

# **Macroeconomic Forecast of the Czech Republic**

**July 2016**

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

Tel.: +420 257 041 111

E-mail: [macroeconomic.forecast@mfcz.cz](mailto:macroeconomic.forecast@mfcz.cz)

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# **Macroeconomic Forecast**

## **of the Czech Republic**

**July 2016**

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The Macroeconomic Forecast is prepared by the Economic Policy Department (as of 1 January 2016, Financial Policy Department was renamed to Economic Policy Department) of the Czech Ministry of Finance on a quarterly basis. It contains a forecast for the current and the following year (i.e. until 2017) and for certain indicators an outlook for another 2 years (i.e. until 2019). As a rule, it is published in the second half of the first month of each quarter and is also available on the Ministry of Finance website at:

***[www.mfcr.cz/macroforecast](http://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](mailto:macroeconomic.forecast@mfcr.cz)***

## List of Abbreviations

const.pr.....	constant prices
CNB.....	Czech National Bank
CPI.....	consumer price index
curr.pr.....	current prices
CZSO.....	Czech Statistical Office
EA12.....	euro zone consisting of the 12 original countries
EC.....	European Commission
ECB.....	European Central Bank
ESI.....	Economic Sentiment Indicator
EU27.....	EU28 excluding Croatia
EU28.....	EU 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 **13 July 2016**.

## Notes

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

Data from the previous forecast (April 2016) are indicated by italics. Data relating to the years 2018 and 2019 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

The Czech economy continues to be in a very good shape. As expected, YoY growth of the economy slowed down in the first quarter of 2016, after the one-off effect of European grants wore off. However, this slowdown was less intensive than we had estimated in the previous forecast. In comparison with the same period of 2015, **real GDP increased by 2.7%**, QoQ growth (seasonally adjusted) reached 0.4%.

The fastest growing component of **domestic demand** was private consumption (growth of 2.6%), which reflects improving income situation of households under the conditions of nearly negligible inflation. Government consumption growth reached 2.5%. Investment in fixed capital decreased slightly (by 0.1%), as the high comparison base of the extraordinarily successful year 2015 was reflected here.

In contrast, the balance of **foreign trade** had a favourable influence on GDP growth. Though export growth slowed down considerably, similar change in dynamics was also seen on the side of imports. In addition to the slowdown of export growth, the development of investments, which also have high import content, contributed to this result.

**Real gross value added increased by 2.4% YoY** in the first quarter of 2016. The contribution of manufacturing was crucial; high growth was also seen in trade and transportation.

According to the last known figure of June 2016, **consumer prices** increased only by 0.1% YoY. Low inflation is mainly caused by a deep decline in prices of imported goods, mainly mineral fuels, and generally low inflation on the global scale, which predominates over not yet fully apparent demand pressures. This situation helps the growth of real disposable income of households and subsequently also their consumption.

On the **labour market**, the economic boom is reflected in the dynamic development of all important indicators. The YoY employment growth of 2.0% in the first quarter of 2016 was the highest since the end of 2007. A positive feature is also an increase in the participation rate. Seasonally adjusted unemployment rate (LFS), which has been reaching the lowest level in the whole EU since the beginning of 2016, decreased further to 4.0% in May 2016. Low unemployment and mismatches between supply and demand for labour are already starting to be reflected in the acceleration of wage growth, which is not fully in accordance with the decreasing growth of labour productivity.

**The current account of the balance of payments** has been recording an increasing surplus since 2014. In the first quarter of 2016, it reached 1.4% of GDP (in annual terms), and was thus the highest in the history of the

independent Czech Republic. The surpluses of the balance of goods and services are thus already apparently exceeding the primary income deficit, which is largely influenced by the outflow of income from foreign direct investment in the form of dividends and reinvested earnings.

In the upcoming second half of 2016 and in 2017, however, it is possible to expect a little bit **less optimistic outlook**.

The result of the referendum on the United Kingdom's withdrawal from the EU considerably increased uncertainties in the European economies as well as on the global scale. Even though no relevant information on the time progress and the method of negotiations on the membership termination were available as of the cut-off date of the Forecast, the decrease in economic sentiment is a reason for decreasing the growth forecasts in the economies probably affected, directly or indirectly, by the UK withdrawal from the EU, including the Czech economy.

The prices of **crude oil and mineral fuels** still remain at levels that are considerably lower than the levels common in previous years. In the following period, however, a tendency for their gradual slight growth should probably prevail, and it is thus possible to expect that this positive supply shock will end in the near future.

As far as expenditure breakdown of GDP is concerned, the most problematic factor seems to be the **dynamics of investments**. Private investments are unlikely to outweigh the slump in the general government's gross fixed capital formation, as higher base (of the year 2015) for comparison, lower growth of gross operating surplus, ongoing slowdown in the growth of loans to non-financial corporations or an increase in external risks will weigh on their growth.

Assessment of the aforementioned facts results in the **correction of the forecast of real GDP growth** from 2.5% to **2.2% for 2016** and from 2.6% to **2.4% for 2017**.

The forecast of **inflation rate** in 2016 has been revised slightly downwards from 0.6% to 0.5%. The forecast for 2017, when the inflation rate should reach 1.2%, was also adjusted in the same direction and to a similar extent. The resumption of growth of consumer prices should thus be more gradual and the return to the CNB's inflation target slower.

Favourable situation on the labour market results in a further decrease in the **unemployment rate** (LFS) forecast for 2016 (from 4.4% to 4.1%) as well as for 2017 (from 4.3% to 4.0%).

The forecast for the surplus on **the current account of the balance of payments**, which should reach 1.5% of GDP in 2016 instead of the previously expected 1.1% of GDP, has also improved. For 2017, the forecast of the balance of the current account was increased from 1.0% of GDP to 1.2% of GDP. Thus, the Czech economy is probably becoming one of the countries with a structural surplus in foreign relations.

From the perspective of expected tax revenues it is possible to state that the sum of changes in the **forecast of the most important tax bases** is more or less neutral. Changes in the positive (i.e. higher dynamics of the nominal wage bill) and negative (slower growth of the nominal consumption of households and net operating surplus) directions are roughly offsetting each other.

**Table: Main Macroeconomic Indicators**

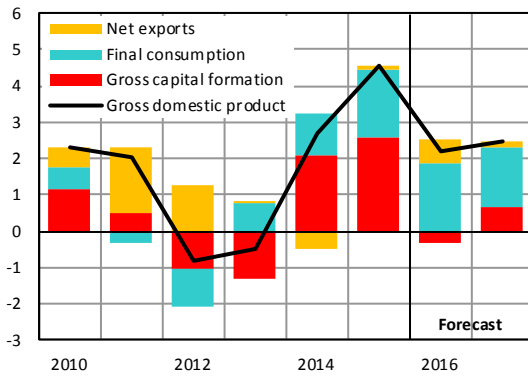
		2011	2012	2013	2014	2015	2016	2017	2015	2016	2017
		Current forecast							Previous forecast		
<b>Gross domestic product</b>	<i>bill. CZK</i>	<b>4 034</b>	<b>4 060</b>	<b>4 098</b>	<b>4 314</b>	<b>4 555</b>	<b>4 681</b>	<b>4 846</b>	4 472	4 629	4 812
<b>Gross domestic product</b>	<i>growth in %, const.pr.</i>	<b>2.0</b>	<b>-0.8</b>	<b>-0.5</b>	<b>2.7</b>	<b>4.5</b>	<b>2.2</b>	<b>2.4</b>	4.2	2.5	2.6
<b>Consumption of households</b>	<i>growth in %, const.pr.</i>	<b>0.3</b>	<b>-1.2</b>	<b>0.5</b>	<b>1.8</b>	<b>3.0</b>	<b>3.1</b>	<b>2.7</b>	2.8	3.1	2.7
<b>Consumption of government</b>	<i>growth in %, const.pr.</i>	<b>-2.2</b>	<b>-2.0</b>	<b>2.5</b>	<b>1.1</b>	<b>2.0</b>	<b>2.2</b>	<b>1.6</b>	2.8	2.1	1.6
<b>Gross fixed capital formation</b>	<i>growth in %, const.pr.</i>	<b>0.9</b>	<b>-3.1</b>	<b>-2.5</b>	<b>3.9</b>	<b>9.0</b>	<b>-0.6</b>	<b>2.8</b>	7.3	0.6	3.0
<b>Net exports</b>	<i>contr. to real GDP growth, pp</i>	<b>1.8</b>	<b>1.3</b>	<b>0.1</b>	<b>-0.5</b>	<b>0.1</b>	<b>0.7</b>	<b>0.2</b>	-0.2	0.2	0.2
<b>Change in inventories</b>	<i>contr. to real GDP growth, pp</i>	<b>0.3</b>	<b>-0.2</b>	<b>-0.7</b>	<b>1.1</b>	<b>0.3</b>	<b>-0.2</b>	<b>0.0</b>	0.7	0.1	0.0
<b>GDP deflator</b>	<i>growth in %</i>	<b>0.0</b>	<b>1.5</b>	<b>1.4</b>	<b>2.5</b>	<b>1.0</b>	<b>0.6</b>	<b>1.1</b>	0.7	1.0	1.3
<b>Average inflation rate</b>	<i>%</i>	<b>1.9</b>	<b>3.3</b>	<b>1.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.5</b>	<b>1.2</b>	0.3	0.6	1.4
<b>Employment (LFS)</b>	<i>growth in %</i>	<b>0.4</b>	<b>0.4</b>	<b>1.0</b>	<b>0.8</b>	<b>1.4</b>	<b>1.6</b>	<b>0.1</b>	1.4	0.5	0.1
<b>Unemployment rate (LFS)</b>	<i>average in %</i>	<b>6.7</b>	<b>7.0</b>	<b>7.0</b>	<b>6.1</b>	<b>5.1</b>	<b>4.1</b>	<b>4.0</b>	5.1	4.4	4.3
<b>Wage bill (domestic concept)</b>	<i>growth in %, curr.pr.</i>	<b>2.3</b>	<b>2.6</b>	<b>0.5</b>	<b>3.6</b>	<b>4.4</b>	<b>5.3</b>	<b>4.9</b>	4.0	4.5	4.6
<b>Current account balance</b>	<i>% of GDP</i>	<b>-2.1</b>	<b>-1.6</b>	<b>-0.5</b>	<b>0.2</b>	<b>0.9</b>	<b>1.5</b>	<b>1.2</b>	0.9	1.1	1.0
<b>General government balance</b>	<i>% of GDP</i>	<b>-2.7</b>	<b>-3.9</b>	<b>-1.2</b>	<b>-1.9</b>	<b>-0.4</b>	<b>-0.3</b>	<b>.</b>	-0.4	-0.6	.
<u>Assumptions:</u>											
<b>Exchange rate CZK/EUR</b>		<b>24.6</b>	<b>25.1</b>	<b>26.0</b>	<b>27.5</b>	<b>27.3</b>	<b>27.0</b>	<b>26.9</b>	27.3	27.0	26.9
<b>Long-term interest rates</b>	<i>% p.a.</i>	<b>3.7</b>	<b>2.8</b>	<b>2.1</b>	<b>1.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.8</b>	0.6	0.6	0.8
<b>Crude oil Brent</b>	<i>USD/barrel</i>	<b>111</b>	<b>112</b>	<b>109</b>	<b>99</b>	<b>52</b>	<b>44</b>	<b>50</b>	52	41	47
<b>GDP in Eurozone (EA-12)</b>	<i>growth in %, const.pr.</i>	<b>1.6</b>	<b>-0.9</b>	<b>-0.3</b>	<b>0.9</b>	<b>1.6</b>	<b>1.5</b>	<b>1.2</b>	1.6	1.3	1.5

Source: CNB, CZSO, Eurostat, U. S. Energy Information Administration, own calculations



### Consumption should be the main driver of GDP growth

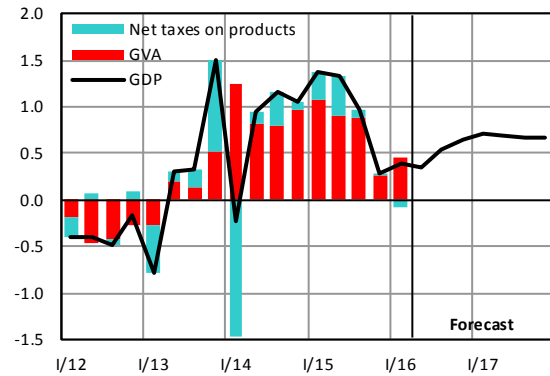
YoY growth rate of real GDP in %, contributions of individual expenditure components in percentage points



Source: CZSO, own calculations

### GDP should grow without major fluctuations

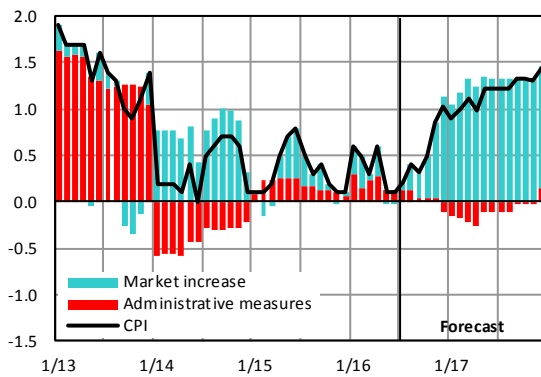
QoQ growth rate of real GDP in %, contributions in percentage points, seasonally adjusted



Source: CZSO, own calculations

### Inflation should exceed 1% only in the next year

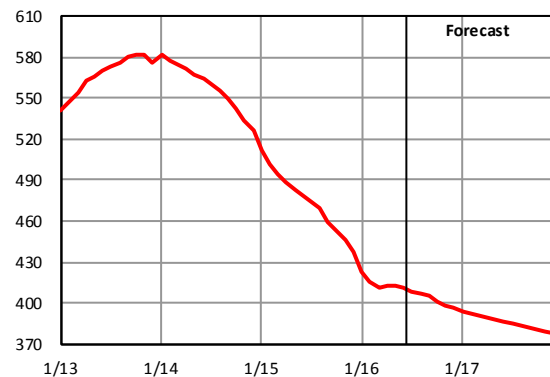
decomposition of YoY growth of CPI, contributions in pp



Source: CZSO, own calculations

### Unemployment should keep falling at a slower pace

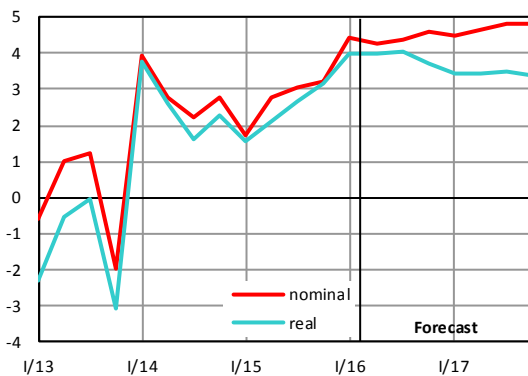
registered unemployment, in thous. of persons, seasonally adjusted



Source: Ministry of Labour and Social Affairs, own calculations

### Average real wage should grow by more than 3%

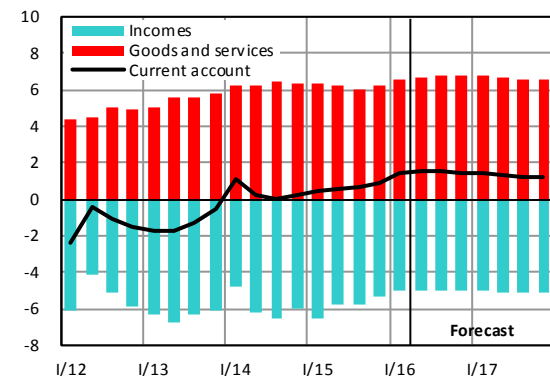
average gross monthly wage, YoY growth rate, in %



Source: CZSO, own calculations

### Current account should remain in moderate surplus

in % of GDP (yearly moving sums)



Source: CNB, CZSO, own calculations

# Risks to the Forecast

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

We consider the most important risk to be the **impact** of the results of the **referendum on the United Kingdom staying in the EU**. We assume that the British government will formally start the process of their EU membership termination this year and that this process will be completed within the two-year period determined in the Treaty of Lisbon. We expect that an arrangement of relations between the United Kingdom and the EU will be found subsequently that will ensure the free movement of goods and services to the extent approaching the current situation. The Czech economy should be influenced by the so-called Brexit especially through foreign trade (due to the slowdown of foreign demand growth). On the side of domestic demand, some investment projects could be postponed due to increased uncertainty. With regard to the existing frictions on the labour market, we do not expect any impact on household consumption growth. The United Kingdom's withdrawal from the EU is detailed in Box A.1.

Another negative risk is the possibility of a **more considerable slowdown of the growth of the Chinese economy**. This risk has been recently mitigated by a number of pro-growth measures; however, they only postpone necessary changes in the structure of the economy and increase the risk of financial instability in the future as they contribute to the further growth of debts. 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 interconnectedness 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.

