

Macroeconomic Forecast of the Czech Republic

April 2017

Macroeconomic Forecast of the Czech Republic

April 2017

Ministry of Finance of the Czech Republic
Letenska 15, 118 10 Prague 1

Tel.: +420 257 041 111

E-mail: macroeconomic.forecast@mfcz.cz

ISSN 2533-5588

Issued quarterly, free distribution

Electronic archive:
<http://www.mfcz.cz/macroforecast>

Macroeconomic Forecast

of the Czech Republic

April 2017

Table of Contents

Summary of the Forecast	1
Risks to the Forecast.....	4
1 Forecast Assumptions.....	5
1.1 External Environment.....	5
1.2 Fiscal Policy.....	13
1.3 Monetary Policy, Financial Sector and Exchange Rates	15
1.4 Structural Policies.....	21
1.5 Demographic Trends	22
2 Economic Cycle.....	25
2.1 Position within the Economic Cycle.....	25
2.2 Business Cycle Indicators.....	27
3 Forecast of the Development of Macroeconomic Indicators.....	29
3.1 Economic Output.....	29
3.2 Prices	38
3.3 Labour Market	43
3.4 External Relations.....	50
3.5 International Comparisons	56
4 Monitoring of Other Institutions' Forecasts	61
5 Looking back at the Year 2016	62

The Macroeconomic Forecast is prepared by the Economic Policy Department of the Czech Ministry of Finance. It contains a forecast for the current and the following year (i.e. until 2018) and for certain indicators an outlook for another 2 years (i.e. until 2020). It is published on a quarterly basis (usually in January, April, July and November) and is also available on the website of the Ministry of Finance at:

www.mfcr.cz/macroforecast

Any comments or suggestions that would help us improve the quality of our publication and closer satisfy the needs of its users are welcome. Please send any comments to the following email address:

macroeconomic.forecast@mfcr.cz

List of Tables

Table 1.1.1: Gross Domestic Product – yearly	9
Table 1.1.2: Gross Domestic Product – quarterly	10
Table 1.1.3: Prices of Selected Commodities – yearly	11
Table 1.1.4: Prices of Selected Commodities – quarterly	11
Table 1.2.1: Net Lending/Borrowing and Debt	14
Table 1.3.1: Interest Rates – yearly	17
Table 1.3.2: Interest Rates – quarterly	17
Table 1.3.3: Loans and Deposits – yearly	17
Table 1.3.4: Loans and Deposits – quarterly	18
Table 1.3.5: Exchange Rates – yearly	19
Table 1.3.6: Exchange Rates – quarterly	19
Table 1.5.1: Demographics	23
Table 2.1.1: Output Gap and Potential Product	25
Table 3.1.1: Real GDP by Type of Expenditure – yearly	31
Table 3.1.2: Real GDP by Type of Expenditure – quarterly	32
Table 3.1.3: Nominal GDP by Type of Expenditure – yearly	33
Table 3.1.4: Nominal GDP by Type of Expenditure – quarterly	33
Table 3.1.5: GDP by Type of Income – yearly	37
Table 3.1.6: GDP by Type of Income – quarterly	37
Table 3.2.1: Prices – yearly	39
Table 3.2.2: Prices – quarterly	40
Table 3.3.1: Labour Market – yearly	45
Table 3.3.2: Labour Market – quarterly	46
Table 3.3.3: Income and Expenditures of Households – yearly	49
Table 3.4.1: Balance of Payments – yearly	51
Table 3.4.2: Balance of Payments – quarterly	52
Table 3.4.3: Decomposition of Exports of Goods – yearly	54
Table 3.4.4: Decomposition of Exports of Goods – quarterly	54
Table 3.5.1: GDP per Capita – Using Current Purchasing Power Parities	57
Table 3.5.2: GDP per Capita – Using Current Exchange Rates	58
Table 4.1: Summary of the Monitored Forecasts	61
Table 5.1: Macroeconomic Framework of the 2016 State Budget – Comparison with Actual Data	62

List of Graphs

Graph 1.1.1: Unemployment rate in the EU in January 2017.....	6
Graph 1.1.2: Growth of GDP in the EA19 and in the USA.....	6
Graph 1.1.3: Ifo (Germany) and Czech manufacturing production.....	7
Graph 1.1.4: Koruna Price of Brent Crude Oil.....	8
Graph 1.1.5: Gross Domestic Product.....	9
Graph 1.1.6: Gross Domestic Product – Czech Republic and the neighbouring states.....	9
Graph 1.1.7: Gross Domestic Product – Czech Republic and the neighbouring states.....	10
Graph 1.1.8: Cyclical Component of GDP – Czech Republic and Germany.....	11
Graph 1.1.9: Dollar Prices of Oil.....	12
Graph 1.1.10: Koruna Indices of Prices of Selected Commodities.....	12
Graph 1.2.1: Decomposition of the Government Balance.....	14
Graph 1.2.2: General Government Debt.....	14
Graph 1.3.1: FX Interventions of the CNB and the Exchange Rate.....	15
Graph 1.3.2: Interest Rates.....	15
Graph 1.3.3: Loans to Households.....	15
Graph 1.3.4: Loans to Non-financial Corporations.....	16
Graph 1.3.5: Non-performing Loans.....	16
Graph 1.3.6: Deposits.....	16
Graph 1.3.7: Ratio of Bank Loans to Households to GDP.....	18
Graph 1.3.8: Nominal Exchange Rates.....	19
Graph 1.3.9: Real Exchange Rate to EA19.....	20
Graph 1.3.10: Real Exchange Rate to EA19.....	20
Graph 1.5.1: Age Groups.....	22
Graph 1.5.2: Population Aged 15–64.....	22
Graph 1.5.3: Life Expectancy at Birth.....	22
Graph 1.5.4: Dependency Ratios.....	23
Graph 1.5.5: Old-Age Pensioners.....	24
Graph 2.1.1: Output Gap.....	26
Graph 2.1.2: Potential Product.....	26
Graph 2.1.3: Potential Product and GVA.....	26
Graph 2.1.4: Levels of Potential Product and GVA.....	26
Graph 2.1.5: Capacity Utilisation in Industry.....	26
Graph 2.1.6: Total Factor Productivity.....	26
Graph 2.2.1: Confidence and GVA in Industry.....	27
Graph 2.2.2: Confidence and GVA in Construction.....	27
Graph 2.2.3: Confidence and GVA in Trade and Services.....	27
Graph 2.2.4: Consumer Confidence and Consumption.....	27
Graph 2.2.5: Composite Confidence Indicator and GVA.....	28
Graph 2.2.6: Composite Leading Indicator.....	28
Graph 3.1.1: Gross Domestic Product (real).....	34
Graph 3.1.2: Gross Domestic Product (real).....	34
Graph 3.1.3: Resources of Gross Domestic Product.....	34
Graph 3.1.4: Gross Domestic Product by Type of Expenditure.....	35
Graph 3.1.5: Consumption of Households.....	35
Graph 3.1.6: Gross Fixed Capital Formation.....	35
Graph 3.1.7: Gross Fixed Capital Formation by Type of Expenditure.....	36

Graph 3.1.8: Gross Fixed Capital Formation by Sector	36
Graph 3.1.9: Nominal Gross Domestic Product	36
Graph 3.2.1: Consumer Prices	40
Graph 3.2.2: Consumer Prices	41
Graph 3.2.3: Indicators of Consumer Prices	41
Graph 3.2.4: Gross Domestic Expenditure Deflator	41
Graph 3.2.5: Terms of Trade	42
Graph 3.2.6: GDP deflator	42
Graph 3.3.1: Employees in Different Statistics	43
Graph 3.3.2: Indicators of Unemployment	43
Graph 3.3.3: Collection of Social Security Contributions and Total Wage Bill	44
Graph 3.3.4: Nominal Monthly Wage	44
Graph 3.3.5: Employment (LFS)	47
Graph 3.3.6: Ratio of Labour Force and Employment to Population Aged 15–64	47
Graph 3.3.7: Unemployment	47
Graph 3.3.8: Compensation per Employee and Real Productivity of Labour	48
Graph 3.3.9: Wage Bill – nominal, domestic concept	48
Graph 3.3.10: Gross Savings Rate of Households	48
Graph 3.4.1: Current Account	52
Graph 3.4.2: Balance of Trade (national concept)	53
Graph 3.4.3: Balance of Services	53
Graph 3.4.4: Balance of Primary Income	53
Graph 3.4.5: GDP and Imports of Goods in Main Partner Countries	55
Graph 3.4.6: Real Exports of Goods	55
Graph 3.4.7: Deflator of Exports of Goods	55
Graph 3.5.1: GDP per Capita – Using Current Purchasing Power Parities	57
Graph 3.5.2: GDP per Capita – Using Current Exchange Rates	58
Graph 3.5.3: Comparative Price Level of GDP per Capita	59
Graph 3.5.4: Change in Real GDP per Capita during 2008–2016	59
Graph 3.5.5: Current PPP Adjusted GDP per Capita Level Relative to the EA19 Average in 2015	59
Graph 3.5.6: Change in Current PPP Adjusted GDP per Capita during 2008–2015	60
Graph 4.1: Forecast of Real GDP Growth for 2017	61
Graph 4.2: Forecast of Average Inflation Rate for 2017	61

List of Abbreviations

const.pr.....	constant prices
CNB.....	Czech National Bank
CPI.....	consumer price index
CR.....	Czech Republic
curr.pr.....	current prices
CZSO.....	Czech Statistical Office
EA19.....	euro zone consisting of 19 countries
EC.....	European Commission
ECB.....	European Central Bank
ESI.....	Economic Sentiment Indicator
EU28.....	European Union consisting of 28 countries
Fed.....	Federal Reserve System
GDP.....	gross domestic product
GVA.....	gross value added
HICP.....	harmonised index of consumer prices
IMF.....	International Monetary Fund
LFS.....	Labour Force Survey
MFI.....	monetary financial institutions
MoF.....	Ministry of Finance
pp.....	percentage points
rev.....	revisions
SITC.....	Standard International Trade Classification
TFP.....	total factor productivity
VAT.....	value added tax

Basic Terms

Prelim. (preliminary data)	data from quarterly national accounts, released by the CZSO, as yet unverified by annual national accounts
Estimate	estimate of past numbers which for various reasons were not available at the time of preparing the publication, e.g. previous quarter's GDP
Forecast	forecast of future numbers, using expert and mathematical methods
Outlook	projection of more distant future numbers, using mainly extrapolation methods

Symbols Used in Tables

-	A dash in place of a number indicates that the phenomenon did not occur.
.	A dot in place of a number indicates that we do not forecast that variable, or the figure is unavailable or unreliable.
x, (space)	A cross or space in place of a number indicates that no entry is possible for logical reasons.

Cut-off Date for Data Sources

The forecast was made on the basis of data known as of **31 March 2017**.

Notes

Published aggregate data may not match sums of individual items to the last decimal place due to rounding.

Data from the previous forecast (January 2017) are indicated by italics. Data relating to the years 2019 and 2020 are an extrapolation scenario that indicates only the direction of possible developments, and as such are not commented upon in the following text.

Summary of the Forecast

In the fourth quarter of 2016 economic growth in the Czech Republic accelerated slightly to **0.4%** compared with the previous quarter, while in YoY terms real GDP **increased by 1.9%**. In 2016 as a whole economic output increased by **2.4%**.

The main growth factor in 2016 was **household consumption**, which increased by 2.9% compared to 2015. Consumption growth was supported by the dynamics of employment and wages and last but not least by a very low inflation during most of the year.

The development of **foreign trade** also significantly contributed to the economic growth. Its contribution of 1.1 pp was almost evenly distributed between improvements on the balance of goods and the balance of services. A lower dynamics of foreign trade on the global scale and within the EU led to a slowdown in the YoY real growth of export of goods and services from 7.7% in 2015 to 4.3%. However, import saw a more considerable reduction in the growth rate from 8.2% to 3.2%, in particular due to a decrease in import-intensive investments.

Investments in fixed capital, which fell by 3.7% YoY, affected economic growth in the opposite direction. This decrease was due to investment by the general government sector, which slumped by almost one third in comparison with the very high base of the extraordinary year 2015. Conversely, investment activity in the non-financial corporations sector recorded an increase, especially in the fourth quarter of 2016.

On the supply side of the economy, **real gross value added increased by 2.2%** in 2016. The greatest contribution to its growth was traditionally reported by the manufacturing, mainly automotive, industry. In contrast, a YoY decrease was recorded in the construction sector, whose developments in the last year were related to a decrease in investment activity, and in industrial sectors other than manufacturing.

For the beginning of **2017** confidence indicators, Purchasing Managers' Index, industrial production and retail sales all indicate stronger economic growth than at the end 2016.

On the side of domestic demand, we expect resumption of growth in gross fixed capital formation. A gradual start of projects co-funded by the EU from the 2014–2020 programming period will support not only general government investment but also private investment. Investment by the general government sector could thus increase again after a deep decline in 2016, whereas private investment growth should slightly accelerate. Along with the slowdown in the growth of export, the dynamics of investment, which is the most import-intensive component of domestic demand, will be reflected in lower contribution of net exports to GDP growth.

The forecast for real GDP growth in 2017 and 2018 remains almost unchanged. We expect the economy to grow by 2.5% annually in both this and the next year.

There was a strong acceleration in YoY growth of **consumer prices** above the CNB's inflation target in the last two months of 2016 and at the beginning of 2017. The acceleration of inflation was influenced mainly by prices of food and fuel, which reflected the increasing price of crude oil. Anti-inflationary effect of a decrease in prices of imported goods has subsided.

This acceleration of consumer prices growth leads to an increase in the forecast for the average **inflation rate** in 2017 from 2.0% to 2.4%, and in 2018 from 1.6% to 1.7%.

The expected discontinuation of the CNB's exchange rate commitment will then be connected with a higher volatility of the exchange rate and probably with some appreciation.

On the **labour market**, the economic boom is reflected in very high labour force utilization. Employment rose strongly again in the fourth quarter of 2016, by 2.2% YoY, which was the highest growth in the history of the Czech Republic. Seasonally adjusted unemployment rate (in an internationally comparable methodology) further fell to 3.4% in January 2017, being the lowest in the whole EU since the beginning of 2016. The low unemployment and mismatches between the supply of and demand for labour are reflected in a faster growth of real wages and unit labour costs. However, the lack of employees is becoming a barrier for further production growth. Thanks to a bigger-than-estimated decrease at the end of the last year, the forecast for **unemployment rate** in 2017 and 2018 is improved from 3.9% to 3.4% and from 3.9% to 3.3%, respectively. At this level, unemployment has very limited space to decline further.

The current account of the balance of payments has been in a surplus since 2014. It reached 1.1% of GDP in 2016 and was thus the highest in the history of the independent Czech Republic. The surpluses on the balance of goods and services are thus apparently exceeding the deficit of primary income, which is mostly influenced by an outflow of income from foreign direct investment in the form of dividends and reinvested earnings. Revision of data for the past and the subsequent change in the forecast for the primary income balance in direction of a higher deficit, however, leads to a downward revision of the forecast for **surplus** on the **current account** of the balance of payments. The forecast for 2017 is thus lowered from 1.2% of GDP to 0.4% of GDP, and the forecast for 2018 from 1.3% of GDP to 0.5% of GDP.

For the first time in history of the Czech Republic, the balance of the general government sector reached a surplus of 0.6% of GDP in 2016. As a result, the structural balance improved as well, by 1.1 pp YoY to a surplus of

0.5% of GDP. The improved balance of the general government sector was determined mainly by the revenue side of budgets, where tax revenues (including social security contributions) increased by 5.8%. The record-breaking positive outcome is also reflected in the level of

total debt. In a YoY comparison, the **general government debt fell** from 40.3% of GDP to **37.2% of GDP**. This outcome was mainly the result of the last year's absolute decrease in the state debt by almost CZK 60 billion.

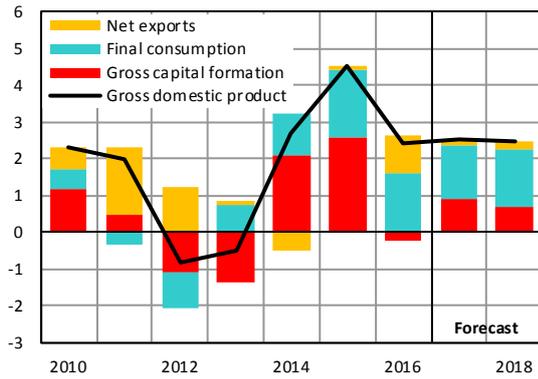
Table: Main Macroeconomic Indicators

		2012	2013	2014	2015	2016	2017	2018	2016	2017	2018
		Current forecast							Previous forecast		
Gross domestic product	<i>bill. CZK</i>	4 060	4 098	4 314	4 555	4 715	4 889	5 103	4 719	4 885	5 082
Gross domestic product	<i>real growth in %</i>	-0.8	-0.5	2.7	4.5	2.4	2.5	2.5	2.5	2.6	2.4
Consumption of households	<i>real growth in %</i>	-1.2	0.5	1.8	3.0	2.9	2.4	2.7	2.7	2.4	2.4
Consumption of government	<i>real growth in %</i>	-2.0	2.5	1.1	2.0	1.2	1.7	1.5	2.0	1.6	1.4
Gross fixed capital formation	<i>real growth in %</i>	-3.1	-2.5	3.9	9.0	-3.7	3.8	3.0	-2.4	3.8	3.0
Net exports	<i>contr. to GDP growth, pp</i>	1.3	0.1	-0.5	0.1	1.1	0.2	0.2	1.1	0.2	0.3
Change in inventories	<i>contr. to GDP growth, pp</i>	-0.2	-0.7	1.1	0.3	0.7	0.0	0.0	0.4	0.0	0.0
GDP deflator	<i>growth in %</i>	1.5	1.4	2.5	1.0	1.1	1.1	1.8	1.1	0.9	1.6
Average inflation rate	<i>%</i>	3.3	1.4	0.4	0.3	0.7	2.4	1.7	0.7	2.0	1.6
Employment (LFS)	<i>growth in %</i>	0.4	1.0	0.8	1.4	1.9	1.1	0.3	1.9	0.8	0.3
Unemployment rate (LFS)	<i>average in %</i>	7.0	7.0	6.1	5.1	4.0	3.4	3.3	4.0	3.9	3.9
Wage bill (domestic concept)	<i>growth in %</i>	2.6	0.5	3.6	4.4	5.8	5.7	4.8	5.6	5.0	4.5
Current account balance	<i>% of GDP</i>	-1.6	-0.5	0.2	0.2	1.1	0.4	0.5	2.1	1.2	1.3
General government balance	<i>% of GDP</i>	-3.9	-1.2	-1.9	-0.6	0.6	0.4	.	0.5	.	.
Assumptions:											
Exchange rate CZK/EUR		25.1	26.0	27.5	27.3	27.0	26.9	26.3	27.0	26.9	26.3
Long-term interest rates	<i>% p.a.</i>	2.8	2.1	1.6	0.6	0.4	0.9	1.5	0.4	0.6	1.1
Crude oil Brent	<i>USD/barrel</i>	112	109	99	52	44	56	57	44	57	57
GDP in Eurozone	<i>real growth in %</i>	-0.9	-0.3	1.2	2.0	1.7	1.5	1.6	1.6	1.4	1.6

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

Growth around 2.5% driven by domestic demand

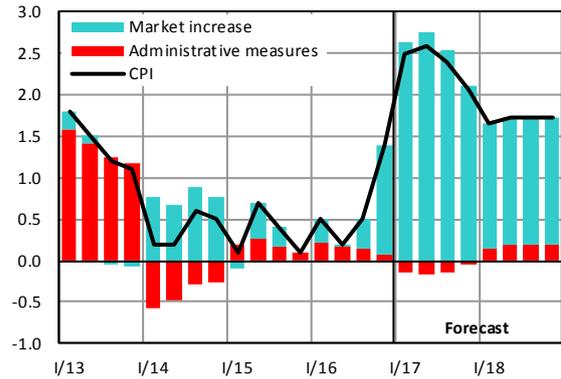
YoY growth rate of real GDP in %, contributions of individual expenditure components in percentage points



Source: CZSO. Calculations of the MoF.

Inflation should temporarily accelerate above 2%

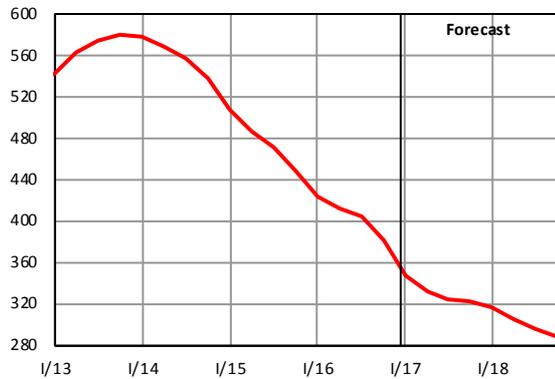
decomposition of YoY growth of CPI, contributions in pp



Source: CZSO. Calculations of the MoF.

Unemployment should continue to decline further

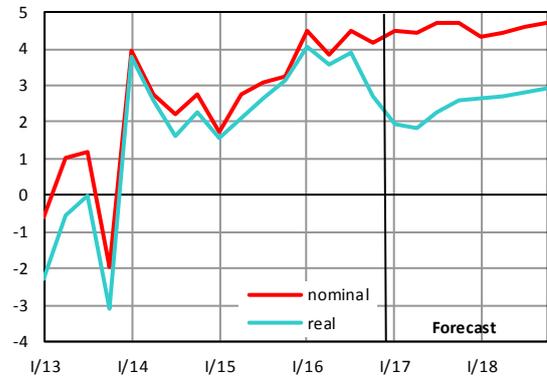
registered unemployment, in thous. of persons, seasonally adjusted



Source: Ministry of Labour and Social Affairs. Calculations of the MoF.

Growth of nominal wages should exceed 4%

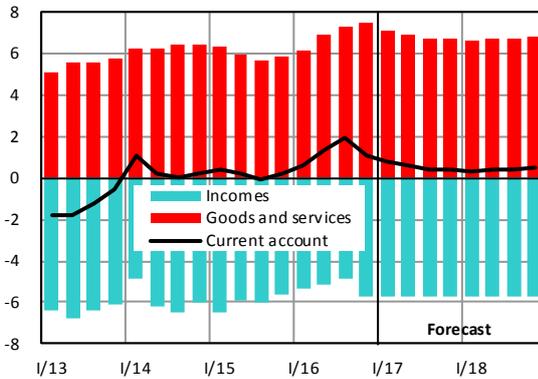
average gross monthly wage, YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Continued positive balance on the current account

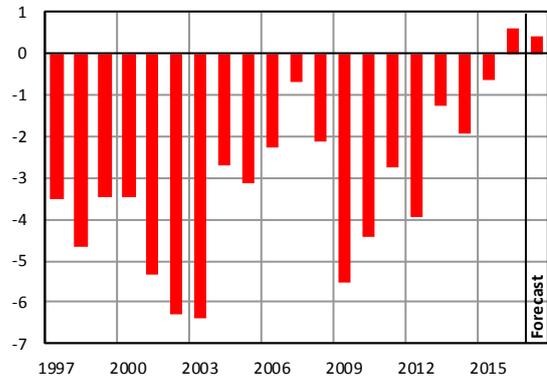
in % of GDP (yearly moving sums)



Source: CNB, CZSO. Calculations of the MoF.

General government balance should remain in surplus

in % of GDP



Source: CZSO. Calculations of the MoF.

Risks to the Forecast

Risks to the forecast are tilted to the downside, in particular due to the external environment.

In our view, the greatest risk is the uncertainty associated with the process and impacts of **the United Kingdom's withdrawal from the EU**. The Czech economy could be influenced in particular through foreign trade (slowdown in foreign demand growth), especially if the future arrangement of relationship between the UK and the EU in the area of international trade significantly diverges from the current state. On the side of domestic demand, some investment projects may be postponed as a result of slower growth of foreign demand or increased uncertainty.

Uncertainty may also increase with the upcoming **elections in France and Germany**. Global economic growth could be negatively affected by a possible change in the **direction of economic policy of the United States**, in particular in the area of openness of foreign trade.

Economic growth in some countries of the EU, and indirectly through foreign trade also in the Czech Republic, could be affected negatively by possible materialization of **risks in the financial sector**, related to not only a high share of non-performing loans in the balances of some European banks but also to concerns about future development of profitability and capital adequacy of some systemically important institutions.

Another negative risk is the possibility of a **more considerable slowdown of the growth of the Chinese economy**. The expected continuation of a gradual slowdown of economic growth in China should not be crucial for the Czech Republic, despite the fact that the interconnectiveness of the Czech and Chinese economies is higher than suggested by data on their mutual foreign trade, due to their involvement in the global supply chains.

Other **geopolitical factors**, such as conflicts in the Middle East and North Africa, which have triggered a **migra-**

tion crisis, could also have an adverse effect. Medium to long term economic impact on individual EU countries of the crisis cannot be estimated. Provided, however, that the number of applicants for asylum in the Czech Republic does not increase considerably, direct impacts on the Czech economy should be negligible.

With the mid-2017 approaching, when the exchange rate commitment was expected to likely be discontinued according to previous statements of the CNB Bank Board, **growing pressures on appreciation of koruna** are apparent, supported by the acceleration in inflation since the end of the last year. Therefore, it cannot be ruled out that the CNB will proceed to the use other, less conventional, monetary policy instruments in response to these appreciation pressures or in the context of its strategy of discontinuation of the exchange rate commitment. Increased exchange rate volatility and/or the possibility of short-term significant appreciation of the koruna after the end of the current exchange regime could pose a problem for some firms. However, with the possibility of exchange rate hedging, we believe that such a development would have a negative impact especially at the microeconomic level without significant effects on the entire economy.

The combination of the environment of low (not only monetary-policy) interest rates and economic growth is reflected in the Czech Republic in a high dynamics of mortgage loans. Together with the factors limiting the supply of residential real estate (some of which are Prague-specific), this development contributes to growth of offer price of flats. Should the fast growth of housing loans and real estate prices continue, it could result in a **bubble in the real estate market** and influence negatively financial stability. However, a strengthening of the CNB's powers, which is being discussed (for details see Chapter 1.4), should help prevent this type of financial imbalance.

1 Forecast Assumptions

1.1 External Environment

Global economic growth slowed down slightly again in 2016 and reached 3.1% according to a preliminary estimate. Developments in individual regions were diverse. Whereas YoY growth was slightly below 2% in the USA and the Euro area in the second half of the previous year, differences were more pronounced among emerging economies. China's economy grew at a fast pace, although it was largely supported by fiscal stimuli; however, a number of other large emerging economies faced difficulties or economic recession (Brazil, Russia).

1.1.1 United States of America

At the end of 2016, the US economy growth slowed down as expected, and real GDP increased by 0.5% QoQ in the fourth quarter (*versus 0.6%*). Household consumption, which has been the main driver of growth since the fourth quarter of 2013, benefited from a good labour market situation and consumer confidence, which was reflected in a strong growth of expenditure on durable goods. Business investment and change in inventories also contributed positively to GDP growth. Conversely, the balance of foreign trade weighed on economic growth as imports rose (strong domestic demand, exchange rate) and exports fell.

In reaction to the continued economic growth, creation of new jobs and an increase in inflation rate, Fed further raised interest rates by 25 pp to 0.75–1.00%. It also anticipated it would raise interest rates two more times in 2017 and three times in the following year. The growth of the price level accelerated in the second half of 2016 and it reached 2.7% YoY in February 2017 due to the increase in energy prices. However, Fed expects the inflation rate will stabilize around 2% in the medium term.

We expect that economic growth will accelerate slightly, with household consumption remaining the key factor. It will be supported by a good situation on the labour market. In February 2017, the unemployment rate reached 4.7%. A lack of labour force has started to manifest itself in some sectors, and a moderate acceleration of wage growth can therefore be expected. Conversely, economic growth should be, with regard to the strong USD exchange rate and continued relatively poor performance of emerging economies, slowed down mainly by export. Last but not least, the economy will be influenced by changes in the fiscal and economic policies in connection with the start of new presidency. However, details on planned steps in the area of taxation, regulation of the financial sector, investment, etc., have not yet been presented. Market expectations from the new American administration are high, as evidenced by developments in financial markets and a number of confidence indicators. Real GDP growth reached 1.6% in 2016 (*in line with*

the estimate). We expect that economic growth will accelerate to 2.3% in 2017 (*unchanged*) and subsequently to 2.4% in the following year (*unchanged*).

1.1.2 China

Dynamics of the Chinese economy has long been slowing down, but it is still high and China thus remains the main driver of global economic growth. QoQ growth of real GDP, which was 1.7% in the fourth quarter of 2016, largely reflects fiscal and monetary stimuli through which the Government is trying to increase household consumption as well as the share of services in the economy. In 2016 as a whole GDP increased by 6.5%. The situation in industry has already started to improve slightly, which is also indicated by the Purchasing Managers' Index in manufacturing and recently also by a dynamic increase in producer prices. Some sectors (e.g. coal mining or steel industry), however, are still struggling with overcapacity. The situation in financial markets is stabilized; however, foreign exchange reserves have been declining since mid-2014. Rapid growth of loans despite tightening regulations, the aim of which is to limit speculative financial activities, also raises considerable concerns. Pressure on the banking sector is further increased by growing volume of non-performing loans. From the long-term perspective, demographic development is a major risk.

1.1.3 European Union

Economic growth in the European Union remains relatively sluggish. The QoQ GDP growth in the fourth quarter of 2016 reached 0.5% in the EU28 (*versus 0.4%*) and 0.4% in the EA19 (*versus 0.3%*). In a YoY comparison, GDP of the EU28 increased by 1.9% (*versus 1.7%*), while GDP of the EA19 rose by 1.7% (*versus 1.5%*). Developments in individual countries remain considerably differentiated. In many countries, structural problems of their economies, loss of competitiveness, low growth rate of investment or high debts of the public and private sectors are still acting as a brake on a more significant recovery.

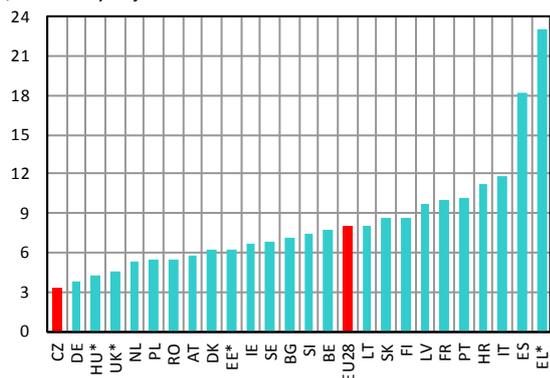
The ECB aims to increase inflation and support economic growth in the Euro area. It has been keeping the main refinancing rate at 0.00% and the deposit rate at –0.40% since March 2016. Moreover, the ECB assumes that the benchmark interest rates will remain at the same or lower levels for a longer time, and definitely beyond the horizon of net asset purchases (monthly purchases of assets worth EUR 60 billion should take place until the end of the year, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation consistent with its inflation target). Aim of the eased monetary conditions is to increase

credit activity and ensure that inflation, through an increase in investment and consumption, returns to the inflation target (inflation below, but close to, 2%). The YoY growth of HICP resumed in the second half of 2016 and reached 2.0% in EA19 in February 2017. However, excluding energy and food prices, the consumer price growth stagnates slightly below 1%.

With regard to economic recovery, the situation on the labour market is also gradually improving. Unemployment rate in the EU28 has been decreasing since mid-2013 and reached 8.1% in January (YoY decline of 0.8 pp). However, enormous differences still persist among individual economies. The worst situation is still in Greece, where the unemployment rate stood at 23.1% in December 2016. Of the EU28 countries, for which data for January 2017 was available as of the cut-off date, the unemployment rate was the highest in Spain (18.2%), Cyprus (14.1%) and Italy (11.9%); on the other hand, the lowest rates were recorded in the Czech Republic (3.4%) and Germany (3.8%).

Graph 1.1.1: Unemployment rate in the EU in January 2017

in %, seasonally adjusted data



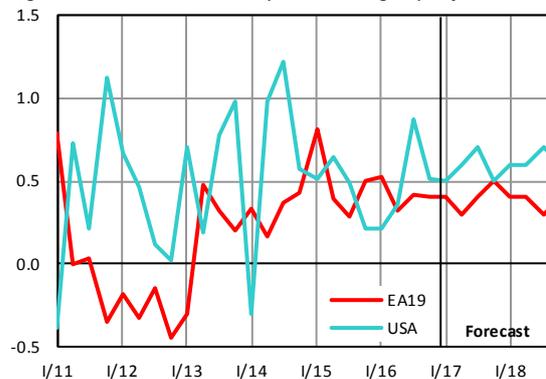
Note: *) December 2016.
Source: Eurostat.

We expect economic growth to be driven mainly by domestic demand in the coming years. The main driver will remain household consumption, which will be supported by low interest rates in the short term and by improving labour market situation in the long term. Investment, however, which will continue to be supported by the eased monetary policy of the ECB, will be negatively affected by the uncertainty associated with the United Kingdom's decision to withdraw from the EU. The impacts on economic growth in the EU cannot be currently quantified. Although the United Kingdom has already officially launched the process of withdrawal from the EU (on 29 March), the future arrangement of mutual relations is unknown. We expect, however, that these impacts will overall be relatively low. Given the gradual global economic recovery, the dynamics of export should also slightly increase. The contribution of export to economic growth will, however, be significantly lower in comparison with the contribution of domestic demand.

On the other hand, problems in the banking sector in the Euro area or high debts of some economies are factors weighing on economic growth. Moreover, uncertainty is increased by parliamentary and presidential elections, which will be held in France and Germany this year. In the EA19 real GDP increased by 1.7% in 2016 (versus 1.6%). We expect growth of 1.5% (versus 1.4%) this year and a slight acceleration to 1.6% (unchanged) in 2018.

Graph 1.1.2: Growth of GDP in the EA19 and in the USA

QoQ growth rate, in %, seasonally and working day adjusted



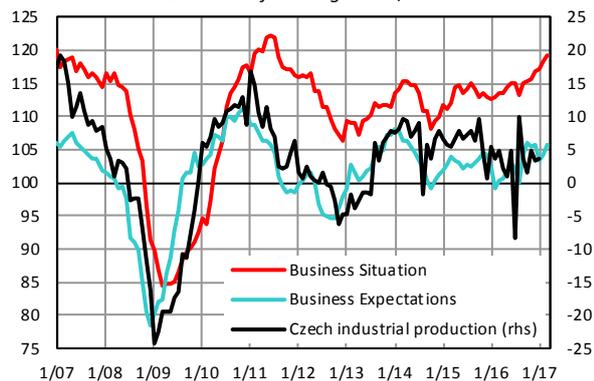
Source: Eurostat. Calculations of the MoF.

In the fourth quarter of 2016, real GDP growth rate in **Germany** accelerated slightly to 0.4% QoQ (versus 0.3%). The growth was driven by all components of domestic demand, with change in inventories posting the biggest contribution. While households benefited from the good labour market situation and low credit costs, the government consumption rose mainly in connection with an increase in expenditure associated with the migration crisis. Investments increased mainly due to residential investments, whereas investments in machinery and equipment are still below the pre-crisis level, despite favourable financial conditions and growth of exports and corporate profits. The balance of foreign trade weighed on economic growth as imports increased due to strong domestic demand faster than exports, whose dynamics reflect, among other things, weak foreign demand and slow growth in the Euro area.

The labour market situation continues to develop favourably. However, it can already be viewed as tightened because the German economy is close to full employment. The unemployment rate stood at 3.9% in February 2017 and employment has reached the highest numbers since German reunification. Wages as well as unit labour costs are rising faster than in the Euro area. Leading indicators continue to develop favourably. The values of the Ifo indicator remain at high level, with the assessment of the current economic situation being the best since July 2011 (see Graph 1.1.3). The Purchasing Managers' Index in manufacturing has seen another significant improvement. The development of the consumer confidence index (GfK) remains encouraging.

Graph 1.1.3: Ifo (Germany) and Czech manufacturing production

2005=100 (Ifo), YoY growth of the seasonally adjusted industrial production index in the Czech manufacturing sector, in %



Source: CESifo, CZSO.

