item.

On the contrary, pension expenditure should increase from 9.0% of GDP in 2013 to 9.7% of GDP in 2060. Although demographic development remains a negative factor, the demographic projection from 2013 was more favourable for the CR than projections in previous rounds. In this perspective, the ratio of working-age population to number of pensioners improves (see Chart 5.1), which brings a more positive macroeconomic outlook due to more favourable labour market development. A new demographic projection has been known since the end of February, which will be used for the upcoming round of long-term projections of expenditure. Box 1 compares individual demographic projections.

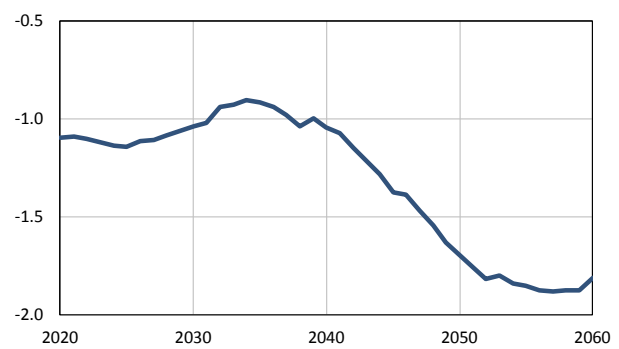**Chart 5.1: Dependency Ratio (65+/15–64)**
(in %)

Source: EC (2011), EC (2014).

Chart 5.2: Projection of Pension Account Balances
(in % of GDP)

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

The resulting projection of the pension system balance (see Chart 5.2) takes into account, in addition to the aforementioned pension expenditure, constant revenue from pension contributions at 7.9% of GDP in all projection years. The assumption is based on an assumed fixed contribution rate for pension insurance over time as well as on an assumption of a relatively constant share of compensation to employees in GDP contained in the macroeconomic scenario. We expect that this balance will be relatively stable, at a level around −1% of GDP, until 2040.

In the following two decades, the balance will deteriorate, due to unfavourable demographic development, to almost −2% of GDP before the end of the projection horizon. The trend of deterioration of the pension system balance should stop just before the end of the projection horizon, and the balance should gradually improve. In that period, those born in years with low birth rate will start reaching retirement age, and the pressure on expenditure will thus be reduced.

It is necessary to note that the projection is based on the data up to 2013. The development in recent years was significantly better than the forecast of that time. Upcoming projection will reflect the outcome of the recent past.

A similar development is apparent virtually in all projected components of pension expenditure. It reaches maximum values always just before the end of the monitored period (in 2057), which indicates a reversal and subsequent decrease in expenditure beyond the projection horizon (after 2060). This aspect, of course, influences the value of the S2 sustainability indicator (see below), which is pushed upwards based on the Ageing Working Group methodology (EC, 2016c) at the end of the projection in 2060. Under the current conditions and setting, the pension insurance system is, with regard to stabilisation at the end of the projection horizon, essentially sustainable.

In contrast, the course of other projected components of expenditure that are dependent on the age structure (health care, long-term care, education) shows a systematic increasing trend across the whole projection horizon.

**Box 1: Demographic projection ESSPOP2015**

At the end of February 2017, Eurostat published an updated demographic projection (Eurostat, 2017b), which will primarily serve as a basis for long-term projections of expenditure associated with population ageing. These will be published in the Ageing Report at the beginning of 2018. Demographic projections will now be updated annually so that short- and medium-term changes in population, mainly in connection with migration developments, can be reviewed with the same frequency. Eurostat is responsible for the consistent demographic projections, which are prepared in cooperation with national statistical offices. The differences between new projections and previous scenarios created three or six years ago indicate, to a large extent, in what direction demography will act on the upcoming results of long-term projections.

Chart 5.3 and Chart 5.4 show a comparison of new and past assumptions about fertility rate and net migration developments. A comparison with previous projections (EC, 2014 and EC, 2011) shows that the CR will have a higher fertility rate in the future, in particular in the horizon until 2035 and in the long term after 2060. In the medium term, fertility rate will be the same or slightly lower. The assumptions about the net migration (the difference between immigration and emigration) developments show decreasing levels over time. In the projection horizon, the net migration will gradually decrease from approx. 20 thousand to 10 thousand people annually. The differences among projections in terms of mortality rates are rather negligible, and the life expectancy is slightly higher in the latest projection.

In summary, however, the new demographic projection shows a completely different trend compared to the previous projection. If we look at the comparison of the total number of population, the projection trends are similar to the 2010 projection. The 2013 projection, which stood behind relatively favourable macroeconomic environment of long-term projections, therefore seems to be a rather exceptional upward deviation.
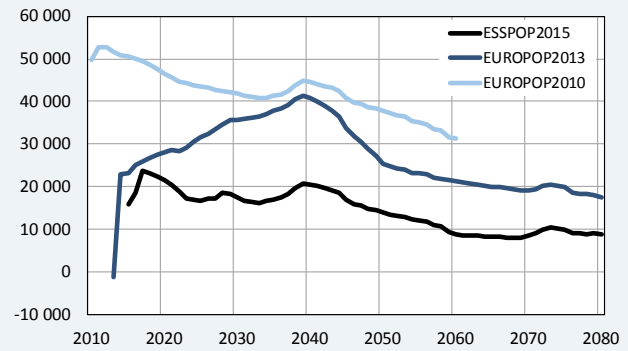
Chart 5.3: Fertility Rate
(No. of live births)
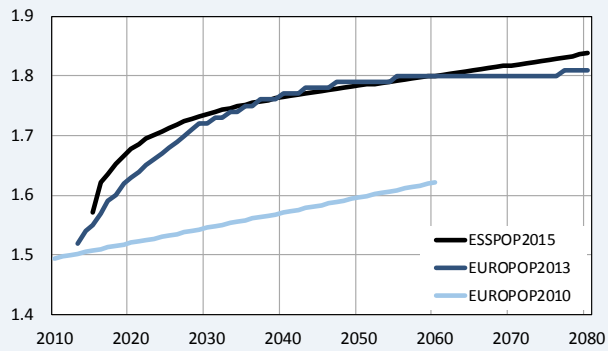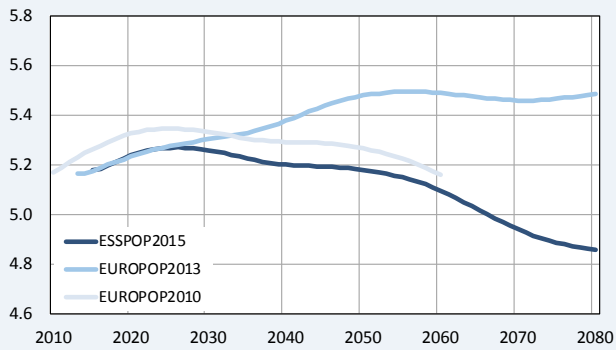

Source: Eurostat (2017b).

Chart 5.4: Net Migration
(No. of persons)

Source: Eurostat (2017b).

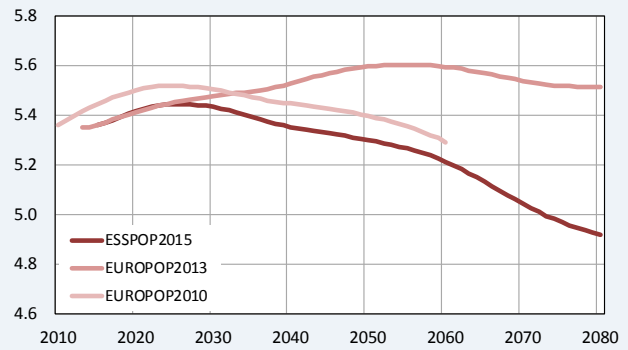**Chart 5.5: Population – Males**
(Million of persons)

Source: Eurostat (2017b).

Chart 5.6: Population – Females
(Million of persons)

Source: Eurostat (2017b).

Chart 5.7: Population – Males (15–64)
(Million of persons)

Source: Eurostat (2017b).

Chart 5.8: Population – Females (15–64)
(Million of persons)

Source: Eurostat (2017b).

Chart 5.9: Population – Males (65+)
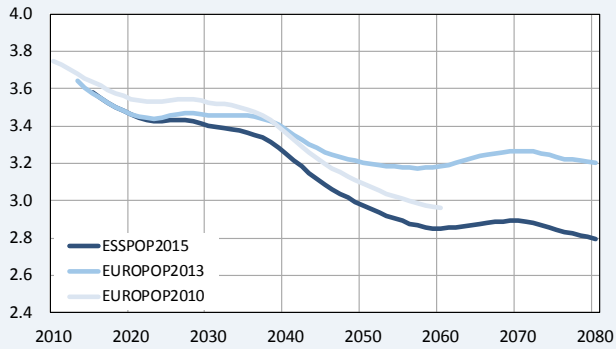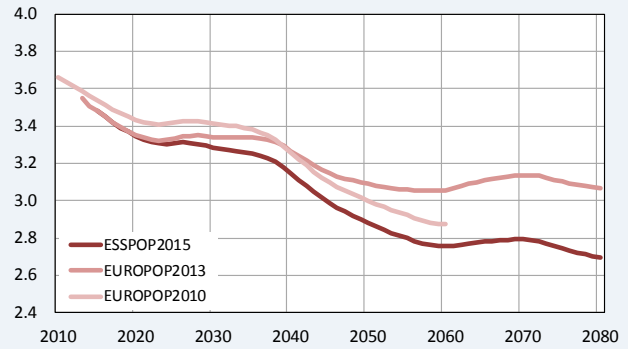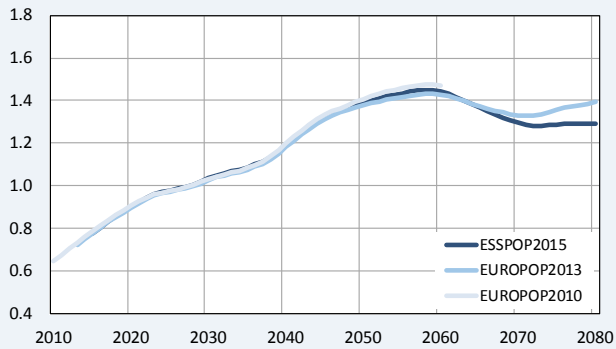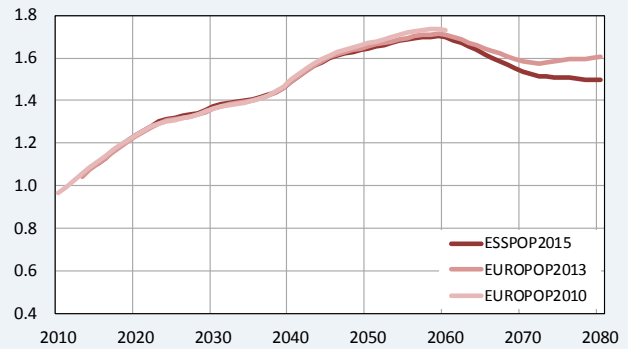*(Million of persons)*

Source: Eurostat (2017b).