Another unfavourable factor is **geopolitical risks**. Conflicts in the Middle East and Northern Africa caused a deep **migration crisis**, the medium to long-term economic impact of which on individual EU states cannot yet be estimated. Provided that the number of applicants for asylum in the Czech Republic does not increase considerably, direct impacts on the Czech economy should be negligible. At present, the migration crisis represents a negative risk for the Czech Republic, particularly due to its possible impact on the future arrangement of the EU (keeping the current Schengen Area arrangements).

Economic growth in some countries of the EU, and indirectly (through foreign trade) also in the Czech Republic, could be affected negatively should **terrorist attacks intensify**. The Czech economy could be influenced through the same channel by the possible materialisation of **risks in the financial sector** in those EU states where major banks struggle with a high share of non-performing loans.

Tensions in Eastern Ukraine persist so, in June 2016, the EU further prolonged sanction measures against Russia until the end of January 2017. The sanctions and mainly a decline in commodity prices considerably contributed to the Russian recession and the weakening of the rouble. However, neither Russia nor Ukraine represents an important export market for the Czech Republic.

Last, but not least, a risk for the Czech economy could be **the continuation of more significant pressures on the appreciation of the koruna exchange rate** below 27 CZK/EUR, which could be strengthened by the further easing of the ECB's monetary policy. Against these tendencies, however, the CNB can intervene on the foreign exchange market basically without limitation, yet the possibility that it would use other, less conventional, instruments of monetary policy to weaken the appreciation pressures in the case of continued accumulation of foreign exchange reserves cannot be excluded.

A possible **decrease** in commodity prices, in particular **crude oil prices**, from the current low levels would result in higher than expected economic growth, consumer prices would increase more slowly, and, compared to the assumption of the forecast, the CNB's monetary policy could be normalised (the termination of the exchange rate commitment and an increase in interest rates) later.

The combination of the environment of low (not only monetary policy) interest rates and economic growth is reflected by an acceleration of mortgage loan growth, which, together with the factors limiting the supply of residential real estate, results, among other things, in a more significant acceleration of growth of offer price of flats. Should the strong growth of accommodation loans and real estate prices continue, it could result in **a bubble in the real estate market** and influence negatively financial stability.

# A Forecast Assumptions

## A.1 External Environment

The growth rate of the global economy further slowed down and hovers at a level around 3%. Developments in individual regions remain diverse. While the economic situation in Western Europe stabilized in the first quarter of 2016 and growth was mainly driven by domestic demand, economic growth in the USA and emerging economies further slowed down. Some large emerging economies (Russia, Brazil) are still coping with difficulties, even though they are shrinking at a slower pace. At present, the biggest uncertainty for global growth is represented by the United Kingdom's decision to leave the EU (see Box A.1).

The economic situation in China remains unclear and opaque, to which a lack of credibility and low reliability of official statistics also contribute. The growth of the Chinese economy has been slowing for a long time; however, the rate of real GDP growth has still been reaching relatively high values. QoQ growth of real GDP in the first quarter of 2016 further decreased to 1.1%. Long declining growth rate of industrial production reflects the reduction of excess capacities, in particular in the coal mining and steel industry sectors. Similarly, the YoY decline in nominal imports of 13.2% largely reflects the decrease in business activities of domestic producers and household consumption. The unfavourable development of the Purchasing Managers' Index in industry also testifies to the deteriorating situation in industry; however, the decrease in industrial activity is partially offset by the stable growth of the service sector. After the turbulence in January, the situation on the financial markets has already stabilized and a decrease in foreign exchange reserves has stopped. However, concerns arise due to the rapid growth of loans, which occurs despite tightening of the regulation, the aim of which is to limit speculative financial activities. The pressure on the banking sector further increases growth of the volume of non-performing loans. From the long-term perspective, the unfavourable demographic development represents a major risk.

### A.1.1 USA

In the first quarter of 2016, the GDP of the USA increased by 0.3% QoQ (*versus 0.5%*), and economic growth thus remained slow. Growth was mainly driven by household consumption expenditure, other components de facto stagnated. However, the YoY growth of household consumption further slowed down, to which the unfavourable weather could also have contributed to a certain extent. The contribution of net exports was neutral; exports increased only negligibly

due to the strong domestic currency and the slowing economic growth in major export markets.

Considering the unexpectedly low increase in the number of new jobs in the previous month, the Fed left interest rates at 0.25–0.50% at its June meeting. The price level growth rate has been stagnating over the last few months; the average inflation rate reached 1.0% in May 2016. However, the Fed expects that the inflation rate will approach the 2% target as late as in the medium-term horizon as the effects of low prices of energies and imports fade and the situation on the labour market improves further.

We expect that economic growth will slow down slightly, with household consumption remaining the main driver of the economy. In the short term, it will still be supported by low energy prices, and by a good labour market situation in the long-term horizon (the unemployment rate reached 4.9% in June 2016). Mainly exports will weigh on economic growth. For the years of 2016 and 2017, we expect the rate of economic growth to be 2.0% (*versus 2.2%*) or 2.4% (*versus 2.5%*), respectively.

### A.1.2 EU

Economic recovery in the European Union still remains relatively fragile. QoQ GDP growth in the first quarter of 2016 reached 0.5% in the EU28 (*versus 0.4%*) as well as in the EA12 (*versus 0.3%*). In a YoY comparison, GDP of the EU28 increased by 1.8% (*versus 1.6%*), while GDP of the EA12 rose by 1.6% (*versus 1.3%*). Developments in individual countries remain considerably differentiated. In many countries, structural problems of their economies, loss of competitiveness, low investment growth rate or high levels of public and private debt are still weighing on the recovery.

Economic growth in the Euro area should be supported by the ECB's monetary policy. In June 2016, purchases under the corporate sector purchase programme were initiated and the first (of the planned four) longer-term refinancing operation was conducted that gives banks the opportunity to borrow liquidity from the ECB for a period of four years (at interest rate which can decrease, depending on the loan activity of banks in the refinancing period, down to the level of the deposit facility rate). The 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%). Despite the ECB's efforts, however, YoY growth of HICP in the EA12 reached only 0.1% in

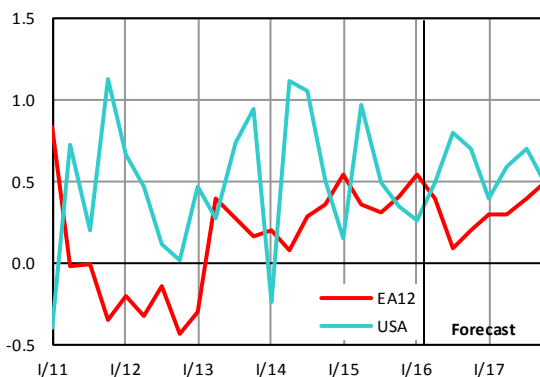
June 2016, in particular due to a decrease in crude oil and energy prices.

In connection with economic recovery, the situation on the labour market is also gradually improving. The unemployment rate in the EU28 has been slowly decreasing since mid-2013, reaching 8.6% in May 2016 (YoY decrease of 1.0%). However, enormous differences still persist among individual economies. The worst situation is still in Greece, where the unemployment rate stood at 24.1% in March 2016. Of the EU28 countries, for which data for May 2016 was available as of the cut-off date, the unemployment rate was the highest in Spain (19.8%), Croatia (13.3%) and Cyprus (12.0%); the lowest rates were recorded in the Czech Republic (4.0%) and Germany (4.2%).

In the second half of 2016, we expect a slight slowdown of economic activity due to the increased uncertainty related to the United Kingdom's decision to leave the EU (see Box A.1). For the EU, the withdrawal of the UK, whose economy is the second biggest in the EU, will mean, among others, a loss of an influential member and a decrease in the attractiveness as a business partner. In this connection, the rating agency Standard & Poor's has already downgraded the EU's rating by one notch to AA. Impacts of the decision of the United Kingdom on economic growth in the EU cannot be quantified unambiguously at present; however, we assume that they will be relatively low in total. Expenditure on private consumption should continue to be the main driver of economic growth, which will be supported by the improving labour market situation and low energy prices. On the other hand, the worsened global outlook or high debts of some economies are factors weighing on economic growth. The economy of the EA12 could increase by 1.5% (versus 1.3%) in 2016 and by 1.2% (versus 1.5%) in 2017.

#### Graph A.1.1: Growth of GDP in EA12 and in the USA

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



Source: Eurostat, own calculations

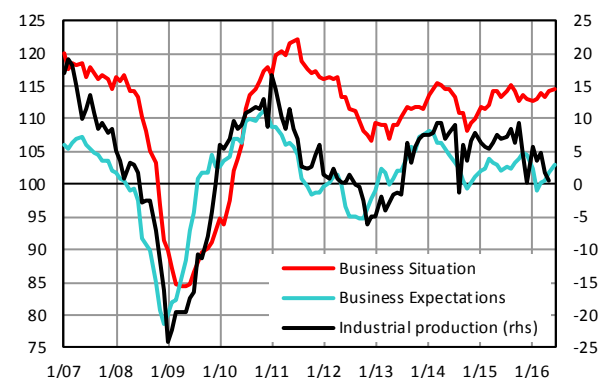
The growth rate of the **German** economy accelerated in the first quarter of 2016, with GDP increasing by 0.7% QoQ (versus 0.4%). As in the previous quarter, investment and household consumption expenditure

made the highest contribution to economic growth. In addition to machinery and equipment investment, the increase in gross fixed capital formation was driven especially by construction investment. In contrast, the contribution of net exports slightly weighed on economic growth as the increase in the growth rate of imports exceeded the increase in the growth rate of exports.

The labour market situation is developing favourably. The growth rate of real wages is gradually increasing and the unemployment rate is continuously slightly decreasing. The impact of the arrival of migrants has not yet manifested itself on the labour market; however, with regard to the increasing number of positively processed applications for asylum, it is possible to expect a slight increase in the unemployment rate in the following years. During the second quarter of 2016, the values of the indicators Ifo and the Purchasing Managers' Index (PMI) in manufacturing improved; on the other hand the PMI in services deteriorated slightly. The development of the GfK Consumer Climate Indicator remains encouraging.

#### Graph A.1.2: Ifo and Czech Industrial Production

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



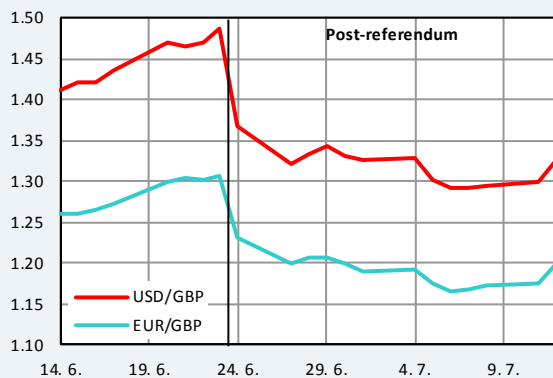
Source: CESifo, CZSO

Domestic demand should remain the main growth driver. In the short-term, consumption expenditure of households will mainly be supported by low oil prices and an expansionary fiscal policy, while a good labour market situation and the related growth of real wages will have a more permanent effect. The increase in consumption expenditure of the government will be supported mainly by expenditure related to the migration crisis, while investment in infrastructure and housing will particularly contribute to an increase in government investment. Export growth will be influenced unfavourably by the weak dynamics of foreign demand in developed and emerging economies and, in particular, by the United Kingdom's withdrawal from the EU, as it is the third biggest export market for the German economy (exports of goods into the UK in 2015 represented 3.0% of GDP). For 2016 we expect a growth of 1.6% (versus 1.4%), for 2017 we forecast its slight slowdown to 1.5% (versus 1.8%).

### Box A.1: Impacts of the United Kingdom's decision to leave the EU

On 23 June 2016, a referendum was held in the United Kingdom in which voters decided whether the UK should remain an EU member or leave the EU. The result of the referendum (the voters – though by a narrow margin – chose the second option) caused an immediate sharp reaction of the financial markets. The immediate slump in most world stock exchanges reflected the surprise of investors who had rather expected the opposite result before the referendum. After a few days, however, the nervousness of investors decreased and the stock indexes until the cut-off date of the Forecast either exceeded the level before the referendum (including the London FTSE 100) or, at least, reduced a considerable portion of the losses. However, the exception is represented by stocks of a number of large banks, as many are located in London, and thus now face considerable uncertainty regarding future access to the EU market. To a greater extent, investors preferred the safety of government bonds; in the space of three weeks, the British 10-year government bond yields decreased nearly to a half. The exchange rate of the pound also saw a sharp decrease, as it weakened not only towards the US dollar and the Euro (on 24 June the pound closed at a level nearly 9% lower towards the US dollar and by 6% towards the Euro), but also towards a number of other world currencies, and it still remains at a lower level for the time being.

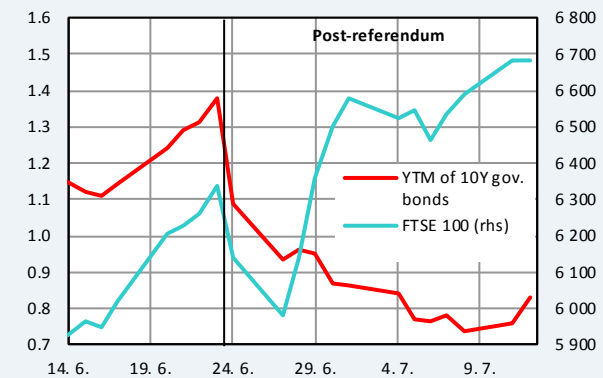
**Graph 1: Nominal ER of the British pound vis-à-vis the US dollar and the euro**



Source: [www.investing.com](http://www.investing.com)

**Graph 2: The FTSE 100 stock market index and YTM of 10Y UK government bonds**

yield to maturity of 10year government bonds in % p.a.



Source: [www.investing.com](http://www.investing.com)

In relation to the result of the referendum, the rating agencies downgraded the United Kingdom's credit rating to AA with a negative outlook (Standard & Poor's), Aa1 with a negative outlook (Moody's) and AA with a negative outlook (Fitch). They assume that the withdrawal from the EU will result in a less predictable, less stable and less effective political structure in the United Kingdom. The role of the British pound as an international reserve currency may be threatened is also at a risk.

The negative impacts of the referendum result were also recorded by leading indicators. A sharp decline was seen in the consumer confidence index: the consumers mainly evaluate negatively the outlook of the overall economic situation in the following 12 months. The Purchasing Managers' Index (PMI) signalise the deterioration of the economic outlook of the British enterprises, fears of which mainly result from uncertainty, loss of access to key European markets and a possible recession in the United Kingdom. In the case of these indicators, however, most responses were sent prior to the referendum, and therefore their further deterioration can be expected.

With respect to enormous uncertainty and a number of unknown factors, the future impacts of the United Kingdom's withdrawal from the EU cannot be quantified. The way negotiations on the withdrawal are handled, and the arrangement of business relations the United Kingdom negotiates with the EU and other economies will play a crucial role, though. However, it can be expected that the new setting will be less favourable for the United Kingdom than EU membership.

#### Short-term impacts on the economy of the UK

The period until the United Kingdom's withdrawal from the EU will be accompanied by huge uncertainties, as the negotiations on the future arrangement of business relations are still to be held. We assume that this increased uncertainty will be negatively reflected in the aggregate demand through postponement of household consumption and investment, which will unfavourably influence the development on the labour market and the state of public finances. However, these effects will be partially offset by a decrease in imports (due to weaker domestic demand) and an increase in exports due to depreciated domestic currency.

In order to strengthen economic growth and prevent investors from leaving the country, the Treasury has announced its intention to decrease corporate tax from 20% to less than 15%. The Bank of England will also try to support economic growth and employment and has already announced a decrease in the requirement for capital reserves and promised to take other necessary measures. It is expected that the central bank will decide at its August meeting on further easing of monetary conditions. Increased uncertainty and volatility on the financial markets will have an effect in the direction of worse financial conditions.

### Medium-term impacts on the economy of the UK

Due to its withdrawal from the EU, the United Kingdom's trade barriers will probably increase, as it is not possible to expect that its access to the EU's internal market in the current form will be maintained. However, the United Kingdom will be able to negotiate more favourable conditions with third countries; although the negotiations will be lengthy. The amount and impact of business barriers on economic growth will be possible to estimate more exactly only after more detailed information on the new arrangement of the EU-UK relation will be known. Nevertheless, it is probable that costs related to the business barriers only will considerably exceed savings resulting from stopping payments to the EU budget.

Any possible restriction of business due to higher barriers will also result in a decrease in the British economy's openness and, subsequently, also in a decrease in economic competition. Competitiveness will also be influenced negatively by the restriction on labour mobility. Both the aforementioned effects will have an unfavourable impact on total factor productivity.

Possible higher barriers for financial services would also have a significant impact on the British economy, as they account for nearly 12% of GDP. If London banks are not able to offer all their products freely in the EU through the so-called EU passport, the position of the City of London, being one of the major world financial centres, will weaken and banks will move to other financial centres in the Euro area (Frankfurt, Paris or Dublin).

### Long-term impacts on the economy of the UK

The quantification of long-term (approximately in the horizon of 10–15 years after the UK's withdrawal from the EU) impact of the Brexit on the United Kingdom's economy is subject to extreme uncertainty. At the qualitative level, however, rather a negative impact on labour productivity can be expected due to lower technological progress, migration restrictions (impact on the size and structure of the labour force) and a decrease in the stock of capital due to a decline in foreign direct investment.