We expect that economic growth will be driven by domestic demand. In the short-term horizon, the household consumption expenditure will mainly be supported by an increase in wages in the general government sector and of pensions, while the low number of unemployed and the related real wage growth will have a more permanent effect. Moreover, the minimum wage was increased by 4% in January. The increase in general government sector consumption expenditure will be supported mainly by expenditure related to the migration crisis, though to a smaller extent than in 2016. Investment in infrastructure and housing will particularly contribute to an increase in government investment. Export growth will be unfavourably affected by the United Kingdom's withdrawal from the EU, as it is the third biggest export market for the German economy (the share of exports to the UK in total exports was 8.4% in 2015, which corresponded to 3.8% of German GDP). Another risk for further development is parliamentary elections taking place in autumn this year. The growth of German economy reached 1.9% in 2016 (*versus 1.6%*). We expect that growth will slow down slightly to 1.6% (*versus 1.5%*) in 2017 due to lower number of working days (by 3 compared to 2016), and it will reach the same pace also in the following year (*unchanged*).

At the end of 2016, growth of the **French** economy accelerated slightly as GDP increased by 0.4% QoQ in the fourth quarter (*versus 0.3%*). On the side of domestic demand, growth was mainly driven by household consumption that was supported not only by low interest rates, low inflation rate and increasing consumer confidence, but temporarily also by more chilly weather and the associated higher expenditure on energy. Economic growth was also fuelled, although to a smaller extent, by government consumption expenditure or household and business investments, which benefit from the ECB's expansionary monetary policy, a temporarily lower tax burden on investment and high optimism. The contribution of net exports was also positive as growth of export accelerated again and surpassed import growth. Change

in inventories was the only component that weighed on economic growth.

The labour market situation is, unlike in most EU countries, not improving much. The unemployment rate is around 10%, the long-term unemployment rate shows an upward trend, and wage growth remains relatively weak. Leading indicators point to some improvement in economic developments. The business sentiment indicator has shown an increasing trend since 2013, and the consumer confidence indicator has reached the highest values since 2007. Also, the Purchasing Managers' Indexes in manufacturing and services indicate more dynamic economic growth. A faster recovery, however, will be hampered by low competitiveness and the associated declining share on export markets, continuing rigidities on the labour market or high levels of public and private debt. The upcoming presidential and parliamentary elections also pose a risk for further developments. Real GDP increased by 1.2% in 2016 (*versus 1.1%*). We expect that economic growth will remain relatively weak and the French economy will grow by 1.3% (*unchanged*) both in 2017 and in the following year.

The quarterly growth of the **Polish** economy dramatically accelerated to 1.7% (*versus 0.6%*) in the fourth quarter of 2016. Economic growth was driven by domestic and foreign demand. The fastest growing component was household consumption expenditures supported by increasing employment and wages, higher child benefits and improved consumer sentiment. The only component that weighed on economic growth was gross fixed capital formation. A decrease in investment, which already slightly slowed down compared to the previous quarter and reached 6.4% in a YoY comparison, is mainly due to a deep decline in investment by the general government sector as a result of termination of projects from the previous financial perspective of the EU. A decline in business investment was probably related to private sector's concerns about increasing government interventions in the economy. In the coming two years, economic growth should continue to be driven mainly by household consumption, which will be supported by growth of social benefits, good labour market situation, low interest rates and increasing consumer confidence. Investment growth should resume with the start of programmes of the 2014–2020 financial perspective; however, lower predictability of government policies is a risk. Real GDP increased by 2.8% in 2016 (*versus 2.3%*). For 2017, we estimate GDP growth of 3.4% (*versus 2.9%*) due to a statistical effect (carry-over) of the strong growth in the fourth quarter of 2016, and a slight slowdown to 3.2% (*versus 3.1%*) in the following year.

Growth of the **Slovak** economy slightly accelerated in the fourth quarter of 2016, when GDP increased by 0.8% QoQ (*versus 0.6%*). Economic growth was driven exclusively by household consumption expenditure, whereas other components of domestic demand together with balance of foreign trade slightly weighed on economic

growth. The household consumption growth is also supported by low inflation and developments in the labour market, where the situation has improved significantly since 2013. The unemployment rate decreased to 8.4% (YoY decrease of 1.7 pp) in February 2017, and the YoY real wage growth reached 3.7% in January. However, deep regional differences persist on the Slovak labour market; another problem is low labour mobility. After almost three years, the price level began to increase YoY in December 2016 and in February inflation reached 1.2%. In the coming years, household consumption should show a steady growth, which will also be facilitated by further employment growth, increase in the minimum wage by 7.4% in January and wage growth as in some regions there are already tensions in the labour market and associated lack of qualified workers. However, the real wage growth will slow down due to accelerating inflation. A gradual recovery in investment will also be supported by the government sector investment in the infrastructure or continued investment in the automotive industry. Start of production of the Jaguar Land Rover car factory should significantly contribute to an acceleration of exports in 2018. Economic growth will also be supported by a decrease in the corporate income tax by 1 pp to 21% from 2017 or by an increase in lump-sum expenses for sole traders from 40% to 60% together with a sharp increase in their ceiling from 2018. Real GDP increased by 3.3% in 2016 (*versus 3.4%*). For 2017 we expect a growth of 3.3% (*versus 3.2%*), for 2018 a slight acceleration to 3.6% (*versus 3.5%*).

1.1.4 Commodity Prices

We estimate that the Brent crude oil price increased by 12.4% QoQ in the first quarter of 2017, averaging USD 55/barrel (*versus 57 USD/barrel*).

The Brent crude oil price increased significantly after 30 November 2016, when an OPEC cartel agreement to limit output by 1.2 million barrels daily was announced. According to available information, the agreement is be-

ing fulfilled approximately by 90%. Moreover, it is possible that the output limitation will be prolonged or tightened. On the other hand, the oil market is influenced by increased production in the United States. According to estimates, this year's global oil production should roughly correspond to consumption, and downward pressure on prices, which had been driven by rising oil stocks in the last two years, should thus be eliminated.

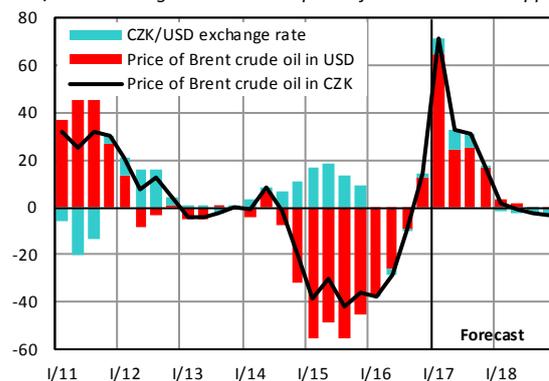
In accordance with a relatively flat curve of futures prices we expect almost stagnating Brent crude oil price. The average price should reach USD 56/barrel in 2017 (*versus USD 57/barrel*), and we expect an average price of USD 57/barrel in 2018 (*unchanged*).

According to our estimates, this year's YoY increase in the Brent crude oil prices in koruna terms reached the highest value in the first quarter and it should slow down considerably by the end of the year. In 2018, it should be around zero (see Graph 1.1.4).

Given the possibility that the increase in oil production in the United States exceeds market expectations, we consider the risks to the forecast of oil price to be tilted to the downside.

Graph 1.1.4: Koruna Price of Brent Crude Oil

YoY change of the koruna price of Brent crude oil in %, contributions of the CZK/USD exchange rate and USD price of Brent crude oil in pp



Source: CNB, U. S. Energy Information Admin.. Calculations of the MoF.

Table 1.1.1: Gross Domestic Product – yearly

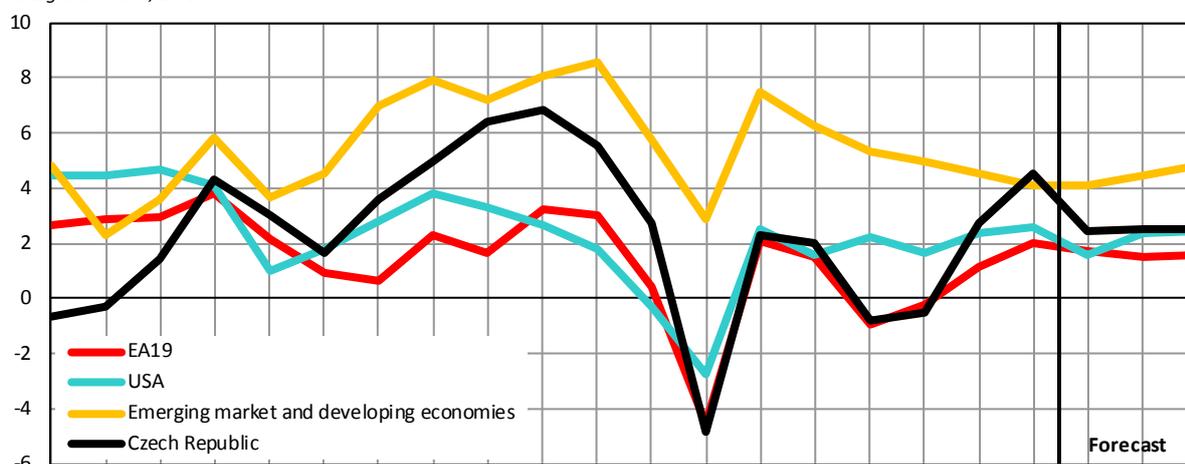
YoY real growth rate, in %

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
									Forecast	Forecast
World	-0.1	5.4	4.2	3.5	3.3	3.4	3.2	3.1	3.4	3.6
USA	-2.8	2.5	1.6	2.2	1.7	2.4	2.6	1.6	2.4	2.4
China	9.2	10.6	9.5	7.7	7.7	7.3	6.9	6.7	6.5	6.3
EU28	-4.4	2.1	1.7	-0.5	0.2	1.6	2.2	1.9	1.8	1.9
EA19	-4.5	2.1	1.5	-0.9	-0.3	1.2	2.0	1.7	1.5	1.6
Germany	-5.6	4.1	3.7	0.5	0.5	1.6	1.7	1.9	1.6	1.6
France	-2.9	2.0	2.1	0.2	0.6	0.6	1.3	1.2	1.3	1.3
United Kingdom	-4.3	1.9	1.5	1.3	1.9	3.1	2.2	1.8	1.6	1.2
Austria	-3.8	1.9	2.8	0.7	0.1	0.6	1.0	1.5	1.6	1.5
Hungary	-6.6	0.7	1.7	-1.6	2.1	4.0	3.1	2.0	2.5	2.5
Poland	2.6	3.7	5.0	1.6	1.4	3.3	3.9	2.8	3.4	3.2
Slovakia	-5.4	5.0	2.8	1.7	1.5	2.6	3.8	3.3	3.3	3.6
Czech Republic	-4.8	2.3	2.0	-0.8	-0.5	2.7	4.5	2.4	2.5	2.5

Source: CZSO, Eurostat, IMF, NBS China. Calculations of the MoF.

Graph 1.1.5: Gross Domestic Product

YoY real growth rate, in %



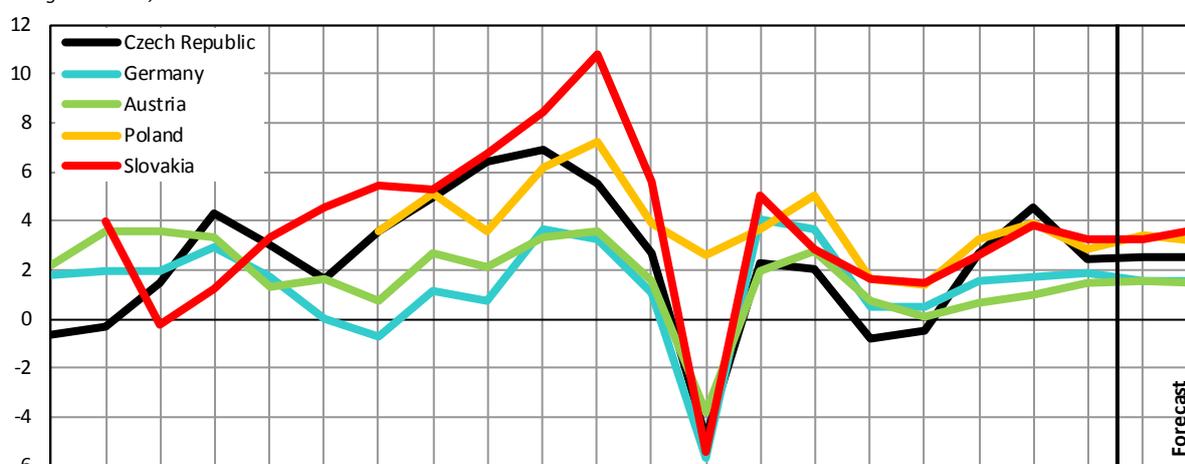
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Note: Emerging market and developing economies comprising 154 countries (according to the IMF's classification)

Source: Eurostat, IMF. Calculations of the MoF.

Graph 1.1.6: Gross Domestic Product – Czech Republic and the neighbouring states

YoY real growth rate, in %



1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Source: Eurostat. Calculations of the MoF.

Table 1.1.2: Gross Domestic Product – quarterly

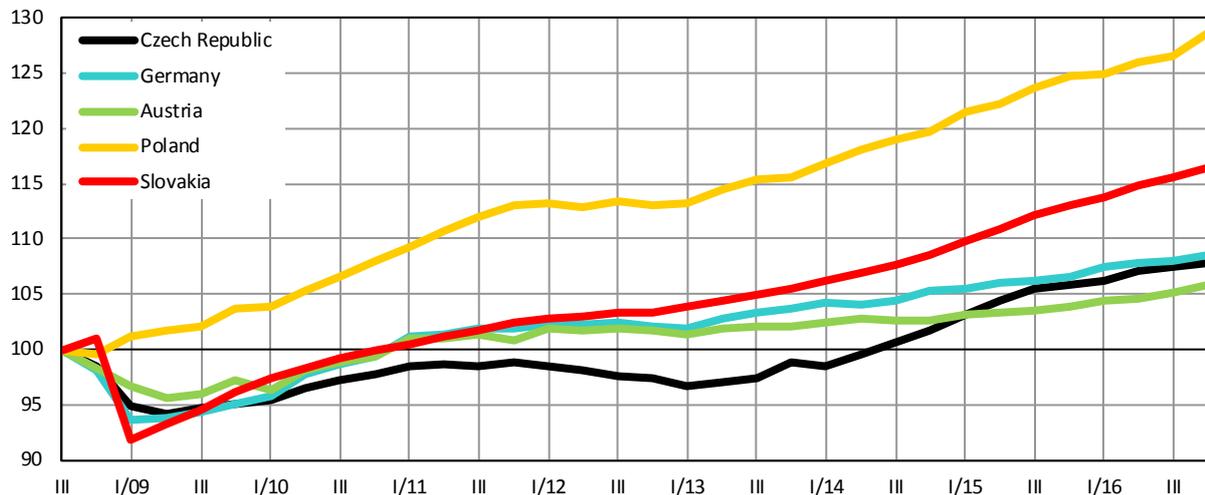
real growth rate, in %, seasonally adjusted data

		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
USA	QoQ	0.2	0.4	0.9	0.5	0.5	0.6	0.7	0.5
	YoY	1.6	1.3	1.7	2.0	2.3	2.5	2.3	2.3
China	QoQ	1.3	1.9	1.8	1.7	1.4	1.5	1.6	1.5
	YoY	6.4	6.7	6.7	6.9	7.0	6.6	6.3	6.1
EU28	QoQ	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.5
	YoY	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8
EA19	QoQ	0.5	0.3	0.4	0.4	0.4	0.3	0.4	0.5
	YoY	1.7	1.6	1.8	1.7	1.6	1.5	1.5	1.6
Germany	QoQ	0.7	0.5	0.1	0.4	0.6	0.4	0.5	0.4
	YoY	1.8	1.8	1.7	1.8	1.6	1.6	1.9	1.9
France	QoQ	0.6	-0.1	0.2	0.4	0.5	0.4	0.2	0.3
	YoY	1.2	1.1	0.9	1.1	1.0	1.5	1.5	1.4
United Kingdom	QoQ	0.2	0.6	0.6	0.7	0.3	0.2	0.3	0.2
	YoY	1.6	1.7	2.0	2.0	2.2	1.8	1.5	1.0
Austria	QoQ	0.6	0.1	0.6	0.6	0.4	0.3	0.3	0.3
	YoY	1.4	1.2	1.6	1.8	1.7	1.9	1.6	1.3
Hungary	QoQ	-0.3	1.0	0.3	0.4	0.5	0.4	0.6	0.5
	YoY	1.3	2.3	2.0	1.5	2.3	1.7	1.9	2.0
Poland	QoQ	0.0	1.0	0.4	1.7	0.6	0.7	0.9	0.8
	YoY	2.8	3.2	2.3	3.1	3.7	3.4	3.9	3.0
Slovakia	QoQ	0.6	0.8	0.7	0.8	0.8	0.9	0.9	0.8
	YoY	3.6	3.5	3.1	2.9	3.1	3.2	3.4	3.4
Czech Republic	QoQ	0.4	0.9	0.2	0.4	0.8	0.9	0.8	0.7
	YoY	3.0	2.6	1.8	1.9	2.3	2.4	2.9	3.2

Source: Eurostat, NBS China. Calculations of the MoF.

Graph 1.1.7: Gross Domestic Product – Czech Republic and the neighbouring states

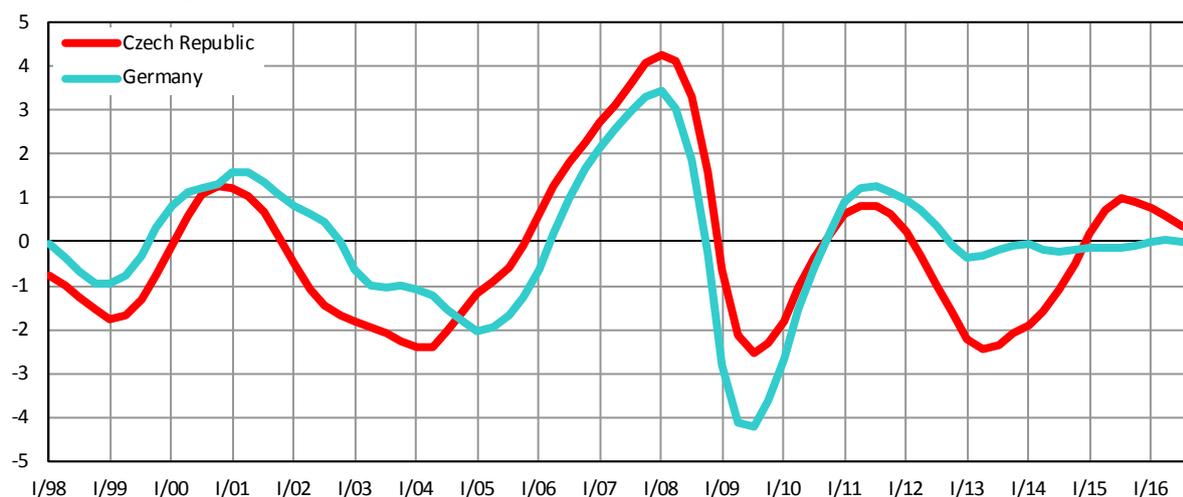
Q3 2008=100, seasonally adjusted data, constant prices



Source: Eurostat. Calculations of the MoF.

Graph 1.1.8: Cyclical Component of GDP – Czech Republic and Germany

in % of GDP, derived using the Hodrick-Prescott filter



Source: Eurostat. Calculations of the MoF.

Table 1.1.3: Prices of Selected Commodities – yearly

spot prices

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
											Forecast	Forecast
Crude oil Brent	<i>USD/barrel</i>	61.5	79.6	111.3	111.6	108.6	99.0	52.4	43.6	56	57	
	<i>growth in %</i>	-36.5	29.3	39.9	0.3	-2.6	-8.8	-47.1	-16.8	29.3	0.8	
Crude oil Brent index (in CZK)	<i>2010=100</i>	76.1	100.0	129.5	143.8	139.9	134.6	85.1	70.1	95	94	
	<i>growth in %</i>	-28.6	31.4	29.5	11.0	-2.7	-3.8	-36.8	-17.5	35.5	-1.5	
Natural gas	<i>USD/MMBtu</i>	8.9	8.2	10.6	12.0	11.2	10.5	7.3	4.4	.	.	
	<i>growth in %</i>	-32.6	-7.1	28.9	13.1	-6.6	-6.5	-30.2	-40.4	.	.	
Natural gas index (in CZK)	<i>2010=100</i>	110.2	100.0	119.7	149.4	139.4	138.2	114.6	67.8	.	.	
	<i>growth in %</i>	-23.3	-9.3	19.7	24.8	-6.7	-0.9	-17.1	-40.8	.	.	

Source: CNB, IMF, U. S. Energy Information Administration. Calculations of the MoF.

Table 1.1.4: Prices of Selected Commodities – quarterly

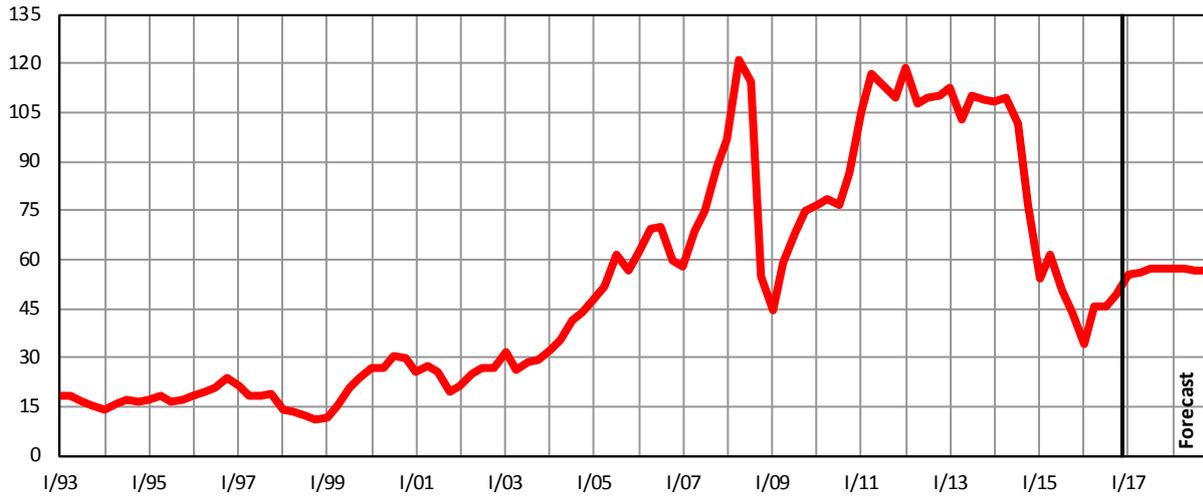
spot prices

		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Crude oil Brent	<i>USD/barrel</i>	33.8	45.6	45.8	49.1	55	56	57	57
	<i>growth in %</i>	-37.3	-26.1	-9.2	12.8	63.1	23.1	24.3	16.3
Crude oil Brent index (in CZK)	<i>2010=100</i>	54.7	71.8	73.0	81.1	94	95	96	96
	<i>growth in %</i>	-37.3	-28.6	-10.4	14.4	71.1	32.4	31.4	17.9
Natural gas	<i>USD/MMBtu</i>	4.7	4.0	4.2	4.6	.	.	.	.
	<i>growth in %</i>	-50.2	-45.4	-36.9	-22.5	.	.	.	.
Natural gas index (in CZK)	<i>2010=100</i>	72.8	61.2	64.3	73.0	.	.	.	.
	<i>growth in %</i>	-50.3	-47.3	-37.7	-21.4	.	.	.	.

Source: CNB, IMF, U. S. Energy Information Administration. Calculations of the MoF.

Graph 1.1.9: Dollar Prices of Oil

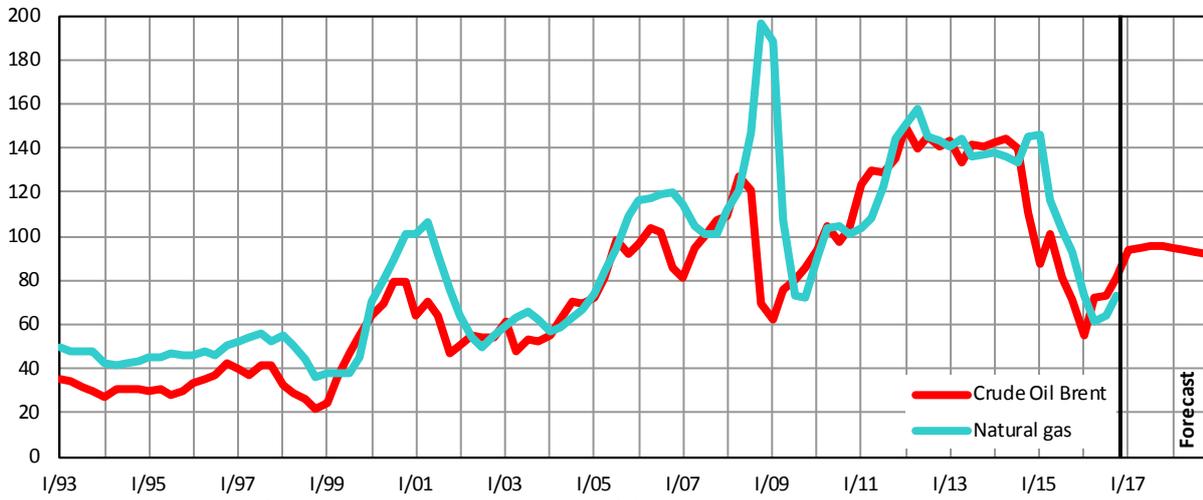
USD/barrel



Source: U. S. Energy Information Administration. Calculations of the MoF.

Graph 1.1.10: Koruna Indices of Prices of Selected Commodities

index 2010=100



Source: CNB, IMF, U. S. Energy Information Administration. Calculations of the MoF.

1.2 Fiscal Policy

According to data released by the Czech Statistical Office, the balance of the general government sector ended up in a surplus of 0.6% of GDP in 2016. This is the best result in modern history of the Czech Republic or more precisely in available time series. What's more, it is the first surplus of the whole general government sector in internationally comparable European methodology ESA 2010 on accrual basis.

The balance of the general government sector improved by 1.3 pp YoY, which demonstrates ongoing efforts of the Czech government to improve the state of public finance. The structural balance also reached a record-high surplus, though given a positive output gap (see Chapter 2.1) it was only 0.5% of GDP. The structural balance improved by 1.1 pp YoY, which shows that the improvement in the balance of the general government sector was not in a large part affected by the change of position of the economy in economic cycle.

The improvement in the balance of the general government sector was primarily determined by the revenue side of budgets, where tax revenues including social security contributions increased by 5.8% YoY, which corresponds to more than CZK 90 billion (1.9% of GDP) in absolute terms. Except for economic growth, a number of new measures to fight tax evasion played a role, mainly the introduction of electronic tax reporting at the start of 2016, with dynamics of VAT exceeding nominal growth of household consumption by approx. 2 pp. Personal income tax as well as social security contributions, which were primarily driven by increases in the wage bill in the economy, also reached high rates of growth. These revenues were also affected by the change of distribution of wages and salaries following the 7.6% increase in minimum and guaranteed wage, and by the introduction of the first phase of electronic registration of sales in the accommodation and food services sector, even though its impact is limited given that this measure was effective only in December 2016.

Revenues from excise taxes rose at a relatively low pace of 2.5% that was mainly due to an increase in the tax rate on tobacco products, with the impact estimated at CZK 3 billion.

A marked slowdown in dynamics of net operating surplus manifested itself in revenues from the corporate income tax that increased by 2.7%. Investment activity stimulated by EU funds from the previous financial perspective played a role here, as it reached a peak in 2015, i.e. in the last year when the funds could have been used. This had an effect on profitability of firms as well as on revenues from the tax.

The transition between financial perspectives affected also expenditure of the general government sector, as nominal investment expenditure dropped by almost 33%. The slump was caused by a high level of EU co-

financed expenditure in 2015 and a slow transition to the new 2014–2020 programming period. With respect to methodology, the impact on the balance is only limited, whereas there is an effect on economic growth and on individual sides of the balance sheet of the general government sector taken separately. In line with the ESA 2010 rules, the level of investment expenditure financed exclusively from Czech public budgets was in 2015 affected also by a one-off imputation of financial lease of supersonic aircraft amounting to almost CZK 10 billion. Abstracting from this effect, investment financed from national resources increased by 3.5% YoY.

The 1.9% decrease in total expenditure of the general government sector was also due to interest expenses, which fell by almost 9%. Repeated fall in their level is related to a decrease in total debt of the general government sector by approximately CZK 80 billion (1.7% of GDP) to 37.2% of GDP, and to low yields along relatively flat yield curve reflecting positive perception of stable macroeconomic environment, Czech fiscal policy and last but not least the exchange rate commitment of the CNB (see Chapter 1.3).

Compared with 2015, the dynamics of final consumption expenditure of the general government sector slowed down slightly to 3.7%, being primarily driven by wage increases in the general government sector, where the compensation of employees rose by 5.6%.

We assume that the balance of the general government sector will again end up in surplus in 2017 that will reach 0.4% of GDP. From the perspective of the structural balance there should again be a small surplus, with primary fiscal stimulus (YoY change in the structural balance) amounting to 0.4 pp. To a certain extent this is also due to the expected increase in investment expenditure following its slump in the last year. The forecast scenario assumes start of projects from the 2014–2020 financial perspective as well as an increase in investment financed exclusively from national resources. In total, investment expenditure of the general government sector is expected to increase by 15%.

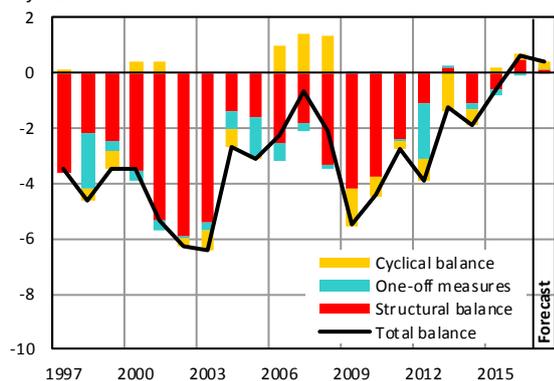
Total revenues from taxes and social security contributions should increase by 4% in 2017, i.e. by more than CZK 66 billion in absolute terms. Electronic tax reporting, where the positive effect of the last year is expected to intensify in relation to the use of more sophisticated analytical approaches, should further contribute to the growth of revenues. The effects of electronic registration of sales should be evident to a greater extent, as the larger part of the first phase for the accommodation and food services sector will be reflected in revenues of 2017. Effective from 1 March 2017, the second phase of electronic registration of sales was launched, which extended the requirement to register sales to entities in wholesale and retail trade. This measure should also be

reflected in revenues from personal and corporate income tax, social security contributions and VAT.

Growth of final consumption expenditure of the general government sector should accelerate slightly to 4%. Similarly to 2016, it will be primarily driven by increases in salaries of a range of general government sector employees. The forecast for 2017 can be assessed as balanced, the biggest risks being unfavourable economic developments or some discretionary measures not meeting expectations.

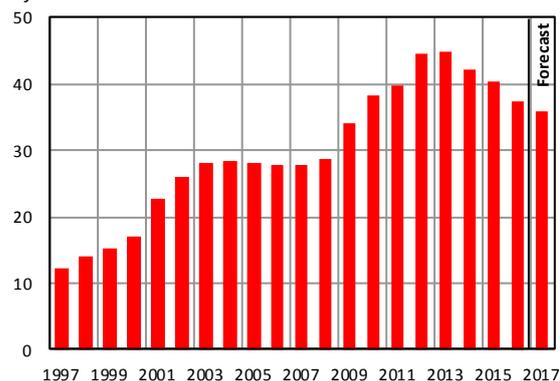
With the balance of the general government sector expected in surplus, debt to GDP ratio is anticipated to fall further to 36.0%. The Czech Republic thus belongs to the group of countries with the lowest ratio of the general government sector debt to GDP. The main drivers of these developments are the state debt, as well as budgets of local governments, where another strongly positive balance is expected in 2017.

Graph 1.2.1: Decomposition of the Government Balance
in % of GDP



Source: CZSO. Calculations of the MoF.

Graph 1.2.2: General Government Debt
in % of GDP



Source: CZSO. Calculations of the MoF.

Table 1.2.1: Net Lending/Borrowing and Debt

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
											Forecast
General government balance	% GDP	-2.1	-5.5	-4.4	-2.7	-3.9	-1.2	-1.9	-0.6	0.6	0.4
	bill. CZK	-85	-216	-175	-110	-160	-51	-83	-29	29	20
Cyclical balance	% GDP	1.3	-1.3	-0.7	-0.2	-0.8	-1.4	-0.6	0.2	0.2	0.3
Cyclically adjusted balance	% GDP	-3.4	-4.2	-3.7	-2.5	-3.1	0.2	-1.3	-0.8	0.4	0.1
One-off measures¹⁾	% GDP	-0.1	0.0	0.0	-0.1	-2.0	0.0	-0.3	-0.2	-0.1	0.0
Structural balance	% GDP	-3.4	-4.2	-3.8	-2.4	-1.1	0.2	-1.1	-0.6	0.5	0.1
Fiscal effort²⁾	pp	-1.5	-0.9	0.5	1.4	1.3	1.3	-1.2	0.5	1.1	-0.4
Interest expenditure	% GDP	1.0	1.2	1.3	1.3	1.4	1.3	1.3	1.1	0.9	0.9
Primary balance	% GDP	-1.1	-4.3	-3.1	-1.4	-2.5	0.1	-0.6	0.4	1.6	1.3
Cyclically adjusted primary balance	% GDP	-2.4	-2.9	-2.4	-1.2	-1.7	1.5	0.0	0.3	1.4	1.0
General government debt	% GDP	28.7	34.1	38.2	39.8	44.5	44.9	42.2	40.3	37.2	36.0
	bill. CZK	1 151	1 336	1 509	1 606	1 805	1 840	1 819	1 836	1 755	1 760
Change in debt-to-GDP ratio	pp	0.9	5.4	4.1	1.7	4.6	0.4	-2.7	-1.9	-3.1	-1.2

¹⁾ One-off and temporary measures are such measures that have only a temporary impact on public budgets. Besides their temporary impact on overall balance, these measures are usually of non-recurring nature and very often result from the events that are beyond the direct power of the government.

²⁾ Change in structural balance.

Source: CZSO. Calculations of the MoF.

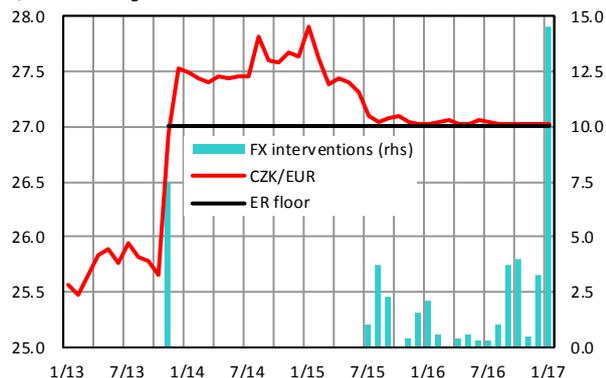
1.3 Monetary Policy, Financial Sector and Exchange Rates

1.3.1 Monetary Policy

Monetary policy of the CNB remains eased. The two-week repo rate has been set at 0.05% since November 2012, and since November 2013, the CNB has been using the exchange rate as an additional monetary policy instrument through its commitment not to allow the koruna to strengthen below 27 CZK/EUR. Since mid-2015, the CNB has been again intervening on the foreign exchange market (see Graph 1.3.1) in order to defend the exchange rate commitment with the total volume of interventions reaching EUR 40.3 billion between July 2015 and January 2017. Due to growing speculations on appreciation of the koruna after discontinuation of the exchange rate commitment, interventions were very intensive in January 2017 (EUR 14.5 billion). According to available information, the volume of interventions was very high also in February and March. The CNB can intervene against pressures for appreciation of the koruna basically without limits.

Graph 1.3.1: FX Interventions of the CNB and the Exchange Rate

monthly volume of foreign exchange interventions in EUR billion, CZK/EUR exchange rate



Source: CNB

1.3.2 Financial Sector and Interest Rates

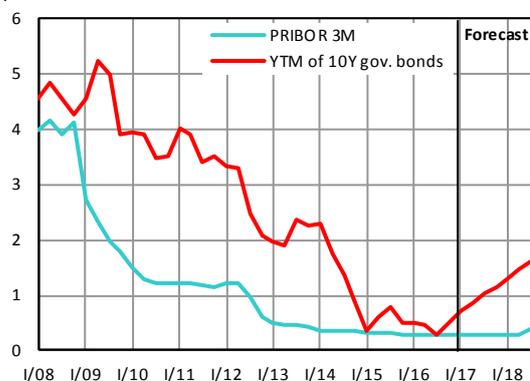
In the first quarter of 2017, the **3M** (3-month) **PRIBOR** interbank market rate averaged 0.3% (*in line with the forecast*). With respect to the expected development of monetary policy rates, the 3M PRIBOR should remain at this level also until mid-2018. The expected increase in the second half of the next year should be, however, slight, only to 0.5% in the fourth quarter of 2018 (*unchanged*).