Chart 5.10: Population – Females (65+)
(Million of persons)
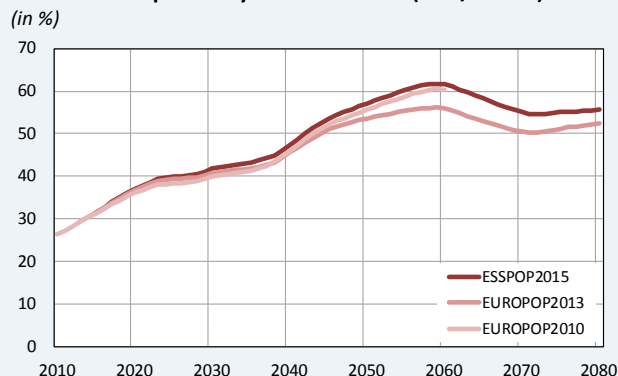

Source: Eurostat (2017b).

Chart 5.5 and Chart 5.6 document widening of a gap between the new and previous projection from 2013. The difference at the end of the 2080 outlook listed here is approx. 626 thousand people in the case of men and 594 thousand women, which means an overall lower population by 1.22 million people. These declines will take place mainly in productive age cohorts 15–64 (see Chart 5.7 and Chart 5.8), where there will be, at the end of the projection horizon, by approx. 800 thousand working-age people less cumulatively for both sexes. Conversely, post-productive population (defined by age 65+, shown in Chart 5.9 and Chart 5.10) will only decrease by 100 thousand for each sex. This will result in a higher old-age dependency rate, as shown in Chart 5.11 and Chart 5.12. In the outlook horizon, the difference in both sexes is 3 pp between both projections.

Chart 5.11: Dependency Rate – Males (65+ / 15–64)
(in %)
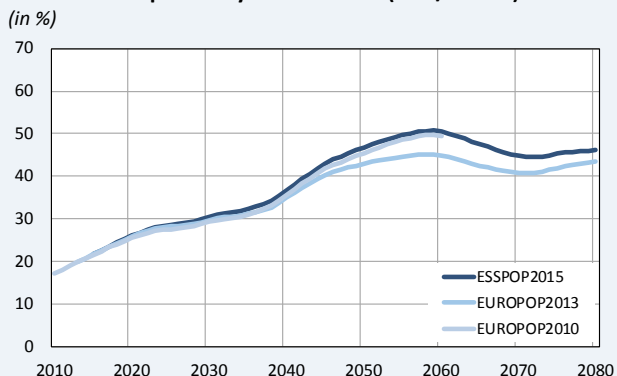
Source: Eurostat (2017b).

Chart 5.12: Dependency Rate – Females (65+ / 15–64)
(in %)

Source: Eurostat (2017b).

5.3 Sustainability Analysis

A sustainability analysis follows up on the long-term projections, which identifies the extent of any fiscal consolidation needed 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 revenues to GDP in order that they correspond to the required levels.

The EC 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 structural primary balance of the general government sector so that general government debt amounts to 60% of GDP in 2030. This indicator for the CR is currently at −1.2% of GDP (an improvement from −0.6% of GDP in the last year's CP). 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 achieving parity of the discounted revenues and discounted expenditure on an infinite horizon. According to recent calculations by the EC (2017b), it is at 2.9% of GDP (an improvement from 3.2% of GDP in the last year's CP).

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 because S0 quantifies risk measure. For the CR, the S0 indicator level is currently around 0.19, which is significantly below the critical limit of 0.43.

The CR is currently assessed as a medium-risky country in the area of long-term sustainability of public finance. The reason is the value of the S2 indicator, although the values of the indicators S0 and S1 correspond to a low risk. Conversely, components of individual indicators related to population ageing are in high risk. This confirms the fact that the CR should further implement measures to enhance long-term sustainability. With regard to the results of projections in Subchapter 5.2, measures should be primarily focused on the healthcare system.

Table 5.1: Sustainability Indicators S1 and S2 for the Czech Republic
(in % of GDP)

	S1	S2
Cost of Ageing	0.7	2.3
Initial budgetary position	-0.2	0.6
Impact of current debt	-1.7	-
Total	**-1.2**	**2.9**

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 stock of guarantees provided by the general government sector to other entities. The increase in general government expenditure represents guarantees 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 volume was 3.6% of GDP at the end of 2016.

The majority share in the general government sector guarantees is represented by state guarantees, and until 2016 mainly a guarantee for the banking sector, namely in the case of takeover of the Investment and Post Bank by the Czechoslovak Trade Bank (3.3% of GDP). So far, CZK 5.8 billion has been paid; whereas no financial compensation was paid in 2016 and no relevant incentive for guarantee call was filed. On the basis of Czechoslovak Trade Bank's unilateral statement, the guarantee by the MF CR is considered to have been terminated in 2016. Only a fraction of the guarantee value has thus been paid.

Another part of the total value of the state guarantees is the item of infrastructure development, amounting to 0.1% of GDP. However, it has been constantly decreasing because the financing of infrastructure development has been secured by loans from the European Investment Bank since 2001, which are directly reflected in the general government debt. Moreover, state guarantees include a guarantee for securing a CNB's loan from its foreign-exchange reserves on behalf of the International Monetary Fund. The drawdown state of the loan showed a zero value at the end of 2016. The value depends on actual drawdown in a given year, and the value promised by the CNB is CZK 2.53 billion.

No new state guarantee was provided in 2016.

Beyond the framework of state guarantees, other guarantees in the general government sector amounting to 0.2% of GDP are recorded. The most important of these is one to the Prague Public Transit Company for postponed repayments of CZK 7.0 billion to purchase trams. Other include guarantees provided by local governments for loans associated with housing needs (CZK 0.3 billion).

In 2017, state guarantee payments of 0.1% of GDP and a decrease in the status of reported state guarantees to 0.1% of GDP as a result of payments of due amounts and maturity of the guarantee in the case of takeover of Investment and Post Bank are expected. A loan to the Czech Railways for the purchase of new railway cars through state-guaranteed loans will be completely repaid. Moreover, two loans of the Railway Infrastructure Administration for financing of modernisation and construction of railway corridors will be repaid in 2017. We do not expect provision of any new state guarantee in 2017.

6 Quality of Public Finances' Revenue and Expenditure

The Government of the CR focuses on rationalising, transparency and improving the effectiveness of functioning of the general government sector. In terms of the revenue side of public finance, a clear priority is a larger amount of collected taxes without needing to increase the tax burden. The success of steps to improve tax collection is apparent in the dynamics of tax revenue growth in recent years. A shift towards effectiveness and transparency was made by the adoption of a bill on the monitoring and management of public finances by the Government at the end of 2016.

6.1 Tax Policy Outlook for 2017–2020

6.1.1 Tax Policy Fundamentals

The starting point of the tax policy strategy is the Policy Statement of the current Government. One of the main priorities is to fight against tax evasion and increase tax collection efficiency. A key prerequisite for introducing related measures is not only their positive impact on tax revenue without needing to increase statutory rates or extend tax bases, but also making the market environment fair. The expected increase in tax revenue can thus provide the government with additional room for possible tax reduction or counter-cyclical measures in the future. A new Act on Income Tax is currently in the process of preparation.

6.1.2 Measures against Tax Evasion

The key measures in this area include VAT reporting, electronic registration of sales and the reverse charge mechanism.

The institution of VAT reporting targets at frauds based on illegitimately claimed excessive 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. With effect from 29 July 2016, an amendment No. 243/2016 Coll., has changed conditions for imposing penalties for non-compliance with the obligation to submit a VAT report. In addition to mitigation of penalties for late submission of a VAT report, the time limit for response to a call to eliminate irregularities has been extended from 5 calendar days to 5 working days, and a possibility to waive some fines has been introduced. Based on the VAT reporting data, the Financial Administration of the CR launched a project in September 2016, which will map entire distribution chains suspected of carousel fraud. That should gradually lead to more and more targeted control activities of the tax administrator only to dishonest payers.

The main objective of the Act on Evidence of Sales (Act No. 112/2016 Coll.) is to prevent concealment of taxable income. The first phase of electronic registration of sales was launched on 1 December 2016 and it applied to food services and accommodation services. The second phase commenced on 1 March 2017, applicable to retail and wholesale. In March 2018, liberal professions (doctors, lawyers, accountants) and persons conducting business in transport or agriculture will join in the third stage of obligation to record sales. The fourth phase will commence on 1 June 2018 and will apply to selected trades 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). Motivation of the public to engage and control will be supported by receipt lottery. An amendment to Act No. 586/1992 Coll., on Income Tax, 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 persons doing business who became obliged to record sales in the given year. Together with the bill on Evidence of Sales, an additional measure was adopted: transfer of food services (except sale of alcoholic beverages) from the basic to the first reduced VAT rate, i.e. from 21% to 15% (an amendment to Act No. 235/2004 Coll.).