At the same time, the United Kingdom will lose the possibility to influence EU regulations. Over time, it is also possible to expect an increase in differences in legislation, which will lead to increased business costs. The effect of deregulation of the business environment and a decrease in administrative burden will be positive, but relatively limited.

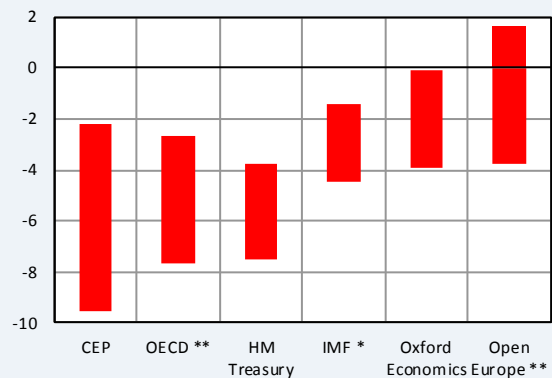
The published estimates of the impact of Brexit on the United Kingdom's economy (see Graph 3) show big variation differences, which documents uncertainties related to this step. We provide them only for illustration, as the results of studies are comparable only with difficulties with respect to different used methods and scenarios of negotiations on the withdrawal and the final arrangement of economic relations of the United Kingdom and the EU.

### Impact on the Czech economy

The expected slowdown of economic growth in the UK and other European economies, which should occur in the forecast horizon as a result of the British referendum, should weigh on foreign demand for Czech exports. Given that the decision of the United Kingdom to leave the EU will have an adverse impact above all on the UK's economy, and with respect to the territorial structure of Czech exports and other export markets, the impact on the Czech economy through the foreign trade channel should be limited. As for domestic demand, some investment projects could be postponed as a result of the increased uncertainty. Owing to existing frictions on the labour market, we don't assume an impact on consumption of households.

**Graph 3: Estimates of the medium to long-term impact of the UK leaving the EU on the level of UK's GDP**

change in GDP level in %



Note: CEP = Centre for Economic Performance.

\*) In 2019.

\*\*\*) In 2030

Source: Analyses of individual institutions.

In the first quarter of 2016, the QoQ real GDP growth rate of **France** accelerated to 0.6% (*versus 0.3%*). The economic growth was driven exclusively by domestic demand, while the dominant factor was household consumption supported by the stagnating price level. Tax relief contributed to business investment growth, but the positive contribution of gross fixed capital formation was fully offset by the contribution of a change of inventories. Foreign trade weighed on GDP growth as a slight increase in imports exceeded the stagnating exports (due to a slump in foreign demand for transport equipment). We expect that the growth structure will remain similar in the following years. While household consumption will be supported by a very low inflation rate especially in 2016, the business environment will continue to benefit from the accommodative monetary policy. With respect to strong domestic demand, we expect strong import growth; on the contrary, the export side will be negatively affected by still weak foreign demand and the low competitiveness of French companies. Last, but not least, exports will be influenced negatively by the decision of the United Kingdom (for France the fifth biggest export partner, exports of goods into the UK represented 1.5% of GDP in 2015) to leave the EU. For 2016, we expect an economic growth of 1.6% (*versus 1.3%*), for 2017 we forecast a slight slowdown of growth to 1.3% (*versus 1.4%*).

As expected, in the first quarter of 2016 the QoQ GDP growth of the **United Kingdom** slowed down to 0.4% (*in line with the estimate*). The main growth driver was household consumption, while investment and exports weighed on economic growth. With respect to the referendum, in which the voters spoke out in favour of withdrawal from the EU (see Box A.1), and the considerable uncertainty that will accompany this step, we are decreasing the estimate of real GDP growth for 2016 to 1.5% (*versus 1.9%*). In the following year, we expect a further slowdown to 0.7% (*versus 2.1%*).

In the first quarter of 2016, economic growth in **Poland** slowed down considerably as GDP dipped by 0.1% QoQ (*versus growth of 0.8%*) and increased by 2.6% YoY. Economic growth was mainly driven by household consumption, which is supported by a decrease in consumer prices and wage growth; government consumption expenditure and a change of inventories also contributed positively to growth. Net exports had an impact in the opposite direction when the growth of imports due to strong domestic demand exceeded the growth of exports. A decrease in gross fixed capital formation is mainly caused by a slump in government investment due to the termination of projects from the previous financial perspective of the EU. We assume that slowdown of the economic growth was only of a short-term character. We expect that economic growth will still be driven mainly by household consumption. With respect to the statistical

effect of the slowdown of economic output in the first quarter of 2016, we decrease our estimate of real GDP growth for 2016 to 2.7% (*versus 3.4%*). In the following year, we expect its acceleration to 3.3% (*versus 3.4%*).

Even in spite of a slight slowdown, the **Slovak** economy showed solid output in the first quarter of 2016, when GDP increased by 0.8% QoQ (*versus 0.6%*). Domestic demand mainly contributed to the economic growth. However, the contribution of a change in inventories, which made the highest contribution to economic output, was fully offset by a decrease in gross fixed capital formation. A QoQ decrease in investment of 6.7% was caused, similarly as in the Czech Republic and Poland, by a slump in investment due to the transition to the new financial perspective of the EU. In addition to a slight decrease in the price level due to the decrease in energy and food prices, the improving labour market situation also contributed to household consumption growth. Unemployment rate decreased by 1.5 pp YoY to 10.0% in May 2016, while real wage growth reached 3.8% in the first quarter of 2016. The aforementioned factors should also have a favourable impact on household consumption in the coming years. In the short-term horizon, a decrease in government investment will be partially offset by private investment that will be supported by low interest rates. In the horizon of the forecast, investment in the car industry and in infrastructure will have a positive impact. A decline in taxes on corporate profits will also contribute to economic growth, on which the government agreed in its Policy Statement in April 2016. For both 2016 and 2017, we expect growth of 3.3% (*unchanged in both years*).

### A.1.3 Commodity Prices

In the second quarter of 2016, the average price of Brent crude oil reached USD 45.6/barrel (*versus USD 41/barrel*). In quarterly terms, it increased by USD 11.7/barrel. As of the cut-off date of the Forecast, Brent crude oil traded below USD 50/barrel.

Both the increasing demand for crude oil and limitations of its supply have been reflected in the rapid increase in its price. The supplies of crude oil to the world market were influenced unfavourably, for example, by the security situation in Nigeria, fires in Canada or impacts of the political and economic crisis in Venezuela. In the United States of America, the shale oil extraction sector continues to go through a restructuring process associated with bankruptcies of mining companies and a decrease in the number of active drilling rigs. However, it seems that prices around USD 50/barrel could result in recovery of production in this sector.

On the other hand, several factors are influencing the market that do not support further price growth. Saudi Arabia conditioned the limitation of its production by the same step taken by Iran, which does not intend,



however, to proceed in this direction. The OPEC cartel has not set any production quotas and it does not seem that it is preparing for such a decision. Moreover, mismatches between supplied and demanded quantity continue, which has resulted in an increase in inventories. However, this imbalance could disappear in 2017.

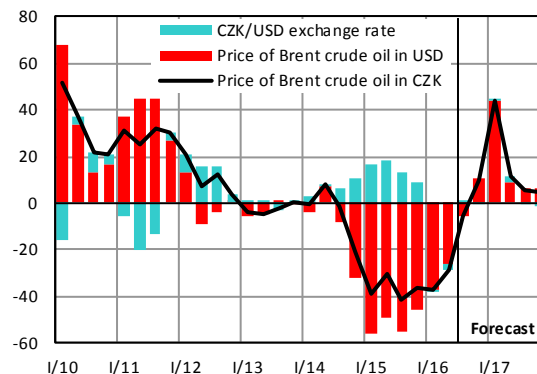
In accordance with a slightly positive slope of the oil futures price curve we expect a gradual increase in the Brent crude oil price. In 2016, it could average USD 44/barrel (versus USD 41/barrel). In 2017, we assume an average price of USD 50/barrel (versus USD 47/barrel).

An extremely deep YoY decline in the CZK crude oil price (see Graph A.1.3) provided an extraordinary growth stimulus to the Czech economy in 2015. In 2016, this situation should gradually dissipate and the

CZK crude oil price should return to YoY growth in the fourth quarter of 2016.

**Graph A.1.3: 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., own calculations

**Table A.1.1: Gross Domestic Product – yearly**

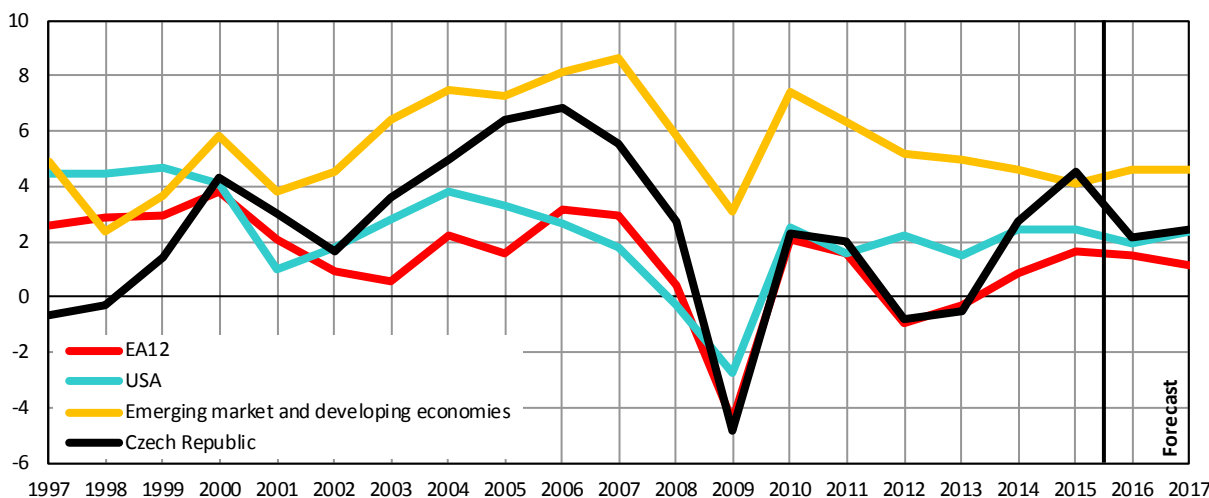
YoY real growth rate, in %

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
									Forecast	Forecast
World	3.1	0.0	5.4	4.2	3.4	3.3	3.4	3.1	3.2	3.5
USA	-0.3	-2.8	2.5	1.6	2.2	1.5	2.4	2.4	2.0	2.4
China	9.6	9.2	10.6	9.5	7.7	7.7	7.3	6.9	6.2	6.1
EU28	0.5	-4.4	2.1	1.8	-0.5	0.2	1.4	2.0	1.8	1.6
EA12	0.4	-4.4	2.1	1.6	-0.9	-0.3	0.9	1.6	1.5	1.2
Germany	1.1	-5.6	4.1	3.7	0.4	0.3	1.6	1.7	1.6	1.5
France	0.2	-2.9	2.0	2.1	0.2	0.6	0.6	1.3	1.6	1.3
United Kingdom	-0.6	-4.3	1.9	1.5	1.3	1.9	3.1	2.2	1.5	0.7
Austria	1.5	-3.8	1.9	2.8	0.8	0.3	0.4	0.9	1.6	1.4
Hungary	0.8	-6.6	0.7	1.8	-1.7	1.9	3.7	2.9	1.5	2.2
Poland	3.9	2.6	3.7	5.0	1.6	1.3	3.3	3.6	2.7	3.3
Slovakia	5.7	-5.5	5.1	2.8	1.5	1.4	2.5	3.6	3.3	3.3
Czech Republic	2.7	-4.8	2.3	2.0	-0.8	-0.5	2.7	4.5	2.2	2.4

Source: CZSO, Eurostat, IMF, NBS China, own calculations

**Graph A.1.4: Gross Domestic Product**

YoY real growth rate, in %



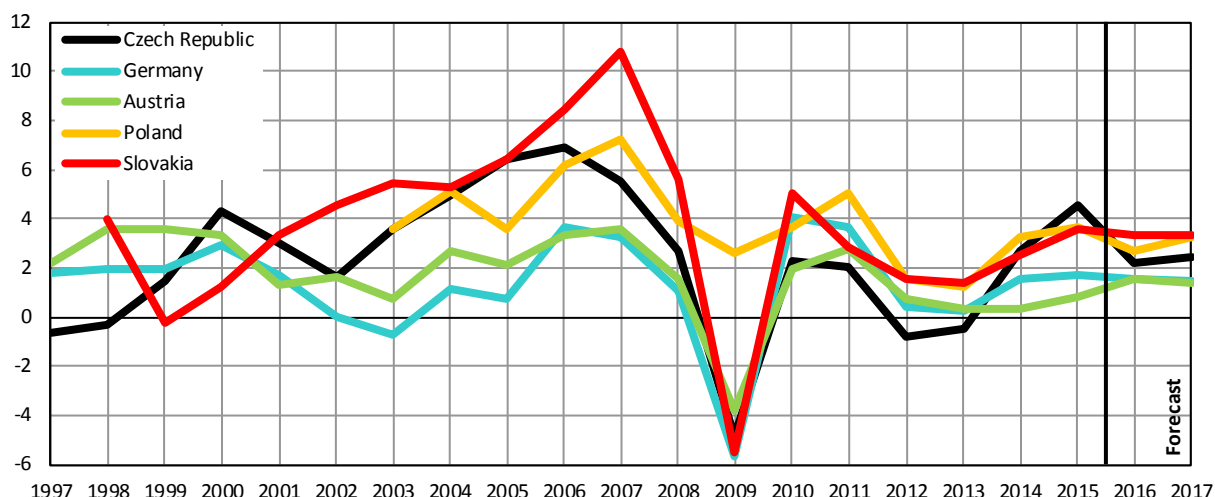
Note: Emerging market and developing economies comprising 154 countries (according to the IMF's classification)

Source: Eurostat, IMF, own calculations



**Graph A.1.5: Gross Domestic Product – Czech Republic and the neighbouring states**

YoY real growth rate, in %



Source: Eurostat, own calculations

**Table A.1.2: Gross Domestic Product – quarterly**

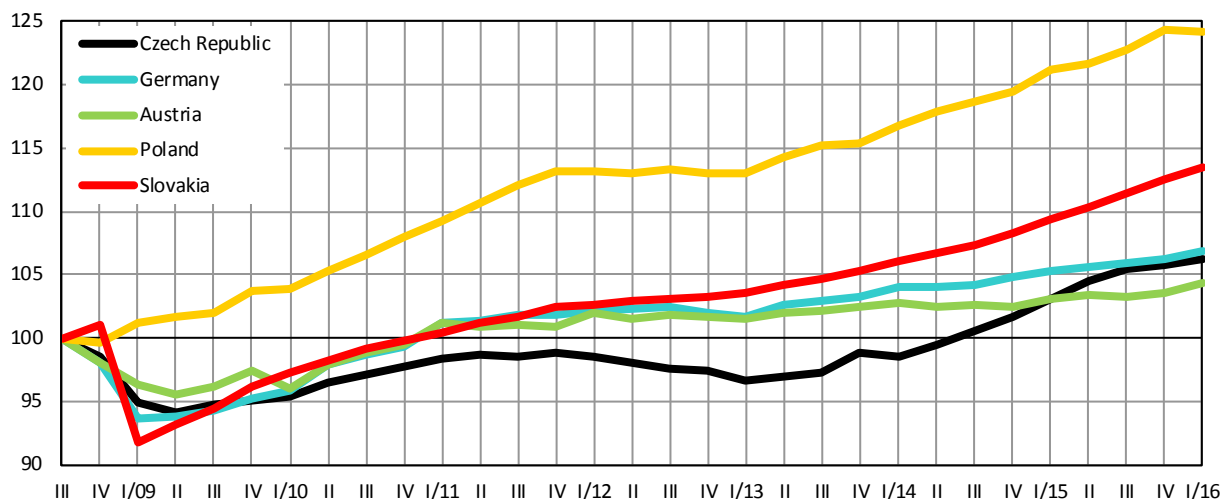
real growth rate, in %, seasonally adjusted data