With respect to mounting inflation pressures, long-term interest rates have recently been increasing, though they still remain close to historic lows. We estimate that the **yield to maturity on 10-year government bonds** for convergence purposes was 0.7% (*versus 0.5%*) in the first quarter of 2017. With regard to the assumed monetary policy stance and development of inflation expectations, we expect an increase in long-term interest rates to 0.9% in 2017 (*versus 0.6%*), and a more significant rise to 1.5% in 2018 (*versus 1.1%*). Discontinuation of the exchange

rate commitment may result in increased volatility also in bond markets.

Graph 1.3.2: Interest Rates

in % p.a.

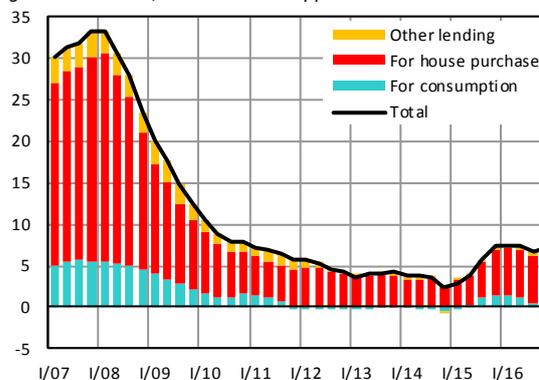


Source: CNB. Calculations of the MoF.

Growth of loans to households slightly accelerated in the fourth quarter of 2016, being mainly driven by housing loans, whose volumes are the largest (they account for nearly 75% of the total). Growth of loans for consumption also accelerated slightly in the fourth quarter of 2016, which may be associated with high optimism of consumers and a relatively dynamic growth of household consumption. Other loans, which include for example loans to sole traders, increased by 3.4% YoY in the fourth quarter (similar pace as in the previous period).

Graph 1.3.3: Loans to Households

YoY growth rate in %, contributions in pp

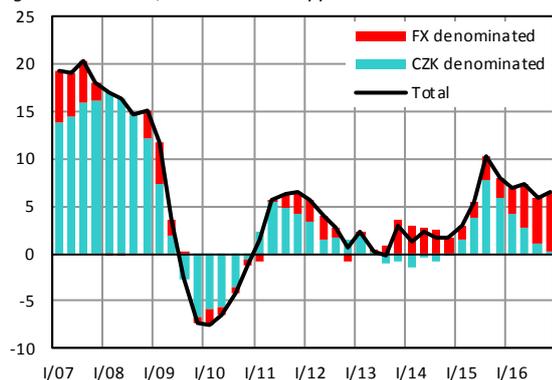


Source: CNB. Calculations of the MoF.

Total loans to non-financial corporations increased by 6.5% YoY in the fourth quarter of 2016. While koruna loans essentially stagnated (an increase by 0.3%), foreign currency loans increased by almost 30%. The continuing shift from koruna to foreign currency loans thus suggests that businesses in this way speculate on appreciation of the koruna after discontinuation of the CNB's exchange rate commitment.

Graph 1.3.4: Loans to Non-financial Corporations

YoY growth rate in %, contributions in pp

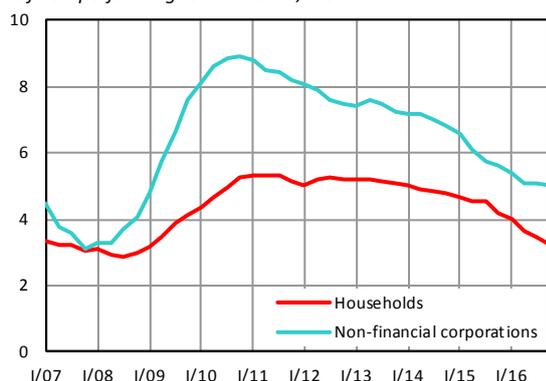


Source: CNB. Calculations of the MoF.

The share of non-performing loans in total loans in the fourth quarter of 2016 was at 3.3% for households (0.1 pp less QoQ, 0.9 pp less YoY) and at 5.0% for non-financial corporations (0.1 pp less QoQ and 0.6 pp less YoY). The low and further decreasing share of non-performing loans testifies the fact that no pressure leading to limitation of availability of bank loans should arise in near future.

Graph 1.3.5: Non-performing Loans

ratio of non-performing to total loans, in %



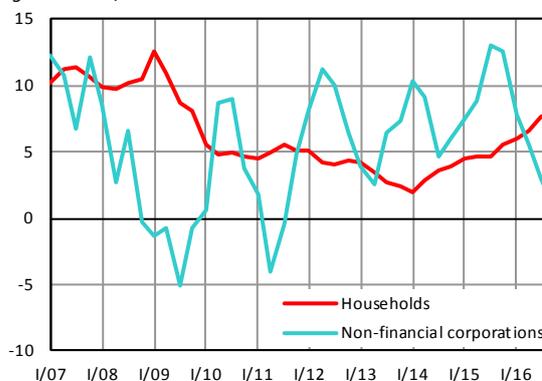
Source: CNB. Calculations of the MoF.

The growth in household deposits continues to increase (8.0% in the fourth quarter of 2016, the highest value since 2009), apparently in connection with their favourable economic situation, while the growth in deposits of

non-financial corporations slowed down to 0.6%. In terms of the capacity of households and non-financial corporations to finance future consumption and investment from own resources, the continued growth of deposits may be assessed positively.

Graph 1.3.6: Deposits

YoY growth rate, in %



Source: CNB. Calculations of the MoF.

1.3.3 Exchange Rates

The exchange rate of the koruna vis-à-vis the Euro has remained near the exchange rate commitment of 27 CZK/EUR since the third quarter of 2015.

On the basis of previous statements of the CNB Bank Board that it would not discontinue the use of exchange rate as a monetary policy instrument before the second quarter of 2017 and that the commitment was likely to be discontinued around mid-2017, we have adopted a technical assumption of stability at 27.0 CZK/EUR for the second quarter of 2017. We expect that, subsequently, the koruna will again start strengthening slightly against the Euro, approximately by 0.6% QoQ. It can be expected that the CNB will use interventions on the foreign exchange market also after discontinuation of the exchange rate commitment to reduce eventual increased volatility of the exchange rate.

The estimated development of the CZK/USD exchange rate is implied by the USD/EUR exchange rate for which we have made a technical assumption of stability at the level of 1.05 USD/EUR (*unchanged*).

Table 1.3.1: Interest Rates – yearly

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
										Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	1.00	0.75	0.75	0.05	0.05	0.05	0.05	0.05	.	.
Main refinancing rate ECB (end of period)	in % p.a.	1.00	1.00	1.00	0.75	0.25	0.05	0.05	0.05	.	.
Federal funds rate (end of period)	in % p.a.	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75	.	.
PRIBOR 3M	in % p.a.	2.19	1.31	1.19	1.00	0.46	0.36	0.31	0.29	0.3	0.4
YTM of 10Y government bonds	in % p.a.	4.67	3.71	3.71	2.80	2.11	1.58	0.58	0.43	0.9	1.5
Client interest rates											
Loans to households	in % p.a.	6.64	6.81	7.00	7.01	6.83	6.46	6.03	5.57	.	.
Loans to non-financial corporations	in % p.a.	4.85	5.59	4.58	4.10	3.93	3.69	3.19	3.00	.	.
Deposits of households	in % p.a.	1.29	1.55	1.38	1.25	1.20	1.18	1.01	0.84	.	.
Deposits of non-financial corporations	in % p.a.	1.41	1.80	0.87	0.56	0.52	0.56	0.41	0.29	.	.

Source: CNB, ECB, Fed. Calculations of the MoF.

Table 1.3.2: Interest Rates – quarterly

		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	0.05	0.05	0.05	0.05	0.05	.	.	.
Main refinancing rate ECB (end of period)	in % p.a.	0.05	0.05	0.05	0.05	0.00	.	.	.
Federal funds rate (end of period)	in % p.a.	0.50	0.50	0.50	0.75	1.00	.	.	.
PRIBOR 3M	in % p.a.	0.29	0.29	0.29	0.29	0.28	0.3	0.3	0.3
YTM of 10Y government bonds	in % p.a.	0.48	0.45	0.30	0.48	0.7	0.9	1.0	1.2
Client interest rates									
Loans to households	in % p.a.	4.85	4.70	4.54	4.42	.	.	.	.
Loans to non-financial corporations	in % p.a.	2.63	2.60	2.58	2.52	.	.	.	.
Deposits of households	in % p.a.	0.55	0.48	0.43	0.40	.	.	.	.
Deposits of non-financial corporations	in % p.a.	0.13	0.11	0.09	0.07	.	.	.	.

Source: CNB, ECB, Fed. Calculations of the MoF.

Table 1.3.3: Loans and Deposits – yearly

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Households – MFI											
Loans	growth in %	31.8	28.7	16.1	8.7	6.5	4.9	4.0	3.4	4.9	7.2
For consumption	growth in %	26.3	25.5	15.9	7.2	3.9	-0.9	-0.1	-1.0	3.9	5.8
For house purchase	growth in %	34.0	30.0	15.1	8.7	6.5	6.3	5.4	4.5	5.8	8.1
Other lending	growth in %	27.8	24.8	23.5	11.5	11.1	5.6	1.3	2.7	1.2	3.0
CZK denominated	growth in %	31.8	28.7	16.1	8.7	6.5	4.9	4.0	3.4	4.9	7.2
FX denominated	growth in %	3.1	-8.7	0.7	31.3	2.3	30.7	-2.2	1.1	12.2	8.4
Deposits	growth in %	10.8	10.1	10.0	5.0	5.0	4.4	3.2	3.1	4.8	7.1
CZK denominated	growth in %	11.7	10.8	9.9	5.6	5.4	4.7	3.2	2.8	4.2	7.1
FX denominated	growth in %	-3.9	-2.7	12.5	-7.2	-3.8	-2.0	2.3	9.4	22.1	6.8
Non-performing loans (banking statistics)	share, in %	3.2	3.0	3.7	4.8	5.3	5.2	5.2	4.9	4.5	3.6
Loans to deposits ratio	in %	48	56	59	61	62	63	63	63	63	63
Non-financial corporations – MFI											
Loans	growth in %	19.2	15.7	1.0	-4.9	5.0	3.3	1.4	1.8	6.7	6.7
CZK denominated	growth in %	18.5	18.4	-0.3	-4.8	5.1	2.5	0.1	-0.9	6.1	2.5
FX denominated	growth in %	22.0	4.1	7.8	-5.1	4.1	7.1	7.0	12.8	8.9	21.6
Deposits	growth in %	10.5	4.3	-2.0	5.5	0.5	8.9	5.1	7.4	10.5	4.1
CZK denominated	growth in %	10.0	5.4	-2.8	6.7	2.2	8.1	4.4	5.4	6.9	4.1
FX denominated	growth in %	12.2	0.1	1.2	0.8	-6.0	12.0	8.1	15.3	23.2	3.9
Non-performing loans (banking statistics)	share, in %	3.7	3.6	6.2	8.6	8.5	7.7	7.4	7.0	6.0	5.1
Loans to deposits ratio	in %	117	130	134	121	126	120	115	109	106	108

Source: CNB, ECB. Calculations of the MoF.

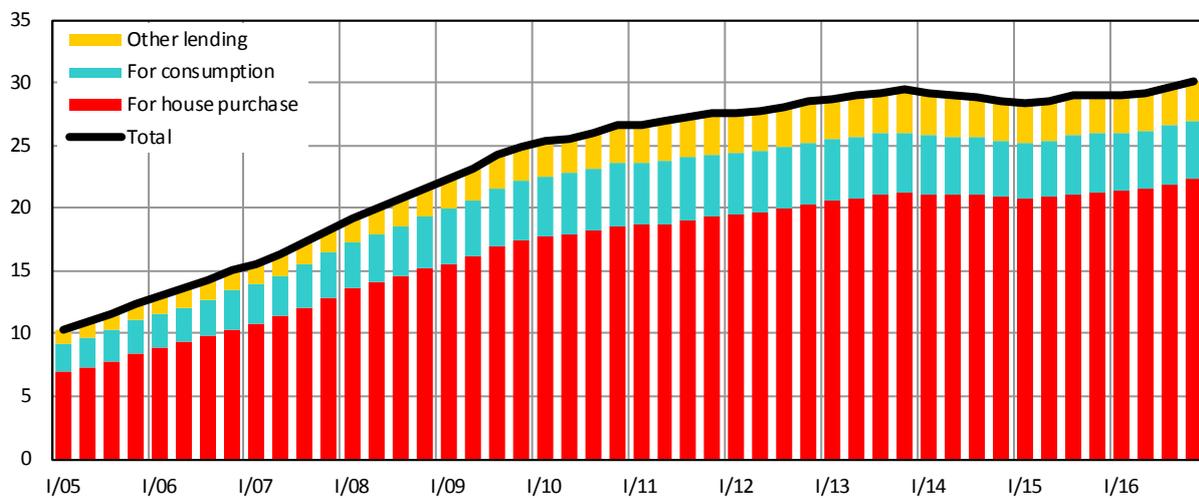
Table 1.3.4: Loans and Deposits – quarterly

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Households – MFI									
Loans	<i>growth in %</i>	2.9	3.9	5.6	7.3	7.5	7.3	6.6	7.3
For consumption	<i>growth in %</i>	-2.2	1.4	7.5	8.9	9.9	7.4	2.4	4.0
For house purchase	<i>growth in %</i>	4.5	5.0	5.9	7.7	7.7	8.0	8.1	8.5
Other lending	<i>growth in %</i>	0.0	0.4	1.2	3.0	2.6	2.6	3.2	3.4
CZK denominated	<i>growth in %</i>	2.9	3.9	5.6	7.3	7.4	7.3	6.6	7.3
FX denominated	<i>growth in %</i>	10.3	13.3	17.6	8.0	15.7	17.3	4.3	-2.2
Deposits	<i>growth in %</i>	4.5	4.6	4.6	5.6	6.0	6.6	7.6	8.0
CZK denominated	<i>growth in %</i>	4.0	3.9	3.8	5.1	5.8	6.5	7.7	8.3
FX denominated	<i>growth in %</i>	20.0	24.6	26.7	17.3	10.8	8.4	6.3	2.4
Non-performing loans (banking statistics)	<i>share, in %</i>	4.7	4.5	4.5	4.2	4.0	3.7	3.4	3.3
Loans to deposits ratio	<i>in %</i>	62	63	64	64	63	63	64	64
Non-financial corporations – MFI									
Loans	<i>growth in %</i>	3.0	5.4	10.3	8.0	6.9	7.4	6.0	6.5
CZK denominated	<i>growth in %</i>	2.0	4.8	9.8	7.6	5.3	3.5	1.2	0.3
FX denominated	<i>growth in %</i>	6.8	7.6	11.8	9.2	12.8	21.9	23.0	28.0
Deposits	<i>growth in %</i>	7.5	8.8	13.0	12.5	7.7	5.5	3.0	0.6
CZK denominated	<i>growth in %</i>	3.8	5.3	9.2	9.4	7.2	4.9	2.5	2.2
FX denominated	<i>growth in %</i>	21.2	21.1	27.1	23.4	9.3	7.1	4.7	-4.6
Non-performing loans (banking statistics)	<i>share, in %</i>	6.6	6.1	5.7	5.6	5.3	5.1	5.1	5.0
Loans to deposits ratio	<i>in %</i>	107	106	108	102	106	108	111	108

Source: CNB, ECB. Calculations of the MoF.

Graph 1.3.7: Ratio of Bank Loans to Households to GDP

yearly moving sums, in %



Source: CNB, CZSO. Calculations of the MoF.

Table 1.3.5: Exchange Rates – yearly

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
								Forecast	Forecast	Outlook	Outlook
Nominal exchange rates											
CZK / EUR	average	24.59	25.14	25.98	27.53	27.28	27.04	26.9	26.3	25.6	25.0
	appreciation in %	2.8	-2.2	-3.2	-5.6	0.9	0.9	0.5	2.4	2.5	2.5
CZK / USD	average	17.69	19.59	19.57	20.75	24.65	24.44	25.5	25.0	24.4	23.8
	appreciation in %	8.0	-9.7	0.1	-5.7	-15.8	0.8	-4.2	2.0	2.5	2.5
NEER	average of 2015=100	112.8	108.9	106.4	100.8	100.0	102.4	103	105	108	110
	appreciation in %	3.1	-3.5	-2.3	-5.2	-0.8	2.4	0.2	2.3	2.5	2.5
Real exchange rate to EA19¹⁾	average of 2010=100	101.7	99.7	96.7	92.7	93.4	94.2	95	97	101	104
	appreciation in %	1.7	-2.0	-3.0	-4.1	0.8	0.8	0.5	3.0	3.2	3.3
REER	average of 2010=100	102.1	99.2	96.9	91.8	91.3	.	.	.	.	.
(Eurostat, CPI deflated, 42 countries)	appreciation in %	2.1	-2.8	-2.3	-5.2	-0.6	.	.	.	.	.

¹⁾ Deflated by GDP deflators.

Source: CNB, Eurostat. Calculations of the MoF.

Table 1.3.6: Exchange Rates – quarterly

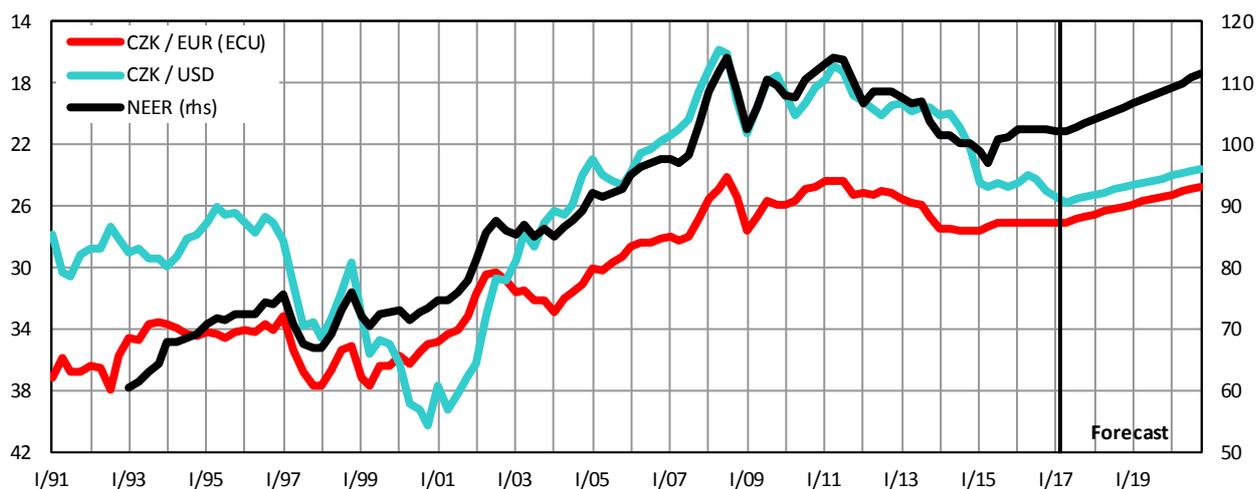
		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Nominal exchange rates									
CZK / EUR	average	27.04	27.04	27.03	27.03	27.02	27.0	26.9	26.7
	appreciation in %	2.2	1.3	0.2	0.1	0.1	0.1	0.7	1.3
CZK / USD	average	24.54	23.94	24.21	25.07	25.38	25.7	25.6	25.4
	appreciation in %	0.0	3.6	1.3	-1.4	-3.3	-7.0	-5.3	-1.3
NEER	average of 2015=100	102.4	102.4	102.5	102.4	102	102	103	103
	appreciation in %	3.3	5.5	1.5	1.2	-0.1	-0.3	0.3	1.0
Real exchange rate to EA19¹⁾	average of 2010=100	94.1	94.0	94.1	94.3	94	94	95	96
	appreciation in %	2.3	1.0	0.2	-0.3	-0.6	0.0	0.8	1.6
REER	average of 2010=100	94.1	93.4	93.4	.	.	.	.	.
(Eurostat, CPI deflated, 42 countries)	appreciation in %	3.7	4.1	1.1	.	.	.	.	.

¹⁾ Deflated by GDP deflators.

Source: CNB, Eurostat. Calculations of the MoF.

Graph 1.3.8: Nominal Exchange Rates

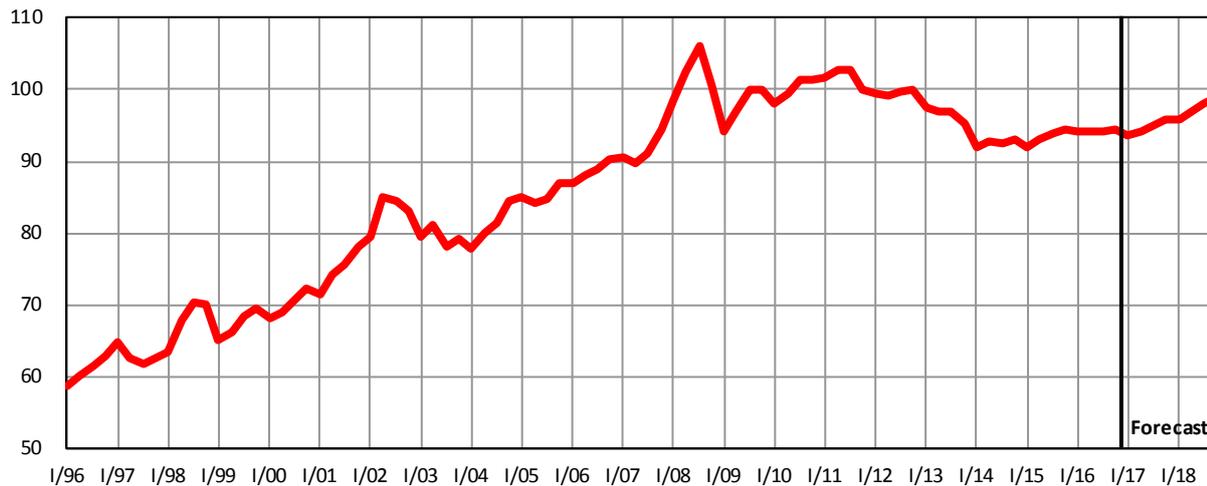
quarterly averages, average 2015=100 (rhs)



Source: CNB. Calculations of the MoF.

Graph 1.3.9: Real Exchange Rate to EA19

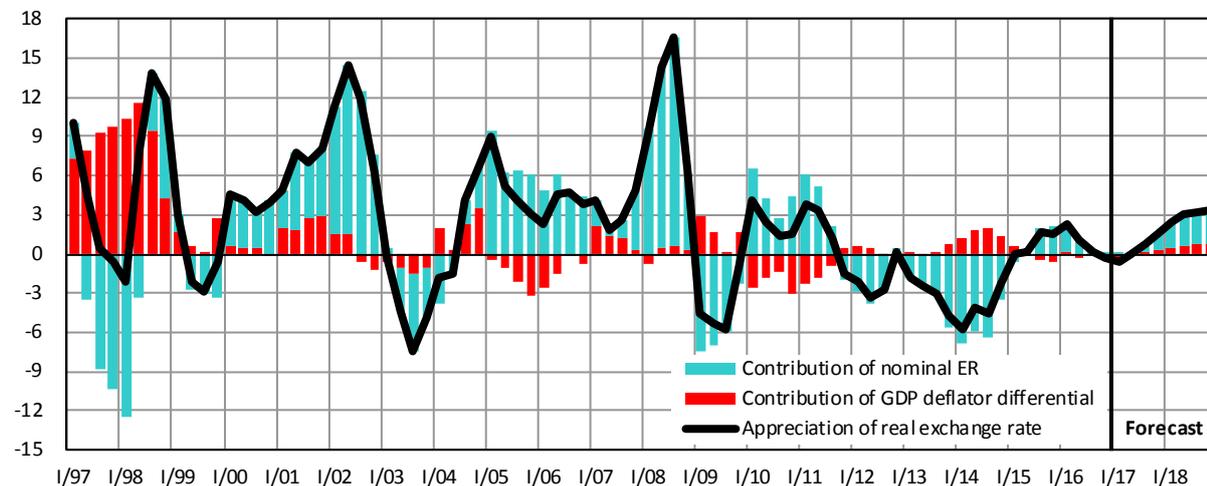
quarterly averages, deflated by GDP deflators, average 2010=100



Source: CNB, Eurostat. Calculations of the MoF.

Graph 1.3.10: Real Exchange Rate to EA19

deflated by GDP deflators, YoY growth rate in %, contributions in percentage points



Source: CNB, Eurostat. Calculations of the MoF.

1.4 Structural Policies

1.4.1 Business Environment

An amendment to the Insolvency Act, which will come into effect on 1 July 2017, should enhance the transparency of insolvency proceedings and reduce administrative tasks of insolvency courts. It will also strengthen regulation of entities providing services related to the institution of debt relief and it will introduce stronger protection against misuse of insolvency petitions.

1.4.2 Taxes

In accordance with the approved **Act on Electronic Registration of Sales**, which obliges selected business entities to carry out registration of sales through a permanent electronic connection, companies in wholesale and retail trade sectors joined the system on 1 March 2017.

On 1 March 2017, an **amendment to the Act on Excise Duties** came into effect, introducing refunds of excise duty on fuels for animal husbandry farmers, fish farmers and forest management companies.

On 13 January 2017, the Chamber of Deputies approved a **Bill amending some acts on taxation**. In order to strengthen the fight against tax evasion, the institute of unreliable person was introduced, i.e. a natural or legal person breaching its duties related to VAT administration in a serious manner. Further, the draft increases tax credits for the second, third and any additional child, tightens conditions for the payment of a tax bonus for a maintained child and regulates the tax regime for incomes from small-scale dependant activity up to CZK 2,500. Last but not least, it reduces the limit for lump-sum expenses of self-employed persons to CZK 1 million.

1.4.3 Financial Markets

On 16 January 2017, the Government approved an **amendment to the Act on the Czech National Bank**, which broadens the range of instruments designed to

fulfil the CNB's statutory objectives. As regards macroprudential policies, the amendment introduces an authority of the CNB to set an upper limit of credit indicators that must not be exceeded in provision of a consumer loan secured by residential property. In this context, it authorizes the CNB to issue a decree stipulating the method and rules for calculation of credit indicators. The amendment should come into effect on 1 July 2017.

1.4.4 Social and Health Care Systems

An amendment to the Act on Public Health Insurance, approved by the Government on 30 January 2017, reduces the annual limit for co-payments for drugs for children under 18 years and seniors over 65 years from CZK 2,500 to 1,000, and to CZK 500 for seniors over 70 years. The amendment should come into effect on 1 January 2018.

An amendment to the Act on Public Health Insurance Contributions, approved by the Government on 30 January 2017, will increase public health insurance contributions for state insured persons in 2019 and 2020. Payment per person and calendar month is CZK 920 in 2017 and it will increase, with a Government Regulation, to CZK 969 in 2018. The bill further increases the payment to CZK 1018 in 2019 and CZK 1067 in 2020. Payments for state insured persons will thus increase by CZK 3.5 billion annually in 2018–2020. The amendment should come into effect from 1 January 2019.

On 24 February 2017, the Chamber of Deputies approved an **amendment to the Health Insurance Act**, which introduces a benefit of one-week paternal postnatal child care. The amendment should come into effect on the first day of the ninth calendar month after its publication.

1.5 Demographic Trends

The population of the CR is steadily and slightly rising. As at the end of 2016, 10.579 mill. people lived in the Czech Republic. Its population increased by 25.0 thous. persons during 2016, i.e. by 0.2%.

This increase was mainly due to a **positive net migration** of 20.1 thous. persons with a YoY increase of 4.1 thous. There were 37.5 thous. persons who moved from abroad to the Czech Republic, 2.6 thous. more than in 2015. Most immigrants came from Ukraine (6.8 thous.), Slovakia (6.7 thous.) and Russia (2.4 thous.). In the opposite direction, i.e. from the CR abroad, 17.4 thous. persons changed their residence, 1.5 thousand fewer YoY.

Natural increase in the Czech population was 4.9 thous. persons. The number of live births increased YoY for the third time in a row in 2016. A total of 112.7 thous. children were born alive, which was 1.9 thous. more YoY and the most in the last six years. According to preliminary calculations, the total fertility rate increased above 1.6 children per woman in the Czech Republic in 2016.

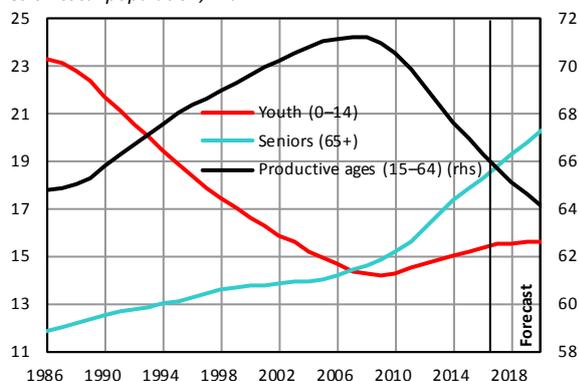
According to preliminary data, 107.8 thous. citizens of the Czech Republic died in 2016, 3.4 thousand fewer than in the previous year. The number of deaths, however, was record-high in 2015.

Population development is more favourable than anticipated in the high scenario of the Czech Statistical Office's 2013 Demographic Projection, on which the assumptions of the Macroeconomic Forecast are based. There is a significant difference in the birth rate, where the number of births in 2016 exceeded the projected value by 12 thous., i.e. more than 10%. The total fertility rate, as indicated above, exceeded 1.6 children compared to the projected 1.46. The causes of such difference cannot be clearly determined; there is a likely impact of a favourable economic and social situation.

The developments of the death rate and cross-border migration roughly correspond to the projected values.

Graph 1.5.1: Age Groups

shares on total population, in %

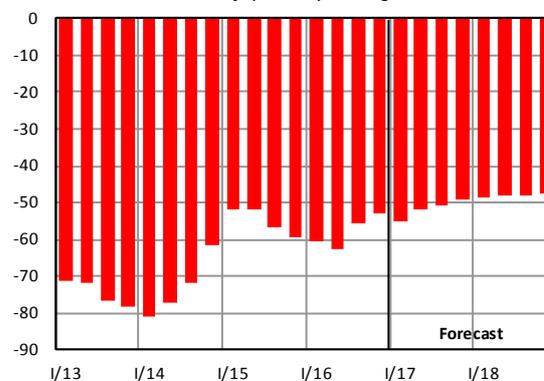


Source: CZSO. Calculations of the MoF.

As regards the **age structure** of the population, seniors over 64 years are the group where there are the biggest increases, while working-age population is shrinking.

Graph 1.5.2: Population Aged 15–64

based on LFS, YoY increases of quarterly averages, in thousands

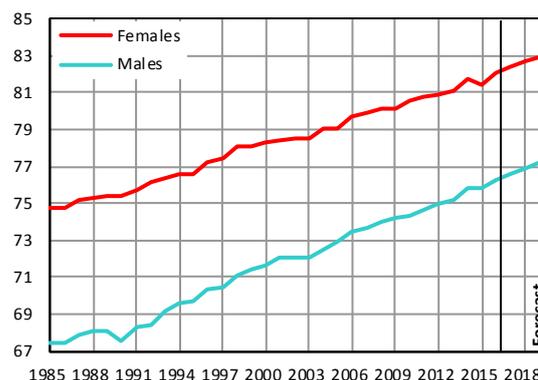


Source: CZSO. Calculations of the MoF.

The number of **old-age pensioners** in 2012–2014 more or less stagnated, which was a result of a high increase in their number following a parametric change in the system in 2011 (see Graph 1.5.5). Since 2015, growth of the number of pensioners resumed, being roughly in line with demographic development and the increasing statutory retirement age. As of the end of the last year, 2.397 mill. old-age pensioners were clients of the pension system. The YoY increase was 19 thousand persons, i.e. 0.8%. Virtually the entire increase is manifested in the category of reduced old-age pensions (after early retirement), whereas the number of full pensions stagnates (see Graph 1.5.5).

Graph 1.5.3: Life Expectancy at Birth

in years



Source: CZSO.

Table 1.5.1: Demographics
in thousands of persons (unless stated otherwise)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
						<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Outlook</i>	<i>Outlook</i>
Population (as of 1 January)	10 487	10 505	10 516	10 512	10 538	10 554	10 579	10 593	10 606	10 618
<i>growth in %</i>	-0.2	0.2	0.1	0.0	0.2	0.1	0.2	0.1	0.1	0.1
0–14 years	1 522	1 541	1 560	1 577	1 601	1 624	1 641	1 648	1 653	1 652
<i>growth in %</i>	1.8	1.3	1.2	1.1	1.5	1.4	1.1	0.4	0.3	0.0
15–64 years	7 328	7 263	7 188	7 109	7 057	6 998	6 949	6 899	6 852	6 811
<i>growth in %</i>	-1.2	-0.9	-1.0	-1.1	-0.7	-0.8	-0.7	-0.7	-0.7	-0.6
65 and more years	1 637	1 701	1 768	1 826	1 880	1 932	1 989	2 046	2 101	2 154
<i>growth in %</i>	2.4	3.9	3.9	3.3	3.0	2.8	2.9	2.9	2.7	2.5
Old-age pensioners (as of 1 January) ¹⁾	2 260	2 340	2 341	2 340	2 355	2 377	2 395	2 421	2 437	2 450
<i>growth in %</i>	.	3.5	0.0	0.0	0.6	0.9	0.8	1.1	0.6	0.6
Old-age dependency ratios (as of 1 January, in %)										
Demographic ²⁾	22.3	23.4	24.6	25.7	26.6	27.6	28.6	29.7	30.7	31.6
Under current legislation ³⁾	37.4	37.8	38.3	38.8	39.3	39.8	39.9	40.5	40.8	41.1
Effective ⁴⁾	45.9	47.9	47.6	47.2	46.9	46.8	46.2	46.4	46.7	46.7
Fertility rate	1.427	1.452	1.456	1.528	1.570	1.6	1.46	1.47	1.47	1.48
Population increase	19	11	-4	26	16	25	14	13	12	10
Natural increase	2	0	-2	4	0	5	-5	-6	-8	-9
Live births	109	109	107	110	111	113	99	98	96	95
Deaths	107	108	109	106	111	108	105	104	104	104
Net migration	17	10	-1	22	16	20	19	19	20	20
Immigration	23	30	30	42	35	38	.	.	.	.
Emigration	6	20	31	20	19	17	.	.	.	.

¹⁾ In 2010 disability pensions of pensioners over 64 were transferred into old-age pensions.

²⁾ Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (15–64).

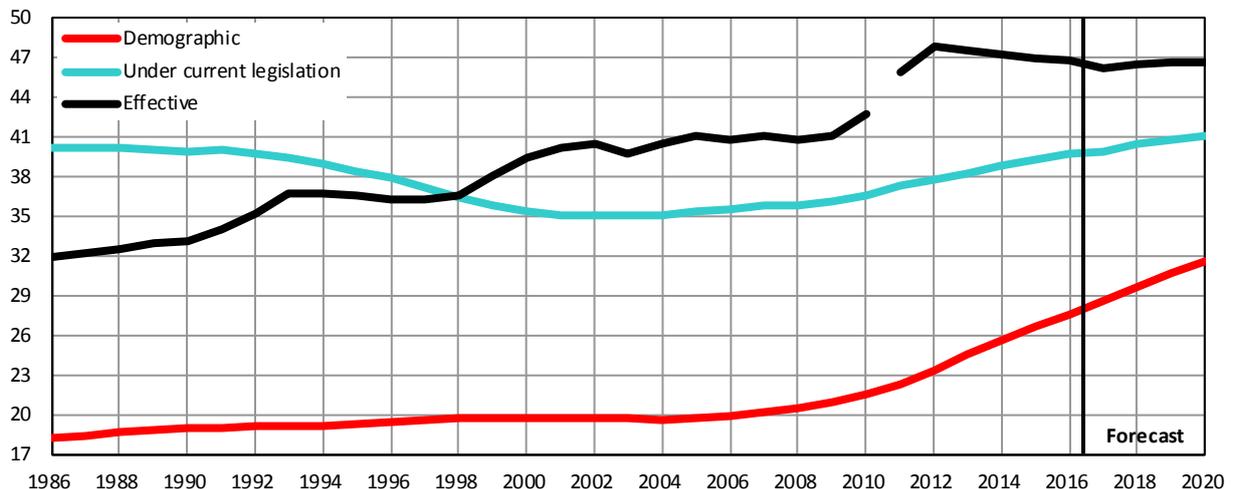
³⁾ Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.