The reverse charge mechanism transfers the obligation to declare and pay tax from the supplier to the customer, and it is an efficient tool to fight against carousel fraud. During 2016, it was extended by other items allowed by the EU directive on the common system of VAT. The mechanism has been permanently applied to supply of immovable property since 1 January 2016. Commodities for which the mechanism can be applied temporarily by a government regulation include, from 1 February 2016, supply of natural gas and electricity, and with effect from 1 October 2016, wholesale telecommunication services provided among entrepreneurs in electronic communications. In the context of an amendment to the law on VAT (Act No. 235/2004 Coll.), the Government of the CR submitted to the Chamber of Deputies of the Parliament of the CR a proposal for extension of the reverse charge regime to remaining commodities which are possible under the rules of the single EU market, but their involvement in the reverse charge mechanism requires approval of the Czech Parliament (Chamber of Duties Print No. 873). These include, for example, provision of intermediary services, provision of workers to carry out construction or assembly work, supply of goods provided as a guarantee in realisation of such guarantee, supply of goods after assignment of the reservation of ownership to the purchaser, and supply of immovable property sold by a debtor due to a court decision.

In December 2016, the Commission submitted a proposal to amend the directive on the common system of VAT in connection with a temporary introduction of an across-board reverse charge mechanism on supply of goods and services above a threshold. The CR will engage in the negotiations about this proposal so as to be able to introduce it temporarily because it believes that it should further strongly help reduce the amount of VAT tax evasion.

6.1.3 Proving the Origin of Property

With effect of Act No. 321/2016 Coll., amending some laws in connection with proving the origin of property, mechanisms have been introduced since 1 December 2016 to improve the ability of tax administrators to detect undeclared or concealed income and tax it subsequently. The law will enable tax administrators to request that taxpayers prove their income if the difference between the taxpayer's assets, their consumption or other expenditure and income declared in tax returns exceeds CZK 5 million. Based on this request, the taxpayer is to prove that his or her property has been financed from duly taxed income. Where the taxpayer is unable to prove the origin of his or her income, the tax administrator is entitled to tax the undeclared income according to the procedure stipulated by the law. The tax administrator will also impose a penalty from the amount of the assessed tax of 50% or 100% in the case that the taxpayer's failure to provide cooperation severely hinders or prevents tax assessment. The tax administrator may also request submission of a declaration of assets if taxpayer's assets exceed CZK 10 million.

6.1.4 International Co-operation against Tax Evasion

The CR increases the intensity of cooperation and communication in the exchange of information with tax administrations of other countries in the world. One of initiatives the CR has been actively involved in is Base Erosion and Profit Shifting (BEPS), which mainly aims at unlawful tax evasion of multinational corporations. Moreover, it introduced measures to Czech legislation to prevent tax evasion or tax cuts.

In the context of the amendment to the income tax law (Act No. 125/2016 Coll.), amendments to Council Directive 2011/96/EU on the common system of taxation applicable in the case of parent companies and subsidiaries of different Member States have been implemented with effect from May 2016. Their aim is to prevent double non-taxation in the case of hybrid loan instruments and to prevent abuse of dividend policies to illegal tax optimisation.

In the fight against tax cuts through incorrect transaction pricing between personnel- or property-related entities, a mandatory tax return attachment was introduced in 2014 for entities that use transfer pricing to a large extent. This measure contributed to an additional

assessment of roughly 100% more taxes in 2016 than in the previous years. Additionally, some entities experienced a further reduction in the possibility of declaring losses, up to twenty times.

6.1.5 Increasing Efficiency of Tax Collection

The Financial Administration's activities are undergoing a process of increasing efficiency. More computerisation of the tax document circulation will reduce administration costs and will accelerate the ability of the tax administrator to react to current threats in the form of tax evasion. In addition to an established duty of all VAT payers and most corporate income tax payers to file tax returns only electronically and a possibility to file electronic returns regarding also other taxes, there is an extension in electronic communication between the taxpayer and the tax administrator (e.g. emailing of data for the payment of the real estate tax or notification about tax arrears). Enhanced computerisation also reflects a change in entrepreneurs' preferences towards more computerisation in managing their business.

In connection with the project of computerisation of the public administration, electronic invoicing in public procurement will be gradually introduced in the following years based on the public procurement law and in the context of Directive 2014/55/EU on electronic invoicing in public procurement. This measure is to reduce the administrative burden both on the side of entrepreneurs and the public administration, which may also have a positive impact on tax revenues.

6.1.6 Tax Administration Simplification

Some taxes and fees can be paid by credit card or SIPO (joint collection of utility payments) starting from 2017. User comfort has been increased by a measure stipulating that absence of some parts of the electronic submission will not automatically be an error as was the case in the past. Starting from 2017, the time limit for the Financial Administration to return excessive deductions to entrepreneurs without penalty interest is shorter.

Also starting from 2017, or specifically from the tax year 2016, a new simplified and clear form is available for employees who only have income from employment and file their personal income tax return themselves. This form now only has 2 pages.

One of measures in the amendment to the income tax law (Chamber of Deputies Print No. 873) which aims to simplify the filing of tax returns is extension of the institution of lump-sum tax for entrepreneurs and making it more attractive. This measure can be used already for the 2017 tax year.

In June 2016, the MF CR presented project "MOJE daně" (MY taxes; MOJE standing for modern and simple taxes in Czech), which aims to essentially simplify the entire tax system in the CR. The project consists of 4 parts: a completely new law on income taxes, self-assessment,

tax kiosk and a new IT system for tax administration. The forthcoming new law on income taxes is to bring substantial simplification of income taxes, overall reduction in administration and abolition of mandatory employer reporting for individual employees.

The institution of self-assessment will allow, for example in the case of VAT, for retention of only the disputed part of excess deduction, and the tax kiosk, "virtual tax office", will offer pre-filled forms. These comprehensive solutions are currently being intensively prepared and

they are going to be gradually implemented in the coming years.

Moreover, initial work has started on the project of a new tax information system which will replace the current one (ADIS). This project is in the preparatory stage and its full deployment is envisaged at the earliest in the medium term. In connection with the "MOJE daně" project, bids are being evaluated for a project of a new data repository that will have to be managed in this context.

6.2   Other Aspects of Tax Policy

6.2.1   Tax Burden Decreasing

Better tax collection and rigorous fight against tax evasion have created room for further decreasing the tax burden of selected population groups also in 2017. In order to support families with children, an increase of tax credit for the second child by CZK 200 per month and for the third and any additional child by CZK 300 per month, compared to 2016, has been approved. In addition, an increase of tax credit for the first child by CZK 150 per month is planned, which should be prospectively effective from 2018.

With regard to possible adjustments through the aforementioned new law on income tax, the issue of a comprehensive solution to the difference between taxation of employees and self-employed persons is being analysed. However, further decision-making in this issue will depend on the future government.

6.2.2   Environmental Charges

The CR continues to carry out activities for future increase in environmental charges. On 9 January 2017, the

Government took note of the Analysis of the Possibilities and Impacts of Taking into Account the Environmental Elements in Excise and Energy Tax Rates in the CR (Government Resolution No. 6/2017), prepared by the MF CR in cooperation with the Ministry of the Environment, and the Ministry of Industry and Trade. The analysis will be updated based on the outcome of negotiations on emission reduction in the EU emissions trading system (EU ETS), and beyond this system in the EU accompanied by a more detailed environmental impact assessment and submitted to the Government by the end of 2018.

At the turn of 2016 and 2017, the Government Legislative Council considered a bill on waste, which includes an increase in the charge for deposit of waste in a landfill and supports a shift in the hierarchy of its disposal. However, this bill will also be dealt with by the following government. The same applies to the prepared bill amendment to charges for the drain of waste waters into surface waters and charges for collection of groundwater.

6.3   Tax Assignment

The latest amendment to Act No. 243/2000 Coll., on budgetary designation of taxes on expenditure (Act No. 391/2015 Coll.) increased, with effect from 1 January 2016, the VAT revenue share for regions from 7.86% to 8.92% of the nationwide revenues. This is a return to the value applicable until 2011. As a result, income of regions increased (and state budget revenues decreased) by approx. CZK 3.5 billion. With effect from 1 January 2017, the same amendment increased the share for municipalities in the nationwide gross VAT revenue from 20.83% to 21.40%. This change should bring additional CZK 2.1 billion to municipality budgets. Conversely, the 30% share for municipalities on the

revenue from personal income tax from self-employment was abolished, which will reduce income of municipalities by CZK 1.2 billion. In total, income of municipalities has increased by approx. CZK 0.9 billion with effect from 1 January 2017. Another bill amendment to Act No. 243/2000 Coll. (Chamber of Deputies Print No. 791) is being considered in the Chamber of Deputies of the Parliament of the CR, whereby the council of the Liberec Region proposed, with effect from 1 January 2018, an increase in the share for municipalities in the VAT from the current 21.40% to 23.58% at the expense of the state budget share. The impact of this change is estimated at CZK 8.5 billion.

6.4 Rationalisation of General Government Expenditure

In line with the Government's priorities to significantly rationalise state finances and carry out an audit of state property, including its central registry (Government Policy Statement, 2014), the Government adopted, on 19 December 2016, a bill on the management and control of public finance (Chamber of Deputies Print No. 1001). The bill transposes part of Council Directive 2011/85/EU, establishing, in line with the Directive, basic principles and rules for verification mechanisms of management and control of public finance at all levels of public administration organisation. The aim of the proposed new legal regulation is to create a simple, transparent system of public finance control which clearly stipulates responsibility of particular entities for the approval and control of public expenditure. Its main points include improved coordination and higher reliability of controls by implementing principles of a single audit, reduced bureaucracy and unification of the regime of control of expended national funds and resources from EU funds. Introduction of audit committees in individual ministries and the Office of the Government should increase the quality and independence of internal audits, including application of international audit standards.