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	
USA	QoQ	0.2	1.0	0.5	0.3	0.3	0.5	0.8	0.7
	YoY	2.9	2.7	2.1	2.0	2.1	1.6	1.9	2.3
China	QoQ	1.4	1.8	1.8	1.5	1.1	1.7	1.6	1.5
	YoY	7.0	7.0	6.9	6.7	6.3	6.2	6.0	6.0
EU28	QoQ	0.6	0.4	0.4	0.5	0.5	0.5	0.3	0.3
	YoY	1.7	1.9	1.9	2.0	1.8	1.9	1.8	1.6
EA12	QoQ	0.6	0.4	0.3	0.4	0.5	0.4	0.1	0.2
	YoY	1.3	1.6	1.6	1.6	1.6	1.7	1.5	1.3
Germany	QoQ	0.4	0.4	0.3	0.3	0.7	0.5	0.2	0.3
	YoY	1.1	1.6	1.7	1.3	1.6	1.7	1.6	1.7
France	QoQ	0.6	-0.1	0.4	0.4	0.6	0.4	0.2	0.3
	YoY	1.3	1.1	1.1	1.3	1.3	1.8	1.6	1.6
United Kingdom	QoQ	0.3	0.4	0.4	0.7	0.4	0.3	0.0	0.1
	YoY	2.9	2.3	2.0	1.8	2.0	1.9	1.4	0.9
Austria	QoQ	0.6	0.4	-0.2	0.3	0.8	0.4	0.3	0.4
	YoY	0.3	1.1	0.7	1.1	1.3	1.3	1.8	1.9
Hungary	QoQ	1.4	0.4	0.3	0.6	-0.8	0.6	0.7	0.7
	YoY	3.7	2.9	2.5	2.6	0.4	0.7	1.1	1.2
Poland	QoQ	1.3	0.5	0.8	1.3	-0.1	0.9	0.9	0.8
	YoY	3.8	3.2	3.4	4.0	2.6	3.0	3.1	2.5
Slovakia	QoQ	1.0	0.9	1.0	1.0	0.8	0.7	0.7	0.8
	YoY	3.1	3.5	3.8	4.0	3.7	3.5	3.2	3.0
Czech Republic	QoQ	1.4	1.3	1.0	0.3	0.4	0.4	0.5	0.6
	YoY	4.6	5.0	4.8	4.0	3.0	2.0	1.6	1.9

Source: Eurostat, NBS China, own calculations

**Graph A.1.6: Gross Domestic Product – Czech Republic and the neighbouring states**

Q3 2008=100, seasonally adjusted data, constant prices



Source: Eurostat, own calculations

**Table A.1.3: Prices of Selected Commodities – yearly**

spot prices

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
											Forecast	Forecast
<b>Crude oil Brent</b>	USD/barrel	96.9	61.5	79.6	111.3	111.6	108.6	99.0	52.4	44	50	
	growth in %	34.0	-36.5	29.3	39.9	0.3	-2.6	-8.8	-47.1	-16.6	14.0	
<b>Crude oil Brent index (in CZK)</b>	2005=100	106.7	76.1	100.0	129.5	143.8	139.9	134.6	85.1	70	80	
	growth in %	11.1	-28.6	31.4	29.5	11.0	-2.7	-3.8	-36.8	-17.4	14.1	
<b>Wheat</b>	USD/t	287.0	190.1	194.5	280.0	276.1	265.8	242.5	185.6	.	.	
	growth in %	26.5	-33.7	2.3	44.0	-1.4	-3.8	-8.8	-23.5	.	.	
<b>Wheat price index (in CZK)</b>	2005=100	130.8	98.5	100.0	133.6	146.4	140.6	135.7	123.7	.	.	
	growth in %	6.2	-24.7	1.5	33.6	9.6	-4.0	-3.5	-8.8	.	.	

Source: IMF, U. S. Energy Information Administration, own calculations

**Table A.1.4: Prices of Selected Commodities – quarterly**

spot prices

		2015				2016					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
										Forecast	Forecast
<b>Crude oil Brent</b>	USD/barrel	54.0	61.7	50.4	43.6	33.8	45.6	47	48		
	growth in %	-50.1	-43.8	-50.5	-43.0	-37.3	-26.1	-5.9	10.2		
<b>Crude oil Brent index (in CZK)</b>	2005=100	87.3	100.7	81.5	70.9	54.7	71.8	77	78		
	growth in %	-38.8	-30.4	-41.7	-36.3	-37.3	-28.6	-5.7	9.7		
<b>Wheat price</b>	USD/t	205.0	196.3	178.8	162.3	162.6	159.2	.	.		
	growth in %	-17.6	-28.4	-21.0	-26.4	-20.7	-18.9	.	.		
<b>Wheat price index (in CZK)</b>	2005=100	136.1	131.6	118.6	108.4	107.9	103.0	.	.		
	growth in %	0.9	-11.4	-7.0	-17.7	-20.7	-21.7	.	.		

Source: IMF, U. S. Energy Information Administration, own calculations

**Graph A.1.7: Dollar Prices of Oil**

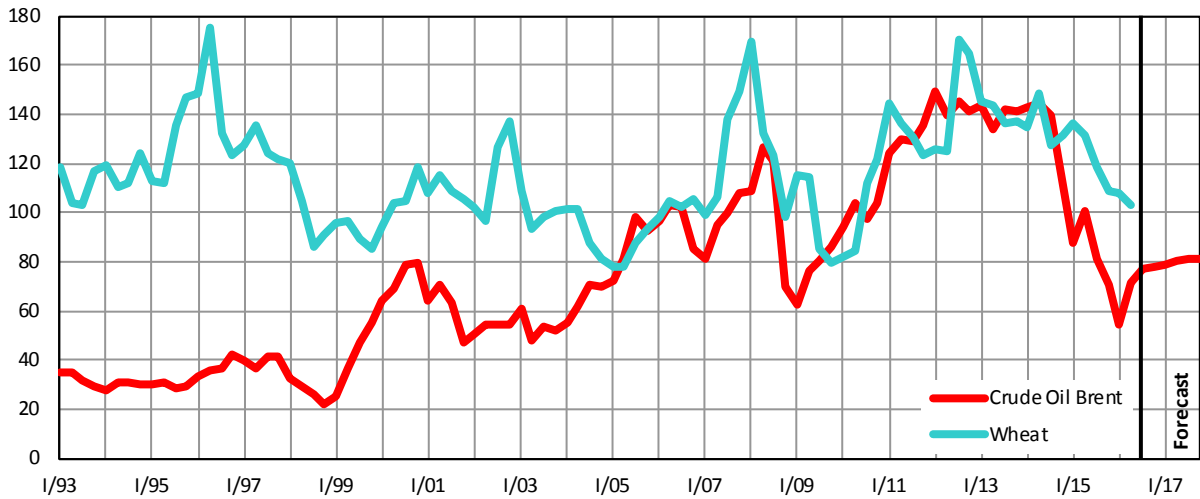
USD/barrel



Source: U. S. Energy Information Administration, own calculations

**Graph A.1.8: Koruna Indices of Prices of Selected Commodities**

index 2010=100



Source: IMF, U. S. Energy Information Administration, own calculations

## A.2 Fiscal Policy

The general government sector balance reached a record-low deficit of CZK 18.7 billion in **2015**, which corresponds to 0.4% of GDP. In the entire available time series for the past (i.e. since 1995), it is the lowest deficit in both absolute and relative terms. In a YoY comparison, the deficit decreased by 1.5 pp.

The result of the year 2015 was mainly caused by a considerable surplus of local governments; an extraordinary revenue of the Deposit Insurance Fund (nowadays the Guarantee system of the financial market) amounting to approximately 0.1% of GDP also contributed to the improvement of the balance. Moreover, the year 2015 was characterized by improved collection of taxes and social security contributions. On the expenditure side, in contrast, the record-breaking increase in investment expenditure was apparent, mainly thanks to the last possibility to draw down from the financial perspective 2007–2013. However, the impact of this investment on the deficit was limited, as it was largely financed from European grants. The costs of the debt portfolio decreased considerably in annual terms due to low interest rates on financial markets and favourable performance of the government sector.

General government consumption increased by 4.8%, which was connected with common expenditure related to the drawdown of remaining funds from the old financial perspective, but also with the wage bill growth. Together with the above-described development of investment, the government sector represented a considerable growth stimulus for the Czech economy.

The very good performance of the government sector should continue also in **2016**. At present, we expect a deficit of approximately 0.3% of GDP, which is by 0.3 pp more favourable result in comparison with the expectation in the last Macroeconomic Forecast and the Convergence Programme. On the basis of currently available information, the fiscal policy in 2016 can be characterized as relatively neutral, with respect to a very small change in the structural balance between 2015 and 2016.

The forecast for the balance is slightly improved mainly thanks to the favourable development so far, both for the government sector as a whole in the accrual methodology ESA 2010 (with regard to data for the first quarter of 2016) and for the state budget, local governments and health insurance companies in the national budgetary methodology (as of the cut-off date, data on cash collection for the first six months of the year was available, in the case of local governments only for five months). In contrast to the accrual methodology, the cash methodology shows differences in coverage and recording transactions, but it provides certain indications regarding the development of the government sector's balance.

On the revenue side, tax revenues and social security contributions developed better than expected in the first quarter of 2016, according to the data from national accounts and cash collection. Indirect taxes increased by nearly 6% on accrual basis (the half-year cash collection only confirms this result and indicates that this development could also continue further). A considerable increase in VAT, which was partially due to more effective tax collection thanks to the introduction of electronic VAT reporting and an extension of the reverse charge mechanism, and partially due to economic development, had an impact here. Excise taxes are also growing, driven by an increase in the rates of tax on tobacco products and also by higher consumption of fuels due to a decrease in their prices and the position of the economy in the cycle. On accrual basis, revenues from direct taxes increased by nearly 14% in the first quarter of 2016. The cash collection for the first half of 2016 shows that a considerably favourable trend in these taxes will also continue further, even if with, most probably, lower dynamics than in the first part of the year.

On the other hand, accrual incomes from EU funds have been decreasing in annual terms. This is an expected development that is related to the extraordinarily high comparison base of 2015 when the remaining allocation of the programming period 2007–2013 was absorbed.

On the expenditure side, we can see also this year a little bit better than expected development in interest costs that decreased quite considerably in accrual terms in the first quarter of 2016. Generally, low interest rates in the economy are behind this development, which is especially true for government bonds where very low debt dynamics and a generally favourable evaluation of the government's fiscal policy by the financial markets also have a considerable impact. The expectation of foreign investors also plays its role here that the koruna will strengthen after the exchange rate commitment of the CNB is discontinued, thanks to which they will earn exchange rate profits (and therefore they are now willing to accept lower bond yields).

Government investment decreased by nearly 2% in the first quarter of 2016; however, we expect that the decrease for the whole year will be considerably higher. While on the expenditure side a decrease in investment was only slight, a considerable decrease in investment grants on the revenue side implies that investment financed purely from Czech resources increased in the first quarter of 2016 in line with the assumptions of the last forecast.

Nominal government consumption should increase by 3.6% in 2016. In comparison with 2015, its growth will thus slow down by 1.2 pp, which will be given, simi-

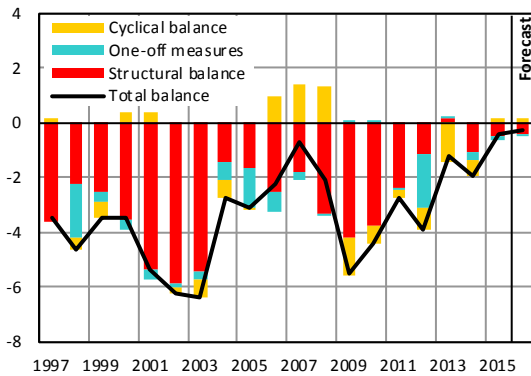
larly as in the case of investment, to a certain extent by the lower drawdown from EU funds for non-investment projects.

The general government debt reached 40.3% of GDP in 2015, mainly due to stabilization of the state debt and

relatively strong nominal GDP growth. We expect the general government debt to decline to 39.8% of GDP in 2016, thanks to favourable budget execution.

**Graph A.2.1: Decomposition of the Government Balance**

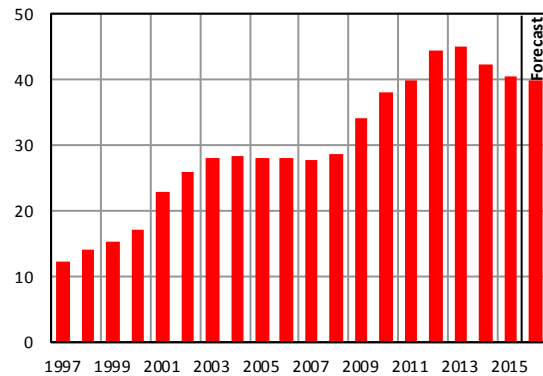
in % of GDP



Source: CZSO, own calculations

**Graph A.2.2: Government Debt**

in % of GDP



Source: CZSO, own calculations

**Table A.2.1: Net Lending/Borrowing and Debt**

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
		<i>Forecast</i>									
<b>General government balance</b> <sup>1)</sup>	% GDP	-0.7	-2.1	-5.5	-4.4	-2.7	-3.9	-1.2	-1.9	-0.4	-0.3
	bill. CZK	-27	-85	-216	-175	-110	-160	-51	-83	-19	-14
<b>Cyclical balance</b>	% GDP	1.4	1.3	-1.3	-0.7	-0.3	-0.9	-1.4	-0.6	0.2	0.2
<b>Cyclically adjusted balance</b>	% GDP	-2.1	-3.4	-4.2	-3.7	-2.5	-3.1	0.2	-1.3	-0.6	-0.5
<b>One-off measures</b> <sup>2)</sup>	% GDP	-0.3	-0.1	0.0	0.0	-0.1	-2.0	0.0	-0.3	-0.1	-0.1
<b>Structural balance</b>	% GDP	-1.8	-3.3	-4.2	-3.7	-2.4	-1.1	0.2	-1.1	-0.5	-0.4
<b>Fiscal effort</b> <sup>3)</sup>	pp	0.7	-1.5	-0.9	0.5	1.4	1.3	1.3	-1.3	0.6	0.1
<b>Interest expenditure</b>	% GDP	1.1	1.0	1.2	1.3	1.3	1.4	1.3	1.3	1.1	1.0
<b>Primary balance</b>	% GDP	0.4	-1.1	-4.3	-3.1	-1.4	-2.5	0.1	-0.6	0.7	0.7
<b>Cyclically adjusted primary balance</b>	% GDP	-1.0	-2.4	-2.9	-2.4	-1.2	-1.6	1.5	0.0	0.5	0.6
<b>General government debt</b>	% GDP	27.8	28.7	34.1	38.2	39.8	44.5	44.9	42.2	40.3	39.8
	bill. CZK	1 066	1 151	1 336	1 509	1 606	1 805	1 840	1 819	1 836	1 861
<b>Change in debt-to-GDP ratio</b>	pp	-0.1	0.9	5.4	4.1	1.7	4.6	0.4	-2.7	-1.9	-0.6

1) General government net lending (+)/borrowing (-)

2) 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.

3) Change in structural balance.

Source: CZSO, own calculations

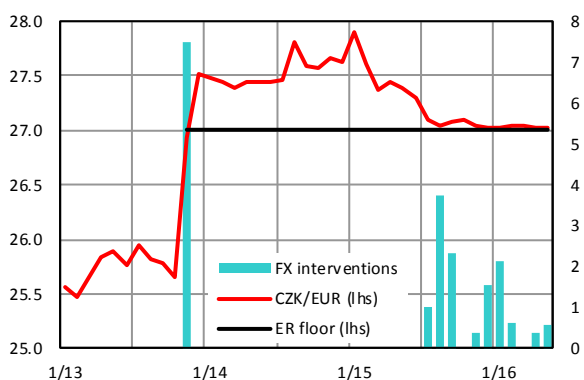
## A.3 Monetary Policy, Financial Sector and Exchange Rates

### A.3.1 Monetary Policy

For a long time, the CNB's monetary policy can be characterized as eased. Since November 2012, the two-week repo rate has been set at 0.05%, i.e. technically at the zero lower bound. 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 the second half of 2015, the CNB has been intervening on the foreign exchange market in order to defend its exchange rate commitment, with the total volume of interventions reaching approximately EUR 12.7 billion between July 2015 and May 2016. The CNB can intervene against pressures for the koruna's appreciation basically without limits.

**Graph A.3.1: FX Interventions of the CNB and the Exchange Rate**

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



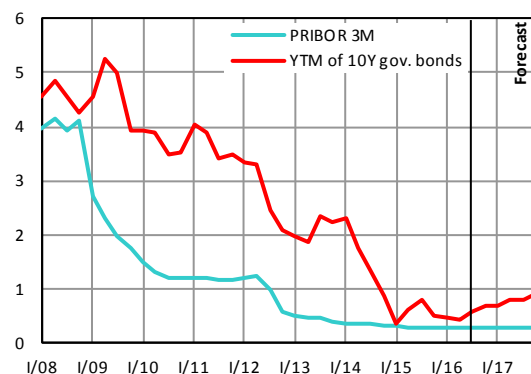
Source: CNB

### A.3.2 Financial Sector and Interest Rates

In the second quarter of 2016, 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 throughout the years 2016 and 2017.

**Graph A.3.2: Interest Rates**

in % p.a.