⁴⁾ Effective dependency: ratio of old-age pensioners to working people (LFS methodology).

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

Graph 1.5.4: Dependency Ratios

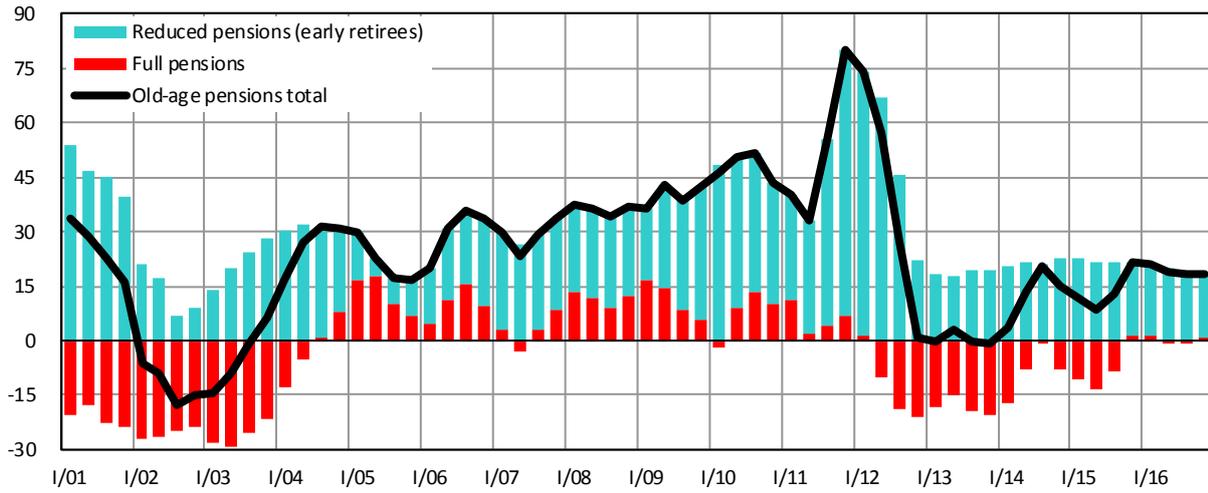
As of January 1, in %, inconsistent between 2010 and 2011 due to transfer of disability pensions to old-age pensions for people over 64 years



Source: CZSO. Calculations of the MoF.

Graph 1.5.5: Old-Age Pensioners

absolute increase over a year in thousands of persons



Note: Adjusted for the transfer of disability pensions to old-age pensions for people over 64 years in 2010.

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

2 Economic Cycle

2.1 Position within the Economic Cycle

Approximately since the beginning of 2015, the economy has been, according to our calculations, in the conditions of a slightly **positive output gap**. In the second half of 2016, however, QoQ growth of gross value added slowed down below the growth rate of potential product and the positive output gap started to close. It is estimated to have reached only 0.2% of potential product in the fourth quarter of 2016 (see Chart 2.1.1). Given the forecast of economic growth and assumed developments of potential product, the output gap should remain slightly positive below the level of 1% in the coming period. That would imply equilibrium of the economy in the cycle.

However, the situation is not clearly interpretable. On the one hand, the labour market has started to show signs of overheating (see Chapter 3.3). Since the beginning of 2014, the unemployment rate (LFS) has been below its long-term average and continues to decline. The number of vacancies recorded by the Ministry of Labour and Social Affairs highly exceeds the average level and shows marked increases in a YoY comparison. In some professions and regions, mismatches between the supply of and demand for labour force have been increasingly manifesting themselves, and the lack of employees is becoming a barrier to economic growth. However, this fact is reflected in a relatively dynamic wage growth.

On the other hand, the dynamics of economic growth is rather average. In the fourth quarter, investment in fixed capital was in a deep slump that was, however, largely caused by the end of the financial perspective of EU funds and time distribution of implementation of projects from this programming period with a peak in 2015.

The YoY growth of **potential product** has been accelerating since 2014 and it reached 2.1% in the fourth quarter of 2016. We consider this result to approach the growth possibilities of the Czech economy, which we approximate by long-term average of growth in gross value added (and potential product) of 2.4%.

Total factor productivity is the main driver of potential growth. The contribution of its trend component, derived using the Hodrick-Prescott filter, has been steadily reaching 1.4 pp since the fourth quarter of 2015, which is below average compared to the period after 2000.

Labour supply is being affected by a long-lasting decrease in the working-age population (15–64 years), caused by the process of population ageing (see Chapter 1.5). In the fourth quarter of 2016, **demographic development** slowed potential product growth by 0.4 pp.

However, the negative impact of population ageing on labour supply is fully offset by the **increasing participation rate**. Its increase by 6.3 pp since the beginning of 2011 is exceptional both in the historical context of the Czech economy and when compared to other European countries. Structural factors – an increase in the number of inhabitants in age groups with naturally high participation and an increase in the statutory and effective retirement age – are predominating here. In the fourth quarter of 2016, the contribution of the participation rate to potential product growth reached 0.8 pp.

The 2015 investment wave, supported by efforts for maximal possible utilization of allocation of EU funds, has led to an increase in the contribution of **capital stock** from 0.3 pp at the turn of 2013 and 2014 to 0.6 pp in the fourth quarter of 2015. The current decrease in investment, however, leads to a repeated reduction in the contribution of capital stock to 0.4 pp.

From a long-run perspective, the regular **average working time** is shortening in the Czech Republic. However, the intensity of this factor's effect is decreasing with a high demand for work. In the fourth quarter of 2016, the contribution of the number of hours usually worked was only 0.1 pp versus 0.4 pp at the end of the recession in the first quarter of 2013.

Table 2.1.1: Output Gap and Potential Product

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Output gap	%	3.9	3.9	-3.7	-1.9	-0.7	-2.3	-3.8	-1.6	0.5	0.5
Potential product ¹⁾	growth in %	4.0	3.3	2.1	0.9	0.7	0.9	1.0	1.1	1.8	2.1
Contributions											
Trend TFP	pp	2.9	2.0	1.2	0.7	0.4	0.4	0.6	1.0	1.3	1.4
Fixed assets	pp	1.1	1.2	0.8	0.6	0.6	0.5	0.4	0.4	0.5	0.5
Demography ²⁾	pp	0.3	0.3	0.1	-0.2	-0.4	-0.5	-0.5	-0.5	-0.4	-0.4
Participation rate	pp	-0.2	0.0	0.3	0.1	0.3	0.8	1.0	0.5	0.5	0.7
Usually worked hours	pp	0.0	-0.1	-0.3	-0.3	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1

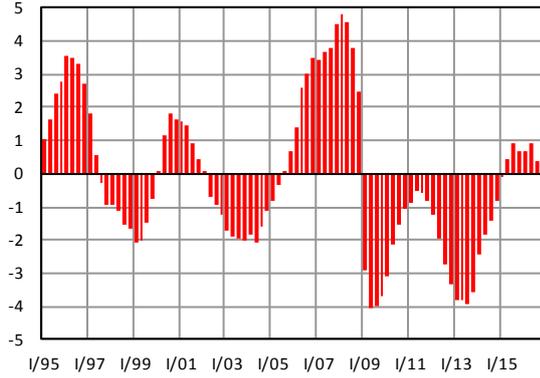
¹⁾ Based on gross value added.

²⁾ Contribution of growth of working-age population (15–64 years).

Source: CZSO. Calculations of the MoF.

Graph 2.1.1: Output Gap

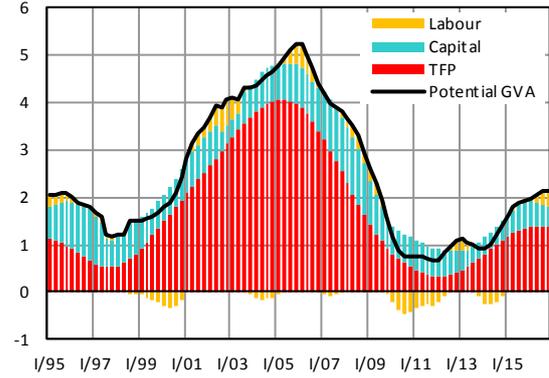
in % of potential product



Source: CZSO. Calculations of the MoF.

Graph 2.1.2: Potential Product

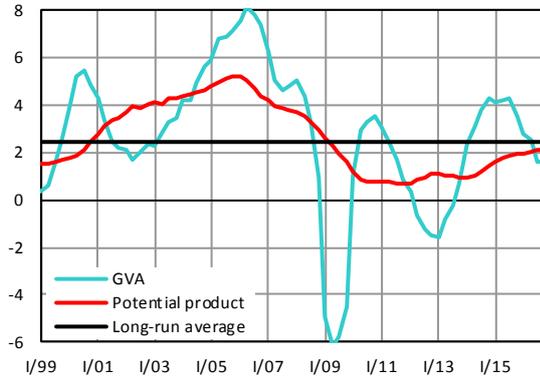
YoY growth rate in %, contributions in percentage points



Source: CZSO. Calculations of the MoF.

Graph 2.1.3: Potential Product and GVA

YoY growth rate, in %

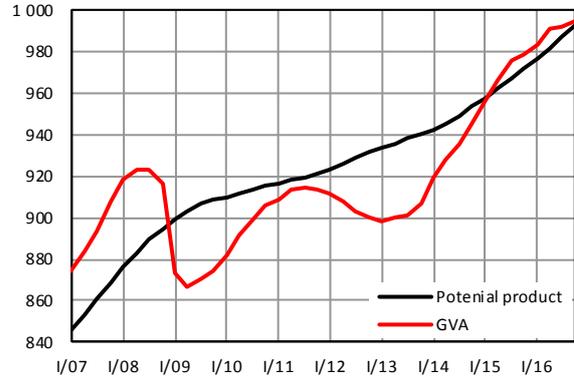


Note: Long-run average growth of potential GVA.

Source: CZSO. Calculations of the MoF.

Graph 2.1.4: Levels of Potential Product and GVA

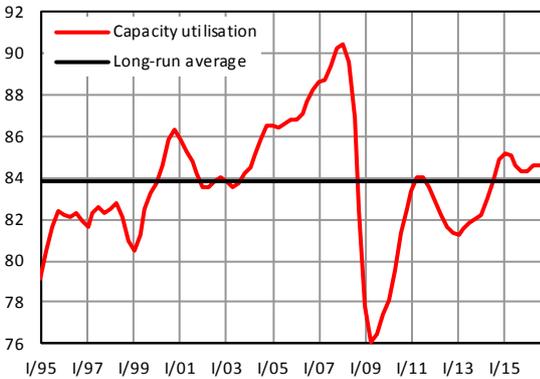
in bill. CZK of 2010



Source: CZSO. Calculations of the MoF.

Graph 2.1.5: Capacity Utilisation in Industry

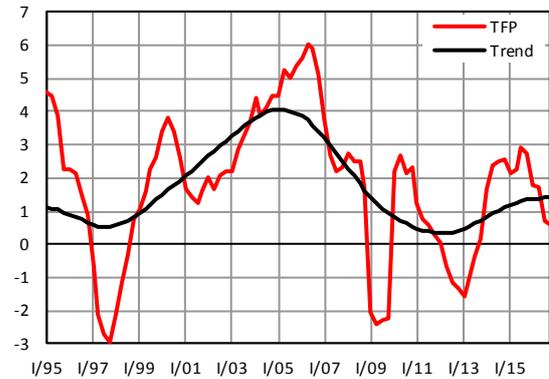
smoothed by Hodrick-Prescott filter, in %



Source: CZSO.

Graph 2.1.6: Total Factor Productivity

YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

2.2 Business Cycle Indicators

Confidence indicator in industry fell in the first quarter of 2017, which points to a likely decrease in the YoY dynamics of GVA in industry.

In construction, the confidence indicator rose again slightly in the first quarter of 2017. This indicates that the YoY decline of GVA in the sector, which was strongly influenced by a lower volume of investment from EU funds, should stop deepening. However, we cannot omit here the fact that the correlation between the development of confidence and GVA in construction is very low, as is apparent from Graph 2.2.2.

Confidence in trade and services fell slightly in the first quarter of 2017, nevertheless pointing to a resumption of the high rate of YoY growth of GVA in this sector.

The consumer confidence indicator rose further in the first quarter of 2017 and reached a record high, which

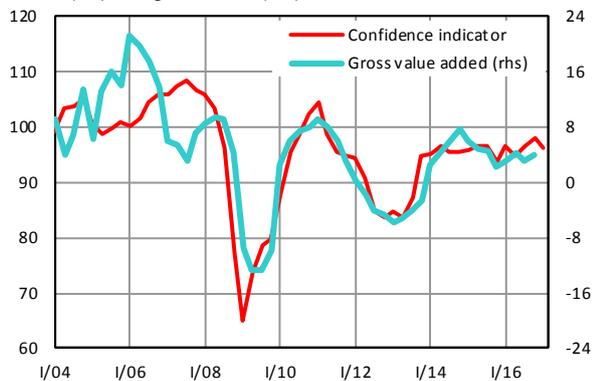
indicates an increase in the growth momentum of household consumption in the first half of 2017. This conclusion results from the fact that the development of the consumer confidence indicator leads household consumption by 1–2 quarters.

Owing to the weakening of most of its components, the composite confidence indicator fell slightly, though it remains at a relatively high level. This signals that YoY growth rate of GVA accelerated (rather than slowed down or stagnated) in the first quarter of 2017.

Throughout 2016, the composite leading indicator predicted the development of the relative cyclical component of GVA very precisely. For the first half of 2017 it indicates a clear increase in the positive output gap.

Graph 2.2.1: Confidence and GVA in Industry

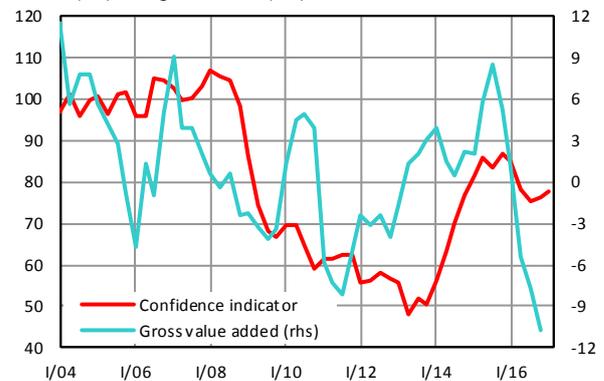
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.2: Confidence and GVA in Construction

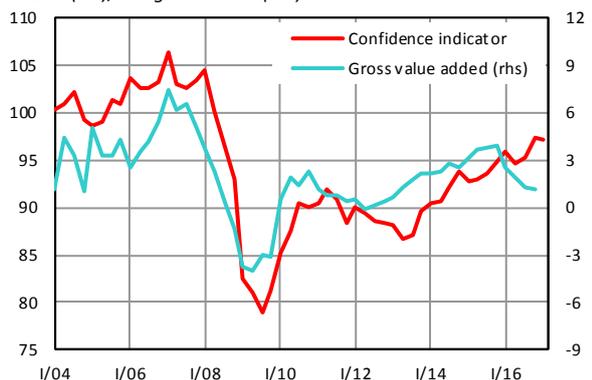
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.3: Confidence and GVA in Trade and Services

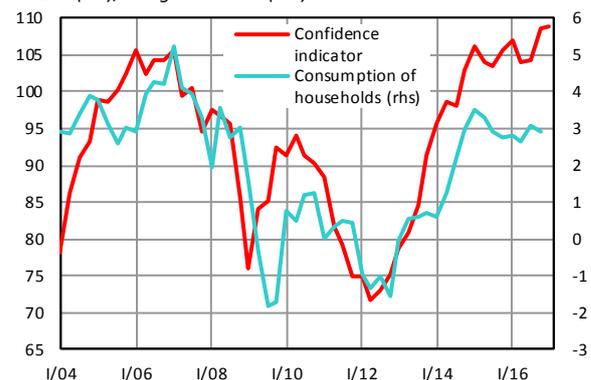
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO. Calculations of the MoF.

Graph 2.2.4: Consumer Confidence and Consumption

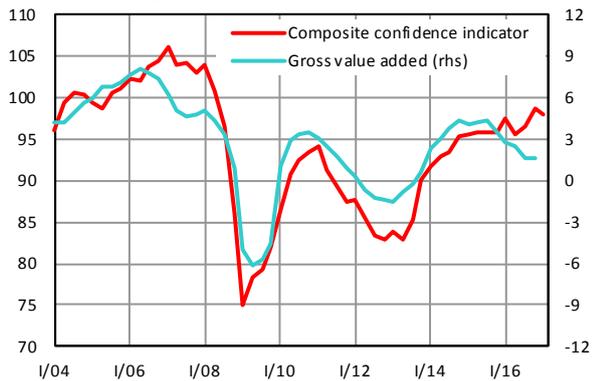
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.5: Composite Confidence Indicator and GVA

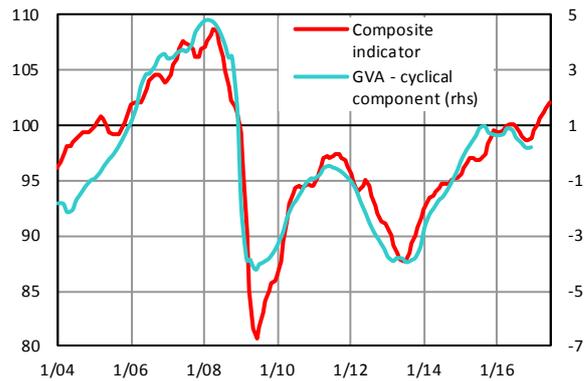
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.6: Composite Leading Indicator

2005=100 (lhs), in % of GVA (rhs)



Note: Synchronized with the cyclical component of GVA derived from the Cobb-Douglas production function (see Chapter 2.1), on a monthly basis.

Source: CZSO. Calculations of the MoF.

3 Forecast of the Development of Macroeconomic Indicators

3.1 Economic Output

3.1.1 GDP in the Fourth Quarter of 2016

Economic performance measured by real GDP rose by 2.0% YoY (*versus 2.2%*) in the fourth quarter of 2016, while seasonally adjusted GDP increased by 0.4% QoQ (*versus 0.7%*). The growth of gross value added by 0.3% QoQ was mainly driven by the manufacturing industry, real estate activities, financial and insurance activities, and information and communication. Conversely, the gross value added growth was significantly slowed down by the construction sector hit by a drop in the demand of the general government sector. The Czech Statistical Office revised the structure of GDP growth for the first three quarters of 2016 while maintaining its overall dynamics. This led to an increase in household consumption growth coupled with a deeper slump in fixed capital investment that was partly offset by a higher accumulation of inventories, though. The contribution of foreign trade to GDP growth was reduced.

The YoY increase in GDP in the fourth quarter of 2016 reflected growing foreign and, most importantly, domestic demand. The main growth driver was final consumption expenditure of households. Gross fixed capital formation had a negative effect on GDP growth; however, the negative contribution of overall investment was mitigated by an increase in stocks. The growth rate of exports and imports has decreased considerably; however, the balance of foreign trade in goods and services significantly supported the growth dynamics of GDP.

The increase in household consumption was due to rising disposable income and high consumer confidence. Household consumption expenditure was also supported by a YoY decrease in the savings rate. Expenditure on semi-durable and durable goods was the most dynamically growing component of household consumption, which suggests optimism of households regarding the future developments of the economy. Expenditure on services and mainly non-durable items, which are less sensitive to economic fluctuations, also contributed to the growth of total household consumption. Household consumption increased by 3.0% (*versus 2.8%*) in real terms. Consumption of the general government sector rose by 0.2% (*versus 2.0%*), to which a decrease in current expenditure financed partly from EU funds had contributed.

The increased investment activity co-financed by the EU funds from the previous financial perspective had subsided, which was fully reflected in a decrease of gross fixed capital formation by 5.0% (*versus 3.1%*). This effect influenced in particular investment of the general gov-

ernment but also largely private investment activity, which has nevertheless posted a sharp acceleration of growth. The growth rate of investment was also negatively affected by a one-off imputation of financial lease of military aircraft in the fourth quarter of 2015, which further increased the comparison base. Gross fixed capital formation was dragged down by a slump in investment in information and communication technologies and other machinery and equipment, and in other buildings and structures. Purchases of transport equipment, investment in dwellings and intellectual property products had an impact in the opposite direction. Considering the positive YoY contribution of change in inventories, gross capital formation fell less than investment in fixed capital, specifically by 2.3% (*versus 2.4%*).

Amid a slowdown of exports of both components, the YoY growth of exports of goods and services decreased by 7.5 pp to 1.8% (*versus 4.8%*) compared to the previous quarter, not only due to a slower export market growth but, more importantly, due to deteriorated export performance. Imports of goods and services increased by 0.5% (*versus 3.7%*) and its weaker dynamics reflected mainly a significant export slowdown and a slump in import-intensive investment demand.

A higher decrease in export prices compared to import prices resulted in a deterioration of the terms of trade of 0.2% (*versus 0.4%*). The trading loss resulting from foreign trade brought about a situation where real gross domestic income, which unlike GDP includes this factor, increased by 1.7% YoY (*versus 1.9%*).

Gross operating surplus grew by 0.1% (*versus 0.5%*), compensation of employees increased by 5.8% (*versus 5.4%*) and net taxes on production were higher by 4.7% YoY (*versus 8.3%*). As a result, nominal GDP recorded growth of 2.8% (*versus 3.2%*).

3.1.2 Estimate for the First Quarter of 2017

We estimate that in the first quarter of 2017 real GDP increased by 3.3% YoY (*versus 3.6%*) and by 0.8% QoQ (*unchanged*). The estimated acceleration in the QoQ GDP growth reflects the data on the development of the economy in the first quarter available as of the cut-off date of the Forecast (industrial and construction production, sales in retail and in selected sectors of services, and confidence indicators).

We believe that the increase in GDP was mainly due to the growth in domestic demand. As a result of rising disposable income and record-high consumer confidence, the final consumption expenditure of households could

have increased by 3.5% YoY (*versus 3.3%*), while consumption of the general government sector could have risen by 1.5% (*versus 1.7%*). Gross capital formation increased, according to our estimates, by 4.8% (*versus 4.2%*) due to a positive contribution of change in inventories and resumption of growth of investment in fixed capital.

Foreign trade may have had a positive impact on GDP dynamics, despite the fact that the estimated export market growth was to some extent dampened by declining export performance (see Chapter 3.4). We estimate that exports of goods and services increased by 4.1% (*versus 6.8%*) and imports by 4.3% (*versus 6.5%*).

3.1.3 Forecast for the Years 2017 and 2018

In 2017, economic growth should be driven mainly by domestic demand led by final consumption expenditure of households and restored investment activity of firms and the general government sector. GDP growth should also be strengthened by the general government consumption and foreign trade. We expect real GDP to grow by 2.5% both in 2017 and 2018 (*versus 2.6% and 2.4%, respectively*).

Household consumption will be supported by growth of real disposable income, which will, however, be slower compared to 2016, and decreasing savings rate. In 2017, the development of household consumption should positively reflect also the dynamics of consumer loans and consumers' optimistic expectations (see Chapter 2.2). Household consumption could thus increase by 2.4% in 2017 (*unchanged*). With respect to a number of discretionary measures in the social area, whose legislative approval is likely before the autumn parliamentary elections, we forecast growth of household consumption to accelerate to 2.7% (*versus 2.4%*) in 2018.

We expect consumption of the general government sector to grow by 1.7% (*versus 1.6%*) in 2017 and by 1.5% (*versus 1.4%*) in 2018. The main driver of its growth in 2017 will be an increase in compensation of employees, partially related to the planned creation of up to 7.5 thousand new jobs (in particular in the regional school system and the military). The contribution of expenditure on goods and services should be lower than in 2016 due to reduced growth of operating expenses asso-

ciated with transport infrastructure in favour of restoration of the general government sector's investment activity.

In 2017, private investment activity as well as investment of the general government sector will have a positive impact in the growth of gross fixed capital formation. Private investment will be supported by growth in gross operating surplus, eased monetary conditions (which are reflected in the growth of loans to non-financial corporations; see Chapter 1.3) and above-average utilization of production capacities in manufacturing related to the position of the economy in economic cycle. Also, increasing lack of employees could motivate businesses to invest in order to increase labour productivity. Conversely, increased risks in the external environment could weigh on private investment. In the case of the general government sector investment, we expect stable growth in investment expenditure financed from national resources in both these years. Investment activity of the private and general government sectors in 2017 and 2018 should be supported by start of projects co-funded by EU funds from the 2014–2020 financial perspective.

Gross fixed capital formation could thus increase by 3.8% in 2017 (*unchanged*) and by 3.0% in 2018 (*unchanged*) with a positive contribution of government and especially private investment.

Contribution of a change in inventories to GDP growth should be zero both in 2017 and in 2018. In 2017 we expect an increase in gross capital formation by 3.5% (*versus 3.6%*), and 2.7% in 2018 (*unchanged*).

We expect that exports of goods and services will grow by 3.0% (*versus 4.0%*) in 2017 and by 4.1% (*versus 4.3%*) in 2018. Lower growth dynamics compared to 2016 reflect the expected slowdown of export market growth without a significant acceleration of export performance (see Chapter 3.4). On the side of imports of goods and services, we expect influence of a slower growth rate of imports, which will, however, be offset by an increase in gross domestic expenditure and in that context mainly by import-intensive investment demand. Hence, imports will probably grow by 3.1% (*versus 4.1%*) in 2017 and by 4.1% (*versus 4.2%*) in 2018.

Table 3.1.1: Real GDP by Type of Expenditure – yearly*chained volumes, reference year 2010*

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
								<i>Forecast</i>	<i>Forecast</i>	<i>Outlook</i>	<i>Outlook</i>
Gross domestic product	<i>bill. CZK 2010</i>	4 033	4 001	3 981	4 089	4 275	4 379	4 490	4 602	4 712	4 821
	<i>growth in %</i>	2.0	-0.8	-0.5	2.7	4.5	2.4	2.5	2.5	2.4	2.3
Private consumption expenditure ¹⁾	<i>bill. CZK 2010</i>	1 952	1 929	1 939	1 973	2 034	2 092	2 142	2 200	2 248	2 294
	<i>growth in %</i>	0.3	-1.2	0.5	1.8	3.0	2.9	2.4	2.7	2.2	2.1
Government consumption exp.	<i>bill. CZK 2010</i>	792	776	796	804	820	830	844	857	869	881
	<i>growth in %</i>	-2.2	-2.0	2.5	1.1	2.0	1.2	1.7	1.5	1.4	1.4
Gross capital formation	<i>bill. CZK 2010</i>	1 094	1 051	997	1 083	1 191	1 181	1 222	1 255	1 289	1 323
	<i>growth in %</i>	1.8	-3.9	-5.1	8.6	10.0	-0.9	3.5	2.7	2.7	2.7
Gross fixed capital formation	<i>bill. CZK 2010</i>	1 075	1 042	1 016	1 056	1 151	1 108	1 150	1 185	1 220	1 257
	<i>growth in %</i>	0.9	-3.1	-2.5	3.9	9.0	-3.7	3.8	3.0	3.0	3.0
Change in stocks and valuables	<i>bill. CZK 2010</i>	18	9	-19	26	40	73	72	70	68	66
Exports of goods and services	<i>bill. CZK 2010</i>	2 856	2 978	2 984	3 242	3 492	3 641	3 749	3 902	4 068	4 242
	<i>growth in %</i>	9.2	4.3	0.2	8.7	7.7	4.3	3.0	4.1	4.3	4.3
Imports of goods and services	<i>bill. CZK 2010</i>	2 661	2 732	2 734	3 008	3 256	3 361	3 463	3 606	3 755	3 915
	<i>growth in %</i>	6.7	2.7	0.1	10.1	8.2	3.2	3.1	4.1	4.1	4.2
Gross domestic expenditure	<i>bill. CZK 2010</i>	3 838	3 756	3 733	3 860	4 043	4 102	4 207	4 309	4 403	4 496
	<i>growth in %</i>	0.2	-2.1	-0.6	3.4	4.7	1.4	2.6	2.4	2.2	2.1
Methodological discrepancy ²⁾	<i>bill. CZK 2010</i>	0	-1	0	-4	-5	-4	-5	-5	-5	-6
Real gross domestic income	<i>bill. CZK 2010</i>	3 990	3 942	3 956	4 112	4 303	4 442	4 524	4 651	4 778	4 906
	<i>growth in %</i>	0.9	-1.2	0.4	3.9	4.6	3.2	1.8	2.8	2.7	2.7
Contributions to GDP growth ³⁾											
Gross domestic expenditure	<i>pp</i>	0.2	-2.1	-0.6	3.2	4.4	1.4	2.4	2.3	2.0	2.0
Consumption	<i>pp</i>	-0.3	-1.0	0.8	1.1	1.8	1.6	1.5	1.6	1.3	1.3
Household expenditure	<i>pp</i>	0.1	-0.6	0.3	0.9	1.5	1.4	1.1	1.3	1.0	1.0
Government expenditure	<i>pp</i>	-0.5	-0.4	0.5	0.2	0.4	0.2	0.3	0.3	0.3	0.3
Gross capital formation	<i>pp</i>	0.5	-1.1	-1.3	2.1	2.6	-0.2	0.9	0.7	0.7	0.7
Gross fixed capital formation	<i>pp</i>	0.2	-0.8	-0.6	1.0	2.3	-1.0	0.9	0.7	0.7	0.8
Change in stocks	<i>pp</i>	0.3	-0.2	-0.7	1.1	0.3	0.7	0.0	0.0	0.0	0.0
Foreign balance	<i>pp</i>	1.8	1.3	0.1	-0.5	0.1	1.1	0.2	0.2	0.4	0.3
External balance of goods	<i>pp</i>	2.0	1.4	0.1	-0.1	-0.6	0.6	0.1	0.1	0.3	0.2
External balance of services	<i>pp</i>	-0.2	-0.1	0.0	-0.4	0.7	0.5	0.1	0.1	0.1	0.1
Gross value added	<i>bill. CZK 2010</i>	3 655	3 624	3 606	3 729	3 876	3 963	.	.	.	.
	<i>growth in %</i>	2.0	-0.8	-0.5	3.4	3.9	2.2	.	.	.	.
Net taxes and subsidies on products	<i>bill. CZK 2010</i>	378	376	375	363	399	416	.	.	.	.

¹⁾ The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.²⁾ Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.³⁾ Calculated on the basis of prices and structure of the previous year with perfectly additive contributions.

Source: CZSO. Calculations of the MoF.

Table 3.1.2: Real GDP by Type of Expenditure – quarterly

chained volumes, reference year 2010

		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		<i>Prelim.</i>	<i>Prelim.</i>	<i>Prelim.</i>	<i>Prelim.</i>	<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
Gross domestic product	<i>bill. CZK 2010</i>	1 022	1 113	1 110	1 134	1 056	1 125	1 139	1 170
	<i>growth in %</i>	2.7	3.6	1.6	2.0	3.3	1.1	2.6	3.2
	<i>growth in %¹⁾</i>	3.0	2.6	1.8	1.9	2.3	2.4	2.9	3.2
	<i>QoQ in %¹⁾</i>	0.4	0.9	0.2	0.4	0.8	0.9	0.8	0.7
Private consumption expenditure²⁾	<i>bill. CZK 2010</i>	496	523	529	544	514	533	540	556
	<i>growth in %</i>	2.5	3.1	2.9	3.0	3.5	2.0	2.1	2.1
Government consumption exp.	<i>bill. CZK 2010</i>	192	203	202	232	195	207	206	235
	<i>growth in %</i>	1.5	2.4	0.9	0.2	1.5	2.1	1.8	1.4
Gross capital formation	<i>bill. CZK 2010</i>	248	304	325	303	260	302	338	322
	<i>growth in %</i>	2.5	-1.2	-1.7	-2.3	4.8	-0.7	3.9	6.2
Gross fixed capital formation	<i>bill. CZK 2010</i>	248	267	286	308	248	271	297	334
	<i>growth in %</i>	-0.9	-4.1	-4.3	-5.0	0.2	1.6	4.0	8.6
Change in stocks and valuables	<i>bill. CZK 2010</i>	0	37	40	-5	12	31	41	-12
Exports of goods and services	<i>bill. CZK 2010</i>	901	946	865	930	938	952	894	966
	<i>growth in %</i>	5.5	8.4	1.5	1.8	4.1	0.6	3.3	3.9
Imports of goods and services	<i>bill. CZK 2010</i>	816	862	810	873	851	868	837	908
	<i>growth in %</i>	5.3	6.4	0.9	0.5	4.3	0.6	3.4	4.0
Gross domestic expenditure	<i>bill. CZK 2010</i>	937	1 030	1 056	1 079	969	1 042	1 084	1 113
	<i>growth in %</i>	2.3	1.7	1.1	0.9	3.4	1.2	2.6	3.1
Methodological discrepancy³⁾	<i>bill. CZK 2010</i>	0	-1	-2	-1	-1	-1	-2	0
Real gross domestic income	<i>bill. CZK 2010</i>	1 042	1 133	1 126	1 141	1 061	1 135	1 150	1 177
	<i>growth in %</i>	3.9	4.9	2.4	1.7	1.9	0.2	2.2	3.1
Gross value added	<i>bill. CZK 2010</i>	931	1 009	1 001	1 023	.	.	.	.
	<i>growth in %</i>	2.4	3.6	1.3	1.7	.	.	.	.
	<i>growth in %¹⁾</i>	2.8	2.5	1.6	1.6	.	.	.	.
	<i>QoQ in %¹⁾</i>	0.5	0.8	0.1	0.3	.	.	.	.
Net taxes and subsidies on products	<i>bill. CZK 2010</i>	92	104	109	111	.	.	.	.

¹⁾ From seasonally and working day adjusted data²⁾ The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.³⁾ Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.

Source: CZSO. Calculations of the MoF.

Table 3.1.3: Nominal GDP by Type of Expenditure – yearly

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
								Forecast	Forecast	Outlook	Outlook
Gross domestic product	<i>bill. CZK</i>	4 034	4 060	4 098	4 314	4 555	4 715	4 889	5 103	5 322	5 550
	<i>growth in %</i>	2.0	0.6	0.9	5.3	5.6	3.5	3.7	4.4	4.3	4.3
Private consumption expenditure ¹⁾	<i>bill. CZK</i>	1 979	1 998	2 025	2 074	2 140	2 215	2 322	2 425	2 522	2 622
	<i>growth in %</i>	1.6	1.0	1.4	2.4	3.2	3.5	4.8	4.4	4.0	4.0
Government consumption exp.	<i>bill. CZK</i>	813	804	826	849	890	915	952	988	1 018	1 048
	<i>growth in %</i>	0.4	-1.1	2.7	2.8	4.8	2.9	4.0	3.8	3.0	3.0
Gross capital formation	<i>bill. CZK</i>	1 087	1 063	1 011	1 116	1 246	1 237	1 293	1 345	1 402	1 460
	<i>growth in %</i>	1.2	-2.2	-4.9	10.4	11.6	-0.7	4.5	4.1	4.2	4.1
Gross fixed capital formation	<i>bill. CZK</i>	1 067	1 052	1 027	1 084	1 198	1 158	1 217	1 271	1 329	1 390
	<i>growth in %</i>	0.1	-1.4	-2.4	5.5	10.5	-3.3	5.0	4.5	4.5	4.5
Change in stocks and valuables	<i>bill. CZK</i>	20	11	-16	32	48	79	76	74	73	70
External balance	<i>bill. CZK</i>	154	195	236	275	279	347	323	345	381	420
Exports of goods and services	<i>bill. CZK</i>	2 876	3 092	3 150	3 561	3 778	3 788	3 896	4 019	4 198	4 411
	<i>growth in %</i>	9.9	7.5	1.9	13.0	6.1	0.3	2.8	3.2	4.4	5.1
Imports of goods and services	<i>bill. CZK</i>	2 722	2 897	2 914	3 286	3 499	3 441	3 573	3 674	3 817	3 991
	<i>growth in %</i>	9.1	6.5	0.6	12.8	6.5	-1.7	3.8	2.8	3.9	4.6
Gross national income	<i>bill. CZK</i>	3 728	3 808	3 854	4 022	4 255	4 436	4 603	4 805	5 016	5 235
	<i>growth in %</i>	2.0	2.1	1.2	4.4	5.8	4.2	3.8	4.4	4.4	4.4
Primary income balance	<i>bill. CZK</i>	-305	-252	-245	-292	-299	-279	-286	-298	-306	-314

¹⁾ The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.