Pursuant to Government Resolution No. 924/2014, purchase of specific commodities through a system of state central purchases 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 purchasing in five EU countries, Government Resolution No. 289/2015 stipulated a list of commodities included in state central purchasing. At present, work has started on the preparation of a summary Report on the Evaluation of Central Purchasing of the State and the Departmental System of Centralised Procurement for 2016, which will be subsequently submitted to the Government.

The Act on Contracts Registry entered into effect on 1 July 2016 (Act No. 340/2015 Coll.), aiming to increase transparency in the use of public sector funds, limit the potential for corruption and, ultimately, contribute to cost reduction in goods and services purchasing. The Act obliges state and public institutions, local governments,

state-owned enterprises, legal entities with majority ownership by the state or local government unit and other institutions defined by this Act to publish, in an information system of contract registry, newly concluded contracts exceeding CZK 50 thousand without VAT, within 30 days of their conclusion. From 1 July 2017, the effect of contracts will be conditional upon their publication in the registry, and where a contract is not published through the register within 3 months of its conclusion, it will be deemed cancelled *ab initio*. Due to threats to the competitiveness of state-owned enterprises, the Chamber of Deputies of the Parliament of the CR approved an amendment to the Act on 22 February 2017 (Chamber of Deputies Print No. 699). The amendment grants state-owned enterprises, Budweiser Budvar – National Corporation, commercial and industrial companies with a majority interest of the state or local government and public institutions an exception from the obligation to publish contracts with the private business sector which would harm these entities operating in a competitive environment through disclosure of a business strategy or trade secret.

An amendment to the Act on the Property of the Czech Republic and its representation in legal relations (implemented by Act No. 51/2016 Coll.), which came into effect on 1 March 2016, is to contribute to a more effective use of state property. The amendment creates the basis for gradual centralisation of selected state property at the Office for Government Representation in Property Affairs, which should lead to more economical use of state property. Currently, there are significant savings by rationalising rental and information system expenditure. An efficient instrument to increase the effectiveness of the use of public funds should be the Central Registry of Administrative Buildings, whose administrator and operator is the Office. The system records all administrative buildings owned by the state, and should thus help optimise the occupancy of general government-owned buildings and identify unnecessary property which will subsequently be sold. Selection procedures with auctions are now used for sale leading to higher sales prices and thereby increasing state budget revenue.

6.5 Composition of General Government Expenditure

In 2009–2015, total general government expenditure in relation to GDP showed a downward trend or stagnation, except 2012. In that year, the total expenditure was influenced by an increase in capital transfers in the General Public Service section, which was due to one-off recording of financial compensations as a part of property settlement with churches and religious societies (impact 1.5% of GDP), and a flat-rate correction of refunds from the EU funds (0.3% of GDP).

Despite the decreasing trend in relation to GDP, the total general government expenditure increased, in absolute terms, on average by approx. 2.5% annually in 2009–2015. The largest average contribution to expenditure growth was expenditure on Social Affairs and Health sections. After several years of a decline, expenditure in the Economic Affairs section had relatively large contributions to the total general government expenditure growth in 2014–2015, which was caused by

an increase in investment expenditure and intermediate consumption in the Transport group.

In 2018–2020, we expect continuation of the downward trend of the amount of general government expenditure in relation to GDP. In 2020, expenditure should decrease by 2.5 pp in comparison with 2015 and we expect higher expenditure in the Defence section by 0.3 pp to 1.3% of GDP in 2020. This increase is in line with the medium-term budgetary outlook and it is also compliant with the approved Long-term Defence Outlook 2030 (Government Resolution No. 466/2015). In absolute terms, we expect, in the years of the outlook, an average YoY dynamics of general government expenditure growth of approx. 3.8%, 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 indicates the structure of expenditure by functions in relation to total general government expenditure in 2015 and its expected structure in 2020. The forecast shows, in the given period, a decrease in expenditure in the General Public Service and Private Activities categories counterbalanced by an increase in expenditure on the Health and Education, Pure Public Goods, and, slightly, Social Affairs categories. We expect expenditure of approx. 48.7% of the total general government expenditure (i.e. 19.3% of GDP) spent on social security and provision of healthcare, which is an increase in this share by approx. 0.5 pp compared to 2015.

Chart 6.1: Structure of General Government Expenditure, Divided by Function
(in % of total expenditure)
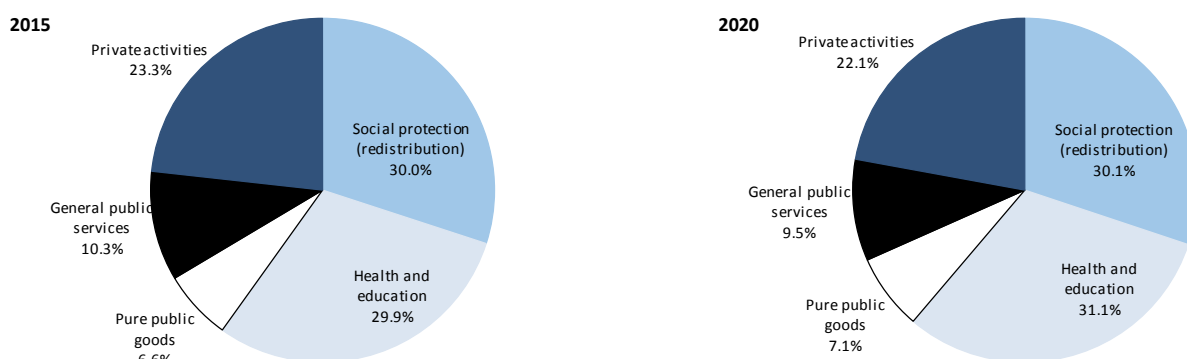
Note: The category "Pure public goods" includes "Defence" and "Public Order and Security". The category "Private activities" is a sum of "Economic Affairs", "Environmental Protection", "Housing and Community Amenities", and "Recreation, Culture and Religion". For details about the division see ECB (2009).
Source: CZSO (2017d). MF CR calculations.

7 Changes in Institutional Framework of Public Finances

High-quality and credible institutional framework of fiscal and budgetary policy represents a basic prerequisite for healthy and sustainable public finances. In this connection, therefore, laws on budgetary responsibility were discussed and at the beginning of 2017 finally approved. At the same time, steps to strengthen tax administration and reduce tax evasion as well as a number of measures to ensure transparency and effectiveness of the public finance system in the CR were adopted.

7.1 Budgetary Responsibility and Government Finance Statistics

7.1.1 Budgetary Responsibility Regulations

In February 2015, the Government of the CR approved a package of legislative proposals in the area of budgetary responsibility, through which, among others, transposition of the Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States into national law should be ensured. A draft constitutional law on fiscal responsibility after incorporating amendments was not approved in the Chamber of Deputies of the Parliament of the CR in October 2016. At the same time, a draft law on fiscal responsibility rules, that fully integrated the original constitutional legislation, was presented in the Chamber of Deputies of the Parliament of the CR. This proposal was then accepted by the members. The draft, including a draft amending law in connection with adoption of fiscal responsibility regulations and accompanying draft law on the collection of selected data for purposes of monitoring and control of public finances, was rejected by the Senate. Rejection by the Senate was outvoted by the Chamber of Deputies of the Parliament of the CR and the laws came into force after the signature of the President of the CR in February 2017. In March 2017, most senators filed a complaint to the Constitutional Court concerning the provisions relating to the new fiscal rules of local governments for alleged state interference into municipalities' rights to self-government and financial management, which is in conflict with the Constitution of the CR. The decision of the Constitutional Court of the CR will thus not affect the remaining provisions, including the method of derivation of expenditure frameworks for the state budget and state funds.

Act No. 23/2017 Coll., on fiscal responsibility rules, and the amending act No. 24/2017 Coll., amending certain laws in connection with the adoption of fiscal responsibility regulations, entered into effect on 21 February 2017, while the provision on corrective item in order to ensure at least the statutory minimum of payments of principal from debt of a local government unit takes effect form 1 January 2018. It thus enables local governments to adjust their settings of budgets and debt repayments. A follow-up Act No. 25/2017 Coll., on the collection of selected data for purposes of monitoring and control of public finances, was approved along with these laws.

The contents of the specific legislative provisions have already been described in detail in the Convergence Programme updates submitted in 2015 and 2016 (MF CR, 2015b and MF CR, 2016a) and in the Fiscal Outlook of the CR (MF CR, 2015a). There are also follow-up measures resulting from the statutory provisions which are to be taken, established or activated. A National Budgetary Council should be established under Act No. 23/2017 Coll. The National Budgetary Council will be an independent expert authority operating in the area of fiscal and budgetary policy. It will, inter alia, evaluate the performance of the numerical fiscal rules as well as prepare reports on the long-term sustainability of public finance. It will also play an important role in the budget process itself through verification of the methods of derivation and determination of medium-term expenditure frameworks of the state budget and state funds. Last but not least, it will propose the chairman and the members of the Committee for Fiscal Forecasts to the Government of the CR (see below).

The MF CR is also, under Act No. 23/2017 Coll., obliged to submit the Budgetary Strategy of Public Sector Units of the CR to the Government of the CR for approval every year.[2] This year's Budgetary Strategy for the years 2018 to 2020 is presented to the Government in April 2017 together with the updated CP, which is an attachment to the Strategy. The Budgetary Strategy is based on macroeconomic forecasts and fiscal forecasts of the general government sector. It replaces the "Medium-Term Expenditure Frameworks" document and will become the starting point of the budgetary process. In order to achieve a more transparent evaluation of the fiscal rules fulfilment, the Budgetary Strategy will also include the methodology of budgetary frameworks derivation and a description of the financial relations of the state budget to the budgets of the other subsectors of the general government sector (primarily to local governments and the public health insurance system).