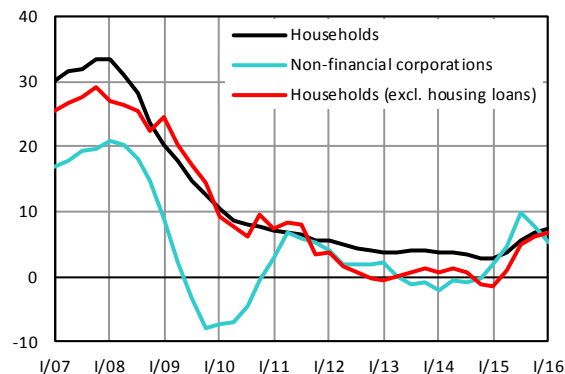
Source: CNB, own calculations

With respect to the practically zero reference interest rates of the CNB and persisting very weak inflation pressures, long-term interest rates continue to be at extremely low values. **The yield to maturity on 10-year government bonds** for convergence purposes reached 0.5% in the second quarter of 2016 (*in line with the forecast*), and we forecast 0.6% on average for the whole year 2016 (*unchanged*). With respect to the expected development of monetary policy rates and the inflation forecast, we expect only a slight increase in long-term interest rates to 0.8% in 2017 (*unchanged*).

In April 2016, the CNB conducted another regular bank lending survey which concluded that, in the first quarter of 2016, credit standards had not changed considerably for loans of all types. For the second quarter of 2016, banks expected further easing of credit standards for consumer loans to households and for loans to non-financial corporations, and, in contrast, their tightening for housing loans to households.

**Graph A.3.3: Loans**

YoY growth rate, in %

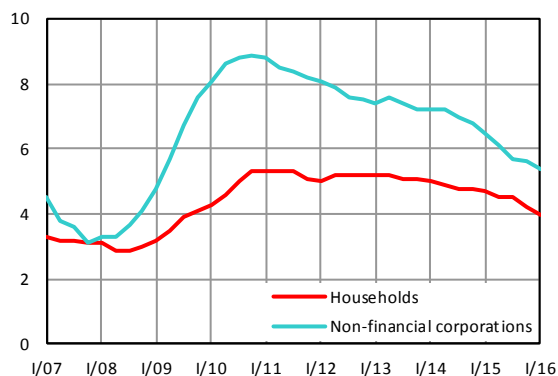


Source: CNB, own calculations

The growth of loans to households, the dynamics of which are mostly influenced by housing loans (in volume terms, housing loans are the most important loan category – see Graph A.3.6), has been slowly increasing. The strong growth of consumer loans (in the first quarter of 2016 of 10.1% YoY) is due to the merger of a bank with a non-banking entity in mid-2015 and the related changes in the banking and monetary statistics. So-called “other loans”, which include e.g. loans to sole traders, have been growing only slightly (by 2.4% in the first quarter of 2016). The growth of loans to non-financial corporations has been slowing down considerably in recent months (due to decreases in short-term loans).

### Graph A.3.4: Non-performing Loans

ratio of non-performing to total loans, in %

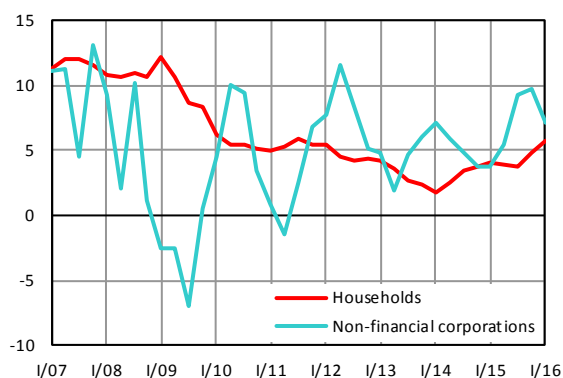


Source: CNB, own calculations

The share of non-performing loans in total loans has been permanently decreasing in line with the improving state of the real economy. In the first quarter of 2016, the share stood at 4.0% for households (0.2 pp less QoQ, 0.7 pp less YoY) and at 5.4% for non-financial corporations (0.2 pp less QoQ and 1.1 pp less YoY).

### Graph A.3.5: Deposits

YoY growth rate, in %



Source: CNB, own calculations

Household deposits increased by 5.8% YoY in the first quarter of 2016, and their growth is thus gradually accelerating. A more considerable growth of deposits

is probably prevented by the combination of the relatively high confidence of households in future economic development and only gradual growth of disposable income. YoY growth of deposits of non-financial corporations slowed down to 7.2% in the first quarter of 2016.

### A.3.3 Exchange Rates

From the change in the exchange rate regime in November 2013 until approximately mid-2015, the CZK/EUR exchange rate mostly hovered close to the level of 27.50 CZK/EUR. At the end of the second quarter of 2015, the koruna exchange rate started strengthening in connection with favourable developments of the economy, approaching the value of 27 CZK/EUR, close to which it remained during the second half of 2015 and the first half of 2016. At the end of June 2016, in connection with the result of the referendum on the United Kingdom staying in the EU, the koruna weakened temporarily from values close to the level of 27 CZK/EUR to values around 27.10 CZK/EUR. However, this was only a short-term fluctuation.

It is not determined yet when, and in what manner, will the CNB stop using the exchange rate instrument. On the basis of the available information (especially the CNB's statement that it considers it likely that the exchange rate commitment will be discontinued in the first half of 2017), we have made a technical assumption for the period until the second quarter of 2017 that the exchange rate will remain stable at 27.0 CZK/EUR. We expect that, subsequently, the koruna will again start strengthening slightly against the Euro, approximately by 0.6% QoQ. The expected development is in line with the CNB's statement that it will not allow considerable appreciation of the koruna after it discontinues the exchange rate commitment.

The estimated development of the CZK/USD exchange rate is implied by the USD/EUR exchange rate for which we have adopted the technical assumption of stability at the level of 1.10 USD/EUR (*unchanged*).

Table A.3.1: Interest Rates – yearly

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
										Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	2.25	1.00	0.75	0.75	0.05	0.05	0.05	0.05	.	.
Main refinancing rate ECB (end of period)	in % p.a.	2.50	1.00	1.00	1.00	0.75	0.25	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	0.25	0.50	.	.
PRIBOR 3M	in % p.a.	4.04	2.19	1.31	1.19	1.00	0.46	0.36	0.31	0.3	0.3
YTM of 10Y government bonds	in % p.a.	4.55	4.67	3.71	3.71	2.80	2.11	1.58	0.58	0.6	0.8

Source: CNB, ECB, Fed, own calculations

**Table A.3.2: Interest Rates – quarterly**

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Forecast	Forecast	
Repo 2W rate CNB (end of period)	in % p.a.	0.05	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	0.00	.	.
Federal funds rate (end of period)	in % p.a.	0.25	0.25	0.25	0.50	0.50	0.50	.	.
PRIBOR 3M	in % p.a.	0.33	0.31	0.31	0.29	0.29	0.29	0.3	0.3
YTM of 10Y government bonds	in % p.a.	0.37	0.62	0.80	0.51	0.48	0.45	0.6	0.7

Source: CNB, ECB, Fed, own calculations

**Table A.3.3: Interest Rates, Deposits and Loans – yearly**

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Households – MFI (CR, unless stated otherwise)</b>											
– interest rates on loans	in % p.a.	6.93	6.64	6.81	7.00	7.01	6.83	6.46	6.03	5.57	5.14
– loans	growth in %	32.7	32.2	31.7	29.0	16.3	8.7	6.5	4.8	4.0	3.5
– loans without housing loans	growth in %	28.3	27.3	25.3	19.1	8.3	6.8	1.4	0.4	0.3	2.7
– interest rates on deposits	in % p.a.	1.22	1.29	1.55	1.38	1.25	1.20	1.18	1.01	0.84	0.65
– deposits	growth in %	8.2	11.8	10.8	10.0	5.6	5.4	4.7	3.2	2.9	4.1
– share of non-performing loans	in %	3.7	3.2	3.0	3.7	4.8	5.3	5.2	5.2	4.9	4.5
– loans to deposits ratio	in %	43	51	59	62	64	65	65	65	65	66
– loans to deposits ratio (Eurozone)	in %	99	99	94	89	90	90	87	84	82	81
<b>Non-financial firms – MFI (CR, unless stated otherwise)</b>											
– interest rates on loans	in % p.a.	4.29	4.85	5.59	4.58	4.10	3.93	3.69	3.19	3.00	2.77
– loans	growth in %	17.3	18.5	18.6	0.0	-4.8	5.2	2.5	0.1	-0.9	6.1
– interest rates on deposits	in % p.a.	1.08	1.41	1.80	0.87	0.56	0.52	0.56	0.41	0.29	0.19
– deposits	growth in %	10.5	10.0	5.7	-2.9	6.9	2.3	8.2	4.4	5.4	7.0
– share of non-performing loans	in %	4.5	3.8	3.6	6.2	8.6	8.5	7.8	7.4	7.1	6.0
– loans to deposits ratio	in %	113	122	137	141	125	129	122	117	110	109
– loans to deposits ratio (Eurozone)	in %	306	308	329	326	308	301	291	264	239	211

Source: CNB, ECB, own calculations

**Table A.3.4: Interest Rates, Deposits and Loans – quarterly**

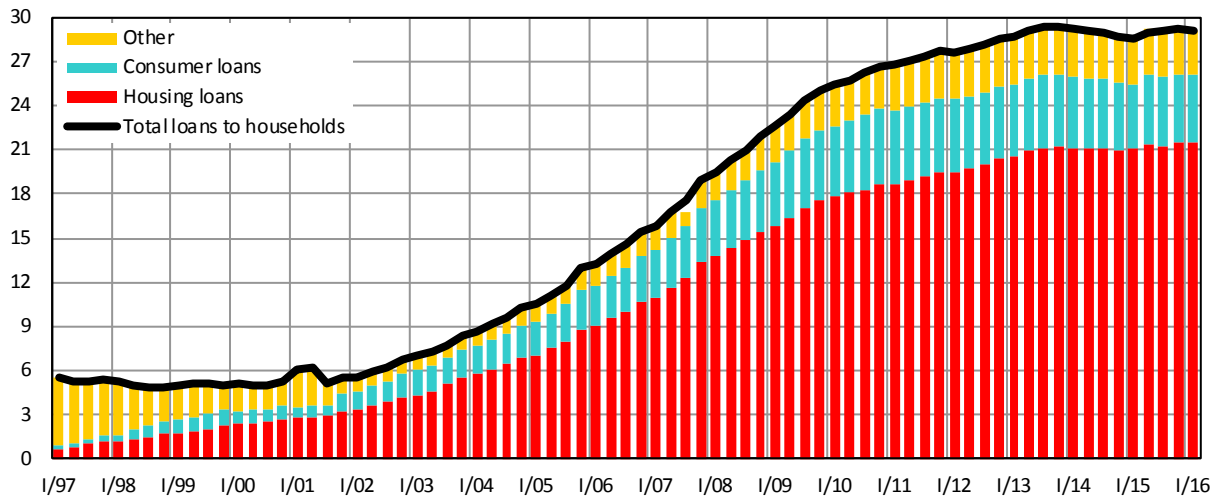
		2014			2015				2016
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>Households – MFI (CR, unless stated otherwise)</b>									
– interest rates on loans	in % p.a.	5.62	5.52	5.40	5.28	5.18	5.11	4.97	4.85
– loans	growth in %	3.8	3.6	2.7	2.9	3.9	5.6	6.9	7.5
– loans without housing loans	growth in %	1.2	0.6	-1.2	-1.4	1.0	4.9	6.1	6.9
– interest rates on deposits	in % p.a.	0.87	0.81	0.77	0.72	0.66	0.62	0.59	0.55
– deposits	growth in %	2.6	3.4	3.7	4.0	3.9	3.8	4.8	5.8
– share of non-performing loans	in %	4.9	4.8	4.8	4.7	4.5	4.5	4.2	4.0
– loans to deposits ratio	in %	65	66	65	65	65	67	66	66
– loans to deposits ratio (Eurozone)	in %	82	82	81	81	81	81	81	81
<b>Non-financial firms – MFI (CR, unless stated otherwise)</b>									
– interest rates on loans	in % p.a.	3.04	2.98	2.93	2.88	2.80	2.72	2.67	2.63
– loans	growth in %	-0.6	-0.9	-0.1	2.0	4.8	9.8	7.8	5.3
– interest rates on deposits	in % p.a.	0.32	0.26	0.24	0.22	0.20	0.17	0.15	0.13
– deposits	growth in %	5.9	4.9	3.8	3.8	5.4	9.2	9.7	7.2
– share of non-performing loans	in %	7.2	7.0	6.8	6.5	6.1	5.7	5.6	5.4
– loans to deposits ratio	in %	111	110	107	110	111	111	105	108
– loans to deposits ratio (Eurozone)	in %	247	239	230	217	216	210	202	203

Source: CNB, ECB, own calculations



**Graph A.3.6: Ratio of Bank Loans to Households to GDP**

yearly moving sums, in %



Source: CNB, CZSO, own calculations

**Table A.3.5: Exchange Rates – yearly**

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
								Forecast	Forecast	Outlook	Outlook
<b>Nominal exchange rates:</b>											
<b>CZK / EUR</b>	average	25.29	24.59	25.14	25.98	27.53	27.28	27.0	26.9	26.2	25.6
	appreciation in %	4.6	2.8	-2.2	-3.2	-5.6	0.9	0.9	0.6	2.4	2.5
<b>CZK / USD</b>	average	19.11	17.69	19.59	19.57	20.75	24.65	24.4	24.4	23.8	23.3
	appreciation in %	-0.3	8.0	-9.7	0.1	-5.7	-15.8	1.0	-0.1	2.4	2.5
<b>NEER</b>	average of 2010=100	100.0	103.1	99.5	97.3	92.5	92.5	95	95	98	100
	appreciation in %	2.1	3.1	-3.5	-2.2	-4.9	-0.1	2.3	0.8	2.6	2.2
<b>Real exchange rate to EA12<sup>1)</sup></b>	average of 2010=100	100.0	101.8	99.8	96.7	92.7	93.3	93	94	96	99
	appreciation in %	2.4	1.8	-2.0	-3.1	-4.2	0.6	0.2	0.5	2.5	2.9
<b>REER</b>	average of 2010=100	100.0	102.1	99.2	96.9	91.8	91.3	.	.	.	.
	(Eurostat, CPI deflated, 42 countries) appreciation in %	1.2	2.1	-2.8	-2.3	-5.2	-0.6	.	.	.	.

1) Deflated by GDP deflators.

Source: CNB, Eurostat, own calculations

**Table A.3.6: Exchange Rates – quarterly**

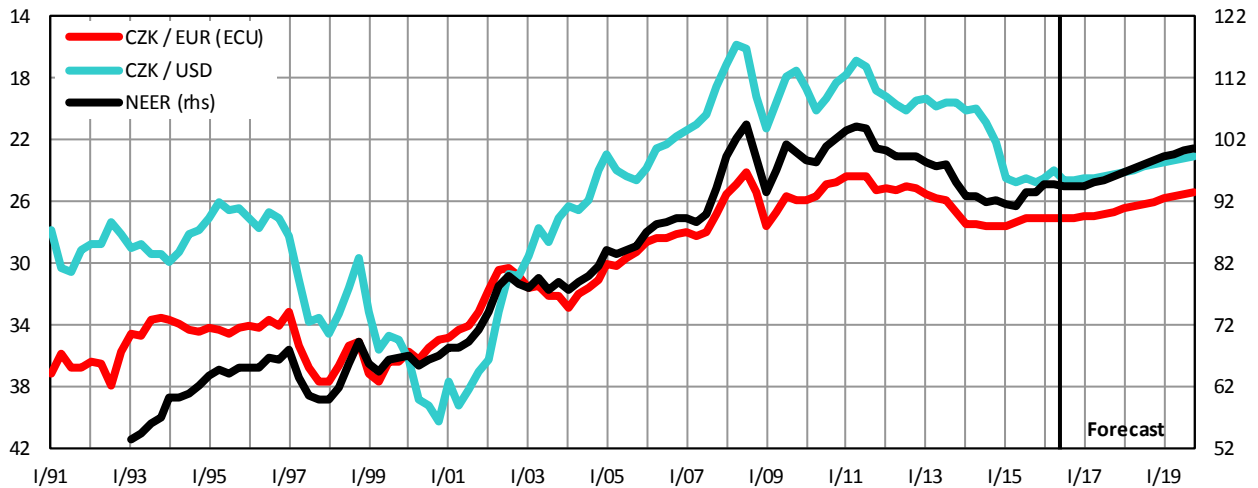
		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	
<b>Nominal exchange rates:</b>									
<b>CZK / EUR</b>	average	27.62	27.38	27.07	27.06	27.04	27.04	27.0	27.0
	appreciation in %	-0.7	0.2	2.0	2.1	2.2	1.3	0.1	0.1
<b>CZK / USD</b>	average	24.55	24.79	24.53	24.71	24.54	23.94	24.6	24.6
	appreciation in %	-18.4	-19.2	-15.0	-10.5	0.0	3.6	-0.2	0.5
<b>NEER</b>	average of 2010=100	91.7	91.1	93.4	93.6	94.9	94.7	94	94
	appreciation in %	-1.4	-2.0	1.6	1.5	3.5	3.9	1.0	0.8
<b>Real exchange rate to EA12<sup>1)</sup></b>	average of 2010=100	91.9	93.0	93.7	94.4	93.8	94	93	93
	appreciation in %	-0.2	0.0	1.3	1.4	2.0	0.6	-0.4	-1.2
<b>REER</b>	average of 2010=100	90.7	89.8	92.4	92.0	.	.	.	.
	(Eurostat, CPI deflated, 42 countries) appreciation in %	-2.3	-2.5	1.5	0.7	.	.	.	.