Source: CZSO. Calculations of the MoF.

Table 3.1.4: Nominal GDP by Type of Expenditure – quarterly

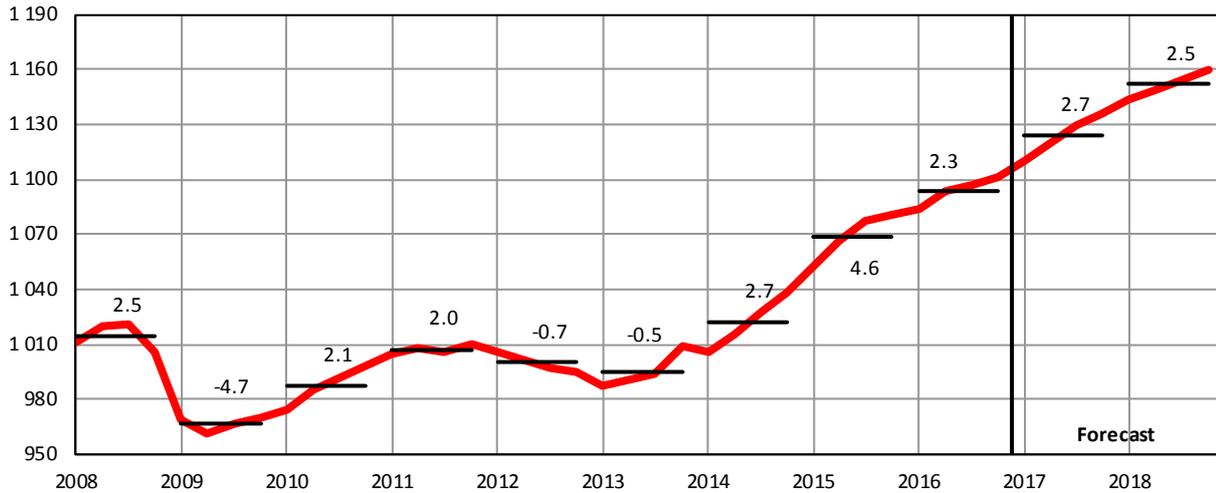
		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		<i>Prelim.</i>	<i>Prelim.</i>	<i>Prelim.</i>	<i>Prelim.</i>	<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
Gross domestic product	<i>bill. CZK</i>	1 094	1 195	1 195	1 230	1 136	1 222	1 243	1 288
	<i>growth in %</i>	3.9	4.6	2.8	2.8	3.8	2.3	4.0	4.7
Private consumption expenditure ¹⁾	<i>bill. CZK</i>	521	552	562	580	553	577	587	605
	<i>growth in %</i>	2.6	3.2	3.7	4.4	6.0	4.6	4.5	4.2
Government consumption exp.	<i>bill. CZK</i>	205	222	222	266	214	232	231	275
	<i>growth in %</i>	3.4	3.7	2.5	2.1	4.1	4.6	4.0	3.3
Gross capital formation	<i>bill. CZK</i>	261	317	340	319	275	318	357	343
	<i>growth in %</i>	3.0	-1.7	-1.7	-1.6	5.5	0.3	4.9	7.4
Gross fixed capital formation	<i>bill. CZK</i>	259	279	298	322	262	286	314	354
	<i>growth in %</i>	-0.6	-4.1	-3.9	-4.2	1.2	2.7	5.2	10.0
Change in stocks and valuables	<i>bill. CZK</i>	2	39	42	-3	13	32	43	-12
External balance	<i>bill. CZK</i>	107	105	71	65	94	95	68	65
Exports of goods and services	<i>bill. CZK</i>	937	980	900	971	966	989	933	1 008
	<i>growth in %</i>	0.4	2.8	-1.8	-0.4	3.1	0.9	3.6	3.8
Imports of goods and services	<i>bill. CZK</i>	830	876	829	906	872	894	865	942
	<i>growth in %</i>	-1.2	-0.6	-3.4	-1.4	5.1	2.1	4.3	4.0

¹⁾ The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.

Source: CZSO. Calculations of the MoF.

Graph 3.1.1: Gross Domestic Product (real)

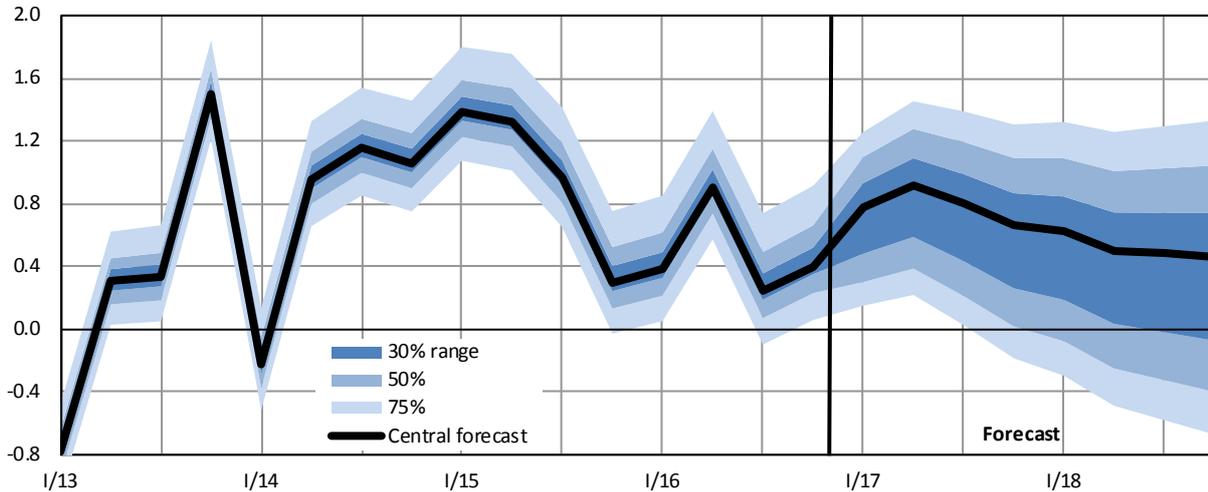
bill. CZK in const. prices of 2010, seasonally adjusted, black lines with labels show the average level and growth rate of GDP in the given year



Source: CZSO. Calculations of the MoF.

Graph 3.1.2: Gross Domestic Product (real)

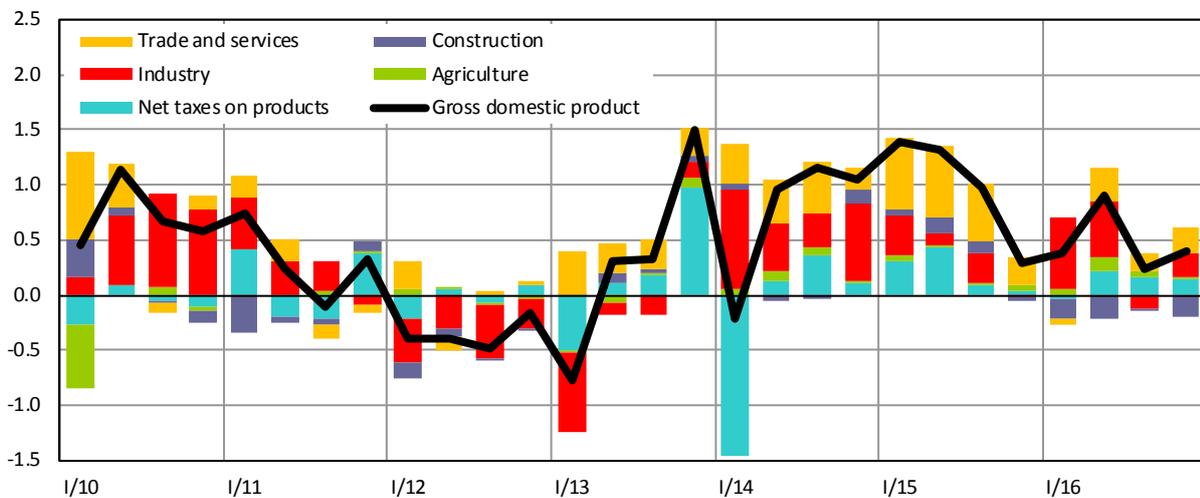
QoQ growth rate, in %, seasonally adjusted, past probability distribution reflects the actual distribution of data revisions, future probability distribution is based upon the MoF's forecasting performance



Source: CZSO. Calculations of the MoF.

Graph 3.1.3: Resources of Gross Domestic Product

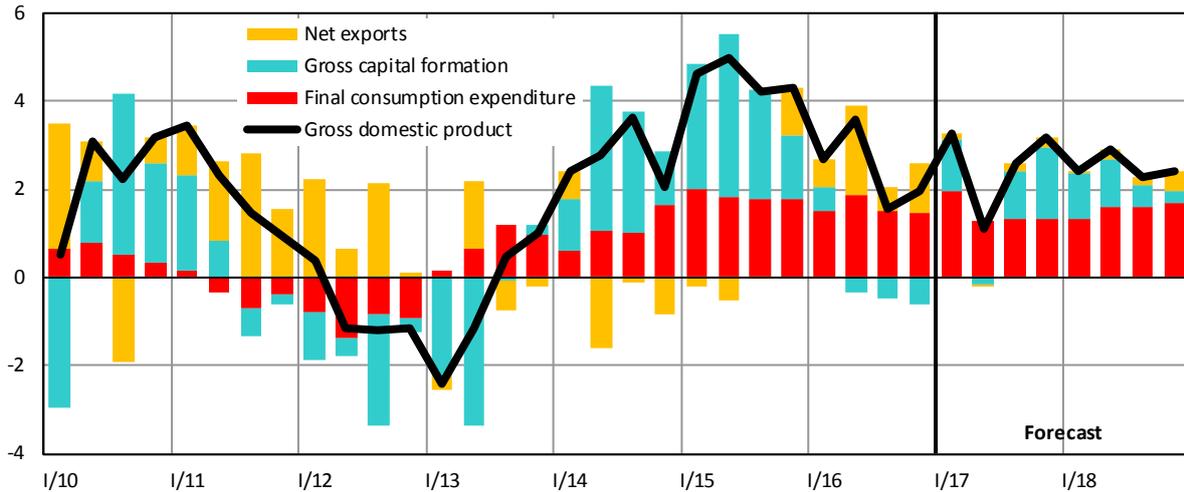
QoQ real growth rate of GDP in %, contributions of individual components in percentage points, seasonally adjusted



Source: CZSO. Calculations of the MoF.

Graph 3.1.4: Gross Domestic Product by Type of Expenditure

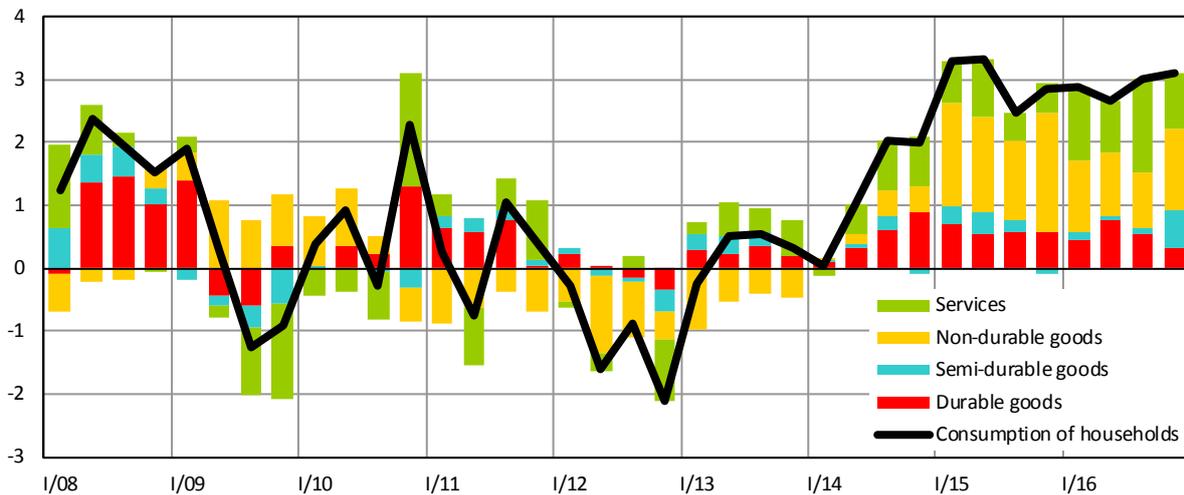
YoY real growth rate of GDP in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.5: Consumption of Households

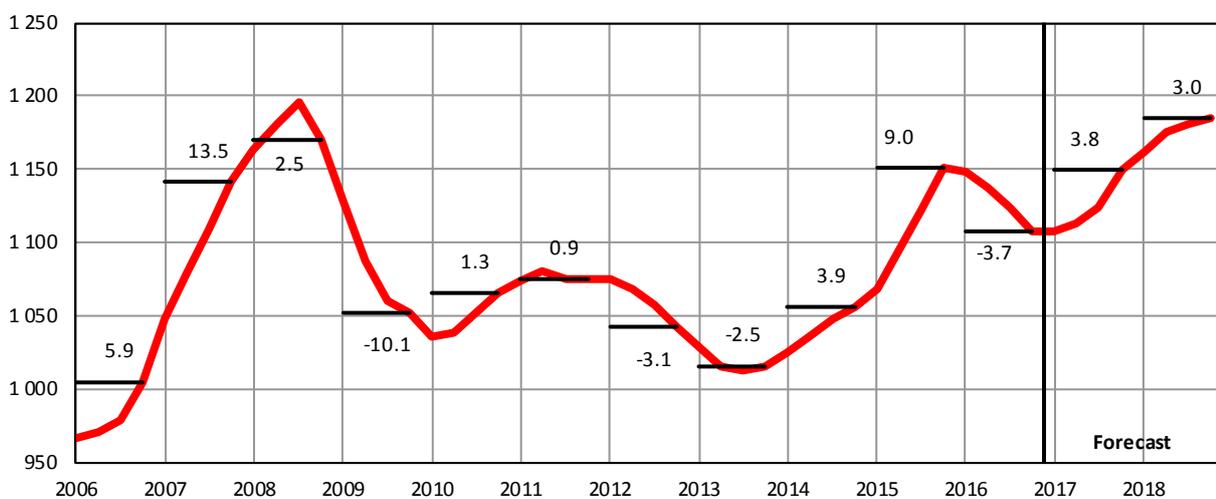
consumption of households in domestic concept, YoY real growth rate in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.6: Gross Fixed Capital Formation

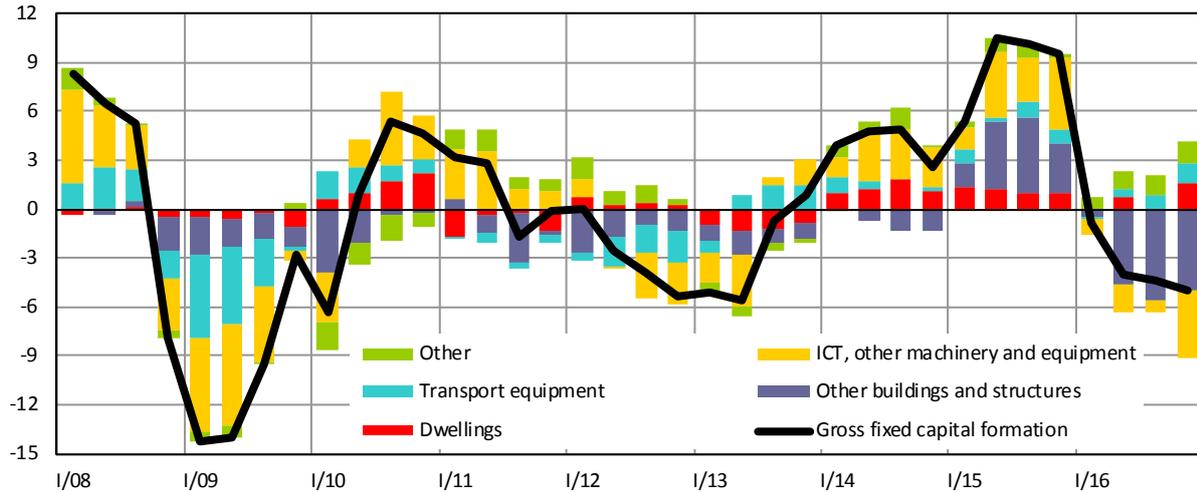
yearly moving sums, bill. CZK in const. prices of 2010, black lines with labels show the average level and growth rate of GFCF in the given year



Source: CZSO. Calculations of the MoF.

Graph 3.1.7: Gross Fixed Capital Formation by Type of Expenditure

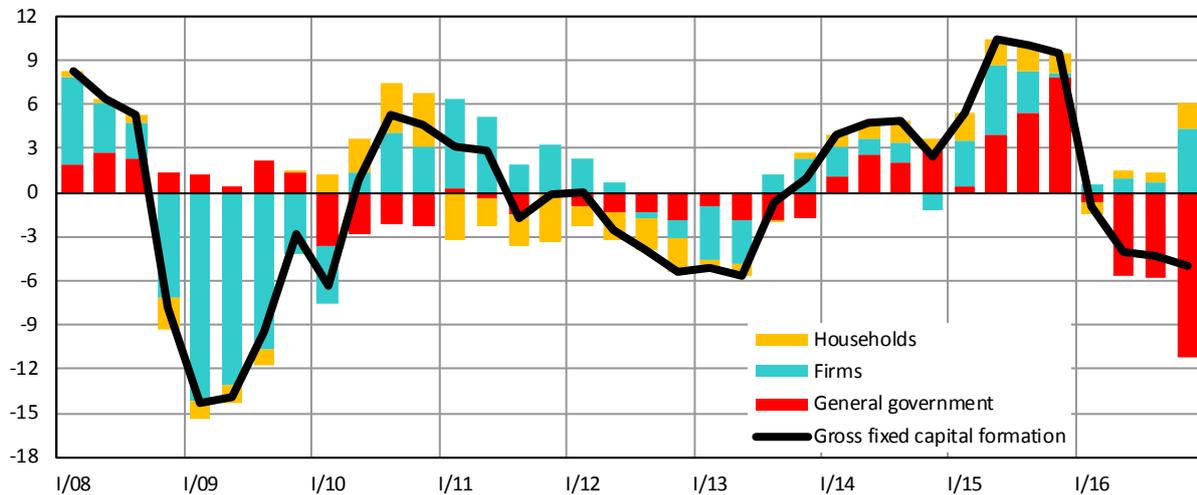
YoY real growth rate in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.8: Gross Fixed Capital Formation by Sector

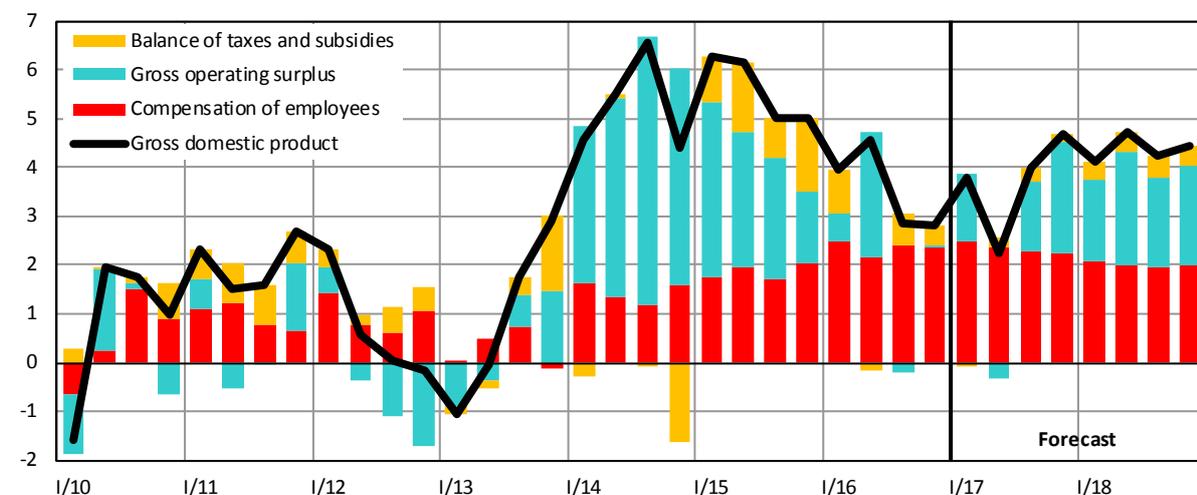
YoY real growth rate in %, contributions of individual sectors in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.9: Nominal Gross Domestic Product

YoY growth rate of GDP in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Table 3.1.5: GDP by Type of Income – yearly

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
								Forecast	Forecast	Outlook	Outlook
GDP	<i>bill. CZK</i>	4 034	4 060	4 098	4 314	4 555	4 715	4 889	5 103	5 322	5 550
	<i>growth in %</i>	2.0	0.6	0.9	5.3	5.6	3.5	3.7	4.4	4.3	4.3
Balance of taxes and subsidies	<i>bill. CZK</i>	369	385	402	381	433	453	460	480	495	509
	<i>% of GDP</i>	9.1	9.5	9.8	8.8	9.5	9.6	9.4	9.4	9.3	9.2
	<i>growth in %</i>	8.4	4.4	4.2	-5.1	13.4	4.7	1.5	4.4	3.2	2.8
Taxes on production and imports	<i>bill. CZK</i>	488	508	528	518	566	600	.	.	.	.
	<i>growth in %</i>	9.2	4.1	3.9	-1.8	9.3	5.9	.	.	.	.
Subsidies on production	<i>bill. CZK</i>	119	123	126	137	134	147	.	.	.	.
	<i>growth in %</i>	11.8	3.0	2.7	8.5	-2.2	9.8	.	.	.	.
Compensation of employees <i>(domestic concept)</i>	<i>bill. CZK</i>	1 626	1 665	1 676	1 735	1 815	1 923	2 033	2 130	2 226	2 321
	<i>% of GDP</i>	40.3	41.0	40.9	40.2	39.9	40.8	41.6	41.7	41.8	41.8
	<i>growth in %</i>	2.3	2.4	0.7	3.5	4.7	5.9	5.7	4.8	4.5	4.2
Wages and salaries	<i>bill. CZK</i>	1 237	1 269	1 275	1 321	1 379	1 459	1 542	1 616	1 689	1 761
	<i>growth in %</i>	2.3	2.6	0.5	3.6	4.4	5.8	5.7	4.8	4.5	4.2
Social security contributions	<i>bill. CZK</i>	390	396	402	414	436	464	490	514	537	560
	<i>growth in %</i>	2.5	1.6	1.4	3.1	5.4	6.3	5.7	4.8	4.5	4.2
Gross operating surplus	<i>bill. CZK</i>	2 038	2 010	2 020	2 198	2 307	2 340	2 397	2 493	2 601	2 720
	<i>% of GDP</i>	50.5	49.5	49.3	50.9	50.6	49.6	49.0	48.9	48.9	49.0
	<i>growth in %</i>	0.7	-1.4	0.5	8.8	5.0	1.4	2.4	4.0	4.3	4.6
Consumption of capital	<i>bill. CZK</i>	864	880	906	939	981	1 002	1 039	1 086	1 132	1 181
	<i>growth in %</i>	1.7	1.8	3.0	3.6	4.5	2.1	3.7	4.5	4.2	4.3
Net operating surplus	<i>bill. CZK</i>	1 174	1 130	1 114	1 259	1 325	1 338	1 357	1 407	1 469	1 539
	<i>growth in %</i>	0.0	-3.8	-1.4	13.0	5.3	0.9	1.5	3.6	4.4	4.8

Source: CZSO. Calculations of the MoF.

Table 3.1.6: GDP by Type of Income – quarterly

		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		<i>Prelim.</i>	<i>Prelim.</i>	<i>Prelim.</i>	<i>Prelim.</i>	<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
GDP	<i>bill. CZK</i>	1 094	1 195	1 195	1 230	1 136	1 222	1 243	1 288
	<i>growth in %</i>	3.9	4.6	2.8	2.8	3.8	2.3	4.0	4.7
Balance of taxes and subsidies	<i>bill. CZK</i>	100	112	126	115	99	115	129	117
	<i>growth in %</i>	10.5	-1.6	6.2	4.7	-0.9	2.3	2.4	1.7
Compensation of employees <i>(domestic concept)</i>	<i>bill. CZK</i>	460	475	475	511	487	504	503	539
	<i>growth in %</i>	6.0	5.5	6.3	5.8	5.9	5.9	5.7	5.4
Wages and salaries	<i>bill. CZK</i>	348	360	362	389	368	381	382	410
	<i>growth in %</i>	6.1	5.6	5.8	5.6	5.9	5.9	5.7	5.4
Social security contributions	<i>bill. CZK</i>	113	115	114	122	119	122	120	129
	<i>growth in %</i>	5.6	5.5	7.7	6.6	5.9	5.9	5.7	5.4
Gross operating surplus	<i>bill. CZK</i>	534	608	594	604	550	604	611	632
	<i>growth in %</i>	1.1	5.0	-0.4	0.1	2.9	-0.6	2.9	4.7

Source: CZSO. Calculations of the MoF.

3.2 Prices

3.2.1 Consumer Prices

Growth in consumer prices was 2.5% YoY (*versus 2.0%*) in February 2017. The deviation from the forecast was mainly due to the developments of prices in the food and non-alcoholic beverages division. The pro-inflationary risk identified in the previous Macroeconomic Forecast thus came true.

The last time inflation was higher in the Czech Republic was in November 2012, when administrative measures played a crucial role, though. Their contribution to YoY inflation, however, was -0.2 pp in February 2017, mainly due to a slight decrease in regulated prices. In terms of individual divisions of the consumer basket, the YoY inflation showed, in particular, a clear contribution of the food and non-alcoholic beverages (0.8 pp) and transportation (0.7 pp) divisions.

The aforementioned error in the January prediction is the only essential reason for a significant increase in the forecast of average inflation rate **in 2017**. Administrative measures should only play a negligible role in this year's inflation. As regards regulated prices, probably the biggest impact on consumer prices will result from cheaper natural gas (contribution -0.1 pp), the price of which was reduced in February. As regards tax changes, consumer prices will reflect in particular a further increase in the excise taxes on tobacco products (contribution 0.1 pp). The impact of reduced VAT rate for printed matter will be negligible. We expect the contribution of administrative measures to the YoY increase in consumer prices in December 2017 to reach 0.1 pp (*unchanged*).

The YoY inflation should hover near 2.5% in the first three quarters of 2017 before slowing 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 domestic demand and a slightly positive output gap. We assume that the koruna will start appreciating only slightly from the third quarter of 2017, and the effect of the exchange rate on this year's inflation should therefore be almost negligible.

In 2017, the **average inflation rate** should reach 2.4% (*versus 2.0%*), with a YoY increase in consumer prices of 2.0% (*versus 1.6%*) in December.

In 2018, inflation should decrease after dissipation of probably one-off factors from the fourth quarter of 2016 and the beginning of 2017 (food prices, introduction of electronic registration of sales) and with a small contribution of appreciating koruna. Stagnating price of crude

oil should have a neutral effect and administrative measures should have only a very slight pro-inflationary effect. Similarly to this year, inflation should reflect the growth in unit labour costs, domestic demand and the positive output gap. In 2018, the average inflation rate should be 1.7% (*versus 1.6%*), with a YoY increase in consumer prices of 1.7% (*versus 1.6%*) in December.

YoY inflation has been above the 2% target of the CNB for two months, and it should, according to our prediction, remain above it for most of 2017. In the following years, it should fall within the tolerance band of ± 1 pp around the inflation target. This situation creates a prerequisite for discontinuation of use of the exchange rate as an additional monetary policy instrument, which we anticipate, in accordance with the CNB's statements, in mid-2017 (see Chapter 1.3.3).

3.2.2 Deflators

In the fourth quarter of 2016, GDP deflator increased by 0.8% (*versus 0.9%*), with gross domestic expenditure deflator rising by 1.3% (*versus 1.5%*) and terms of trade deteriorating by 0.2% (*versus 0.4%*). While growth rates of the household and government consumption deflators slightly lagged behind the estimate from the last forecast, the dynamics of gross fixed capital formation deflator was again estimated accurately. Decrease in import prices, where the development of the crude oil price played a significant role, as well as in export prices was deeper than estimated.

We expect growth of GDP deflator to reach 1.1% (*versus 0.9%*) in 2017 and then accelerate to 1.8% (*versus 1.6%*) in 2018. With a slight slowdown in the growth of gross domestic expenditure deflator in 2018, such acceleration will result from the developments in foreign trade prices. The terms of trade could decrease by 0.9% (*versus 1.0%*) in 2017 amid a *de facto* stagnation of export prices and a slight increase in import prices resulting from developments in commodity markets. However, terms of trade could improve by 0.4% (*unchanged*) in 2018 with decreasing prices of export and import (effect of nominal exchange rate appreciation). The situation is clearly shown in Graph 3.2.6.

Growth of gross domestic expenditure deflator could accelerate from 0.7% in 2016 to 1.9% (*versus 1.8%*) in 2017. This change in dynamics will be mainly due to developments of deflators of household consumption and gross capital formation (see Graph 3.2.4). Due to the slowdown in growth of consumer prices (see above), the growth of gross domestic expenditure deflator could decelerate to 1.7% (*versus 1.5%*) in 2018.

Table 3.2.1: Prices – yearly

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
								Forecast	Forecast	Outlook	Outlook
Consumer Price Index											
Average of a year	<i>average 2005=100</i>	117.1	121.0	122.7	123.2	123.6	124.4	127.3	129.5	131.9	134.0
	<i>growth in %</i>	1.9	3.3	1.4	0.4	0.3	0.7	2.4	1.7	1.8	1.8
December	<i>average 2005=100</i>	118.3	121.1	122.8	122.9	123.0	125.4	127.9	130.1	132.6	135.1
	<i>growth in %</i>	2.4	2.4	1.4	0.1	0.1	2.0	2.0	1.7	1.9	1.9
Of which the contribution of:											
Administrative measures ¹⁾	<i>percentage points</i>	1.2	2.2	1.0	-0.2	0.1	0.0	0.1	0.2	0.2	0.2
Market increase	<i>percentage points</i>	1.2	0.1	0.4	0.3	0.0	2.0	1.9	1.5	1.8	1.7
HICP	<i>average 2005=100</i>	116.2	120.3	121.9	122.4	122.8	123.6	126.6	128.8	131.2	133.6
	<i>growth in %</i>	2.1	3.5	1.4	0.4	0.3	0.6	2.4	1.8	1.8	1.8
Offering prices of flats											
Czech Republic	<i>average 2010=100</i>	95.1	96.1	97.2	100.7	106.9	117.6	.	.	.	.
	<i>growth in %</i>	-4.9	1.1	1.1	3.6	6.2	10.0	.	.	.	.
Czech Republic excluding Prague	<i>average 2010=100</i>	96.6	92.5	91.3	93.0	97.7	107.1	.	.	.	.
	<i>growth in %</i>	-3.4	-4.2	-1.3	1.9	5.1	9.6	.	.	.	.
Prague	<i>average 2010=100</i>	93.6	99.6	103.1	108.5	116.1	128.2	.	.	.	.
	<i>growth in %</i>	-6.4	6.4	3.5	5.2	7.0	10.4	.	.	.	.
Deflators											
GDP	<i>average 2010=100</i>	100.0	101.5	102.9	105.5	106.5	107.7	108.9	110.9	113.0	115.1
	<i>growth in %</i>	0.0	1.5	1.4	2.5	1.0	1.1	1.1	1.8	1.9	1.9
Domestic final use	<i>average 2010=100</i>	101.1	102.9	103.5	104.6	105.7	106.5	108.5	110.4	112.2	114.1
	<i>growth in %</i>	1.1	1.8	0.5	1.1	1.1	0.7	1.9	1.7	1.7	1.7
Consumption of households	<i>average 2010=100</i>	101.4	103.6	104.5	105.1	105.2	105.9	108.4	110.2	112.2	114.3
	<i>growth in %</i>	1.4	2.2	0.8	0.6	0.1	0.6	2.4	1.7	1.8	1.8
Consumption of government	<i>average 2010=100</i>	102.7	103.6	103.8	105.6	108.5	110.4	112.8	115.3	117.1	118.9
	<i>growth in %</i>	2.7	0.9	0.2	1.7	2.8	1.7	2.2	2.2	1.5	1.6
Fixed capital formation	<i>average 2010=100</i>	99.2	100.9	101.1	102.7	104.1	104.5	105.8	107.3	108.9	110.5
	<i>growth in %</i>	-0.8	1.7	0.1	1.6	1.4	0.4	1.2	1.5	1.5	1.5
Exports of goods and services	<i>average 2010=100</i>	100.7	103.8	105.6	109.8	108.2	104.0	103.9	103.0	103.2	104.0
	<i>growth in %</i>	0.7	3.1	1.7	4.0	-1.5	-3.8	-0.1	-0.9	0.2	0.8
Imports of goods and services	<i>average 2010=100</i>	102.3	106.1	106.6	109.2	107.5	102.4	103.2	101.9	101.6	101.9
	<i>growth in %</i>	2.3	3.7	0.5	2.5	-1.6	-4.7	0.8	-1.2	-0.2	0.3
Terms of trade	<i>average 2010=100</i>	98.5	97.9	99.0	100.5	100.7	101.6	100.7	101.1	101.5	102.0
	<i>growth in %</i>	-1.5	-0.6	1.2	1.5	0.1	0.9	-0.9	0.4	0.4	0.4

¹⁾ The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.

Source: CZSO, Eurostat. Calculations of the MoF.

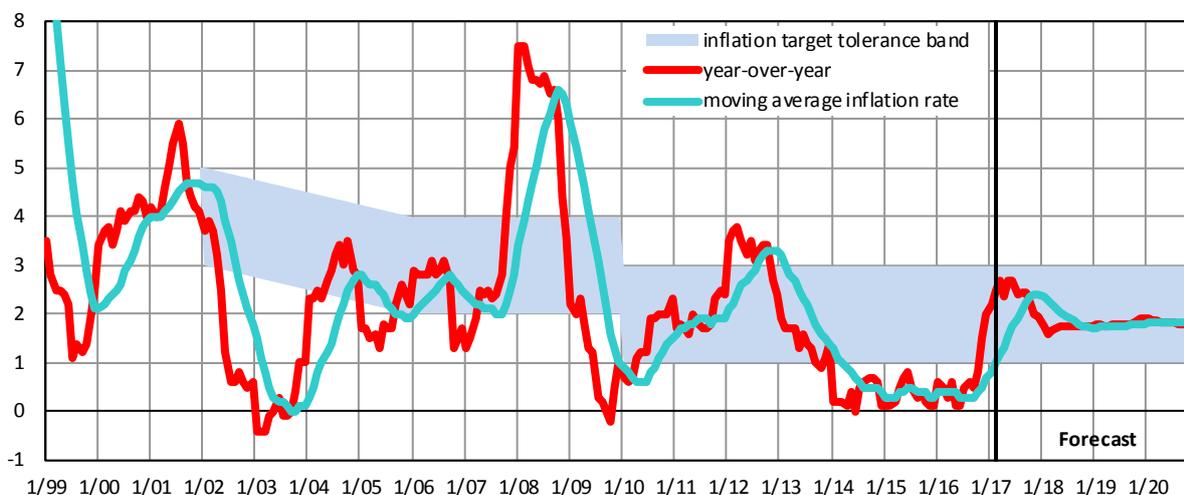
Table 3.2.2: Prices – quarterly

		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Consumer Price Index	<i>average 2005=100</i>	123.7	124.3	124.5	125.0	126.8	127.5	127.5	127.6
	<i>growth in %</i>	0.5	0.2	0.5	1.4	2.5	2.6	2.4	2.1
Of which the contribution of:									
Administrative measures ¹⁾	<i>percentage points</i>	0.2	0.2	0.1	0.1	-0.1	-0.2	-0.1	-0.1
Market increase	<i>percentage points</i>	0.3	0.0	0.4	1.3	2.6	2.7	2.5	2.1
HICP	<i>average 2005=100</i>	122.9	123.5	123.7	124.2	126.0	126.8	126.8	126.8
	<i>growth in %</i>	0.5	0.2	0.6	1.5	2.5	2.6	2.5	2.1
Offering prices of flats									
Czech Republic	<i>average 2010=100</i>	113.4	116.5	118.8	121.9	.	.	.	.
	<i>growth in %</i>	10.2	10.3	9.9	9.9	.	.	.	.
Czech Republic excluding Prague	<i>average 2010=100</i>	103.5	106.1	108.4	110.2	.	.	.	.
	<i>growth in %</i>	10.1	9.9	10.1	8.5	.	.	.	.
Prague	<i>average 2010=100</i>	123.2	126.8	129.2	133.7	.	.	.	.
	<i>growth in %</i>	10.2	10.5	9.8	11.3	.	.	.	.
Deflators									
GDP	<i>average 2010=100</i>	107.1	107.4	107.8	108.4	107.6	108.6	109.2	110.0
	<i>growth in %</i>	1.2	1.0	1.3	0.8	0.5	1.2	1.3	1.5
Domestic final use	<i>average 2010=100</i>	105.4	105.9	106.4	108.0	107.5	108.1	108.5	109.9
	<i>growth in %</i>	0.6	0.2	0.7	1.3	2.0	2.1	1.9	1.7
Consumption of households	<i>average 2010=100</i>	105.0	105.6	106.2	106.6	107.6	108.3	108.8	108.8
	<i>growth in %</i>	0.1	0.1	0.8	1.4	2.5	2.6	2.4	2.1
Consumption of government	<i>average 2010=100</i>	106.9	109.1	109.8	114.8	109.6	111.8	112.1	117.0
	<i>growth in %</i>	1.9	1.3	1.6	1.9	2.5	2.5	2.1	1.9
Fixed capital formation	<i>average 2010=100</i>	104.5	104.3	104.5	104.8	105.6	105.5	105.8	106.1
	<i>growth in %</i>	0.3	0.0	0.4	0.8	1.1	1.1	1.2	1.3
Exports of goods and services	<i>average 2010=100</i>	104.0	103.7	104.1	104.4	103.0	104.0	104.4	104.3
	<i>growth in %</i>	-4.9	-5.1	-3.2	-2.2	-0.9	0.3	0.2	-0.1
Imports of goods and services	<i>average 2010=100</i>	101.7	101.6	102.4	103.8	102.5	103.0	103.3	103.8
	<i>growth in %</i>	-6.2	-6.6	-4.3	-2.0	0.8	1.4	0.9	0.0
Terms of trade	<i>average 2010=100</i>	102.2	102.0	101.7	100.6	100.5	100.9	101.1	100.5
	<i>growth in %</i>	1.4	1.6	1.1	-0.2	-1.7	-1.1	-0.6	-0.1

¹⁾ The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.
Source: CZSO, Eurostat. Calculations of the MoF.