Act No. 23/2017 Coll. also stipulates an obligation to assess the probability of fulfilment of forecasts used for purposes of preparing the state budget, budgets of the state funds and health insurance companies and their medium-term outlooks by an independent Committee for Fiscal Forecasts. Before the Committee is established, its role is held by the existing expert panel composed of experts from national institutions dealing with forecasts of development of 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 pro-

---

[2] The sector of public institutions under the law on the fiscal responsibility rules is equivalent to the general government sector according to the ESA 2010 methodology.

grammes, proposals for the state budget and the budgets of the state funds on a range of conservative–realistic–optimistic. The result of the evaluation is published in relevant publications (see Chapter 4.3) and taken into account in the next forecast or in the final macroeconomic framework for the preparation of the state budget and budget of the state funds.

7.1.2 International Monetary Fund's Government Finance Statistic of 2014

In the field of government financial statistics, MF CR made a transition to the International Monetary Fund's updated 2014 manual (GFSM 2014) in the second half of the year 2016. The manual replaced the methodology contained in the 2001 manual (GFSM 2001), in which the MF CR published data for public budgets of the CR. In principle, the transition did not change the main principles of statistical recording of financial or non-financial operations; however, it means further approximation to the European system of national accounts ESA 2010. The structure has undergone certain changes in the reporting of revenue and expenditure and also the presentation of financial statistics which contains the new indicator "total expenditure". It represents the sum of operating expenditure and net investment or capital expenditure on non-financial assets adjusted for net sales of non-financial assets.

The general principles of methodology of the GFSM 2014 can be summarised as follows:
- harmonisation with other international statistical systems, in particular, the System of national accounts from 2008 and the European system of national and regional accounts from 2010,
- inclusion of entities in the general government sector on the basis of an institutional approach, which is defined in accordance with the methodology of the System of national accounts from 2008 and the European system of national and regional accounts from 2010,
- monitoring of all economic flows that affect assets and liabilities; there are transactions (expenditure and revenue, financing) and the category of other economic flows defined,
- in addition to recording the economic case at the moment of the receipt or expenditure of money (cash principle), it captures operations based on the accounting (accrual) principle, i.e. at the moment of economic case occurrence, or receivable/obligation recording,
- assets and liabilities should be valued at market values,
- all account balances and flows between units at the level of the general government sector and for each of the subsectors are consolidated, thus mutual economic relationships between the individual entities of the general government sector are excluded.

In the current phase of the GFS 2014 methodology implementation in the CR, only cash transactions of public budgets (revenue, expenditure, financing) and, among stock values, only debt are monitored. Institutional definition is

narrower than one that corresponds to the full coverage of the general government sector according to the methodology of the ESA 2010. The aim of MF CR is to achieve the same institutional coverage in both methodologies. The new Act No. 25/2017 Coll. on the collection of selected data for purposes of monitoring and control of public finances and its implementing decree, or specifically the draft implementing decree (see below) aim in this direction.

The MF CR will, to comply with the International Monetary Fund yearbook (GFSM Yearbook) according to the methodology of the GFSM 2014, accept the offer of Eurostat on the transmission of data within the "Eurostat option".

7.1.3 Fiscal Data and other Information published by MF CR required by the Council Directive 2011/85/EU

On its website, the MF CR publishes fiscal data and other information required by Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States. Particular categories of published data and the periodicity of the publication are summarised in Table 7.1.

Table 7.1: Fulfilment of the Council Directive 2011/85/EU

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	Q
Municipalities, regions, VAM and RCCR	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	
Government guarantees	A
Non-performing loans	A
Liabilities of public corporations' operations	A
Off-balance sheet 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.

In order to publish comprehensive fiscal data according to the requirements of the above-mentioned directive, it was necessary to implement into the legislation the

obligation to provide relevant financial data for entities which had not been providing such data till then. These entities include, in particular, institutions of the central government subsector (e.g. public universities, public research institutions, Railway Infrastructure Administration) and public hospitals from the local government subsector (these are entities included in the general government sector, which are established by local government and have a different legal form than a co-funded organisation). They are now obliged to submit financial information under Act No. 25/2017 Coll., on the collection of selected data for purposes of monitoring and control of public finances. Its application, however, was postponed to 1 January 2018 due to a risk of infringing the principle of non-retroactivity. The law will be implemented by a decree of the MF CR. Its draft is now undergoing an interdepartmental comment procedure.

7.2 Increasing Transparency and Effectiveness of Public Finances

7.2.1 Open Data of Public Administration

During 2016, other ministries (Regional Development, Defence, Transport, Environment and Justice), the Czech Telecommunication Office and the Prague Institute of Planning and Development joined the project "Open data of the public administration", which was started by launch of the "Open Data Portal of Ministry of Finance of Czech Republic" (MF CR, 2015c) in 2015. The aim of the project is to increase the transparency of the activities of authorities as well as the provision and utilisation of purposeful expenditures from the state budget. Within the open data project, machine-processed data on the economy of participating state institutions are published. For example, paid invoices from selected ministries, data from reviews of municipality performance and data about provided subsidies can be looked up. The plan is also to extend the catalogues by annual final accounts of ministries. For better orientation in the published data, the "Supervisor" application has been launched to clearly visualise and access data from published paid invoices.

Data from the Central Registry of Administrative Buildings are also available on the site "Open Data Portal of Ministry of Finance of Czech Republic", where it is possible to find, for example, a list of real estate of the public administration, including the total and free area of the individual buildings, an overview of operating expenses and income for individual entities, as well as comparison of rental costs and an overview of leases used by state institutions to deploy their employees in private and joint-ownership buildings.

7.2.2 Financial Statements for the Czech Republic

In 2016, financial statements for the CR were prepared for the first time in order to obtain information on the state's overall financial position from the accounting point of view. The consolidated financial statements should, on the one hand, increase the transparency of the management of public finances and, on the other hand, help the public administration to use them more efficiently. The first set of financial statements covered the 2015 period. At the initial stage, only a limited number of accounting units (about 7,000) were included into the accounting consolidation of the state, in particular municipalities, regions, state funds or organisational units of the state. Starting with the accounting period of 2016, however, the financial statements will already cover the full scope of accounting units (approximately 19 thousand), i.e. including co-funded organisations, state-owned enterprises, public research institutions or major commercial corporations controlled by the state or local governments.

7.2.3 New Act on Public Procurement

On 1 October 2016, the new Public Procurement Act (Act No. 134/2016 Coll.), which transposes the EU procurement directives (2014/24/EU and 2014/25/EU) and the EU directive on the award of concession contracts (2014/23/EU), came into effect. The aim of the law is to set clear rules which guarantee an economical use of public funds so as the entire procurement process is simpler and more efficient. This should increase the transparency of the procurement process and thus eliminate corruption. The law should also allow rapid implementation of the necessary public projects and fair competition among suppliers. The main changes include, among others, the introduction of new procurement procedures (e.g. innovation partnerships), introduction of fully electronic public procurement for all procurement procedures of all types and for all contracting entities (from October 2018) and the introduction of evaluation of tenders on an economical basis, that is according to multiple criteria with respect to quality and not just by the lowest price. There is also a new obligation for tender winners to provide information about the actual owners of the company (only for Czech companies).

7.2.4 Anti-corruption Measures

In accordance with the Government's conceptual anti-corruption documents, a draft law on the protection of whistle-blowers was approved on 8 February 2017. The Government-approved draft (Chamber of Deputies Print No. 1034) is to amend the Code of Judicial Procedure to provide employees with efficient protection in situations when they report suspicion of unlawful conduct and are penalised or disadvantaged in their employment because of such report. For this purpose, the measures contained in the draft law shift the burden of proof to the employer, thus providing whistle-blowers with a better procedural status in any litigation with the em-

ployer. The draft amendment to the Act has the potential to contribute to a greater number of corrupt practices notifications and thus to a more vigorous fight against corruption and detection of unlawful conduct in general.

References

Act No. 92/1991 Coll., on the conditions of transfer of state property to other persons.

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

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

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

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

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. 235/2004 Coll., on Value-Added Tax, as amended.

Act No. 183/2014 Coll., amending the Act on Pension Insurance.

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

Act No. 84/2015 Coll., amending the Act No. 72/2000 Coll., on Investment Incentives and on Amendment of some Acts (Act on Investment Incentives), as amended and other relevant Acts.

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).

Act No. 376/2015 Coll., on Pension Savings Termination.

Act No. 377/2015 Coll., amending some Acts in Relation with the Legislation of the Act on Pension Savings Termination.

Act No. 381/2015 Coll., on One-off Benefit for Pensioner.

Act No. 391/2015 Coll., Amending Act no. 243/2000 Coll., On the Tax Assignment of Certain Tax Revenues for Municipalities and Some State Funds (the Act on Tax Assignment), 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 Evidence of Sales.

Act No. 113/2016 Coll., amending Some Acts in Relation to the Approval of the Act on Evidence of Sales.

Act No. 125/2016 Coll., amending the Act No. 586/1992, on Income Taxes, as amended.

Act No. 134/2016 Coll., on Public Procurement.

Act No. 243/2016 Coll., amending some Acts in Relation with the Legislation of the Customs Act.

Act No. 321/2016 Coll., amending some Acts in Relation with the Proving of the Origin of Property.

Act No. 457/2016 Coll., on State Budget of the Czech Republic for 2017.

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

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

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

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

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.

Chamber of Deputies Print No. 699/0, Draft of Deputies of Act amending 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).