1) Deflated by GDP deflators.

Source: CNB, Eurostat, own calculations

### Graph A.3.7: Nominal Exchange Rates

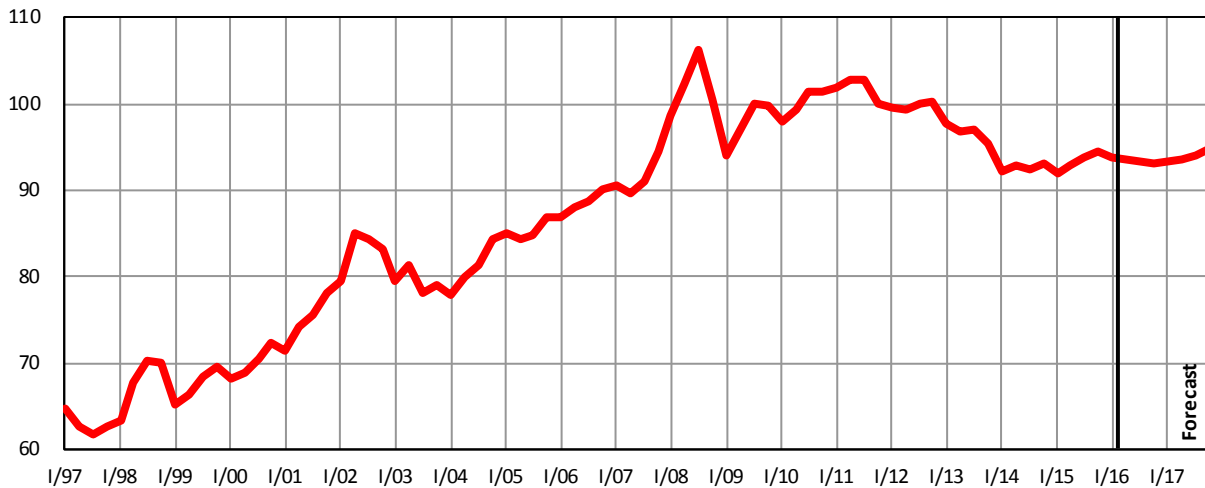
quarterly averages, average 2010=100 (rhs)



Source: CNB, own calculations

### Graph A.3.8: Real Exchange Rate to EA12

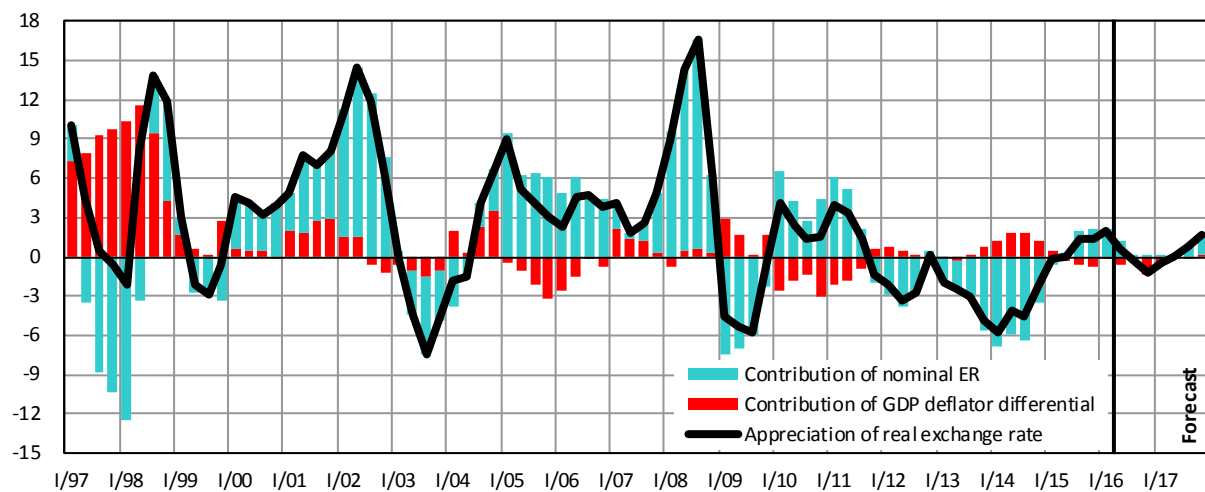
quarterly averages, deflated by GDP deflators, average 2010=100



Source: CNB, Eurostat, own calculations

### Graph A.3.9: Real Exchange Rate to EA12

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



Source: CNB, Eurostat, own calculations

## A.4 Structural Policies

### A.4.1 Business Environment

On 1 July 2016, the **Act on the Contract Register** came into effect. According to the new legal regulation, the state, regions, municipalities with extended competence, state-funded institutions, public research institutions, universities, state and national enterprises, and companies with a majority participation of the state are obliged to publish contracts with performance above CZK 50,000 excl. VAT in the register. Contracts must be sent to the register within one month from their conclusion. Then the register's administrator will publish them in short order, whereby the contract will come into effect. If a contract is not published within three months from its conclusion, it will be cancelled. However, this rule will come into effect up to 1 July 2017.

**The Act on Public Procurement**, signed by the President of the Czech Republic on 22 April 2016, should increase transparency and reduce the administrative requirements of the procurement process and, at the same time, ensure compliance with the European legal regulation. According to the Act, it will be possible to exclude such a bidder from a tender who did not prove successful in the past. It will not be possible to conclude contracts with tender participants who do not meet the requirements of the Act or the contracting authorities. For selected types of tenders, more obligatory evaluating criteria will be introduced, not only the lowest price. Winners of public contracts will have to prove their ownership structure. Public institutions will be able to award contracts for legal services in judicial and administrative disputes without any bidding process. The Act will come into effect on 1 October 2016.

### A.4.2 Taxes

On 1 May 2016, **the amendment to the Income Tax Act** came into effect, which increased tax credits for the second child by CZK 100 per month and for the third and any additional child by CZK 300 per month. The amendment also facilitated taxation of solar power stations with installed output up to 10 kW and implemented into the Czech legal system the EU Directive regulating the payment of dividends and removing double economic taxation of profit.

On 7 July 2016, the government approved the **draft of the Act 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. The draft further 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. The Act should come into effect from 1 January 2017.

**The draft of the Act on Gambling** and the related **draft of the Act on Gambling Tax** signed by the President of the Czech Republic on 7 June 2016 should avoid social pathological phenomena related to gambling and fight against these phenomena, open the Czech gambling market for operators located in the EU and make tax collection more effective. In this connection, the gambling tax will be introduced, while the tax rate will be determined in the amount of 35% for technical games and 23% for other types of gambling. The Acts will come into effect on 1 January 2017.

On 18 April 2016, the government approved **the amendment to the Act on Excise Duties**, introducing returns of excise duty on fuels for animal husbandry farmers.

In order to strengthen the fight against tax evasion, on 1 July 2016 the Chamber of Deputies approved **the draft of the Act on Central Account Record-Keeping**, authorizing the CNB to establish and administer a central database of basic information on natural persons' and legal entities' accounts. The central account records will not include information on account balances; data history will be created as late as after starting operation and the data will be archived for 5 years. The Act is scheduled to come into effect on the fifteenth day following its announcement.

### A.4.3 Financial Markets

On 3 June 2016, the Chamber of Deputies approved the draft of the **Act on Consumer Loans**, transposing into the Czech legal system the Directive on credit agreements for consumers relating to residential immovable properties (the Mortgage Credit Directive, MCD) and, at the same time, unifying regulation of all types of consumer loans. The new legal regulation strengthens the position of consumers, limits sanctions for late loan repayments and strengthens the responsibility of creditors for granting loans. At the same time, it deals with serious and systematic problems in the sector of non-banking providers and loan intermediaries, in particular unfair trading practices and the low expertise and credibility of some loan distributors. Supervision over all loan providers and intermediaries will be transferred to the Czech National Bank. The Act will come into effect on the first day of the fourth calendar month following its announcement.

### A.4.4 Education, Science and Research

**The amendment to the School Act**, repeatedly approved by the Chamber of Deputies on 24 May 2016, introduces a compulsory one year of pre-school education that can be, however, replaced by home education. In the following years, four-year-old, three-year-old and two-year-old children will gradually be entitled to places in kindergartens. At the same time, the amendment regulates the system of entrance exams

for the fields of secondary education completed with the leaving examination and the model of the leaving examination. The amendment will come into effect on 1 September 2016; however, the aforementioned regulations only in later years.

#### **A.4.5 Labour Market**

**The amendment to the Act on Ensuring Occupational Safety and Health Protection**, which came into effect on 1 May 2016, increases state contributions by CZK 800 per month to employers for the wages of handicapped persons.

In order to better harmonize professional and family life, on 22 June 2016 the government approved **the amendment to the Act on State Social Security Benefit**. The amendment will enable parents to decide on the amount and time of drawing down parental allowances in a more flexible way and, at the same time, it will ease conditions for placing children in pre-school facilities at the time of receiving parental allowances.

The amendment should come into effect on 1 January 2017.

On 23 June 2016, the President of the Czech Republic signed **the amendment to the Act on Pension Insurance**. Old-age pensions are indexed each year by price growth and a third of real wage growth. However, if pension growth does not reach 2.7%, the government will be able to increase the incomes of pensioners with its regulation so that the average old-age pensions will grow by 2.7%. The amendment will come into effect on 1 August 2016.

Another **amendment to the Act on Pension Insurance**, signed by the President of the Czech Republic on 23 June 2016, extends the group of persons working in the mining industry who have the reduced retirement age. Miners who have worked 3,300 shifts underground in underground mines and 2,200 shifts in uranium mines will become entitled to retirement seven years earlier. The amendment will come into effect on 1 October 2016.

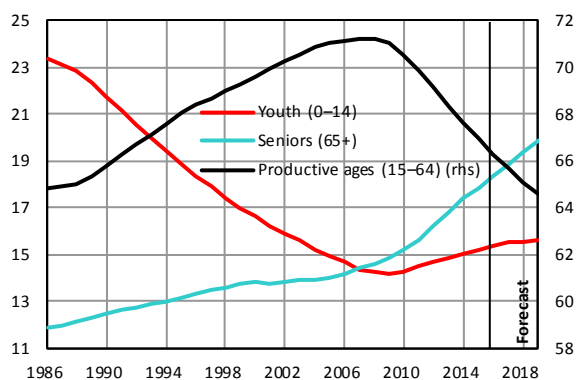
## A.5 Demographic Trends

As of 31 March 2016, 10.558 million people lived in the Czech Republic. Its population increased by 4.7 thousand persons during the first quarter of 2016. Net migration was positive (5.5 thousand persons) while natural increase was slightly negative (−0.8 thousand persons).

These results are fully in line with the tendencies of recent years. With a similar number of births and deaths, and therefore a more or less zero natural increase, a small increase in the population of approximately 0.1% annually is a result of net positive migration. In the first quarter of 2016, similarly as in previous years, most persons that moved to the Czech Republic from abroad were from Slovakia and Ukraine.

### Graph A.5.1: Age Groups

shares on total population, in %



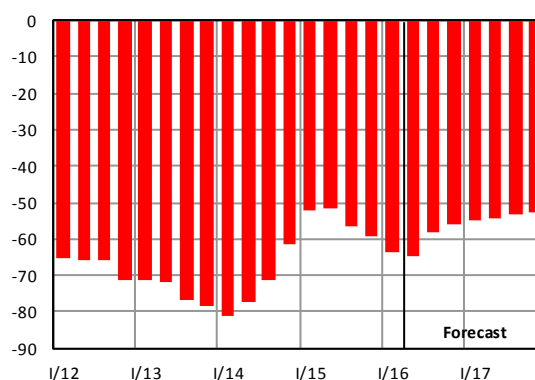
Source: CZSO, own calculations

The CZSO published the estimate of the age structure of the population at the beginning of 2016. In the last five years (since the Census in 2011), the number of inhabitants of the Czech Republic has increased by 67 thousand persons. The population in the senior category over 65 years has increased by 295 thousand persons; the number of children up to 14 years was higher by 102 thousand. On the other hand, the number of **persons aged 15–64 years** has decreased considerably, by 330 thousand.

With respect to the fluctuating birth-rate in the past, however, the development in this category is far from homogeneous. The fall was concentrated in the age group 15–38 years with the decrease of 445 thousand persons, while the population aged 53–64 years shrank by 167 thousand persons. In contrast, a considerable increase in the number of people in the age group 39–52 years was recorded, by 282 thousand. People in this age group show the highest employment and participation rates, which fully eliminates, thus far, the impact of population ageing on the supply side of the economy.

### Graph A.5.2: Population Aged 15–64

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



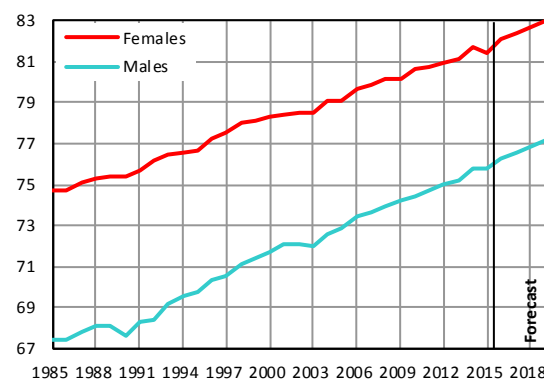
Source: CZSO, own calculations

The structural share of **seniors aged over 64 years** in the total population reached 18.3% at the beginning of 2016 and, due to the lengthening life expectancy and demographic structure, it should regularly increase approximately by 0.5 pp per year. The number of seniors in the population should exceed 2 million persons during the year 2017. From the perspective of the sustainability of the pension system, however, increases in the retirement age are adequate to match the lengthening of life expectancy in the next 20–25 years.

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 A.5.5). Since 2015, growth of the number of pensioners resumed, being roughly in line with demographic development and the increasing statutory retirement age. At the end of March 2016, the YoY increase was 22 thousand pensioners.

### Graph A.5.3: Life Expectancy at Birth

in years



Source: CZSO

**Table A.5.1: Demographics**
*in thousands of persons (unless stated otherwise)*

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
							Forecast	Forecast	Outlook	Outlook
<b>Population (January 1)</b>	<b>10 507</b>	<b>10 487</b>	<b>10 505</b>	<b>10 516</b>	<b>10 512</b>	<b>10 538</b>	<b>10 554</b>	<b>10 569</b>	<b>10 583</b>	<b>10 596</b>
growth in %	0.4	-0.2	0.2	0.1	0.0	0.2	0.1	0.1	0.1	0.1
<b>Age structure (January 1):</b>										
<b>(0–14)</b>	<b>1 494</b>	<b>1 522</b>	<b>1 541</b>	<b>1 560</b>	<b>1 577</b>	<b>1 601</b>	<b>1 624</b>	<b>1 638</b>	<b>1 646</b>	<b>1 651</b>
growth in %	1.0	1.8	1.3	1.2	1.1	1.5	1.4	0.9	0.5	0.3
<b>(15–64)</b>	<b>7 414</b>	<b>7 328</b>	<b>7 263</b>	<b>7 188</b>	<b>7 109</b>	<b>7 057</b>	<b>6 998</b>	<b>6 942</b>	<b>6 889</b>	<b>6 842</b>
growth in %	-0.2	-1.2	-0.9	-1.0	-1.1	-0.7	-0.8	-0.8	-0.8	-0.7
<b>(65 and more)</b>	<b>1 599</b>	<b>1 637</b>	<b>1 701</b>	<b>1 768</b>	<b>1 826</b>	<b>1 880</b>	<b>1 932</b>	<b>1 989</b>	<b>2 048</b>	<b>2 103</b>
growth in %	2.7	2.4	3.9	3.9	3.3	3.0	2.8	2.9	3.0	2.7
<b>Old-age pensioners (January 1)<sup>1)</sup></b>	<b>2 108</b>	<b>2 260</b>	<b>2 340</b>	<b>2 341</b>	<b>2 340</b>	<b>2 355</b>	<b>2 377</b>	<b>2 401</b>	<b>2 422</b>	<b>2 432</b>
growth in %	2.1	.	3.5	0.0	0.0	0.6	0.9	1.0	0.9	0.4
<b>Old-age dependency ratios (January 1, in %):</b>										
<b>Demographic<sup>2)</sup></b>	<b>21.6</b>	<b>22.3</b>	<b>23.4</b>	<b>24.6</b>	<b>25.7</b>	<b>26.6</b>	<b>27.6</b>	<b>28.7</b>	<b>29.7</b>	<b>30.7</b>
<b>Under current legislation<sup>3)</sup></b>	<b>36.6</b>	<b>37.4</b>	<b>37.8</b>	<b>38.3</b>	<b>38.8</b>	<b>39.3</b>	<b>39.8</b>	<b>40.2</b>	<b>40.7</b>	<b>40.9</b>
<b>Effective<sup>4)</sup></b>	<b>42.8</b>	<b>45.9</b>	<b>47.9</b>	<b>47.6</b>	<b>47.2</b>	<b>46.9</b>	<b>46.8</b>	<b>46.7</b>	<b>47.1</b>	<b>47.2</b>
<b>Fertility rate</b>	<b>1.493</b>	<b>1.427</b>	<b>1.452</b>	<b>1.456</b>	<b>1.528</b>	<b>1.570</b>	<b>1.46</b>	<b>1.46</b>	<b>1.47</b>	<b>1.47</b>
<b>Population increase</b>	<b>-20</b>	<b>19</b>	<b>11</b>	<b>-4</b>	<b>26</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>12</b>
<b>Natural increase</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>-2</b>	<b>4</b>	<b>0</b>	<b>-4</b>	<b>-5</b>	<b>-6</b>	<b>-8</b>
<b>Live births</b>	<b>117</b>	<b>109</b>	<b>109</b>	<b>107</b>	<b>110</b>	<b>111</b>	<b>101</b>	<b>99</b>	<b>98</b>	<b>96</b>
<b>Deaths</b>	<b>107</b>	<b>107</b>	<b>108</b>	<b>109</b>	<b>106</b>	<b>111</b>	<b>105</b>	<b>105</b>	<b>104</b>	<b>104</b>
<b>Net migration</b>	<b>16</b>	<b>17</b>	<b>10</b>	<b>-1</b>	<b>22</b>	<b>16</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>20</b>
<b>Immigration</b>	<b>31</b>	<b>23</b>	<b>30</b>	<b>30</b>	<b>42</b>	<b>35</b>	.	.	.	.
<b>Emigration</b>	<b>15</b>	<b>6</b>	<b>20</b>	<b>31</b>	<b>20</b>	<b>19</b>	.	.	.	.
<b>Census difference</b>	<b>-46</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>

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).