Graph 3.2.1: Consumer Prices

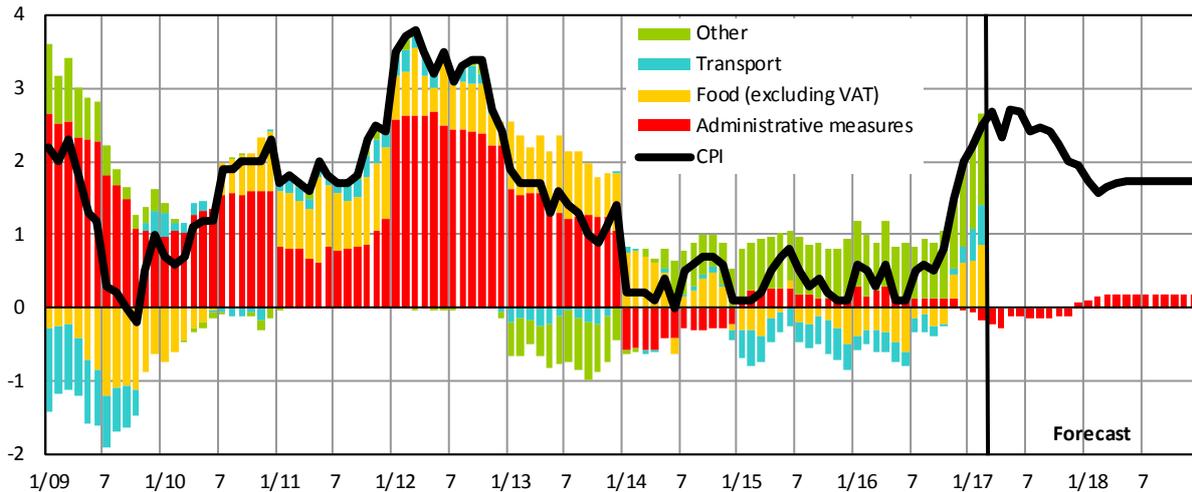
YoY growth rate, in %



Note: For the years 2002–2005 the highlighted area represents target band for headline inflation, whereas from 2006 on it is the tolerance band of the CNB's point target for headline inflation.
Source: CNB, CZSO. Calculations of the MoF.

Graph 3.2.2: Consumer Prices

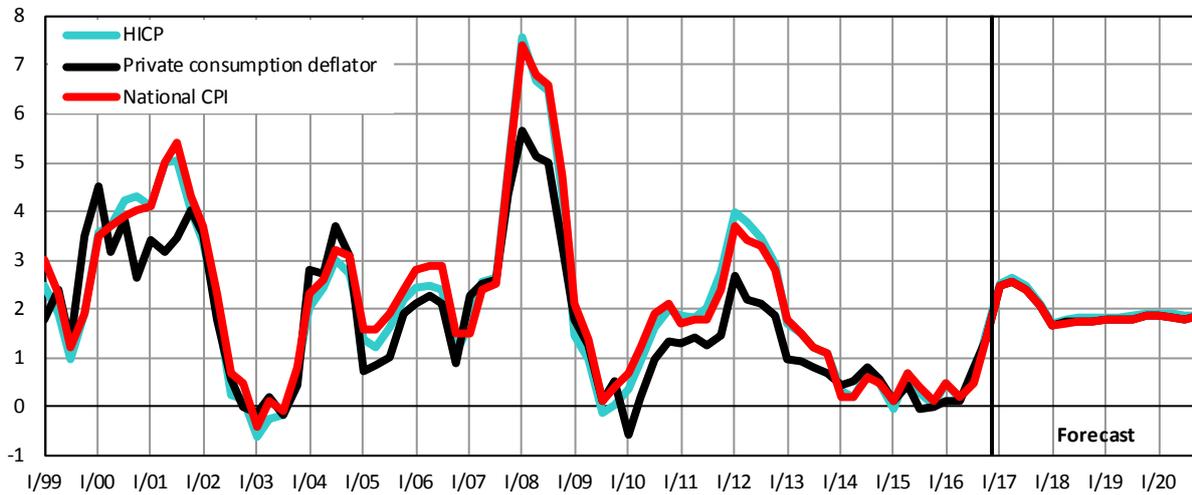
decomposition of YoY growth of CPI, contributions in pp, CPI growth rate in %, Transport excluding administrative measures and excises



Source: CZSO. Calculations of the MoF.

Graph 3.2.3: Indicators of Consumer Prices

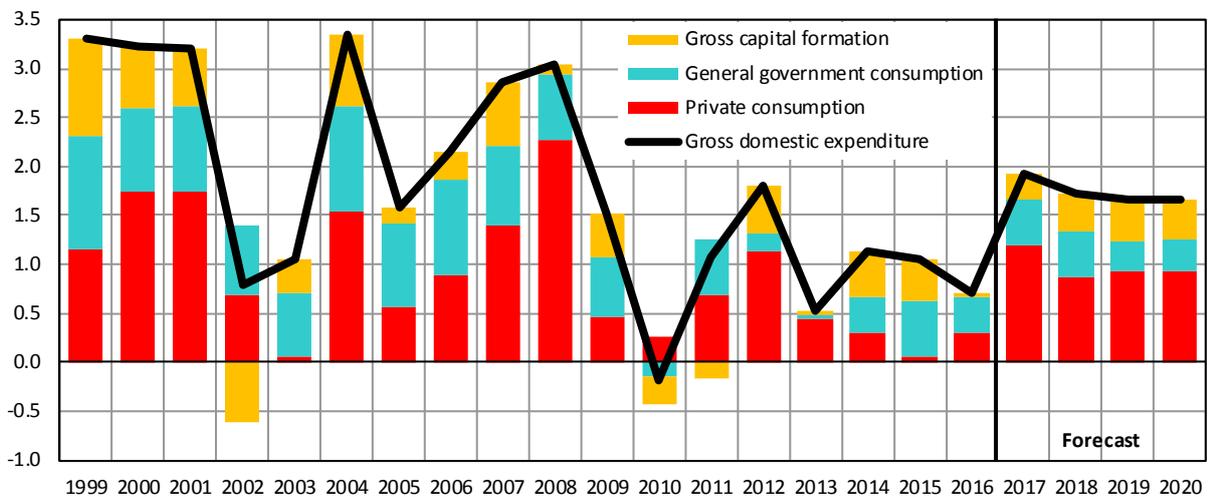
YoY growth rate, in %



Source: CZSO, Eurostat. Calculations of the MoF.

Graph 3.2.4: Gross Domestic Expenditure Deflator

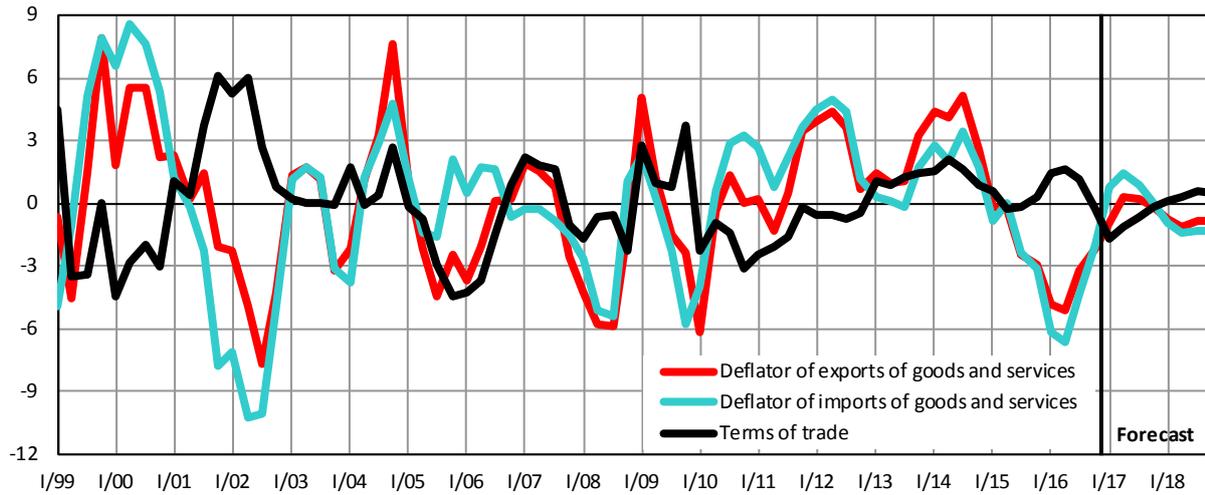
YoY growth rate in %, contributions of growth of deflators of individual components of gross domestic expenditure in pp



Source: CZSO. Calculations of the MoF.

Graph 3.2.5: Terms of Trade

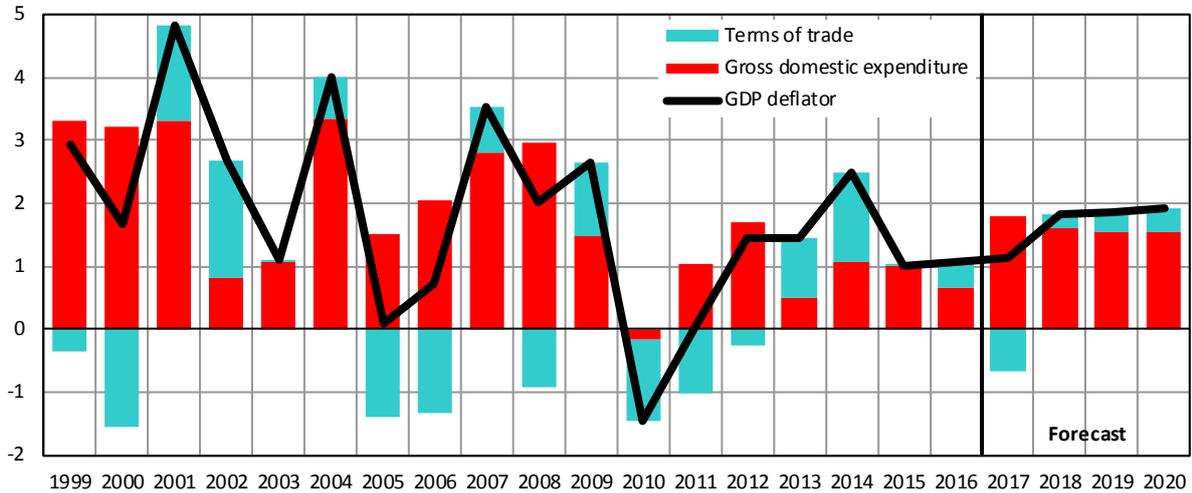
YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Graph 3.2.6: GDP deflator

YoY change in %, contributions of growth of gross domestic expenditure deflator and change in terms of trade in pp



Source: CZSO. Calculations of the MoF.

3.3 Labour Market

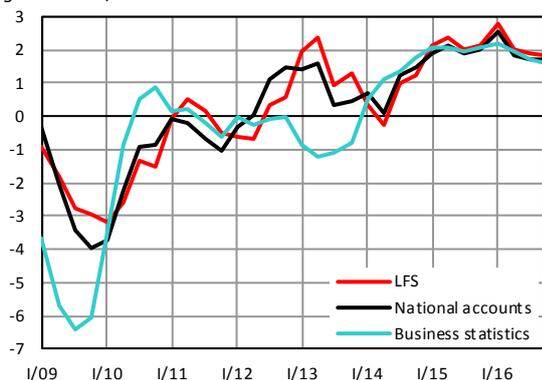
The labour market was developing more favourably at the end of 2016 than it would correspond to the real economic situation. A YoY growth in employment driven by the number of both employees and entrepreneurs continued. The rates of employment and economic activity for the age group 15–64 reached other historically record-breaking values in the fourth quarter of 2016 (72.8% and 75.6%, respectively). The unemployment rate (LFS) continued to decrease to record-lows; YoY decrease in registered unemployment re-accelerated. The number of vacancies has increased again, coming close to the highs of 2008. Rapidly growing frictions in the labour market have also been reflected in a noticeable wage bill growth.

3.3.1 Employment

Employment (LFS) grew by 2.2% YoY (*versus 1.9%*) in the fourth quarter of 2016. The number of employees increased by 1.8% (*versus 1.9%*), the number of entrepreneurs rose by 3.8% (*versus 0.2%*). The number of entrepreneurs without employees continued to grow (by 6.9%) and, conversely, the number of entrepreneurs with employees declined again (by 5.8%).

Graph 3.3.1: Employees in Different Statistics

YoY growth rate, in %



Source: CZSO.

From a sectoral perspective, employment growth (in business statistics) was due to the manufacturing industry, but there has also been strong growth in the number of employees in the sections information and communication; professional, scientific and technical activities; and real estate activities or energy. In contrast, a strong decrease was recorded in mining and quarrying (by more than 8.0%), construction and agriculture.

Shortage of workers is reflected virtually in all sectors and is becoming a barrier to economic growth. In the short term, businesses can limit the extent of this problem for example by hiring foreign workers; investment increasing labour productivity should become more significant in the medium term.

Due to the strong growth at the end of 2016, we are increasing the forecast for employment growth in 2017 to

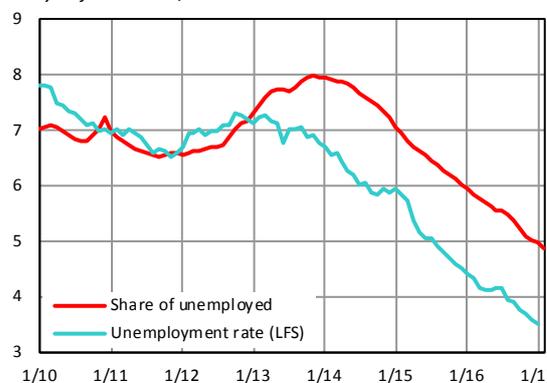
1.1% (*versus 0.3%*). For 2018, we expect only a slight increase in employment by 0.3% (*unchanged*). Here we take into account that with respect to demographic factors (with the exception of raising the retirement age there are virtually no sources of additional increase in the number of employees) and an extremely low unemployment rate, there is only very little space for further growth of employment.

3.3.2 Unemployment

The continued economic growth and a general shortage of employees lead to a further reduction in the number of registered unemployed persons (by 81 thousand YoY in December 2016) as well as according to the LFS statistics (by 44 thousand YoY in the fourth quarter of 2016).

Graph 3.3.2: Indicators of Unemployment

seasonally adjusted data, in %



Source: CZSO, Ministry of Labour and Social Affairs. Calculations of the MoF.

Note: Share of unemployed (Ministry of Labour and Social Affairs) is defined as a share of available job seekers aged 15 to 64 years in the population of the same age.

As regards registered unemployment, we forecast a decrease to 4.5% in 2017 (*versus 4.9%*) due to lower-than-expected level at the beginning of 2017, and further to 4.2% in 2018 (*versus 4.7%*).

In the fourth quarter of 2016, the **unemployment rate (LFS)** decreased to 3.6% (*versus 3.9%*), thus averaging 4.0% (*in line with the estimate*) in 2016 as a whole. With regard to a better-than-estimated developments at the end of 2016 and the continued decrease in unemployment (in the age category 15–64) at the beginning of this year we are decreasing our forecast for the unemployment rate in 2017 to 3.4% (*versus 3.9%*), and we anticipate a slight decrease to 3.3% (*versus 3.9%*) in 2018. At such low levels unemployment would be under its natural rate, according to our estimates.

3.3.3 Economic Activity Rate

We estimate that the **economic activity rate** (15–64 year-olds) grew by 1.4 pp YoY to 75.6% in the fourth quarter of 2016 (*versus 75.5%*). We suppose there is still some room for a further growth in the participation rate (see Graph 3.3.6), with demographic aspects in the form

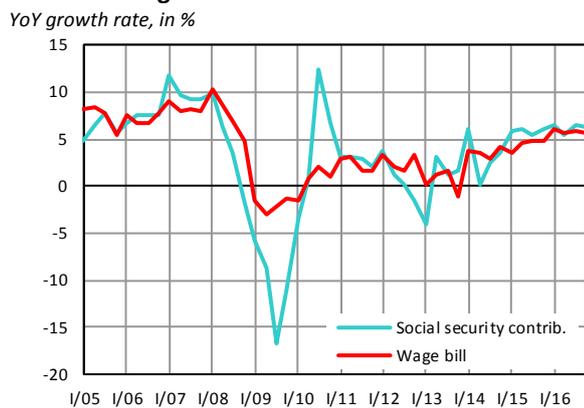
of an increasing weight of cohorts with a naturally high economic activity rate (especially of those aged 40–49 years) and gradual increases in the statutory as well as actual retirement age playing a crucial role.

3.3.4 Wages

The growth rate of the **wage bill** (national accounts, domestic concept) slowed down to 5.6% (*versus* 5.4%) in the fourth quarter of 2016. This was mainly due to the manufacturing industry, in which the wage growth of 5.5% was the lowest over the last two years. The highest wage dynamics was recorded in public administration, education, health and social work (8.5%); in contrast, the wage bill hardly changed in the construction sector (an increase by 0.1%). Wages and salaries increased by 5.8% (*versus* 5.6%) in the national economy for the entire 2016.

The current developments of cash collection of social security contributions in the first quarter of 2017 reflect a continued dynamics of wages, which will be supported by last year's increase in pay scales in the general government sector as well as the minimum wage increase. Therefore, the wage bill could have increased by 5.9% (*versus* 5.2%) in the first quarter of 2017.

Graph 3.3.3: Collection of Social Security Contributions and Total Wage Bill



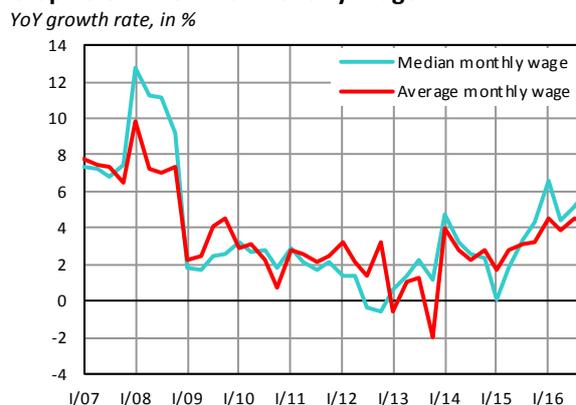
Note: Time series of the collection of social security contributions is influenced, among other factors, by a legislative change in 2009 and a payout of exceptional bonuses at the end of 2012.

Source: CZSO, Ministry of Finance.

The continued growth of employment and already a very tense labour market situation will be reflected in wage progression in 2017. Moreover, attempts to utilize all personnel capacities of the economy will be accompanied by increases in minimum and guaranteed wages. It is highly probable that there will be another increase in pay scales of part of employees in the general government sector (e.g. pay rise of security force members has already been approved by the Government). Therefore, growth of the wage bill could reach 5.7% (*versus* 5.0%) in 2017. Compared to the January forecast, we expect a more significant increase in wages in most categories of non-business sector employees in 2018; the wage bill could thus increase to 4.8% (*versus* 4.5%).

The **average wage** (business statistics, full-time equivalent) increased by 4.2% (*versus* 4.5%) in the fourth quarter of 2016. High demand for manual workers was reflected in a dynamic wage growth mainly in low- and medium-paying professions. Wage median increase (by 6%) was significantly higher in the fourth quarter of 2016 than the average wage dynamics (by 4.2%). The average nominal wage could increase by 4.5% (*unchanged*) in the first quarter of 2017 and by 4.6% (*unchanged*) in 2017 as a whole. The growth rate of wages could slightly slow down to 4.5% (*versus* 4.3%) in 2018.

Graph 3.3.4: Nominal Monthly Wage



Source: CZSO.

Table 3.3.1: Labour Market – yearly

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
								Forecast	Forecast	Outlook	Outlook
Labour Force Survey											
Employment	<i>av. in thous.persons</i>	4 872	4 890	4 937	4 974	5 042	5 138	5 193	5 210	5 227	5 246
	<i>growth in %</i>	0.4	0.4	1.0	0.8	1.4	1.9	1.1	0.3	0.3	0.3
Employees	<i>av. in thous.persons</i>	3 993	3 990	4 055	4 079	4 168	4 257	4 309	4 325	4 340	4 356
	<i>growth in %</i>	0.0	-0.1	1.6	0.6	2.2	2.1	1.2	0.4	0.4	0.4
Entrepreneurs and self-employed	<i>av. in thous.persons</i>	880	901	882	895	874	882	883	885	887	889
	<i>growth in %</i>	2.0	2.4	-2.1	1.5	-2.3	0.8	0.1	0.2	0.2	0.2
Unemployment	<i>av. in thous.persons</i>	351	367	369	324	268	212	185	179	173	168
Unemployment rate	<i>average in %</i>	6.7	7.0	7.0	6.1	5.1	4.0	3.4	3.3	3.2	3.1
Long-term unemployment ¹⁾	<i>av. in thous.persons</i>	144	161	163	141	127	.	.	.	.	.
Labour force	<i>av. in thous.persons</i>	5 223	5 257	5 306	5 298	5 310	5 350	5 378	5 388	5 401	5 414
	<i>growth in %</i>	-0.2	0.7	0.9	-0.2	0.2	0.7	0.5	0.2	0.2	0.2
Population aged 15–64	<i>av. in thous.persons</i>	7 295	7 229	7 154	7 081	7 026	6 968	6 917	6 869	6 825	6 767
	<i>growth in %</i>	-0.7	-0.9	-1.0	-1.0	-0.8	-0.8	-0.7	-0.7	-0.6	-0.9
Employment/Pop. 15–64	<i>average in %</i>	66.8	67.6	69.0	70.2	71.8	73.7	75.1	75.8	76.6	77.5
Employment rate 15–64 ²⁾	<i>average in %</i>	65.7	66.5	67.7	69.0	70.2	72.0	73.2	74.0	74.7	75.6
Labour force/Pop. 15–64	<i>average in %</i>	71.6	72.7	74.2	74.8	75.6	76.8	77.8	78.4	79.1	80.0
Participation rate 15–64 ³⁾	<i>average in %</i>	70.5	71.6	72.9	73.5	74.0	75.0	75.9	76.6	77.2	78.0
Registered unemployment											
Unemployment	<i>av. in thous.persons</i>	508	504	564	561	479	406	330	299	289	283
Share of unemployed ⁴⁾	<i>average in %</i>	6.7	6.8	7.7	7.7	6.6	5.6	4.5	4.2	4.1	4.0
Wages and salaries											
Average monthly wage ⁵⁾											
Nominal	CZK	24 455	25 067	25 035	25 768	26 467	27 589	28 800	30 200	31 400	32 600
	<i>growth in %</i>	2.5	2.5	-0.1	2.9	2.7	4.2	4.6	4.5	4.1	3.9
Real	CZK 2005	20 884	20 717	20 403	20 916	21 413	22 178	22 700	23 300	23 800	24 300
	<i>growth in %</i>	0.6	-0.8	-1.5	2.5	2.4	3.6	2.2	2.8	2.3	2.2
Median monthly wage	CZK	20 743	20 828	21 110	21 786	22 310	23 544	.	.	.	.
	<i>growth in %</i>	2.2	0.4	1.4	3.2	2.4	5.5	.	.	.	.
Wage bill	<i>growth in %</i>	2.3	2.6	0.5	3.6	4.4	5.8	5.7	4.8	4.5	4.2
Labour productivity	<i>growth in %</i>	2.3	-1.2	-0.8	2.2	3.1	0.6	1.5	2.2	2.1	2.0
Unit labour costs ⁶⁾	<i>growth in %</i>	0.6	3.0	0.5	0.4	-0.5	3.3	2.9	2.2	2.0	1.9
Compens. of employees / GDP	%	40.3	41.0	40.9	40.2	39.9	40.8	41.6	41.7	41.8	41.8

¹⁾ Persons in unemployment for longer than 12 months.

²⁾ The indicator does not include employment over 64 years.

³⁾ The indicator does not include labour force over 64 years.

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

⁵⁾ Derived from full-time-equivalent employers in the entire economy.

⁶⁾ Ratio of nominal compensation per employee to real productivity of labour.

Source: CZSO, Ministry of Labour and Social Affairs. Calculations of the MoF.

Table 3.3.2: Labour Market – quarterly

		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Labour Force Survey									
Employment	<i>av. in thous. persons</i>	5 087	5 128	5 152	5 187	5 155	5 196	5 206	5 213
	<i>YoY growth in %</i>	2.0	1.7	1.8	2.2	1.3	1.3	1.1	0.5
	<i>QoQ growth in %</i>	1.0	0.1	0.4	0.7	0.1	0.1	0.1	0.1
Employees	<i>av. in thous. persons</i>	4 231	4 244	4 268	4 283	4 301	4 311	4 318	4 308
	<i>growth in %</i>	2.8	2.0	1.9	1.8	1.6	1.6	1.2	0.6
Entrepreneurs and self-employed	<i>av. in thous. persons</i>	855	885	883	904	854	886	889	905
	<i>growth in %</i>	-1.9	0.2	1.4	3.8	-0.1	0.1	0.6	0.0
Unemployment	<i>av. in thous. persons</i>	231	210	213	193	195	180	184	182
Unemployment rate	<i>average in %</i>	4.3	3.9	4.0	3.6	3.6	3.3	3.4	3.4
Long-term unemployment ¹⁾	<i>av. in thous. persons</i>	106	91	84	.	.	.	.	.
Labour force	<i>av. in thous. persons</i>	5 318	5 338	5 365	5 379	5 350	5 376	5 391	5 395
	<i>growth in %</i>	0.2	0.6	0.9	1.3	0.6	0.7	0.5	0.3
Population aged 15–64	<i>av. in thous. persons</i>	6 990	6 975	6 961	6 948	6 935	6 923	6 911	6 898
	<i>growth in %</i>	-0.9	-0.9	-0.8	-0.8	-0.8	-0.7	-0.7	-0.7
Employment/Pop. 15–64	<i>average in %</i>	72.8	73.5	74.0	74.7	74.3	75.1	75.3	75.6
	<i>increase over a year</i>	2.0	1.9	1.9	2.2	1.6	1.5	1.3	0.9
Employment rate 15–64 ²⁾	<i>average in %</i>	71.0	71.7	72.2	72.8	72.5	73.2	73.5	73.7
	<i>increase over a year</i>	1.6	1.6	1.7	2.0	1.5	1.5	1.2	0.9
Labour force/Pop. 15–64	<i>average in %</i>	76.1	76.5	77.1	77.4	77.1	77.7	78.0	78.2
	<i>increase over a year</i>	0.8	1.1	1.3	1.5	1.1	1.1	0.9	0.8
Participation rate 15–64 ³⁾	<i>average in %</i>	74.3	74.7	75.3	75.6	75.3	75.8	76.1	76.3
	<i>increase over a year</i>	0.4	0.9	1.1	1.4	1.0	1.1	0.9	0.7
Registered unemployment									
Unemployment	<i>av. in thous. persons</i>	458.9	407.8	387.5	369.6	380	327	310	301
Share of unemployed ⁴⁾	<i>average in %</i>	6.3	5.6	5.3	5.0	5.2	4.5	4.3	4.2
Wages and salaries									
Average monthly wage ⁵⁾									
Nominal	CZK	26 499	27 286	27 221	29 320	27 700	28 500	28 500	30 700
	<i>growth in %</i>	4.5	3.8	4.5	4.2	4.5	4.4	4.7	4.7
Real	CZK 2005	21 422	21 952	21 864	23 456	21 800	22 300	22 400	24 100
	<i>growth in %</i>	4.1	3.6	3.9	2.7	2.0	1.8	2.3	2.6
Median monthly wage	CZK	22 549	23 038	23 528	25 061	.	.	.	.
	<i>growth in %</i>	6.6	4.4	5.1	6.0	.	.	.	.
Wage bill	<i>growth in %</i>	6.1	5.6	5.8	5.6	5.9	5.9	5.7	5.4

¹⁾ Persons in unemployment for longer than 12 months.

²⁾ The indicator does not include employment over 64 years.

³⁾ The indicator does not include labour force over 64 years.

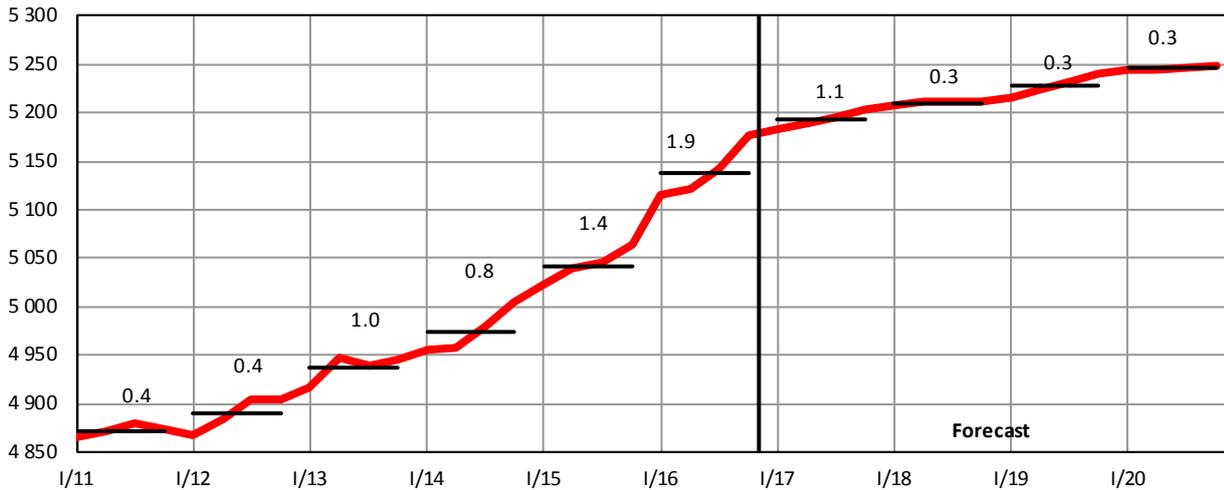
⁴⁾ Share of available job seekers aged 15 to 64 years in the population of the same age.

⁵⁾ Derived from full-time-equivalent employers in the entire economy.

Source: CZSO, Ministry of Labour and Social Affairs. Calculations of the MoF.

Graph 3.3.5: Employment (LFS)

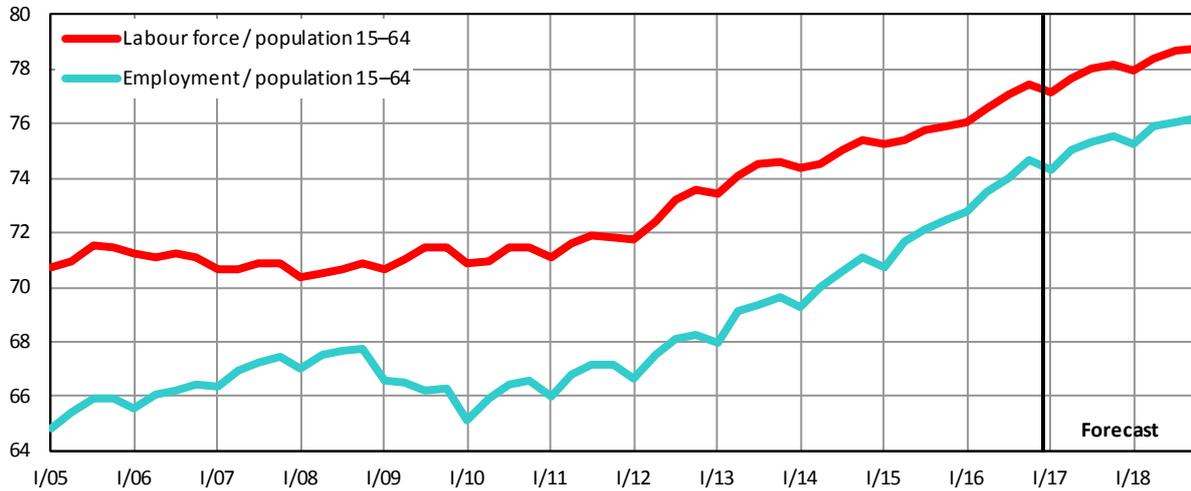
seasonally adjusted data, in thousands of persons, black lines with labels show the average level and growth rate of employment in the given year



Source: CZSO. Calculations of the MoF.

Graph 3.3.6: Ratio of Labour Force and Employment to Population Aged 15–64

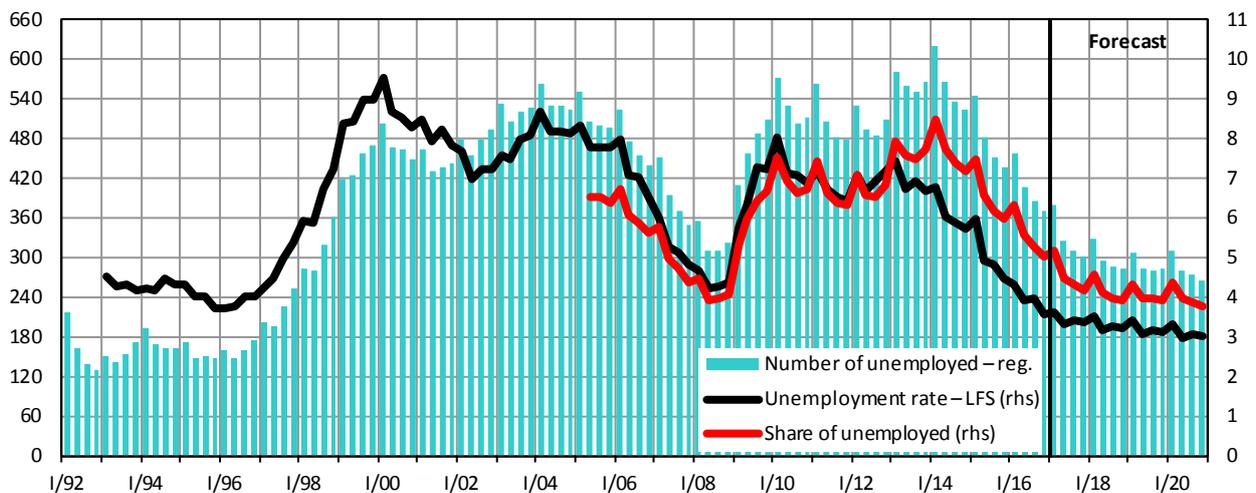
in %



Source: CZSO. Calculations of the MoF.