Chamber of Deputies Print No. 715/0, Government Draft of Act amending Act No. 592/1992 Coll., on Public Health Insurance Premiums, as amended.

Chamber of Deputies Print No. 791/0, Draft of Deputies of the Liberec Region of Act amending Act No. 243/2000 Coll., on Tax Assignment, as amended.

Chamber of Deputies Print No. 821/0, Government Draft of Act amending Act No. 187/2006 Coll., on Sickness Insurance, as amended and other Relevant Acts.

Chamber of Deputies Print No. 854/0, Government Draft of Act amending Act No. 117/1995 Coll., on State Social Support, as amended.

Chamber of Deputies Print No. 873/0, Government Draft of Act amending some Acts on Taxation.

Chamber of Deputies Print No. 912/0, Government Draft of Act amending Act No. 155/1995 Coll., On Pension Insurance, as amended, and Other Related Acts.

Chamber of Deputies Print No. 935/0, Draft of Deputies of Act amending Act No. 329/2011 Coll., on the Provision of Benefits to Disabled Persons and on the Amendment of Relevant Acts, as amended.

Chamber of Deputies Print No. 1001/0, Government Draft of Act on Management and Control of Public Finance.

Chamber of Deputies Print No. 1017/0, Government Draft of Act amending Act No. 48/1997 Coll., on Public Health Insurance and on the Amendment of Relevant Acts, as amended.

Chamber of Deputies Print No. 1018/0, Government Draft of Act amending Act No. 592/1992 Coll., on Public Health Insurance Premiums, as amended.

Chamber of Deputies Print No. 1029/0, Government Draft of Act amending Act No. 187/2006 Coll., on Sickness Insurance, as amended and other Relevant Acts.

Chamber of Deputies Print No. 1034/0, Government Draft of Act amending Act No. 99/1963 Coll., on Civil Procedure, as amended.

Chamber of Deputies Print No. 1065/0, Government Draft of Act on Social Housing and on Housing Allowance.

CNB (2017a): Time Series Database. Prague, Czech National Bank, March 2017 [cit. 31. 3. 2017], <http://www.cnb.cz/docs/arady/html/index_en.htm>.

CNB (2017b): Statement of the Bank Board for the press conference following the extraordinary monetary policy meeting. Prague, Czech National Bank, 6 April 2017 [cit. 7. 4. 2017], <http://www.cnb.cz/en/monetary_policy/bank_board_minutes/2017/170406_prohlaseni.html>.

Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco.

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

Council of the EU (2016): Council Recommendation of 12 July 2016 on the National Reform Programme 2016 of the Czech Republic and delivering a Council opinion on the Convergence Programme of the Czech Republic, 2016. Council of the European Union, 12 July 2016, Official Journal of the EU, 18 August 2016, C series, no. 299, p. 23 [cit. 31. 3. 2017], <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016H0818(06)>.

Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts.

Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC.

Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC.

CZSO (2017a): Gross Domestic Product – Time Series. Prague, Czech Statistical Office, 31. 3. 2017 [cit. 31. 3. 2017], <https://www.czso.cz/csu/czso/hdp_ts>.

CZSO (2017b): General Government Sector, Government Deficit and Debt. Prague, Czech Statistical Office, 24. 4. 2017 [cit. 24. 4. 2017], <http://apl.czso.cz/pll/rocenka/rocenka.indexnu_gov?mylang=en>.

CZSO (2017c): Labour Force Sample Survey. Prague, Czech Statistical Office, 2. 2. 2017 [cit. 31. 3. 2017], <https://www.czso.cz/csu/czso/employment_unemployment_ekon>.

CZSO (2017d): Government Expenditure by Function (COFOG). Prague, Czech Statistical Office, 8. 2. 2017 [cit. 31. 3. 2017], <http://apl.czso.cz/pll/rocenka/rocenkavyber.gov_c?mylang=en>.

EC (2011): The 2012 Ageing Report: Underlying Assumptions and Projection Methodologies. Brussels, European Commission, Directorate-General for Economic and Financial Affairs, 2011, European Economy No. 4 [cit. 31. 3. 2017], <http://ec.europa.eu/economy_finance/publications/european_economy/2011/pdf/ee-2011-4_en.pdf>.

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. 2017], <http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee8_en.pdf>.

EC (2015): The 2015 Ageing Report: Economic and budgetary projections for the 28 EU Member States (2013-2060). Brussels, European Commission, Directorate-General for Economic and Financial Affairs, May 2015, European Economy No. 3 [cit. 31. 3. 2017], <http://ec.europa.eu/economy_finance/publications/european_economy/2015/pdf/ee3_en.pdf>.

EC (2016): Fiscal Sustainability Report 2015. Brussels, European Commission, Institutional paper 018, January 2016, [cit. 31. 3. 2017], <http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip018_en.pdf>.

EC (2017a): European economic forecast: Winter 2017. Brussels, European Commission, 13. 2. 2017 [cit. 31. 3. 2017], <https://ec.europa.eu/info/sites/info/files/ip048_en_3.pdf>.

EC (2017b): Debt Sustainability Monitor 2016. Brussels, European Commission, Institutional paper 047, leden 2017, [cit. 20. 3. 2017], <https://ec.europa.eu/info/sites/info/files/ip047_en.pdf>.

ECB (2009): ECB Monthly Bulletin. Frankfurt am Main, European Central Bank, April 2009 [cit. 31. 3. 2017], <http://www.ecb.int/pub/pdf/mobu/mb200904en.pdf>.

EFC (2016): Specifications on the Implementation of the Stability and Growth Pact and Guidelines on the Format and Content of Stability and Convergence Programmes. Brussels, EFC, 5. 7. 2016 [cit. 31. 3. 2017], <http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/coc/code_of_conduct_en.pdf>.

EIA (2017): Spot Prices for Crude Oil and Petroleum Products. Washington, DC, U.S. Energy Information Administration, 29. 3. 2017 [cit. 30. 3. 2017], <http://www.eia.gov/dnav/pet/pet_pri_spt_s1_a.htm>.

Eurostat (2017a): Eurostat Database. Luxembourg, Eurostat, 31. 3. 2017 [cit. 31. 3. 2017], <http://ec.europa.eu/eurostat>.

Eurostat (2017b): Eurostat Database – Population Projections Data. Luxembourg, Eurostat, 27. 2. 2017 [cit. 20. 3. 2017], <http://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-projections-data>.

Government Office (2017): National Reform Programme of the CR 2017. Prague, Office of the Government of the Czech Republic, April 2017.

IMF (2014): Government Finance Statistics Manual 2014. Washington, DC, International Monetary Fund, 2014 [cit. 3.4. 2017], <http://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf>.

MF CR (2012): Convergence Programme of the CR (Update for 2012–2015). Prague, Ministry of Finance of the CR, April 2012 [cit. 31. 3. 2017], <http://www.mfcr.cz/assets/en/media/Convergence-Programme-of-the-Czech-Republic-April-2012.pdf>.

MF CR (2015a): Fiscal Outlook of the CR (November 2015). Prague, Ministry of Finance of the CR, November 2015 [cit. 31. 3. 2017], <http://www.mfcr.cz/assets/en/media/Fiscal-Outlook-of-the-Czech-Republic-November-2015.pdf>.

MF CR (2015b): Convergence Programme of the CR (Update for 2015–2018). Prague, Ministry of Finance of the CR, April 2015 [cit. 31. 3. 2017], <http://www.mfcr.cz/assets/en/media/Convergence-Programme-CR-April-2015.pdf>.

MF CR (2015c): Open data portal of the Ministry of Finance of the Czech Republic. Prague, Ministry of Finance of the CR, 2015 [cit. 31. 3. 2017], <http://data.mfcr.cz/en>.

MF CR (2016a): Convergence Programme of the CR (Update for 2016–2019). Prague, Ministry of Finance of the CR, May 2016 [cit. 31. 3. 2017], <http://www.mfcr.cz/assets/en/media/Convergence-Programme-CR-May-2016_v01.pdf>.

MF CR (2016b): The Czech Republic Funding and Debt Management Strategy 2017. Prague, Ministry of Finance of the CR, December 2016 [cit. 31. 3. 2017], <http://www.mfcr.cz/assets/en/media/The-Czech-Republic-Funding-and-Debt-Management-Strategy-for-2017.pdf>.

MF CR (2017a): Macroeconomic Forecast of the CR. Prague, Ministry of Finance of the CR, April 2017 [cit. 10. 4. 2017], <http://www.mfcr.cz/assets/en/media/Macroeconomic-Forecast-April-2017.pdf>.

MF CR (2017b): Survey of Macroeconomic Forecasts of the CR (43. Colloquium for the period 2017–2020). Prague, Ministry of Finance of the CR, April 2017 [cit. 18. 4. 2017], <http://www.mfcr.cz/assets/en/media/Survey-of-macroeconomic-forecasts-April-2017.pdf>.

MF CR (2017c): Budgetary Frameworks – Statistical information. Prague, Ministry of Finance of the CR, February 2017 [cit. 31. 3. 2017], <http://www.mfcr.cz/en/statistics/budgetary-frameworks-statistical-information>.

MF CR, CNB (2016): Assessment of the Fulfilment of the Maastricht Convergence Criteria and Degree of Economic Alignment of the Czech Republic with the Euro Area (2016). Prague, Ministry of Finance of the CR and Czech National Bank, December 2016 [cit. 31. 3. 2017], <http://www.mfcr.cz/assets/en/media/Assessment-of-the-Fulfilment-of-the-Maastricht-Convergence-Criteria-2016_v2.pdf>.

Policy Statement of the Government of the Czech Republic. Prague, Office of the Government of the Czech Republic, February 14, 2014 [cit. 3. 4. 2017], <http://www.vlada.cz/assets/media-centrum/dulezite-dokumenty/en_programove-prohlaseni-komplet.pdf>.