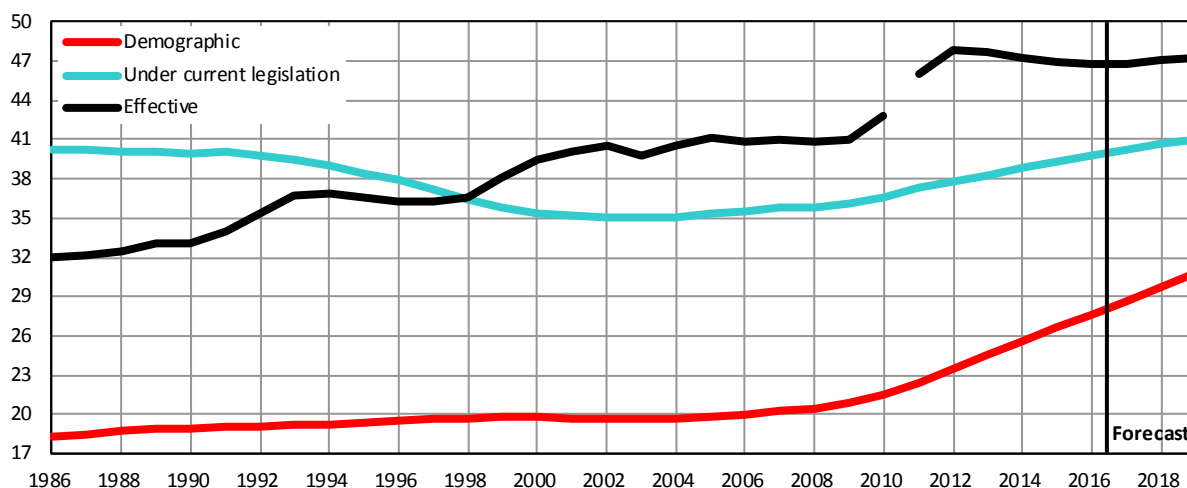
3) Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.

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

Source: Czech Social Security Administration, CZSO, own calculations

**Graph A.5.4: Dependency Ratios**

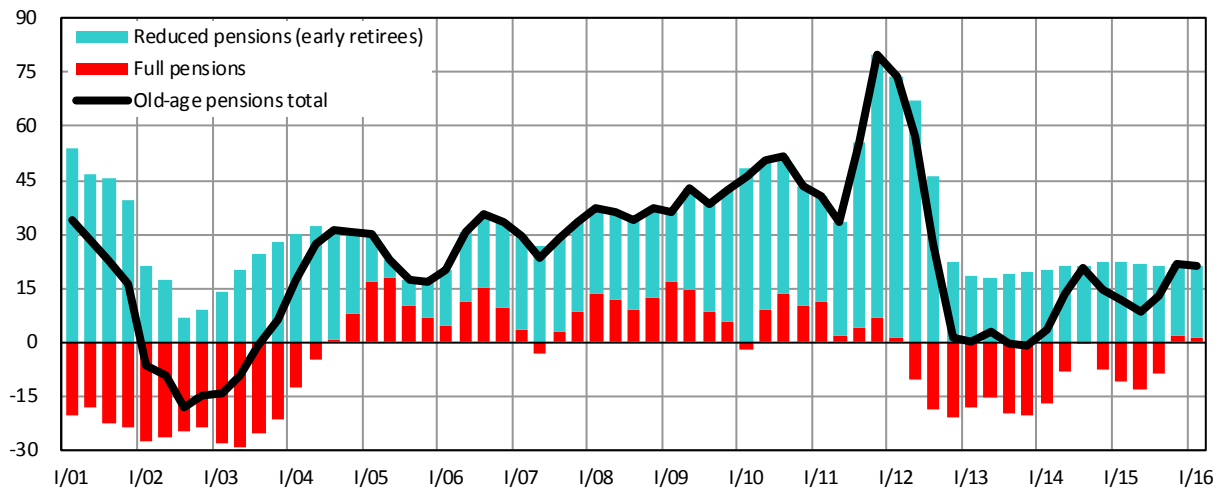
As of January 1, in %, inconsistent between 2010 and 2011 due to transfer of disability pensions to old-age pensions for people over 64 years



Source: CZSO, own calculations

### Graph A.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, own calculations

## B Economic Cycle

### B.1 Position within the Economic Cycle

Potential product, specified on the basis of a calculation by means of the Cobb-Douglas production function, indicates the level of economic output to be achieved with the average utilization of production factors. The growth of potential product expresses the possibilities for sustainable growth of the economy without giving rise to imbalances. It can be broken down into contributions of the labour force, capital stock, and total factor productivity. The output gap identifies the cyclical position of the economy and expresses the relationship between actual and potential product. The concepts of potential product and output gap are used to analyse the economic cycle and to calculate the structural balance of public budgets.

With respect to the revision of the data base (for more details see Chapter C.1), there was a certain shift in the results of calculations of the cyclical position of the Czech economy. According to the new data, the negative **output gap** closed already at the beginning of 2015 (see Graph B.1.1). Approximately since the second quarter of 2015, the economy has been under the conditions of a slightly positive, though not yet extending, output gap. We estimate that the output gap was 0.7% of potential product in the first quarter of 2016. This position of the economy can be assessed positively, as it results in effective utilization of production factors.

In individual sectors of the economy, the cyclical position manifests itself in various manners. Some symptoms of overheating can already be seen on the labour market. Since the beginning of 2014, the unemployment rate (LFS) has remained below its long-term average and has been further decreasing. For several months, moreover, it has been the lowest in the EU. The number of vacancies recorded by the Ministry of Labour and Social Affairs highly exceeds the average level and shows considerable increases in a YoY comparison. In the case of some professions or regions, mismatches between supply and demand have been manifesting themselves more and more, and filling vacancies is becoming a difficult task. This fact is reflected in an acceleration of wage growth.

In contrast, it is not yet possible to observe any manifestations of a slightly positive output gap in consumer price development. However, this is caused by a decrease in the prices of imported goods, in particular of fuels, whose impact on inflation is stronger than the impact of only weak (for the time being) demand pressures. Inflation thus continues to be very low, even if the YoY growth of core inflation has already been reaching approximately 1% for over a year.

With respect to the forecast economic growth, widening of the positive output gap should only be gradual in the coming period. However, any further stimulation of the economy by economic policies could already, in particular in the wage sphere, help sow the seeds of future macroeconomic imbalances.

Since 2014, the YoY growth of **potential product** has evidently been accelerating. According to our calculations, it reached 2.1% in the first quarter of 2016, which we consider to be close to the long-term growth possibilities of the Czech economy.

The main driver of acceleration of potential growth is **total factor productivity**. The contribution of its trend component, derived by the Hodrick-Prescott filter, increased from a minimum of 0.3 pp during the recession in 2012 to 1.4 pp in the first quarter of 2016.

The decrease or only modest growth of investment in 2008–2013 has contributed to the slowdown of potential product growth. The recent investment wave, supported by efforts for maximal possible drawdown 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 first quarter of 2016.

**Labour supply** is being affected by a long-lasting decrease in the working-age population, caused by the process of population ageing (see Chapter A.5). In the first quarter of 2016, **demographic development** slowed potential product growth by 0.4 pp.

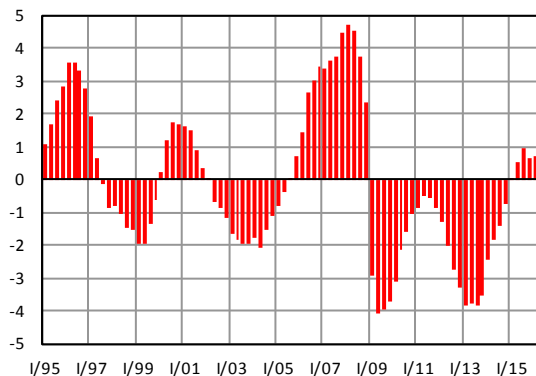
The negative impact of the decline in the population aged 15–64 years on labour supply is more than offset by rising **participation rate**. Its increase during the last four years is exceptional both in the historical context of the Czech economy and when compared to other European countries. Structural factors – an increase in the number of inhabitants in age groups with naturally high participation, labour market flexibility and an increase in the statutory and effective retirement age – are predominating here. The contribution of the participation rate to potential product growth was 0.6 pp in the first quarter of 2016.

From a long-run perspective, the **average normal working time** is shortening in the Czech Republic. As the economic cycle progresses, however, the intensity of this factor's effect is decreasing. In the first 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.



**Graph B.1.1: Output Gap**

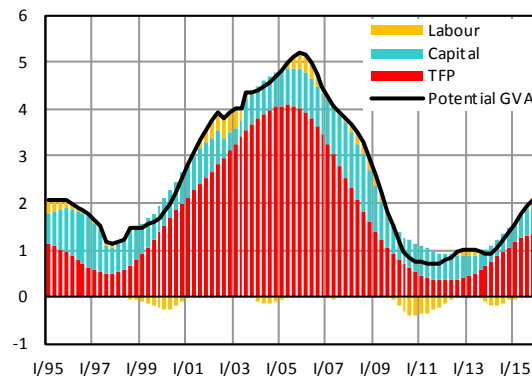
in % of potential product



Source: CZSO, own calculations

**Graph B.1.2: Potential Product**

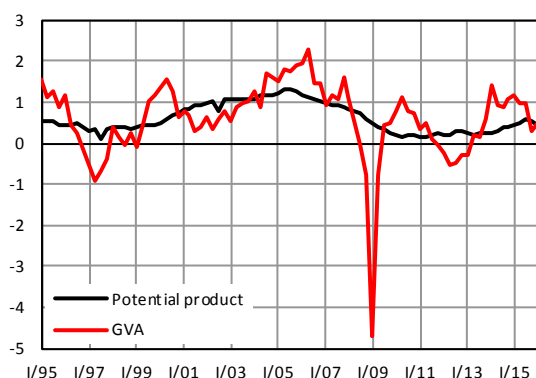
YoY growth rate in %, contributions in percentage points



Source: CZSO, own calculations

**Graph B.1.3: Potential Product and GVA**

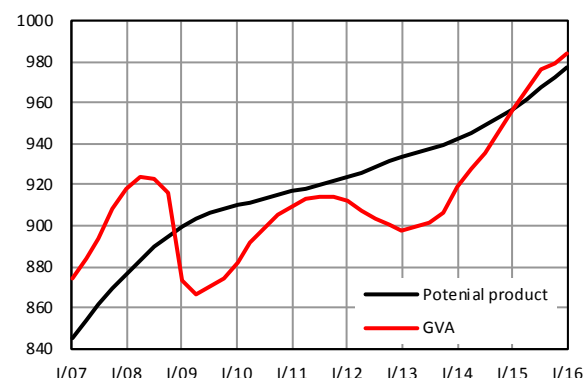
QoQ growth rate, in %



Source: CZSO, own calculations

**Graph B.1.4: Levels of Potential Product and GVA**

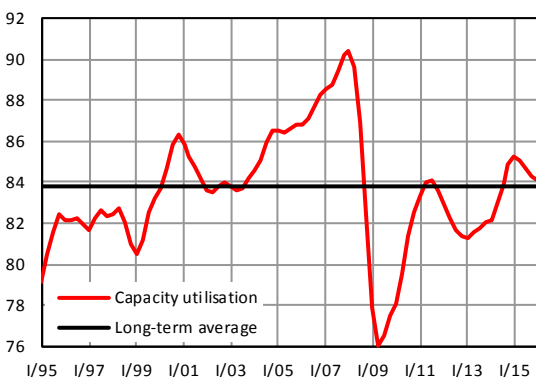
in bill. CZK of 2010



Source: CZSO, own calculations

**Graph B.1.5: Capacity Utilisation in Industry**

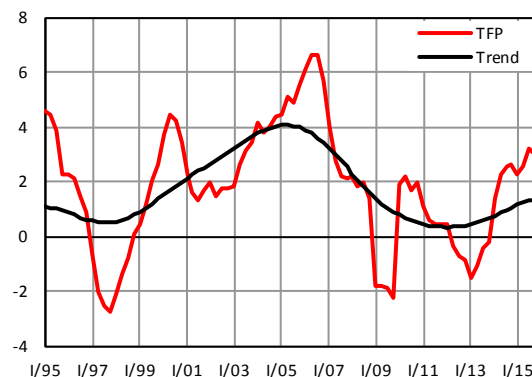
smoothed by Hodrick-Prescott filter, in %



Source: CZSO

**Graph B.1.6: Total Factor Productivity**

YoY growth rate, in %



Source: CZSO, own calculations

**Table B.1: Output Gap and Potential Product**

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
											Q1
<b>Output gap</b>	%	3.8	3.8	-3.7	-2.0	-0.7	-2.3	-3.7	-1.6	0.5	0.7
<b>Potential product</b> <sup>1)</sup>	growth in %	4.0	3.4	2.0	0.9	0.7	0.9	1.0	1.1	1.8	2.1
<b>Contributions:</b>											
<b>Trend TFP</b>	pp	2.9	1.9	1.1	0.7	0.4	0.4	0.6	0.9	1.3	1.4
<b>Fixed assets</b>	pp	1.1	1.2	0.8	0.6	0.6	0.5	0.4	0.4	0.5	0.6
<b>Demography</b> <sup>2)</sup>	pp	0.3	0.3	0.1	-0.2	-0.4	-0.5	-0.5	-0.5	-0.4	-0.4
<b>Participation rate</b>	pp	-0.2	0.0	0.3	0.2	0.3	0.8	0.9	0.5	0.5	0.6
<b>Usually worked hours</b>	pp	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1

1) Based on gross value added  
Source: CZSO, own calculations

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

## B.2 Business Cycle Indicators

Within the so-called business cycle surveys, respondents' views as to the current situation and the short-term outlook are ascertained. The so-called confidence indicators, which are based on the results of these surveys, reflect a wide range of influences shaping the expectations of economic entities and their advantage lies in the quick availability of results. A significant relationship between the confidence indicators and appropriate macroeconomic aggregates enables to assess their course ahead of national accounts publication (questions focused on the evaluation of the current development) or the following quarter (questions focused on the expectations of the future development).

The confidence indicator in industry decreased in the second quarter of 2016, thus suggesting a slowdown of the rate of YoY growth of GVA in industry.

The confidence indicator in construction recorded a slump related to a lower volume of investment from EU funds, and it is already indicating a decrease in GVA in this sector. 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 B.2.2.

Confidence in trade and services, which has been strengthening for a long time, also recorded a minor correction in the second quarter of 2016.

The consumer confidence indicator also developed similarly, decreasing in the second quarter of 2016. It thus implied that the growth dynamics of household

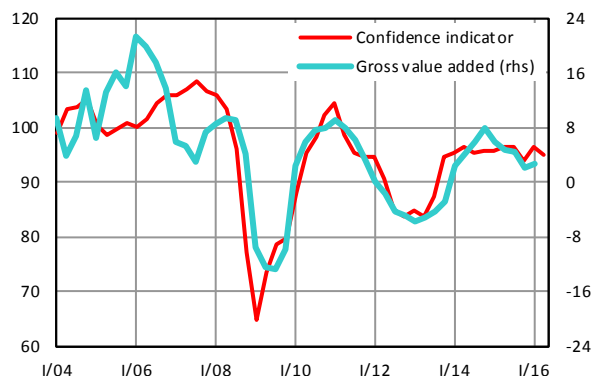
consumption would slow down in the second half of 2016. With respect to the high level of the indicator, however, the slowdown should not be significant. This conclusion results from the fact that the development of the consumer confidence indicator leads household consumption by 1–2 quarters.