Graph 3.3.7: Unemployment

quarterly average, in thousands of persons, in % (rhs)

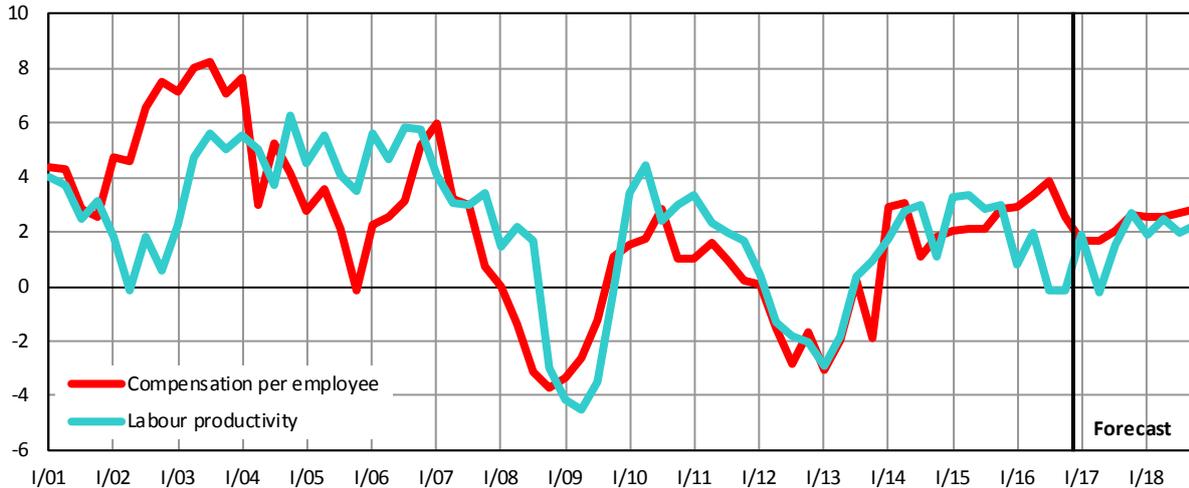


Note: Share of unemployed (Ministry of Labour and Social Affairs) is defined as a share of available job seekers aged 15 to 64 years in the population of the same age.

Source: CZSO, Ministry of Labour and Social Affairs. Calculations of the MoF.

Graph 3.3.8: Compensation per Employee and Real Productivity of Labour

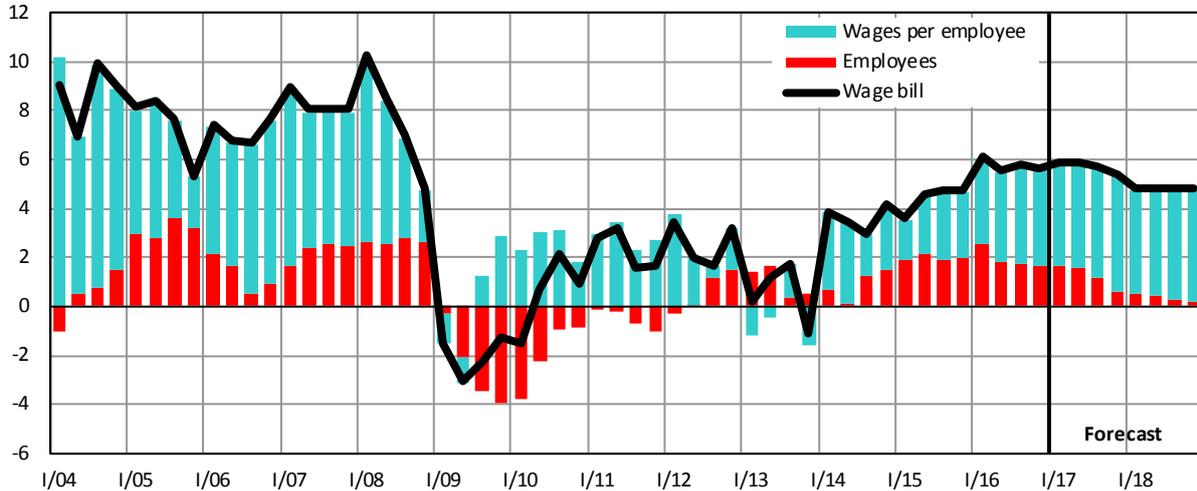
YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Graph 3.3.9: Wage Bill – nominal, domestic concept

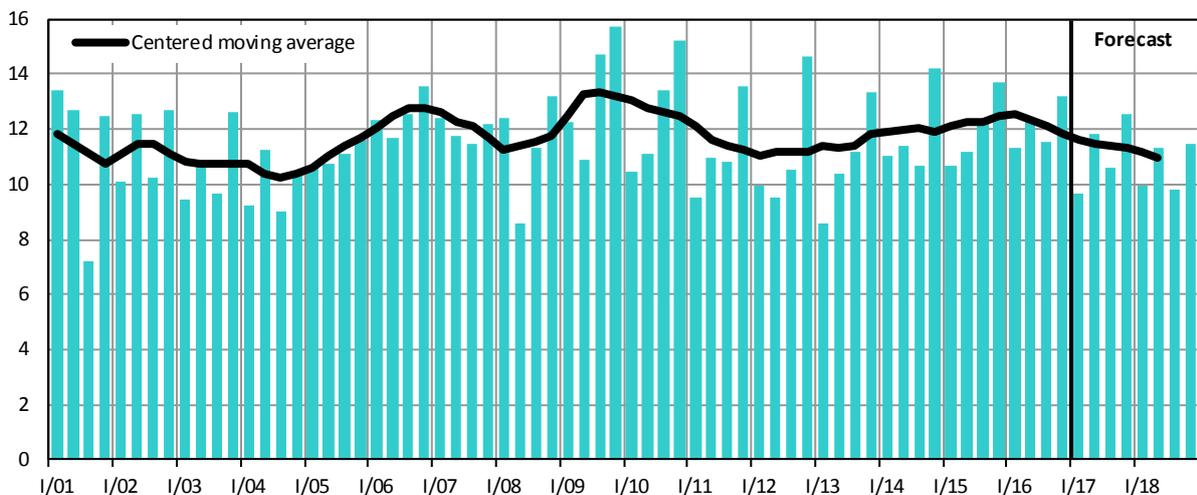
YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Graph 3.3.10: Gross Savings Rate of Households

in % of disposable income



Source: CZSO. Calculations of the MoF.

Table 3.3.3: Income and Expenditures of Households – yearly

SNA methodology – national concept

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
											Forecast	Forecast
Current income												
Compensation of employees	bill.CZK	1 553	1 585	1 627	1 669	1 692	1 760	1 847	1 958	2 067	2 165	
	growth in %	-2.5	2.0	2.6	2.6	1.3	4.0	5.0	6.0	5.6	4.7	
Gross operating surplus and mixed income	bill.CZK	686	685	674	654	645	662	684	694	706	720	
	growth in %	4.5	-0.2	-1.7	-2.9	-1.3	2.6	3.3	1.4	1.8	2.0	
Property income received	bill.CZK	158	152	153	147	158	166	162	164	163	164	
	growth in %	-11.0	-3.5	0.5	-4.0	7.8	5.1	-2.4	0.9	-0.2	0.1	
Social benefits not-in-kind	bill.CZK	535	542	553	567	563	576	590	606	624	659	
	growth in %	8.6	1.2	2.1	2.4	-0.6	2.2	2.6	2.6	3.0	5.5	
Other current transfers received	bill.CZK	141	140	139	151	146	160	181	149	154	157	
	growth in %	-1.4	-1.0	-0.5	8.6	-3.1	9.2	13.3	-17.6	3.0	2.3	
Current expenditure												
Property income paid	bill.CZK	19	23	21	15	21	16	18	15	15	15	
	growth in %	-36.7	17.7	-8.5	-27.2	40.5	-24.3	10.8	-16.6	-0.3	-0.1	
Curr. taxes on income and property	bill.CZK	140	137	156	158	166	177	183	187	198	207	
	growth in %	-3.0	-2.6	13.8	1.6	4.9	6.9	3.0	2.7	5.6	4.7	
Social contributions	bill.CZK	603	621	640	654	670	696	735	774	816	860	
	growth in %	-5.3	2.9	3.0	2.3	2.4	3.8	5.6	5.4	5.4	5.3	
Other current transfers paid	bill.CZK	143	141	145	154	140	150	168	139	140	141	
	growth in %	-1.6	-1.6	3.2	6.2	-9.3	6.9	12.0	-17.3	0.8	1.2	
Gross disposable income	bill.CZK	2 168	2 182	2 184	2 206	2 208	2 285	2 362	2 455	2 546	2 642	
	growth in %	3.0	0.7	0.1	1.0	0.1	3.5	3.4	4.0	3.7	3.8	
Final consumption	bill.CZK	1 891	1 920	1 952	1 970	1 997	2 044	2 110	2 184	2 289	2 391	
	growth in %	0.2	1.5	1.7	0.9	1.3	2.4	3.2	3.5	4.8	4.4	
Change in share in pension funds	bill.CZK	17	15	16	15	35	35	35	31	32	34	
Gross savings	bill.CZK	295	278	248	250	246	276	288	302	289	286	
Capital transfers (income (-) / expenditure (+))	bill.CZK	-25	-29	-25	-21	-13	-32	-13	-13	-21	-23	
Gross capital formation	bill.CZK	212	230	198	183	181	195	218	228	234	244	
	growth in %	-3.1	8.8	-13.9	-7.8	-1.3	8.3	11.4	4.6	2.8	4.2	
Change in financial assets and liab.	bill.CZK	106	75	73	87	77	110	81	85	74	63	
Real disposable income	growth in %	2.1	0.1	-1.3	-1.2	-0.8	2.9	3.3	3.3	1.3	2.0	
Gross savings rate	%	13.5	12.6	11.3	11.3	11.0	11.9	12.0	12.1	11.2	10.7	

Source: CZSO. Calculations of the MoF.

3.4 External Relations

The **current account balance to GDP ratio**¹ reached 1.1% in the fourth quarter of 2016 (*versus 2.1%*), thus deteriorating by 0.8% GDP QoQ. The current account remains in surplus.

The result for the year 2016 has to be evaluated in the context of **revision of data** for the year 2015 and the first three quarters of 2016, which took place simultaneously with the publication of data for the fourth quarter of 2016. The most significant change for 2015 was a reduction in the surplus on the balance of goods by 0.5% of GDP to 4.1% of GDP, and an increase in the deficit on the primary income balance by 0.3% GDP to 5.6% of GDP. The surplus on the current account was thus reduced by 0.7% of GDP to 0.2% GDP.

The current account balance was also influenced by the developments in the fourth quarter of 2016, when there was a higher-than-expected outflow of dividends from direct investment.

Export market growth, which reached 3.7% in the fourth quarter of 2016 (*versus 2.4%*) was significantly faster than estimated. Similarly, growth for the whole of 2016 of 4.0% (*versus 3.1%*) exceeded expectations. The reason for a higher growth is related to a revision of national account of our main trading partners. As a result of a slower growth in international trade we expect export market growth to slow down to 3.2% (*versus 2.7%*) in 2017 and further to 3.1% (*unchanged*) in 2018.

Export performance (indicating a change in the market share of Czech goods in foreign markets) can no longer benefit from the depreciation of the CZK/EUR exchange rate and the effect of the weak koruna. Following an increase in export performance by 1.9% in 2015, its growth rate slowed down during 2016 and in the third quarter there was a decrease by 1.4%, which continued also in the fourth quarter of 2016, reaching 2.3% (*versus an increase by 2.7%*). **Export performance growth** thus **slowed down** to 0.1% in 2016 (*versus 1.6%*). For 2017 we expect a slight recovery to 0.4% (*versus 1.6%*), and we anticipate another acceleration to 1.0% (*unchanged*) in 2018. Increasing labour unit costs reducing price competitiveness of Czech products, and/or the problem of shortage of labour force and production capacities will weigh on growth of export performance. The expected discontinuation of the CNB's exchange rate commitment may also play a role.

As regards foreign trade (balance of payments methodology), the balance has been improving since the fourth quarter of 2015. The **balance of goods** has been increasing due to factors mainly on the import side (crude oil price, decrease in the growth rate of total domestic demand associated with the fall in investment activity). According to current data, the balance of goods reached

a surplus of 5.3% of GDP (*versus 5.5%*) in 2016, which was a YoY improvement of 1.2% of GDP.

The rising surplus on the balance of goods has been due to an improving balance in the machinery and transport equipment group and a reduction in the deficit of mineral fuels.

The development of prices of mineral fuels was the dominant factor affecting terms of trade also in 2016. Terms of trade were improving from September 2015 to September 2016 but in the fourth quarter of 2016 there was an expected turn towards their slight deterioration. This development was associated with an increase in the import prices of crude oil at the end of 2016. The deficit of the fuel part of the balance reached its trough in the third quarter of 2016 at 1.8% of GDP, rising to 1.9% of GDP in the fourth quarter of 2016 (*in line with the estimate*). For 2017, we forecast the fuel balance deficit to widen to 2.4% of GDP (*versus 2.5%*) following the assumed YoY increase in crude oil prices. In 2018, the fuel balance could show a deficit of 2.3% GDP (*unchanged*).

Given the above (including the effect of the revision), we expect the surplus on the balance of goods to deteriorate to 4.5% of GDP (*versus 4.6%*) in 2017, and improve slightly to 4.6% of GDP (*versus 4.8%*) in 2018.

The surplus on the **balance of services** has been rising since the first quarter of 2015. It reached 2.1% of GDP (*versus 1.9%*) in 2016, thus improving by 0.4% of GDP YoY. The balance of transportation and telecommunication services and IT services has improved. With regard to the positive economic developments, we expect improved sales of services abroad in the coming period, and the surplus will stay at similar levels. In 2017, we expect a surplus of 2.2% of GDP (*versus 2.0%*), and we expect the same ratio to GDP also in 2018 (*versus 2.1%*).

The YoY higher surplus on the current account in 2016 by 0.9% of GDP was due to the aforementioned increase in the surplus on the balance of goods and services by 1.7% of GDP. The positive development in the goods and services balance was partly offset by a YoY deterioration of the **primary** and **secondary income balance** by 0.2% of GDP and 0.6% of GDP, respectively. The deficit of primary income reached 5.8% of GDP (*versus 4.7%*) in 2016. The deterioration was due to higher outflow of income from foreign direct investment (mainly dividends), despite a slowdown in the growth of corporate profitability. It can be expected that pressures on payout of dividends will persist. Therefore, we expect a virtually unchanged deficit of primary income in 2017 and 2018 of 5.7% of GDP (*versus 4.7%*).

In this context, we estimate the **current account of the balance of payments** to remain in a slight surplus, which could reach 0.4% of GDP (*versus 1.2% of GDP*) in 2017. For 2018, we expect a marginal increase in the surplus to 0.5% of GDP (*versus 1.3%*).

¹ All quarterly figures relative to GDP are in annual moving sums.

Table 3.4.1: Balance of Payments – yearly

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
										Forecast	Forecast
Goods and services	<i>bill.CZK</i>	147	119	157	201	237	276	266	352	327	350
	<i>% GDP</i>	3.7	3.0	3.9	5.0	5.8	6.4	5.8	7.5	6.7	6.9
Goods	<i>bill.CZK</i>	65	40	75	124	167	220	188	251	219	236
	<i>% GDP</i>	1.7	1.0	1.9	3.0	4.1	5.1	4.1	5.3	4.5	4.6
Services	<i>bill.CZK</i>	82	78	81	78	70	56	78	101	108	114
	<i>% GDP</i>	2.1	2.0	2.0	1.9	1.7	1.3	1.7	2.1	2.2	2.2
Primary income	<i>bill.CZK</i>	-217	-250	-223	-238	-249	-261	-255	-272	-279	-291
	<i>% GDP</i>	-5.5	-6.3	-5.5	-5.9	-6.1	-6.0	-5.6	-5.8	-5.7	-5.7
Secondary income	<i>bill.CZK</i>	-19	-11	-18	-27	-10	-7	0	-27	-29	-31
	<i>% GDP</i>	-0.5	-0.3	-0.5	-0.7	-0.2	-0.2	0.0	-0.6	-0.6	-0.6
Current account	<i>bill.CZK</i>	-89	-142	-85	-63	-22	8	11	53	19	28
	<i>% GDP</i>	-2.3	-3.6	-2.1	-1.6	-0.5	0.2	0.2	1.1	0.4	0.5
Capital account	<i>bill.CZK</i>	51	38	13	53	82	32	102	54	62	70
	<i>% GDP</i>	1.3	1.0	0.3	1.3	2.0	0.7	2.2	1.1	1.3	1.4
Net lending/borrowing	<i>bill.CZK</i>	-38	-104	-72	-10	61	40	113	106	81	97
	<i>% GDP</i>	-1.0	-2.6	-1.8	-0.3	1.5	0.9	2.5	2.3	1.6	1.9
Financial account	<i>bill.CZK</i>	-72	-122	-75	12	68	59	176	118	.	.
Direct investments	<i>bill.CZK</i>	-38	-95	-47	-121	7	-80	50	-141	.	.
Portfolio investments	<i>bill.CZK</i>	-159	-150	-6	-55	-93	90	-164	-170	.	.
Financial derivatives	<i>bill.CZK</i>	1	5	4	-9	-5	-6	-5	11	.	.
Other investments	<i>bill.CZK</i>	62	77	-9	116	-30	-18	-56	-147	.	.
Reserve assets	<i>bill.CZK</i>	61	41	-17	80	188	73	351	564	.	.
International investment position	<i>bill.CZK</i>	-1 726	-1 823	-1 823	-1 864	-1 695	-1 577	-1 512	-1 176	.	.
	<i>% GDP</i>	-44.0	-46.1	-45.2	-45.9	-41.4	-36.6	-33.2	-24.9	.	.
Gross external debt	<i>bill.CZK</i>	1 956	2 164	2 312	2 434	2 733	3 024	3 196	3 528	.	.
	<i>% GDP</i>	49.9	54.7	57.3	60.0	66.7	70.1	70.2	74.8	.	.

Source: CNB, CZSO. Calculations of the MoF.

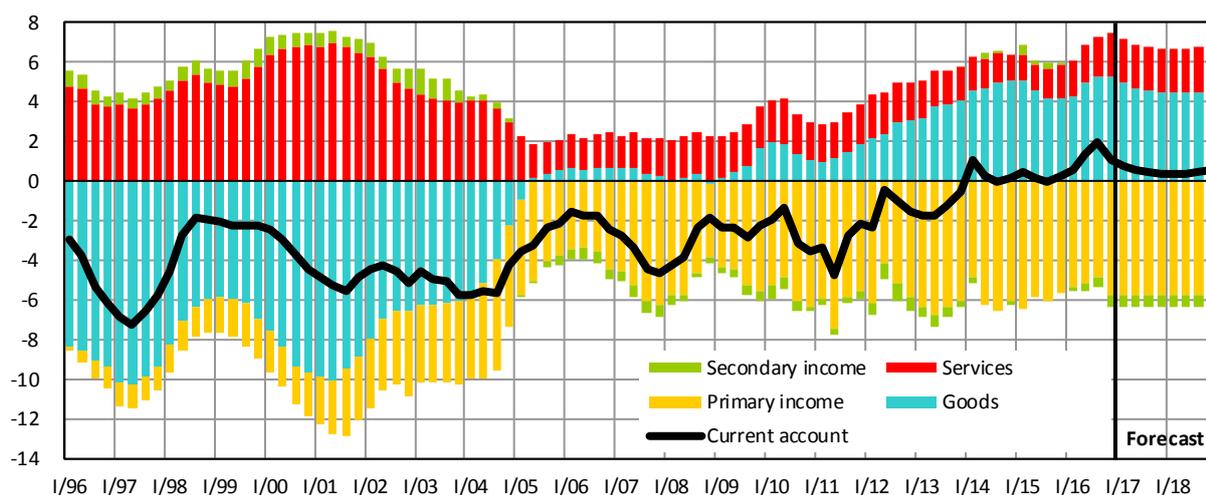
Table 3.4.2: Balance of Payments – quarterly
moving sums of the latest 4 quarters

		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
Goods and services	<i>bill.CZK</i>	281	322	341	352	339	330	326	327
	<i>% GDP</i>	6.1	6.9	7.3	7.5	7.1	6.9	6.8	6.7
Goods	<i>bill.CZK</i>	197	233	245	251	236	225	220	219
	<i>% GDP</i>	4.3	5.0	5.2	5.3	5.0	4.7	4.5	4.5
Services	<i>bill.CZK</i>	83	89	96	101	103	105	107	108
	<i>% GDP</i>	1.8	1.9	2.1	2.1	2.2	2.2	2.2	2.2
Primary income	<i>bill.CZK</i>	-245	-241	-228	-272	-273	-275	-277	-279
	<i>% GDP</i>	-5.3	-5.2	-4.9	-5.8	-5.7	-5.7	-5.7	-5.7
Secondary income	<i>bill.CZK</i>	-8	-16	-23	-27	-28	-28	-29	-29
	<i>% GDP</i>	-0.2	-0.3	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6
Current account	<i>bill.CZK</i>	28	65	90	53	39	27	20	19
	<i>% GDP</i>	0.6	1.4	1.9	1.1	0.8	0.6	0.4	0.4
Capital account	<i>bill.CZK</i>	90	59	63	54	56	58	60	62
	<i>% GDP</i>	2.0	1.3	1.3	1.1	1.2	1.2	1.2	1.3
Net lending/borrowing	<i>bill.CZK</i>	118	123	153	106	94	84	80	81
	<i>% GDP</i>	2.6	2.7	3.3	2.3	2.0	1.8	1.7	1.6
Financial account	<i>bill.CZK</i>	189	134	147	118	.	.	.	.
Direct investments	<i>bill.CZK</i>	56	-27	-99	-141	.	.	.	.
Portfolio investments	<i>bill.CZK</i>	-223	-317	-186	-170	.	.	.	.
Financial derivatives	<i>bill.CZK</i>	-3	-7	-1	11	.	.	.	.
Other investments	<i>bill.CZK</i>	-106	31	-16	-147	.	.	.	.
Reserve assets	<i>bill.CZK</i>	464	453	448	564	.	.	.	.
International investment position	<i>stock in bill.CZK</i>	-1 365	-1 329	-1 252	-1 176	.	.	.	.
	<i>% GDP</i>	-29.7	-28.6	-26.7	-24.9	.	.	.	.
Gross external debt	<i>stock in bill.CZK</i>	3 231	3 320	3 386	3 528	.	.	.	.
	<i>% GDP</i>	70.3	71.4	72.3	74.8	.	.	.	.

Source: CNB, CZSO. Calculations of the MoF.

Graph 3.4.1: Current Account

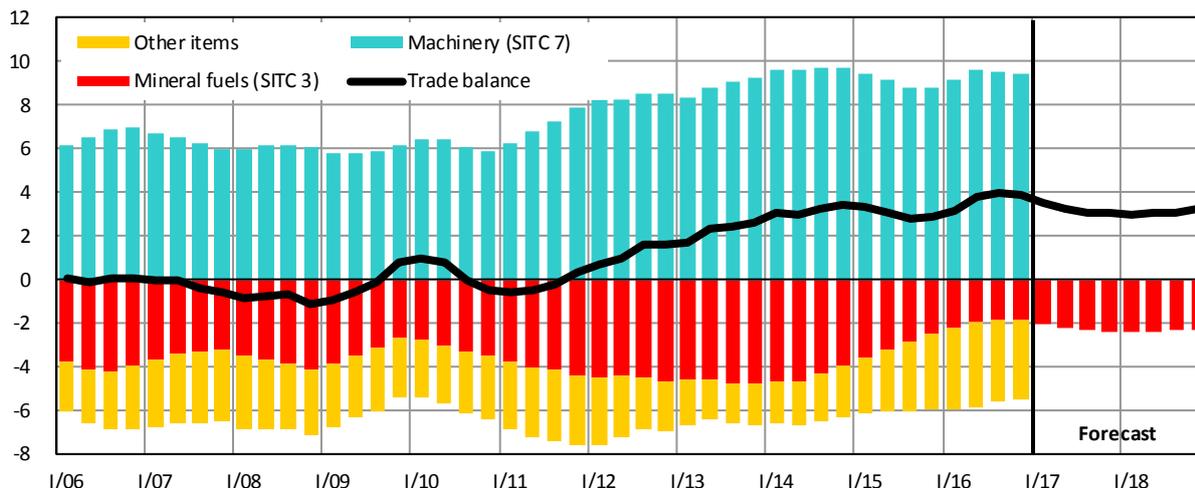
moving sums of the latest 4 quarters, in % of GDP, trade and service balances in BoP definitions



Source: CNB, CZSO. Calculations of the MoF.

Graph 3.4.2: Balance of Trade (national concept)

moving sums of the latest 4 quarters, in % of GDP, in cross-border definitions

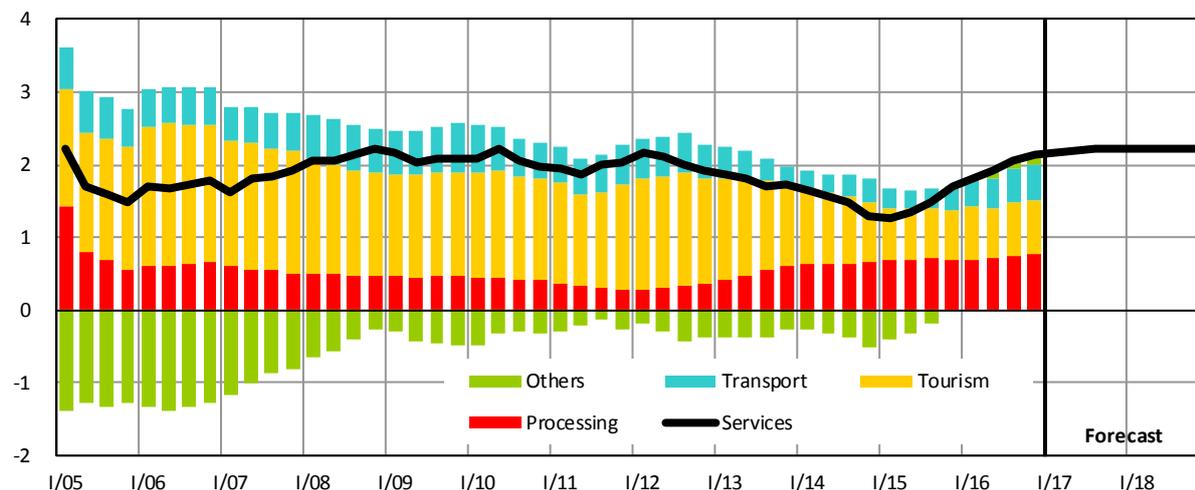


Note: The data in the graph show imports in cif methodology. For this reason, the graph is not comparable with Tables 3.4.1 and 3.4.2, where imports are in fob methodology. Trade balance in the national concept (unlike in the BoP methodology in Tables 3.4.1 and 3.4.2) does not include the import of JAS-39 Gripen fighter jets in the fourth quarter of 2015 amounting to CZK 9.9 bill., i.e. 0.2% of GDP.

Source: CZSO. Calculations of the MoF.

Graph 3.4.3: Balance of Services

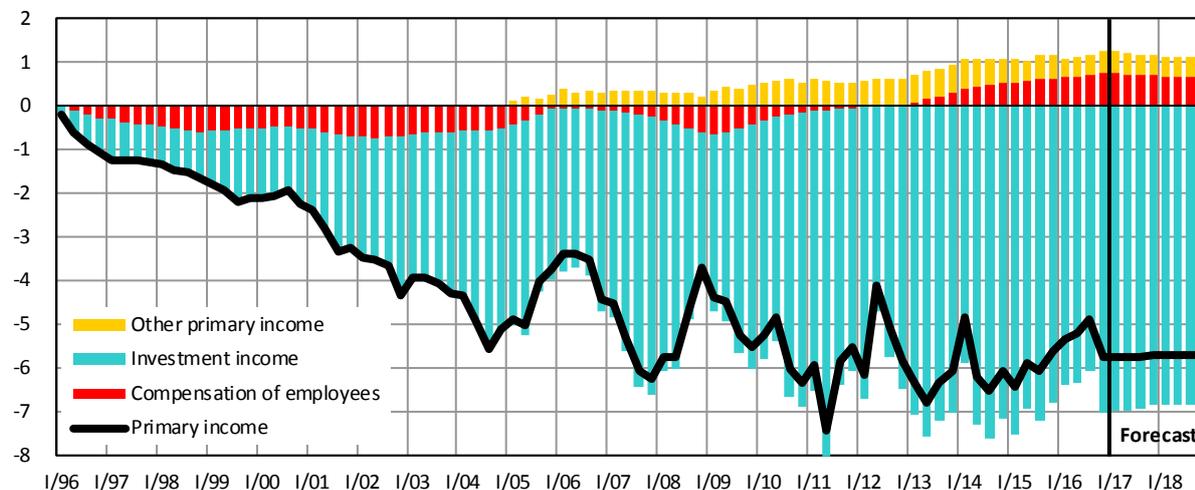
moving sums of the latest 4 quarters, in % of GDP



Source: CNB, CZSO. Calculations of the MoF.

Graph 3.4.4: Balance of Primary Income

moving sums of the latest 4 quarters, in % of GDP



Source: CNB, CZSO. Calculations of the MoF.

Table 3.4.3: Decomposition of Exports of Goods – yearly*seasonally adjusted*

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
											Forecast	Forecast
GDP ¹⁾	<i>average of 2005=100</i>	96.5	100.0	103.4	104.4	105.3	107.3	109.5	111.8	114	116	
	<i>growth in %</i>	-4.2	3.6	3.4	1.0	0.9	1.9	2.1	2.1	2.1	2.0	
Import intensity ²⁾	<i>average of 2005=100</i>	92.0	100.0	104.0	103.1	104.6	107.4	111.0	113.2	114	116	
	<i>growth in %</i>	-6.7	8.7	4.0	-0.9	1.4	2.7	3.4	1.9	1.1	1.1	
Export markets ³⁾	<i>average of 2005=100</i>	88.8	100.0	107.5	107.6	110.1	115.2	121.6	126.5	131	135	
	<i>growth in %</i>	-10.7	12.6	7.5	0.1	2.3	4.6	5.6	4.0	3.2	3.1	
Export performance	<i>average of 2005=100</i>	97.4	100.0	102.5	106.9	105.1	109.8	111.9	112.0	112	114	
	<i>growth in %</i>	0.6	2.7	2.5	4.3	-1.7	4.4	1.9	0.1	0.4	1.0	
Real exports	<i>average of 2005=100</i>	86.5	100.0	110.2	115.0	115.7	126.4	136.0	141.6	147	153	
	<i>growth in %</i>	-10.1	15.6	10.2	4.4	0.6	9.2	7.6	4.1	3.6	4.2	
1 / NEER	<i>average of 2005=100</i>	102.2	100.0	97.0	101.2	103.0	108.6	109.9	106.9	107	104	
	<i>growth in %</i>	3.4	-2.2	-3.0	4.4	1.7	5.5	1.2	-2.8	-0.2	-2.3	
Prices on foreign markets	<i>average of 2005=100</i>	99.2	100.0	103.9	102.7	102.6	101.0	98.3	96.5	96	97	
	<i>growth in %</i>	-3.0	0.8	3.9	-1.1	-0.1	-1.6	-2.7	-1.8	-0.2	1.1	
Exports deflator	<i>average of 2005=100</i>	101.5	100.0	100.8	104.0	105.6	109.7	108.0	103.1	103	102	
	<i>growth in %</i>	0.3	-1.4	0.8	3.2	1.6	3.8	-1.5	-4.6	-0.3	-1.2	
Nominal exports	<i>average of 2005=100</i>	87.6	100.0	111.0	119.6	122.3	138.6	146.9	146.0	151	155	
	<i>growth in %</i>	-10.1	14.2	11.0	7.8	2.2	13.4	6.0	-0.6	3.3	2.9	

¹⁾ Weighted average of GDP of the seven most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France and Italy.²⁾ Index of ratio of real imports of goods to real GDP.³⁾ Weighted average of imports of goods of the main partners.

Source: CNB, CZSO, Eurostat. Calculations of the MoF.

Table 3.4.4: Decomposition of Exports of Goods – quarterly*seasonally adjusted*

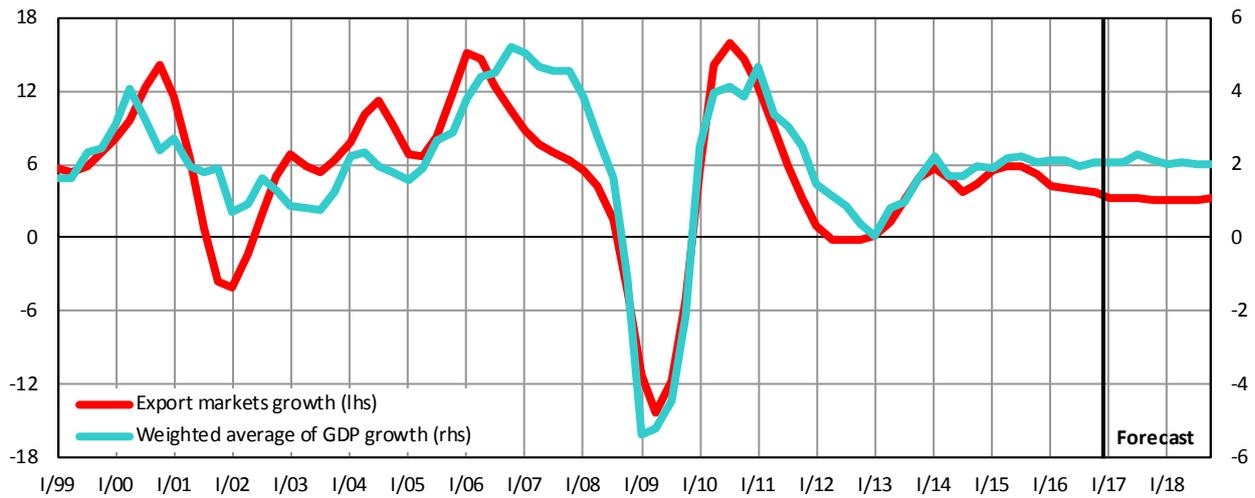
		2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
GDP ¹⁾	<i>average of 2010=100</i>	111.0	111.6	111.9	112.6	113	114	114	115
	<i>growth in %</i>	2.1	2.1	1.9	2.1	2.1	2.0	2.3	2.1
Import intensity ²⁾	<i>average of 2010=100</i>	112.6	112.9	113.4	113.7	114	114	114	115
	<i>growth in %</i>	2.1	1.9	2.0	1.6	1.2	1.1	1.0	1.0
Export markets ³⁾	<i>average of 2010=100</i>	125.0	126.0	126.9	128.1	129	130	131	132
	<i>growth in %</i>	4.3	4.1	3.9	3.7	3.2	3.2	3.3	3.1
Export performance	<i>average of 2010=100</i>	113.9	113.1	109.9	110.9	112	114	111	112
	<i>growth in %</i>	2.2	2.0	-1.4	-2.3	-1.5	1.0	1.1	1.0
Real exports	<i>average of 2010=100</i>	142.4	142.5	139.4	142.1	145	149	146	148
	<i>growth in %</i>	6.6	6.1	2.5	1.4	1.7	4.3	4.4	4.1
1 / NEER	<i>average of 2010=100</i>	106.9	106.9	106.8	106.9	107	107	107	106
	<i>growth in %</i>	-3.2	-5.2	-1.5	-1.2	0.3	0.3	-0.2	-1.0
Prices on foreign markets	<i>average of 2010=100</i>	96.8	95.9	96.5	96.6	95	96	97	97
	<i>growth in %</i>	-2.4	-0.8	-2.6	-1.6	-1.5	-0.1	0.4	0.7
Exports deflator	<i>average of 2010=100</i>	103.5	102.5	103.1	103.3	102	103	103	103
	<i>growth in %</i>	-5.5	-5.9	-4.0	-2.7	-1.3	0.1	0.1	-0.3
Nominal exports	<i>average of 2010=100</i>	147.3	146.0	143.8	146.8	148	152	150	152
	<i>growth in %</i>	0.7	-0.2	-1.6	-1.4	0.4	4.4	4.6	3.8

See notes to Table 3.4.3.