Regulation No. 135/2010 Coll., The Constitutional Court Decision of 23 March 2010 on the Right to Adequate Material Security (on the Proposal to Repeal § 15 of Act No. 155/1995 Coll., on Pension Insurance).

Regulation No. 158/2015 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.

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. 146 of the Government of the Czech Republic of 17 February 2016, on a Draft of Act amending the Act no. 155/1995 Coll., on Pension Insurance, as amended, and other Related Acts.

Resolution No. 796 of the Government of the Czech Republic of 5 September 2016, on a Draft of Act amending the Act no. 155/1995 Coll., on Pension Insurance, as amended, and other Related Acts.

Resolution No. 1149 of the Government of the Czech Republic of 19 December 2016, on the draft of Act on Management and Control of Public Finance and on the Draft of Act amending Certain Acts in Connection with Passing the Act on Management and Control of Public Finance.

Resolution No. 6 of the Government of the Czech Republic of 9 January 2017 on the Analysis of Possibilities and Impacts of taking into account the Environmental Factors of Rates of Excise and Energy Taxes in the Czech Republic.

Resolution No. 107 of the Government of the Czech Republic of 8 February 2017 on the Methodology of Evaluation of Research Organisations and Evaluation of Programmes of Targeted Support for Research, Development and Innovations.

Resolution No. 152 of the Government of the Czech Republic of 27 February 2017 on the Variant Analysis of the Increase in Sickness Insurance Benefits during Long-term Temporal Incapacity.

The Czech Republic's Updated Euro-area Accession Strategy. Joint Document of the Czech Government and the Czech National Bank, proved by the Government of the Czech Republic on August 29, 2007 [cit. 31. 3. 2017], <http://www.mfcr.cz/assets/en/media/The-Czech-Republics-Updated-Euro-area-Accession-Strategy-2007.pdf>.

Table Annex

Table A.1a: Macroeconomic Prospects
(level in CZK billion, growth in %, contributions to growth in percentage points)

	ESA Code	2016 Level	2016	2017	2018	2019	2020
					Rate of change		
Real GDP	B1*g	4665	2.4	2.5	2.5	2.4	2.3
Nominal GDP	B1*g	4715	3.5	3.7	4.4	4.3	4.3
Components of real GDP							
Private consumption expenditure	P.3	2202	2.9	2.4	2.7	2.2	2.1
Government consumption expenditure	P.3	900	1.2	1.7	1.5	1.4	1.4
Gross fixed capital formation	P.51g	1154	-3.7	3.8	3.0	3.0	3.0
Changes in inventories and net acquis. of valuables (% of GDP)	P.52+P.53	82	1.7	1.6	1.4	1.4	1.3
Exports of goods and services	P.6	3940	4.3	3.0	4.1	4.3	4.3
Imports of goods and services	P.7	3612	3.2	3.1	4.1	4.1	4.2
Contributions to real GDP growth							
Final domestic demand		-	0.6	2.4	2.3	2.1	2.0
Changes in inventories and net acquis. of valuables	P.52+P.53	-	0.7	0.0	0.0	0.0	0.0
External balance of goods and services	B.11	-	1.1	0.2	0.2	0.4	0.3

Note: Real levels are stated in 2015 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 (2017a), MF CR (2017a). MF CR calculations.

Table A.1b: Price Developments
(indices 2010=100, growth in %)

	2016 Level	2016	2017	2018	2019	2020
				Rate of change		
GDP deflator	107.7	1.1	1.1	1.8	1.9	1.9
Private consumption deflator	105.9	0.6	2.4	1.7	1.8	1.8
Harmonised index of consumer prices	108.7	0.7	2.4	1.8	1.8	1.8
Public consumption deflator	110.4	1.7	2.2	2.2	1.5	1.6
Investment deflator	104.5	0.4	1.2	1.5	1.5	1.5
Export price deflator (goods and services)	104.0	-3.8	-0.1	-0.9	0.2	0.8
Import price deflator (goods and services)	102.4	-4.7	0.8	-1.2	-0.2	0.3

Source: CZSO (2017a), Eurostat (2017a). MF CR calculations.

Table A.1c: Labour Market Developments
(growth in %)

	ESA Code	2016 Level	2016	2017	2018	2019	2020
					Rate of change		
Employment, persons		5273	1.8	1.1	0.3	0.3	0.3
Employment, hours worked		9.3	2.6	1.3	0.1	0.0	0.2
Unemployment rate (%)		4.0	4.0	3.4	3.3	3.2	3.1
Labour productivity, persons		793	0.6	1.5	2.2	2.1	2.0
Labour productivity, hours worked		441	-0.2	1.3	2.4	2.3	2.1
Compensation of employees	D.1	1923	5.9	5.7	4.8	4.5	4.2
Compensation per employee		427	3.9	4.4	4.4	4.1	3.9

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 2015 prices) per employed person or worked hour.
Source: CZSO (2017a, 2017c). MF CR calculations.

Table A.1d: Sectoral Balances
(in % of GDP)

	ESA Code	2016	2017	2018	2019	2020
Net lending/borrowing vis-à-vis the rest of the world	B.9	**0.8**	**0.3**	**0.6**	**1.2**	**1.9**
Balance of goods and services		7.4	6.6	6.8	7.2	7.6
Balance of primary incomes and transfers		-7.1	-7.0	-7.0	-6.9	-6.7
Capital account		0.5	0.7	0.8	0.9	1.0
Net lending/borrowing of the private sector	B.9	**0.3**	**-0.1**	**0.4**	**0.8**	**1.4**
Net lending/borrowing of general government	B.9	**0.6**	**0.4**	**0.3**	**0.5**	**0.5**
Statistical discrepancy		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Note: Data from national accounts. Net lending/borrowing of general government for 2016–2017 based on notification, for 2018–2020 outlook.
Source: CZSO (2017b). MF CR calculations.

Table A.2a: General Government Budgetary Prospects

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

	ESA Code	2016 Level	2016	2017	2018	2019	2020
					In % of GDP		
Net lending (+)/borrowing (-) (B.9) by sub-sectors							
General government	S.13	**28**	**0.6**	**0.4**	**0.3**	**0.5**	**0.5**
Central government	S.1311	-22	-0.5	-0.4	-0.1	0.2	0.3
State government	S.1312	-	-	-	-	-	-
Local government	S.1313	45	0.9	0.8	0.4	0.3	0.2
Social security funds	S.1314	5	0.1	0.1	0.0	0.0	0.0
General government (S.13)							
Total revenue	TR	**1909**	**40.5**	**40.6**	**40.6**	**40.4**	**40.1**
Total expenditure	TE	**1881**	**39.9**	**40.2**	**40.3**	**39.9**	**39.6**
Net lending (+)/borrowing (-)	B.9	**28**	**0.6**	**0.4**	**0.3**	**0.5**	**0.5**
Interest expenditure	D.41	45	0.9	0.9	0.8	0.8	0.8
Primary balance		72	1.5	1.3	1.0	1.2	1.3
One-off and other temporary measures		**-3**	**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**
Components of revenues							
Total taxes		**945**	**20.0**	**19.9**	**19.9**	**19.7**	**19.5**
Taxes on production and imports	D.2	593	12.6	12.4	12.3	12.1	11.9
Current taxes on income, wealth etc.	D.5	352	7.5	7.5	7.6	7.6	7.6
Capital taxes	D.91	0	0.0	0.0	0.0	0.0	0.0
Social security contributions	D.61	**703**	**14.9**	**15.2**	**15.3**	**15.3**	**15.3**
Property income	D.4	**36**	**0.8**	**0.7**	**0.6**	**0.6**	**0.6**
Other		**224**	**4.8**	**4.8**	**4.8**	**4.8**	**4.7**
Total revenue	TR	**1909**	**40.5**	**40.6**	**40.6**	**40.4**	**40.1**
p.m.: Tax burden		**1648**	**35.0**	**35.1**	**35.1**	**35.0**	**34.8**
Components of expenditures							
Compensation of employees + Intermediate consumption	D.1+P.2	**711**	**15.1**	**15.2**	**15.2**	**15.1**	**14.9**
Compensation of employees	D.1	420	8.9	9.0	9.1	9.1	9.0
Intermediate consumption	P.2	291	6.2	6.1	6.1	6.0	5.9
Social payments		**730**	**15.5**	**15.4**	**15.5**	**15.4**	**15.2**
of which: Unemployment benefits [1]		19	0.4	0.3	0.3	0.3	0.3
Social transfers in kind supplied via market producers	D.632	148	3.1	3.1	3.1	3.1	3.1
Social transfers other than in kind	D.62	582	12.3	12.3	12.4	12.3	12.1
Interest expenditure	D.41	**45**	**0.9**	**0.9**	**0.8**	**0.8**	**0.8**
Subsidies	D.3	**114**	**2.4**	**2.4**	**2.4**	**2.3**	**2.3**
Gross fixed capital formation	P.51g	**159**	**3.4**	**3.7**	**3.8**	**3.8**	**3.9**
Capital transfers	D.9	**27**	**0.6**	**0.6**	**0.7**	**0.6**	**0.5**
Other		**97**	**2.1**	**1.9**	**2.0**	**2.0**	**2.0**
Total expenditures	TE	**1881**	**39.9**	**40.2**	**40.3**	**39.9**	**39.6**
p.m.: Government consumption (nominal)	P.3	**917**	**19.5**	**19.5**	**19.4**	**19.1**	**18.9**

Note: Years 2016–2017 notification. Years 2018–2020 outlook.
1) Includes cash benefits (D.621 and D.624) and in kind benefits (D.631) related to unemployment benefits.
Source: CZSO (2017b). MF CR calculations.

Table A.2b: No-policy Change Projections

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

	2016 Level	2016	2017	2018	2019	2020
				In % of GDP		
Total revenue at unchanged policies	**1909**	**40.5**	**40.6**	**40.6**	**40.4**	**40.1**
Total expenditure at unchanged policies	**1881**	**39.9**	**40.2**	**40.0**	**39.4**	**39.0**

Source: MF CR.

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

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

	2016 Level	2016	2017	2018	2019	2020
				In % of GDP		
Expenditure on EU programmes fully matched by EU funds revenue	**27**	**0.6**	**0.9**	**1.0**	**1.1**	**1.1**
Non-investment expenditure	7	0.2	0.2	0.3	0.3	0.3
Investment expenditure	20	0.4	0.7	0.7	0.8	0.8
Cyclical unemployment benefit expenditure	**-1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Effect of discretionary revenue measures (year-on-year changes)	**27**	**0.6**	**0.3**	**0.2**	**0.1**	**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	2015	2020
General public services	1	**4.3**	**3.8**
Defence	2	**0.9**	**1.3**
Public order and safety	3	**1.8**	**1.6**
Economic affairs	4	**6.6**	**6.0**
Environmental protection	5	**1.1**	**1.1**
Housing and community amenities	6	**0.7**	**0.7**
Health	7	**7.6**	**7.4**
Recreation, culture and religion	8	**1.3**	**1.1**
Education	9	**4.9**	**5.0**
Social protection	10	**12.6**	**11.9**
Total expenditure	TE	**42.1**	**39.6**

Note: Year 2020 outlook.
Source: CZSO (2017d), MF CR (2017a). MF CR calculations.

Table A.4: General Government Debt Developments

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

	ESA Code	2016	2017	2018	2019	2020
General government gross debt		**37.2**	**36.0**	**35.3**	**34.3**	**32.7**
Change in gross debt ratio		**-3.1**	**-1.2**	**-0.7**	**-1.0**	**-1.5**
Contributions to changes in gross debt						
Primary balance		**1.5**	**1.3**	**1.0**	**1.2**	**1.3**
Interest expenditure	D.41	**0.9**	**0.9**	**0.8**	**0.8**	**0.8**
Stock-flow adjustment		**-1.1**	**0.5**	**1.1**	**0.9**	**0.4**
Difference between cash and accruals		0.2	0.0	0.0	0.0	0.0
Net accumulation of financial assets		-1.2	0.5	1.1	0.9	0.4
Privatisation proceeds		0.0	0.0	0.0	0.0	0.0
Valuation effects and other		0.0	0.0	0.0	0.0	0.0
p.m.: Implicit interest rate on debt		**2.5**	**2.4**	**2.2**	**2.2**	**2.3**
Liquid financial assets		**13.2**	**13.2**	**13.7**	**14.1**	**13.9**
Net financial debt [1]		**24.1**	**22.8**	**21.6**	**20.2**	**18.9**
Debt amortization (existing bonds) since the end of the previous year [2]		**3.9**	**4.6**	**5.0**	**4.3**	**4.1**
Foreign-currency exposition of the state debt [2,3]		**3.9**	**4.0**	**3.8**	**3.8**	**3.7**
Average maturity [2]		**5.1**	**5.3**	**5.7**	**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 (2017b). State debt data MF CR. MF CR calculations.

Table A.5: Cyclical Developments
(growth in %, output gap in % of potential GDP, contributions in percentage points, other in % of GDP)

	ESA Code	2016	2017	2018	2019	2020
Real GDP growth (%)		**2.4**	**2.5**	**2.5**	**2.4**	**2.3**
Net lending of general government	B.9	**0.6**	**0.4**	**0.3**	**0.5**	**0.5**
Interest expenditure	D.41	**0.9**	**0.9**	**0.8**	**0.8**	**0.8**
One-off and other temporary measures		**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**
One-offs on the revenue side		0.1	0.1	0.0	0.0	0.0
One-offs on the expenditure side		0.2	0.1	0.0	0.0	0.0
Potential GDP growth (%)		**2.1**	**2.3**	**2.4**	**2.4**	**2.4**
contribution of labour		0.2	0.2	0.1	0.1	0.0
contribution of capital		0.5	0.4	0.5	0.5	0.5
total factor productivity		1.4	1.6	1.9	1.8	1.8
Output gap		**0.5**	**0.8**	**0.8**	**0.8**	**0.8**
Cyclical budgetary component		**0.2**	**0.3**	**0.3**	**0.3**	**0.3**
Cyclically-adjusted balance		**0.4**	**0.1**	**0.0**	**0.2**	**0.2**
Cyclically-adjusted primary balance		**1.3**	**1.0**	**0.7**	**0.9**	**1.0**
Structural balance		**0.5**	**0.1**	**0.0**	**0.2**	**0.2**

Note: Years 2016–2017 notification. Years 2018–2020 outlook.
Source: CZSO (2017b). MF CR calculations.

Table A.6: Divergence from Previous Update
(GDP growth in %, general government balance and debt in % of GDP, differences in pp)

	ESA Code	2016	2017	2018	2019	2020
Real GDP growth (%)						
Previous update		**2.5**	**2.6**	**2.4**	**2.4**	**-**
Current update		**2.4**	**2.5**	**2.5**	**2.4**	**2.3**
Difference		0.0	-0.1	0.1	0.0	-
General government net lending (% of GDP)						
Previous update	B.9	**-0.6**	**-0.5**	**-0.5**	**-0.5**	**-**
Current update	B.9	**0.6**	**0.4**	**0.3**	**0.5**	**0.5**
Difference		1.2	1.0	0.7	0.9	-
General government gross debt (% of GDP)						
Previous update		**41.1**	**40.7**	**40.2**	**39.3**	**-**
Current update		**37.2**	**36.0**	**35.3**	**34.3**	**32.7**
Difference		-3.8	-4.7	-4.9	-5.0	-

Source: MF CR (2016a, 2017a). MF CR calculations.

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

	2013	2020	2030	2040	2050	2060
Total expenditure	41.9	40.6	41.2	41.5	42.9	43.8
of which: Age-related expenditures	18.9	19.4	20.1	20.3	21.5	22.0
Pension expenditure	9.0	9.0	9.0	9.0	9.6	9.7
Social security pensions	9.0	9.0	9.0	9.0	9.6	9.7
Old-age and early pensions	7.3	7.5	7.5	7.4	8.0	8.1
Other pensions	1.7	1.5	1.5	1.6	1.6	1.6
Occupational pensions	0.0	0.0	0.0	0.0	0.0	0.0
Health care	5.7	5.9	6.2	6.5	6.6	6.7
Long-term care	0.7	0.9	1.0	1.2	1.2	1.4
Education expenditure	3.4	3.6	3.9	3.7	4.0	4.1
of which: Non-age-related expenditures	22.1	21.2	21.2	21.2	21.4	21.9
of which: Unemployment benefits	0.2	0.2	0.2	0.2	0.2	0.2
of which: Interest expenditure	1.3	1.2	1.2	1.2	1.4	1.9
Total revenue	40.8	39.9	39.9	39.9	39.9	39.9
of which: Pension contributions	7.9	7.9	7.9	7.9	7.9	7.9
of which: Property income	0.9	0.7	0.7	0.7	0.7	0.7
Pension reserve fund assets	0.6	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
Systemic Pension Reforms						
Social contributions diverted to mandatory private scheme	-	-	-	-	-	-
Pension expenditure paid by mandatory private scheme	-	-	-	-	-	-
Assumptions						
Labour productivity growth	0.9	1.8	1.9	1.8	1.7	1.5
Real GDP growth	-0.9	1.6	1.9	1.6	1.5	1.7
Participation rate of males (aged 20–64)	86.1	87.6	86.8	86.1	87.8	88.7
Participation rate of females (aged 20–64)	69.5	72.2	72.4	71.9	74.8	76.0
Total participation rate (aged 20–64)	77.9	80.0	79.7	79.2	81.4	82.5
Unemployment rate	7.0	6.3	6.0	6.0	6.0	6.0
Population aged 65+ over total population	17.1	20.2	22.3	24.7	27.5	28.2

Source: EC (2014, 2015). MF CR calculations.

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

	2016	2017
General government sector guarantees	3.6	0.2
of which: Linked to the financial sector	3.2	0.0

Source: MF CR.

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

	2016	2017	2018	2019	2020
Short-term interest rate (CZ) (annual average)	0.3	0.3	0.4	0.5	0.7
Long-term interest rate (CZ) (annual average)	0.4	0.9	1.5	2.0	2.3
Nominal effective exchange rate (2010=100)	102.4	102.6	105.0	107.7	110.4
Exchange rate CZK/EUR (annual average)	27.0	26.9	26.3	25.6	25.0
World excluding EU, GDP growth	3.3	3.6	3.8	3.9	3.9
EU28 GDP growth	1.9	1.8	1.9	1.7	1.8
Growth of relevant foreign markets	4.0	3.2	3.1	3.1	3.1
World import volumes, excluding EU	-3.2	3.9	5.5	5.5	5.5
Oil prices (Brent, USD/barrel)	43.6	56.3	56.8	56.4	56.6

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

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 CR. 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 CR, the general government sector includes, in the ESA 2010 methodology, three main subsectors: central government, local government and social security funds.

Government Deficit and Debt Notification is 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 (MTO) 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, 2016). For the CR 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 on the market for interbank deposits with a maturity of three months, calculated (fixed) by the calculation agent for the CNB and the Czech Forex Club (Financial Markets Association of the Czech Republic – A.C.I.) from the quotations of the reference banks for the sale of deposits.

Using the **purchasing power parity** method, comparison of the economic performance of individual countries within the EU is carried out in Purchasing Power Standards (PPS). PPS is an artificial currency unit that expresses a quantity of goods that can be purchased on average for 1 euro in the EU28 after currency conversion for countries using a different currency unit than the euro. Eurostat updated calculations of PPS in December 2016.

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 (LFS) 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 (LFS)** 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**.