Source: CNB, CZSO, Eurostat. Calculations of the MoF.

Graph 3.4.5: GDP and Imports of Goods in Main Partner Countries

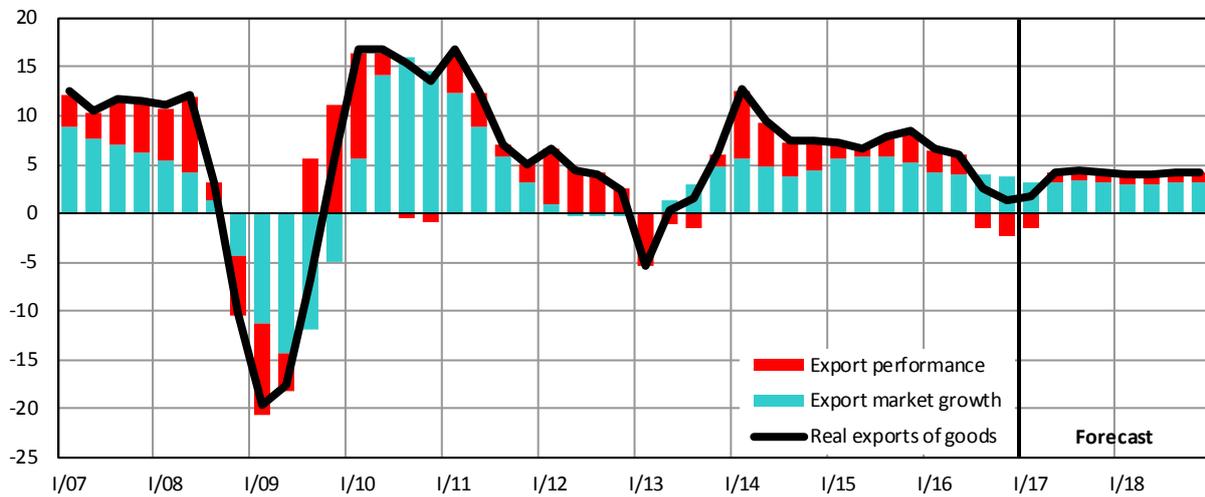
YoY growth rate, in %, seasonally adjusted



Source: Eurostat. Calculations of the MoF.

Graph 3.4.6: Real Exports of Goods

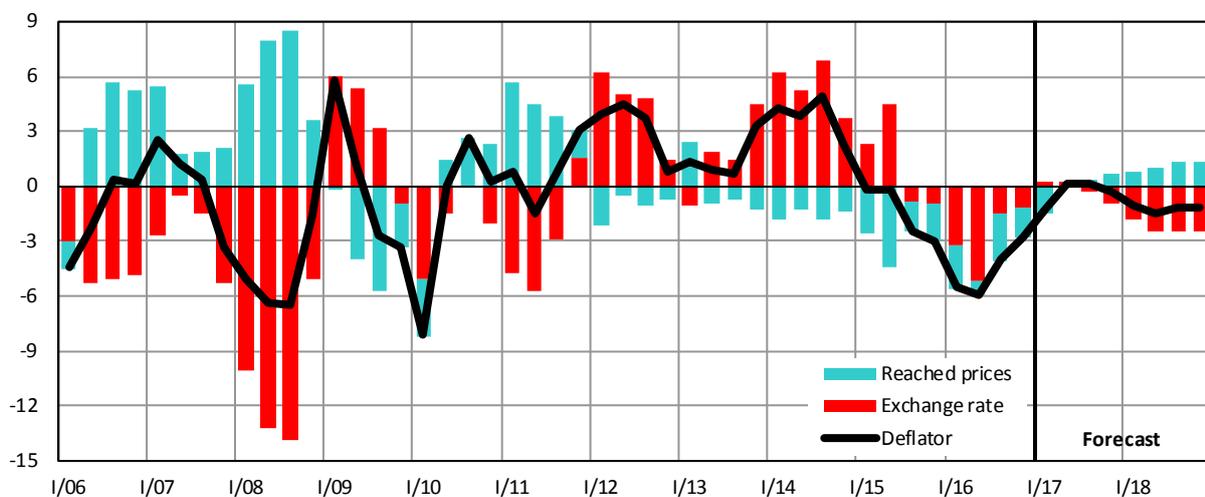
decomposition of YoY growth, in %, seasonally adjusted



Source: CZSO, Eurostat. Calculations of the MoF.

Graph 3.4.7: Deflator of Exports of Goods

decomposition of YoY growth, in %



Source: CNB, CZSO. Calculations of the MoF.

3.5 International Comparisons

Comparisons for the period up to and including 2015 are based on Eurostat statistics. Since 2016, our own calculations on the basis of real exchange rates have been used.

The level of GDP per capita converted by **current purchasing power parity** increased in all monitored countries in 2015. However, there was a slight decrease in relative economic level towards the EA19 countries in Greece, Estonia, Croatia and Lithuania. In the Czech Republic, the purchasing power parity was 17.15 CZK/PPS compared to the EU28 and 17.06 CZK/EUR compared to the EA19. The economic level was circa 25,200 PPS, corresponding to 82% of the economic level in the EA19. By 2018, the relative economic level of the Czech Republic should increase gradually up to 85% of the EA19 average in 2018, thanks to a steady economic growth.

GDP per capita adjusted for the current **exchange rate** takes into account the market valuation of the currency and the ensuing differences in price levels. In the case of the Czech Republic, this indicator was approximately EUR 15,800 in 2015, i.e. 51% of the EA19 level. Higher economic growth and the expected slight appreciation of the exchange rate after discontinuation of the exchange rate commitment will result in a gradual increase in the relative level up to 55 % of the EA19 average in 2018.

When comparing price levels, the **comparative price level of GDP** in the Czech Republic increased by 2 pp in 2015, thus reaching 63% of the EA19 average. In the coming years, the comparative price level of GDP should slightly increase gradually up to 65% in 2018, and the relatively low price level will continue to help the competitiveness of the Czech economy.

Through the decomposition² of GDP into labour productivity, labour market component and demographic component, it is possible to determine in detail the sources of economic growth. The results of the analysis are summarised in Graphs 3.5.5 and 3.5.6.

Labour productivity in the monitored countries has long been increasing; however, its level is still relatively low compared to the EA19 average. Although the economic crisis slowed down labour productivity growth, its absolute level did not decrease in any of the monitored countries except Greece in 2008–2015. In the given period, however, a decrease in the relative level of labour productivity to the EA19 countries was also seen, in addition to Greece, in Slovenia and Portugal, whereas increases in the relative level in Poland, Latvia and Lithuania exceeded 7 pp. In the Czech Republic, labour productivity started growing again dynamically in 2014 and it reached 66% of the EA19 average in 2015.

In the case of the **labour market component**, which gives the number of hours worked per working-age person, there is the opposite situation. From 2008 to 2015, the absolute level of this indicator decreased in all monitored countries, except for Poland, the Czech Republic, Lithuania and Slovakia. The highest slump (by 16%) was seen in Greece due to a 20% decrease in the number of hours worked. In contrast, the relative level of the labour market component has long been exceeding the EA19 average in all countries, with the exception of Slovakia; in Estonia, Latvia, Poland and the Czech Republic by more than 20 pp in 2015.

The share of the working-age population, captured by the **demographic component**, reached its peak in most monitored countries during the first decade of the 21st century and is now decreasing due to population ageing. In 2008–2015, the sharpest decrease of 4.4 pp was recorded in the Czech Republic. Compared to the EA19 average, however, the demographic component is still higher in all monitored countries except Greece, and in Slovakia it exceeded the EA19 average by 10 pp in 2015.

² GDP per capita can be written as follows:

$$\begin{aligned}
 \text{GDP per capita} &= \frac{\text{GDP}}{\text{number of inhabit.}} = \\
 &= \frac{\text{GDP}}{\text{no. of hours worked}} * \frac{\text{no. of hours worked}}{\text{population aged 15 – 64}} * \frac{\text{population aged 15 – 64}}{\text{no. of inhabit.}} = \\
 &= \text{labour productivity} * \text{labour market component} * \text{demographic component}
 \end{aligned}$$

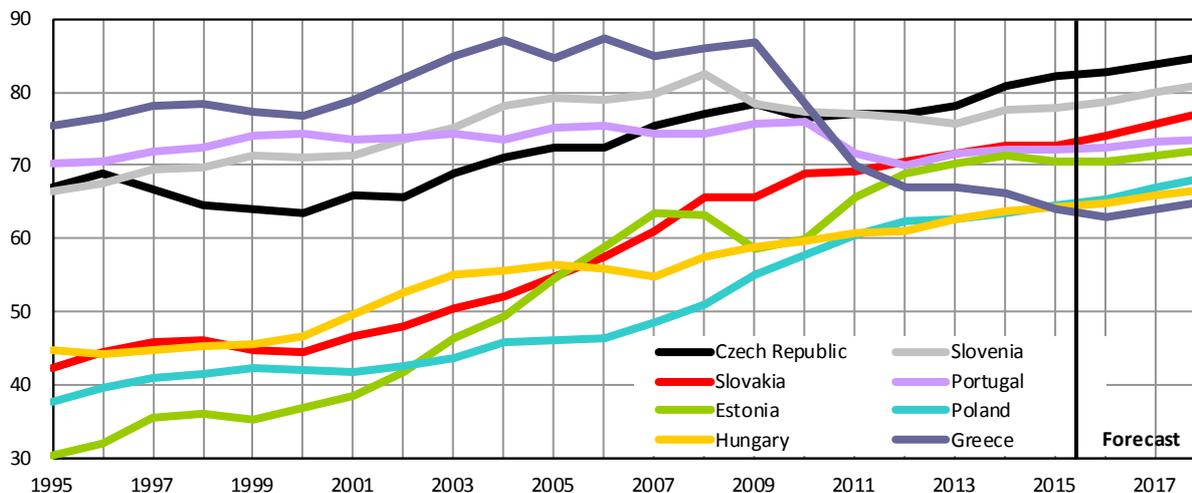
Table 3.5.1: GDP per Capita – Using Current Purchasing Power Parities

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
									<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>
Czech Republic	<i>PPS</i>	20 900	21 000	21 700	21 900	22 400	23 800	25 200	26 000	27 000	28 000
	<i>EA19=100</i>	78	76	77	77	78	81	82	83	84	85
Slovenia	<i>PPS</i>	20 900	21 200	21 700	21 800	21 700	22 800	23 900	24 700	25 700	26 800
	<i>EA19=100</i>	78	77	77	76	76	77	78	79	80	81
Slovakia	<i>PPS</i>	17 400	19 000	19 500	20 100	20 500	21 300	22 300	23 200	24 300	25 500
	<i>EA19=100</i>	66	69	69	71	72	73	73	74	76	77
Lithuania	<i>PPS</i>	13 800	15 400	17 200	18 600	19 600	20 700	21 600	22 500	23 800	25 000
	<i>EA19=100</i>	52	56	61	65	68	70	70	72	74	76
Portugal	<i>PPS</i>	20 100	20 900	20 200	20 000	20 500	21 100	22 200	22 700	23 500	24 300
	<i>EA19=100</i>	76	76	72	70	72	72	72	72	73	74
Estonia	<i>PPS</i>	15 600	16 500	18 500	19 600	20 100	20 900	21 600	22 100	22 900	23 800
	<i>EA19=100</i>	59	60	66	69	70	71	70	71	71	72
Poland	<i>PPS</i>	14 600	15 900	17 000	17 800	17 900	18 600	19 800	20 500	21 500	22 500
	<i>EA19=100</i>	55	58	60	62	63	63	64	65	67	68
Hungary	<i>PPS</i>	15 600	16 400	17 100	17 400	17 900	18 700	19 700	20 400	21 200	22 000
	<i>EA19=100</i>	59	60	61	61	63	64	64	65	66	67
Greece	<i>PPS</i>	23 100	21 500	19 700	19 100	19 200	19 400	19 600	19 800	20 600	21 500
	<i>EA19=100</i>	87	78	70	67	67	66	64	63	64	65
Latvia	<i>PPS</i>	12 800	13 400	14 900	16 100	16 700	17 500	18 600	19 300	20 200	21 200
	<i>EA19=100</i>	48	49	53	56	58	60	61	61	63	64
Croatia	<i>PPS</i>	15 200	15 100	15 600	16 000	15 900	16 100	16 700	17 600	18 400	19 200
	<i>EA19=100</i>	57	55	55	56	56	55	55	56	57	58

Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

Graph 3.5.1: GDP per Capita – Using Current Purchasing Power Parities

EA19=100



Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

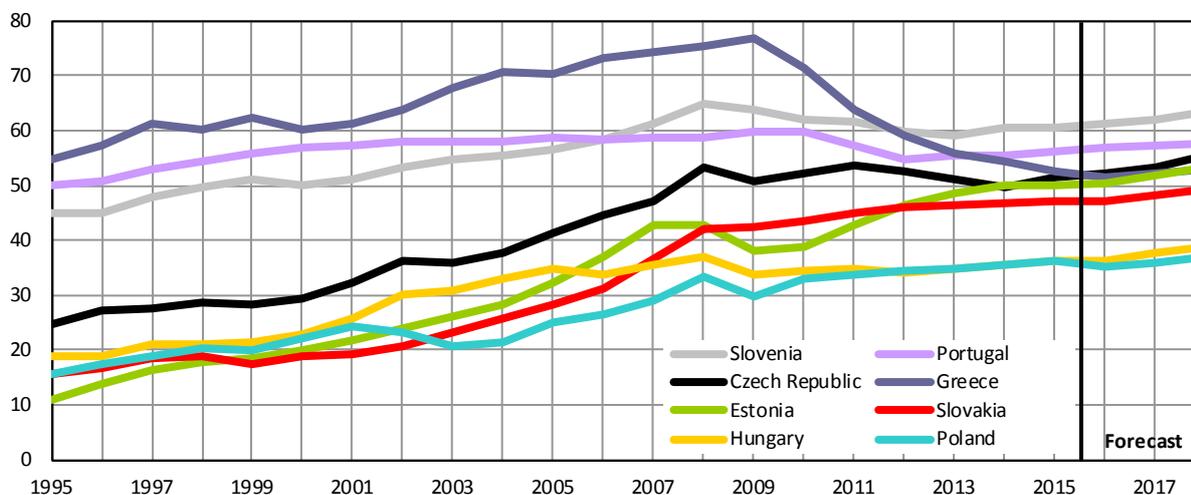
Table 3.5.2: GDP per Capita – Using Current Exchange Rates

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
												<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>
Slovenia	EUR		17 700	17 700	18 000	17 500	17 400	18 100	18 700	19 300	20 000	21 000		
	EA19=100		64	62	62	60	59	60	61	61	62	63		
	Comparative price level	EA19=100	81	80	80	78	78	78	78	78	78	78		
Portugal	EUR		16 600	17 000	16 700	16 000	16 300	16 600	17 300	17 900	18 500	19 200		
	EA19=100		60	60	57	55	55	55	56	57	57	58		
	Comparative price level	EA19=100	79	79	80	78	77	77	78	78	78	78		
Czech Republic	EUR		14 100	14 900	15 600	15 400	15 000	14 900	15 800	16 500	17 200	18 300		
	EA19=100		51	52	54	53	51	50	51	52	53	55		
	Comparative price level	EA19=100	65	68	70	68	65	61	63	63	63	65		
Greece	EUR		21 400	20 300	18 600	17 300	16 500	16 300	16 200	16 200	16 900	17 600		
	EA19=100		77	71	64	59	56	54	52	51	52	53		
	Comparative price level	EA19=100	89	91	91	88	84	82	82	81	81	81		
Estonia	EUR		10 600	11 000	12 500	13 500	14 300	15 000	15 400	15 900	16 700	17 700		
	EA19=100		38	39	43	46	49	50	50	50	52	53		
	Comparative price level	EA19=100	65	65	66	67	69	70	71	71	73	74		
Slovakia	EUR		11 800	12 400	13 100	13 400	13 700	14 000	14 500	14 900	15 500	16 300		
	EA19=100		43	44	45	46	47	47	47	47	48	49		
	Comparative price level	EA19=100	65	63	65	65	65	64	65	64	64	64		
Lithuania	EUR		8 500	9 000	10 300	11 200	11 800	12 500	12 900	13 500	14 300	15 200		
	EA19=100		31	32	35	38	40	42	42	43	44	46		
	Comparative price level	EA19=100	59	57	58	58	59	59	59	59	60	60		
Latvia	EUR		8 800	8 500	9 800	10 800	11 300	11 800	12 300	12 800	13 400	14 200		
	EA19=100		31	30	34	37	39	40	40	40	41	43		
	Comparative price level	EA19=100	65	61	64	66	66	66	66	66	66	67		
Hungary	EUR		9 400	9 800	10 100	10 000	10 300	10 600	11 100	11 500	12 200	12 900		
	EA19=100		34	34	35	34	35	35	36	36	38	39		
	Comparative price level	EA19=100	57	58	57	56	56	56	56	56	57	58		
Poland	EUR		8 300	9 400	9 900	10 100	10 300	10 700	11 200	11 000	11 600	12 200		
	EA19=100		30	33	34	35	35	36	36	35	36	37		
	Comparative price level	EA19=100	54	57	56	55	56	56	56	54	54	54		
Croatia	EUR		10 500	10 500	10 400	10 300	10 200	10 200	10 400	10 900	11 400	12 000		
	EA19=100		38	37	36	35	35	34	34	35	35	36		
	Comparative price level	EA19=100	66	67	65	63	62	62	62	62	62	62		

Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

Graph 3.5.2: GDP per Capita – Using Current Exchange Rates

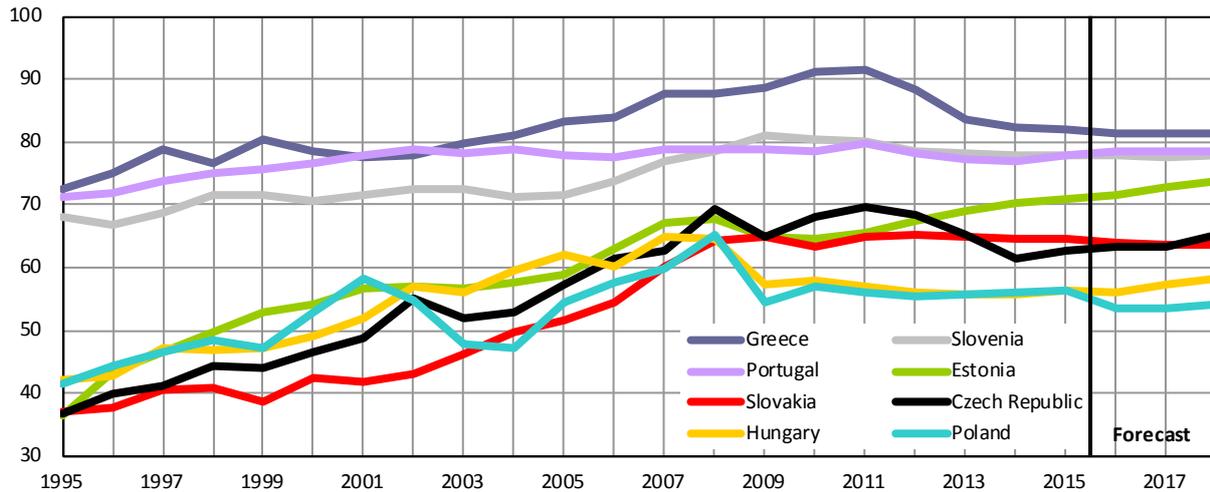
EA19=100



Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

Graph 3.5.3: Comparative Price Level of GDP per Capita

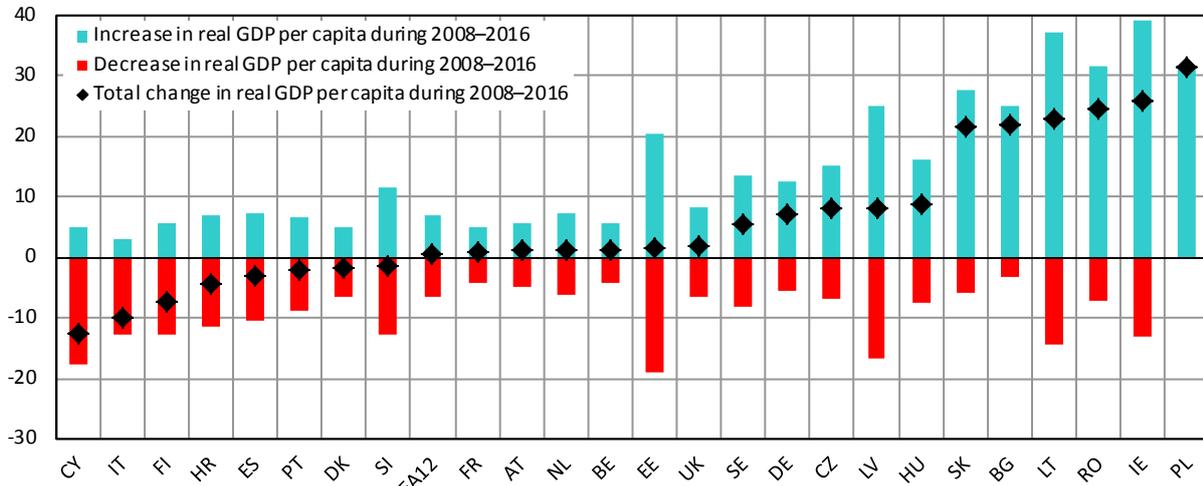
EA19=100



Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

Graph 3.5.4: Change in Real GDP per Capita during 2008–2016

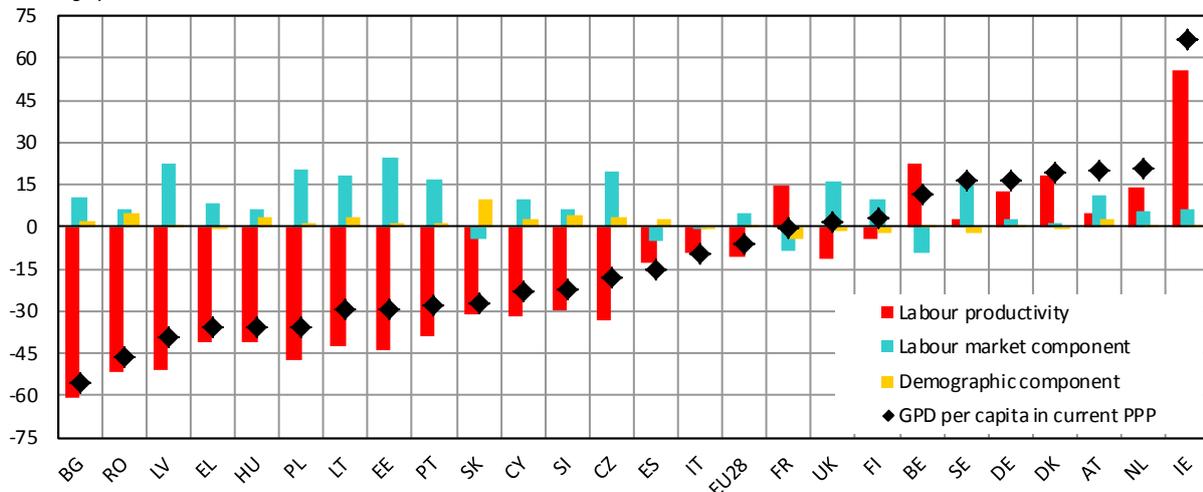
growth in %



Source: Eurostat. Calculations of the MoF.

Graph 3.5.5: Current PPP Adjusted GDP per Capita Level Relative to the EA19 Average in 2015

in percentage points

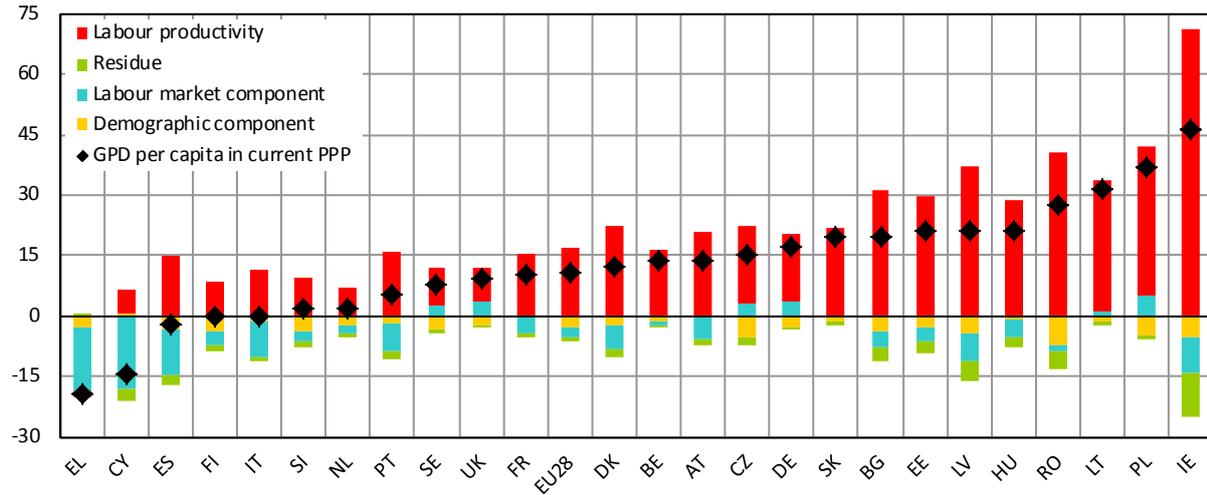


Note: The labour market component is defined as the ratio of total hours worked to working-age (15–64) population, the demographic component is the ratio of the working-age to total population.

Source: Eurostat. Calculations of the MoF.

Graph 3.5.6: Change in Current PPP Adjusted GDP per Capita during 2008–2015

growth in %



Source: Eurostat. Calculations of the MoF.

4 Monitoring of Other Institutions' Forecasts

The Ministry of Finance of the Czech Republic monitors macroeconomic forecasts of other institutions engaged in forecasting the Czech economy. Publicly available forecasts of 13 institutions are monitored. Out of these, 8 institutions are domestic (CNB, Ministry of Labour and Social Affairs, domestic banks and investment companies) and others are foreign (European Commission, Organisation for Economic Co-operation and Development, IMF, etc.) The forecasts are summarised in Table 4.1.

Table 4.1: Summary of the Monitored Forecasts

		March 2017			April 2017
		min.	max.	average	MoF forecast
Gross domestic product (2017)	growth in %, const.pr.	2.3	2.8	2.6	2.5
Gross domestic product (2018)	growth in %, const.pr.	2.0	3.2	2.6	2.5
Average inflation rate (2017)	%	1.8	2.5	2.2	2.4
Average inflation rate (2018)	%	1.6	2.3	2.0	1.7
Average monthly wage (2017)	growth in %	4.5	5.2	4.7	4.6
Average monthly wage (2018)	growth in %	4.0	4.9	4.5	4.3
Current account / GDP (2017)	%	0.7	1.9	1.3	0.4
Current account / GDP (2018)	%	1.1	2.0	1.5	0.7

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

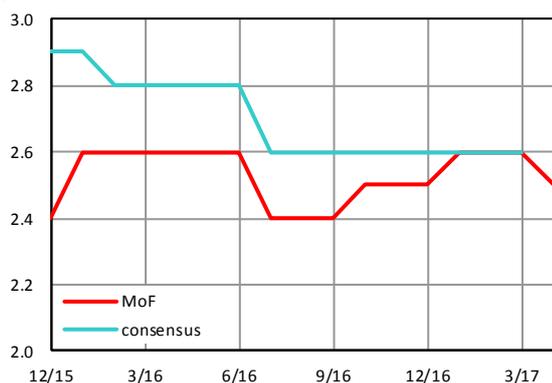
Institutions whose forecasts are monitored on average expect real GDP to grow by 2.6% annually in 2017 and 2018. The average inflation rate should be around 2% and growth of consumer prices should thus correspond to the CNB's inflation target. Growth of the average nominal wage should remain relatively dynamic at around 4.5%. The surplus on the current account of the balance payments should exceed 1% of GDP in both years.

As regards the forecasts for GDP and average nominal wage growth, the April Macroeconomic Forecast differs

from the average of the monitored forecasts only minimally. In the case of consumer prices, the MoF anticipates a more significant reduction in the inflation rate in 2018. Regarding the current account balance, the MoF's forecast already takes into account the revision of balance of payments data (see Chapter 3.4) and for 2017 and 2018 anticipates a surplus of only 0.4% and 0.7% of GDP, respectively.

Graph 4.1: Forecast of Real GDP Growth for 2017

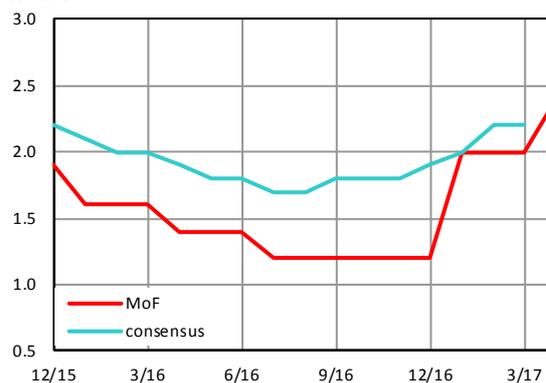
in %; the month, in which the monitoring was conducted on the horizontal axis



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

Graph 4.2: Forecast of Average Inflation Rate for 2017

in %; the month, in which the monitoring was conducted on the horizontal axis



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

5 Looking back at the Year 2016

Macroeconomic framework of the state budget for 2016 was based on the July 2015 Macroeconomic Forecast.

The text below compares the macroeconomic framework of the state budget with the data for 2016 published by 31 March 2017. However, the data for most of the indicators cannot be considered final as they will be revised further.

It can be said that the state budget was based on a realistic macroeconomic framework. Economic growth in 2016 basically corresponded to the macroeconomic framework. The developments of indicators important for the budget of the general government sector also mostly achieved their forecasted values, though they were much better in some cases (e.g. the wage bill).

Table 5.1: Macroeconomic Framework of the 2016 State Budget – Comparison with Actual Data

		2016 State Budget (July 2015)				Outcome (April 2017)				Difference (outcome - forecast)			
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
		<i>Forecast</i>				<i>Prelim.</i>							
Gross domestic product	<i>bill. CZK</i>	4 077	4 261	4 469	4 647	4 098	4 314	4 555	4 715	21	53	86	68
Gross domestic product	<i>growth in %, curr.pr.</i>	0.9	4.5	4.9	4.0	0.9	5.3	5.6	3.5	0.0	0.8	0.7	-0.5
Consumption of households	<i>growth in %, curr.pr.</i>	1.6	2.0	3.5	3.9	1.4	2.4	3.2	3.5	-0.2	0.4	-0.3	-0.4
Gross domestic product	<i>growth in %, const.pr.</i>	-0.5	2.0	3.9	2.5	-0.5	2.7	4.5	2.4	0.0	0.7	0.6	-0.1
Consumption of households	<i>growth in %, const.pr.</i>	0.7	1.5	2.9	2.4	0.5	1.8	3.0	2.9	-0.2	0.3	0.1	0.5
Consumption of government	<i>growth in %, const.pr.</i>	2.3	1.8	2.0	1.6	2.5	1.1	2.0	1.2	0.2	-0.7	0.0	-0.4
Gross fixed capital formation	<i>growth in %, const.pr.</i>	-2.7	2.0	6.4	3.1	-2.5	3.9	9.0	-3.7	0.2	1.9	2.6	-6.8
Contr. of net exports to GDP growth	<i>p.p., const.pr.</i>	0.0	-0.2	-0.4	0.3	0.1	-0.5	0.1	1.1	0.1	-0.3	0.5	0.8
GDP deflator	<i>growth in %</i>	1.4	2.5	1.0	1.5	1.4	2.5	1.0	1.1	0.0	0.0	0.0	-0.4
Average inflation rate	<i>%</i>	1.4	0.4	0.5	1.5	1.4	0.4	0.3	0.7	.	.	-0.2	-0.8
Employment (LFS)	<i>growth in %</i>	1.0	0.8	1.0	0.2	1.0	0.8	1.4	1.9	.	.	0.4	1.7
Unemployment rate (LFS)	<i>average in %</i>	7.0	6.1	5.7	5.5	7.0	6.1	5.1	4.0	.	.	-0.6	-1.5
Share of unemployed	<i>average in %</i>	7.7	7.7	6.6	5.9	7.7	7.7	6.6	5.6	.	.	0.0	-0.3
Wage bill (domestic concept)	<i>growth in %, curr.pr.</i>	0.4	1.9	4.2	4.1	0.5	3.6	4.4	5.8	0.1	1.7	0.2	1.7
Current account balance	<i>% of GDP</i>	-0.5	0.6	0.5	0.2	-0.5	0.2	0.2	1.1	0.0	-0.4	-0.3	0.9
<i>Assumptions:</i>													
Exchange rate CZK/EUR		26.0	27.5	27.5	27.5	26.0	27.5	27.3	27.0	.	.	-0.2	-0.5
Long-term interest rates	<i>% p.a.</i>	2.1	1.6	0.8	1.3	2.1	1.6	0.6	0.4	.	.	-0.2	-0.9
Crude oil Brent	<i>USD/barrel</i>	109	99	61	68	109	99	52	44	.	.	-9	-24
GDP in Eurozone (EA-12)	<i>growth in %, const.pr.</i>	-0.4	0.8	1.4	1.8	-0.3	1.2	2.0	1.7	0.1	0.4	0.6	-0.1

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

At the time of preparation of the macroeconomic framework of the state budget, the economy was in a period of dynamic growth.

According to then available data, real GDP increased by 2.5% QoQ in the first quarter of 2015, and by 4.0% in a YoY comparison. The most dynamically growing expenditure component was gross capital formation with growth of 10.2%.

This extreme dynamics was a manifestation of an increased GDP volatility resulting from an introduction of a legislative limitation of validity of tobacco stamps for the payment of the excise duty on cigarettes. Given the circumstances, a much better indicator reflecting growth momentum of the economy was gross value added. It increased by 1.3% QoQ, which was the fastest growth since the fourth quarter of 2007 according to then available data.

At that time, the dominant factor influencing the economic development in the Czech Republic was the effort to maximize the use of EU funds allocation from the 2007–2013 financial perspective. This led to a massive investment wave not only in the case of government sector investment but also private investment.

The magnitude of the effect of EU subsidies was ultimately even higher than expected when formulating the macroeconomic framework, which positively influenced the outcome in 2015. However, a higher comparison base negatively affected the YoY development of investment (3.7% fall versus an increase by 3.1% in the macroeconomic framework) as well as GDP in 2016.

Another key positive factor for both global and the Czech economy was a deep slump in commodity markets, in particular the crude oil market. While the assumptions of the macroeconomic framework anticipated stagnation to slight increase in crude oil prices in the remaining part of

2015 and in 2016, the actual spot price reached its minimum only in the first quarter of 2016. The average koruna price of crude oil in 2016 was thus lower by 17.5% than in 2015.

Longer persistence of low crude oil prices was reflected in lower inflation for most of 2016. The average inflation rate reached only 0.7% versus a forecast of 1.5%. In addition, cheaper imports of oil helped increase the surpluses on the balance of goods as well as on the current account of the balance payments.

The significantly lower inflation, much more favourable developments of employment and also a faster than expected wage growth accelerated the real household consumption growth to 2.9% instead of the expected 2.4%. However, nominal household consumption growth of 3.5% fell behind the estimate from the macroeconomic framework by 0.4 pp.

The main cause of the positive deviation for the contribution of foreign trade to GDP growth, which was 1.1 pp

instead of the expected 0.3 pp, consisted in a relatively weak growth in imports due to the dynamics of domestic, mainly investment, demand.

The response of the labour market to the 2016 economic boom was unusually strong. Compared to the original expectations, employment growth was higher by 1.7 pp and the unemployment rate, conversely, by 1.5 pp lower (both indicators according to LFS). The share of unemployed persons (Ministry of Labour and Social Affairs) then reached 5.6%, which was 0.3 pp less in comparison with the macroeconomic framework.

A very dynamic employment growth, increase in minimum wages and salaries in the general government sector and the labour market situation contributed to the fact that the wage bill increased by 5.8% versus 4.1% forecasted in the macroeconomic framework of the state budget for 2016.

Ministry of Finance of the Czech Republic
Economic Policy Department
Letenska 15
118 10 Prague 1

<http://www.mfcr.cz/en>