As a result, the composite confidence indicator signals, due to the weakening of all its components, a slowdown of the YoY growth dynamics of GVA in the second quarter of 2016.

For the second quarter of 2016, the composite leading indicator signals stabilization of the relative cyclical component of GDP. For the following quarter, however, a slight decrease in the positive output gap is already signalled.

**Graph B.2.1: Confidence and GVA in Industry**

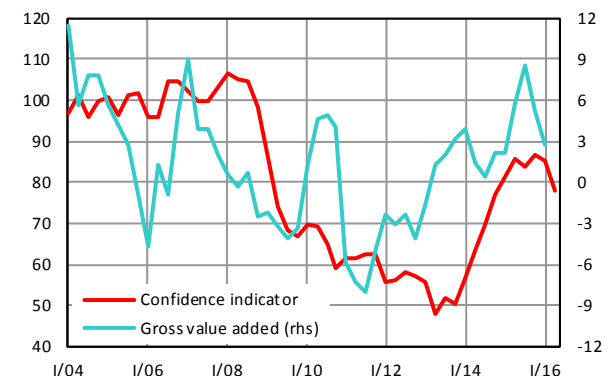
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO

**Graph B.2.2: Confidence and GVA in Construction**

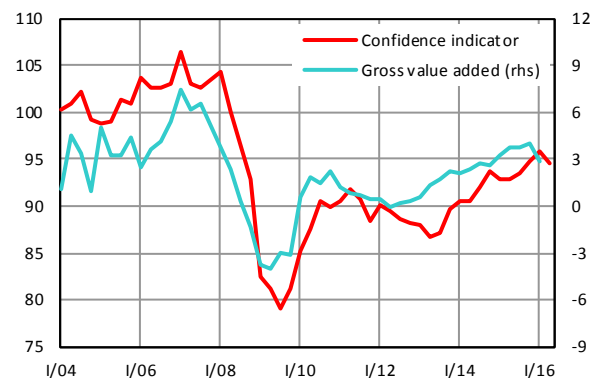
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO

**Graph B.2.3: Confidence and GVA in Trade and Services**

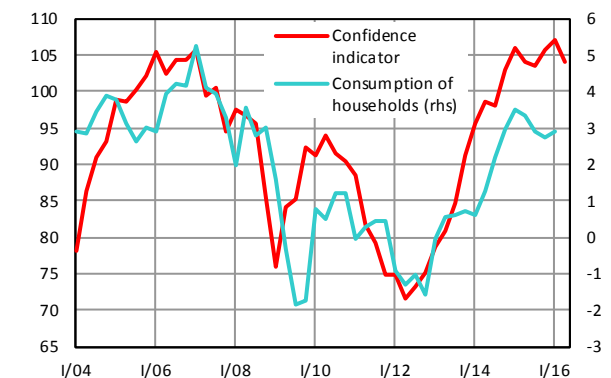
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO, own calculations

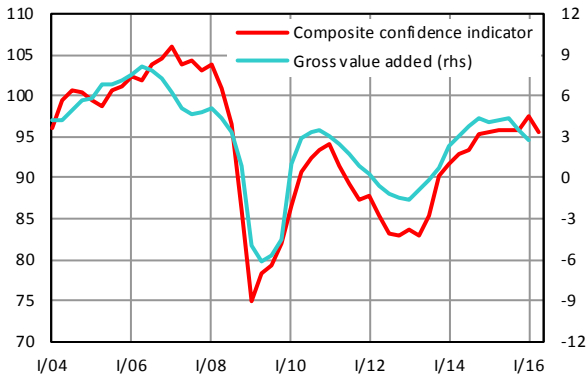
**Graph B.2.4: Consumer Confidence and Consumption**

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



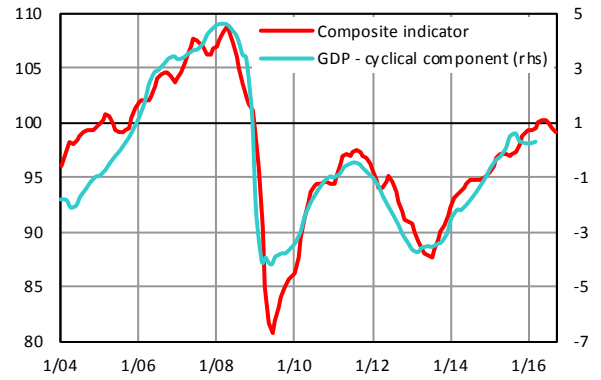
Source: CZSO

**Graph B.2.5: Composite Confidence Indicator and GVA**  
 2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO

**Graph B.2.6: Composite Leading Indicator**  
 2005=100 (lhs), in % of GDP (rhs)



Note: Synchronized with cyclical component of GDP derived from the Cobb-Douglas production function (on a monthly basis)  
 Source: CZSO, own calculations

# C Forecast of the Development of Macroeconomic Indicators

## C.1 Economic Output

### C.1.1 GDP in the First Quarter of 2016

Economic performance measured by real GDP rose by 2.7% YoY (*versus 2.1%*) in the first quarter of 2016, while seasonally adjusted GDP increased by 0.4% QoQ (*versus 0.8%*). Manufacturing and the sections Trade, transportation, accommodation and food service and Financial and insurance activities contributed the most to the 0.5% QoQ growth of gross value added.

The revision of annual and quarterly national accounts for the years 2011 onwards has a considerable impact on the interpretation of deviations of the April Forecast from data for the first quarter of 2016 and on changes in the forecast. In a number of cases revisions were important – e.g. the level of nominal GDP in 2015 increased by CZK 82 billion due to the revision. Starting from data for the year 2014, moreover, the CZSO has been using a new model of seasonal adjustment that already captures a change in the behaviour of traders and producers of tobacco products caused by legislative limitation of the sale of tobacco products bearing tobacco stamps with the old tax rate. In 2014 and 2015, the change of seasonal coefficients resulted in a decrease in QoQ growth of GDP in the first quarter and its increase in the other quarters (growth for the whole year, however, was not influenced by the change in seasonal adjustment).

The YoY increase in GDP in the first quarter of 2016 reflected growing domestic and foreign demand. The main growth driver was final consumption expenditure of both households and the government. Gross fixed capital formation had a neutral impact on GDP, and therefore its contribution to growth was considerably lower compared to 2015. The growth rate of exports decreased, which, however, together with slower growth of domestic demand, contributed to the slowdown of import growth. In total, the balance of foreign trade in goods and services has increased GDP growth dynamics considerably.

Growth of household consumption resulted from rising disposable income amid increasing consumer confidence and a YoY decrease in the savings rate. Expenditure on durable goods was the most dynamically growing component of household consumption, which suggests a higher certainty of households regarding the increasing phase of the economic cycle. This is also assisted by an extraordinarily low unemployment rate. Expenditure on semi-durable goods, services and mainly non-durable goods, which are less sensitive to

economic fluctuations, also contributed to total household consumption growth. Household consumption increased by 2.6% (*versus 2.7%*) in real terms. Government consumption grew by 2.5% (*versus 2.4%*) due to an increase in employment in state administration and higher spending on goods and services.

Growth of gross fixed capital formation, which had been the quickest in 2015 since 2007 thanks to the drawdown of remaining EU funds from the programming period 2007–2013, stopped in the first quarter of 2016. Moreover, the revised data of the CZSO show that growth of investment in the past years was more significant – real growth of gross fixed capital formation was revised upwards in each year in the period 2012–2015, by as much as 1.9 pp in 2014 and 1.7 pp in 2015. Government sector investment decreased slightly in the first quarter of 2016 in YoY terms, while growth of private investment slowed down further (see Graph C.1.8). Gross fixed capital formation was supported by investment in intellectual property products and transport equipment. Investment in dwellings, information and communication technologies and other machinery and equipment had an impact in the opposite direction. Considering the positive contribution of change in inventories to YoY growth of GDP, gross capital formation rose more quickly than investment in fixed capital, specifically by 0.5% (*versus 1.8%*).

Amid a slowdown of exports of both components, the YoY growth of exports of goods and services decreased by 3.5 pp on the quarter to 5.8% (*versus 5.0%*). Imports of goods and services increased by 5.3% (*versus 5.7%*), which was in line with the lower growth of exports and domestic demand.

A higher decrease in import prices compared to export prices resulted in an improvement of the terms of trade of 1.1% (*in line with the estimate*). The trading gain resulting from foreign trade brought about a situation where real gross domestic income, which unlike GDP includes this factor, increased by 3.6% YoY (*versus 3.0%*).

Gross operating surplus grew by 1.2% (*versus 3.0%*), compensation of employees increased by 5.6% (*versus 4.2%*) and net taxes on production were up by 11.1% YoY (*versus 0.9%*). As a result, nominal GDP recorded growth of 3.9% (*versus 3.3%*).

### C.1.2 Estimate for the Second Quarter of 2016

The estimate of GDP and its structure is based on the course of phenomena we already observed in the previous period and commented on above. We estimate that in the second quarter of 2016 real GDP increased by 3.0% YoY (*versus 3.1%*) and by 0.4% QoQ (*versus 0.7%*). A decrease in the QoQ dynamics of GDP is mainly due to the revision of the past data (see above); however, it also reflects the available data about economic development in the second quarter of 2016 (industrial production, retail sales, confidence indicators, etc.)

We suppose that GDP growth was mainly due to the growth of household consumption and foreign trade. Final consumption expenditure of households could have increased by 3.5% (*versus 3.6%*) due to increasing disposable income and still satisfactory consumer confidence, while government consumption could have risen by 2.1% (*unchanged*). According to our estimate, gross fixed capital formation increased by 1.5% (*versus 1.3%*) due to a resumed private investment growth; in contrast, ending the drawdown of EU funds from the previous financial perspective weighed on investment growth.

Foreign trade may have had a positive impact on GDP dynamics to which the continuing growth of export markets and export performance contributed. We estimate that exports of goods and services grew by 5.9% (*versus 5.1%*) and imports, in relation to the development of domestic demand and exports, increased by 5.6% (*versus 6.2%*).

### C.1.3 Forecast for the Years 2016 and 2017

In 2016, the main growth driver should be final consumption expenditure (in particular of households; however, government consumption will also contribute to growth) and net exports. We expect real GDP to grow by 2.2% (*versus 2.5%*) in 2016 and by 2.4% (*versus 2.6%*) in 2017. The chemical industry and power engineering, where the development in the second half of 2015 was influenced by several unfavourable events, could contribute to an acceleration of QoQ growth of GDP in the second half of 2016.

Household consumption will be supported by the growth of real disposable income, declining savings rate and also by consumers' optimistic expectations, as evidenced by the business cycle surveys. For 2016, we expect a gradual increase in the contribution of consumer loans to private consumption resources. Household consumption could thus increase by 3.1% (*unchanged*) in 2016, and its growth could slow down to 2.7% (*unchanged*) in 2017.

We expect that government consumption will grow by 2.2% (*versus 2.1%*) in 2016 and by 1.6% (*unchanged*) in 2017. The main driver of government consumption growth in 2016 will be an increase in compensation of employees, partially related to the planned creation of

up to 13 thousand new jobs (mainly in the regional school system, police and army). In contrast, the contribution of expenditure on goods and services should be lower than in 2015, as higher non-investment expenditure co-financed from EU funds from the programming period 2007–2013 fades out.

In 2016, private investment and government sector investment will influence the growth of gross fixed capital formation in the opposite direction. Eased monetary conditions increasing the availability of loans and the above-average utilization of production capacities in manufacturing (given by the position of the economy in the economic cycle) should contribute to private investment growth. In contrast to the April Forecast, however, we expect slower growth of private investment due to an increased comparison base of 2015, lower growth of gross operating surplus, continuing slowdown of growth of loans to non-financial corporations, and, last but not least, an increase in external risks related to the so-called "Brexit". Government sector investment, which grew dynamically mainly in the second half of 2015 in relation to the drawdown of EU funds from the programming period 2007–2013, should considerably weigh on the growth of total gross fixed capital formation in 2016. The reason is not only the expected slower start of the drawdown from the financial perspective of 2014–2020, but also the impact of the high comparison base of 2015. Gross fixed capital formation could thus decrease by 0.6% (*versus growth of 0.6%*) in 2016. In 2017, its growth should reach 2.8% (*versus 3.0%*), with the positive contribution of both private and government investment.

Gross capital formation should decrease by 1.2% (*versus growth of 1.2%*) in 2016, given a negative contribution of change in inventories to GDP growth. For 2017, we expect the growth of total gross capital formation of 2.6% (*versus 2.8%*) with zero contribution of change in inventories to GDP growth. The forecast has been revised mainly due to the change of the forecast of gross fixed capital formation growth.

We expect that exports of goods and services will grow by 5.6% (*versus 5.5%*) in 2016 and by 4.9% (*versus 5.9%*) in 2017. Lower growth dynamics compared to 2015 mainly reflect the expected slowdown of the growth of export markets and export performance (see Chapter C.4). However, export growth should be supported – similarly as in 2015 – by the low crude oil price (a positive supply impulse not only for the domestic economy, but also for the economies of the CR's main trading partners). On the side of imports of goods and services, we expect the impact of a slower growth of exports and weaker investment demand, which has high import content. Hence, imports will probably grow by 5.2% (*versus 5.6%*) in 2016 and by 5.1% (*versus 6.1%*) in 2017.

**Table C.1.1: Real GDP by Type of Expenditure – yearly***chained volumes, reference year 2010*

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
								<i>Forecast</i>	<i>Forecast</i>	<i>Outlook</i>	<i>Outlook</i>
<b>Gross domestic product</b>	<i>bill. CZK 2010</i>	3 954	4 033	4 001	3 981	4 089	4 275	4 368	4 475	4 584	4 696
	<i>growth in %</i>	<b>2.3</b>	<b>2.0</b>	<b>-0.8</b>	<b>-0.5</b>	<b>2.7</b>	<b>4.5</b>	<b>2.2</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>
<b>Private consumption expenditure <sup>1)</sup></b>	<i>bill. CZK 2010</i>	1 947	1 952	1 929	1 939	1 973	2 034	2 096	2 153	2 204	2 255
	<i>growth in %</i>	<b>1.0</b>	<b>0.3</b>	<b>-1.2</b>	<b>0.5</b>	<b>1.8</b>	<b>3.0</b>	<b>3.1</b>	<b>2.7</b>	<b>2.4</b>	<b>2.3</b>
<b>Government consumption exp.</b>	<i>bill. CZK 2010</i>	810	792	776	796	804	820	838	851	863	874
	<i>growth in %</i>	<b>0.4</b>	<b>-2.2</b>	<b>-2.0</b>	<b>2.5</b>	<b>1.1</b>	<b>2.0</b>	<b>2.2</b>	<b>1.6</b>	<b>1.4</b>	<b>1.3</b>
<b>Gross capital formation</b>	<i>bill. CZK 2010</i>	1 074	1 094	1 051	997	1 083	1 191	1 177	1 207	1 241	1 278
	<i>growth in %</i>	<b>4.4</b>	<b>1.8</b>	<b>-3.9</b>	<b>-5.1</b>	<b>8.6</b>	<b>10.0</b>	<b>-1.2</b>	<b>2.6</b>	<b>2.9</b>	<b>3.0</b>
<b>– gross fixed capital formation</b>	<i>bill. CZK 2010</i>	1 066	1 075	1 042	1 016	1 056	1 151	1 144	1 176	1 211	1 248
	<i>growth in %</i>	<b>1.3</b>	<b>0.9</b>	<b>-3.1</b>	<b>-2.5</b>	<b>3.9</b>	<b>9.0</b>	<b>-0.6</b>	<b>2.8</b>	<b>2.9</b>	<b>3.1</b>
<b>– change in stocks and valuables</b>	<i>bill. CZK 2010</i>	8	18	9	-19	26	40	32	31	31	31
<b>Exports of goods and services</b>	<i>bill. CZK 2010</i>	2 616	2 856	2 978	2 984	3 242	3 492	3 687	3 867	4 059	4 261
	<i>growth in %</i>	<b>14.8</b>	<b>9.2</b>	<b>4.3</b>	<b>0.2</b>	<b>8.7</b>	<b>7.7</b>	<b>5.6</b>	<b>4.9</b>	<b>5.0</b>	<b>5.0</b>
<b>Imports of goods and services</b>	<i>bill. CZK 2010</i>	2 494	2 661	2 732	2 734	3 008	3 256	3 425	3 599	3 780	3 969
	<i>growth in %</i>	<b>14.9</b>	<b>6.7</b>	<b>2.7</b>	<b>0.1</b>	<b>10.1</b>	<b>8.2</b>	<b>5.2</b>	<b>5.1</b>	<b>5.0</b>	<b>5.0</b>
<b>Gross domestic expenditure</b>	<i>bill. CZK 2010</i>	3 831	3 838	3 756	3 733	3 860	4 043	4 109	4 210	4 307	4 405
	<i>growth in %</i>	<b>1.8</b>	<b>0.2</b>	<b>-2.1</b>	<b>-0.6</b>	<b>3.4</b>	<b>4.7</b>	<b>1.6</b>	<b>2.5</b>	<b>2.3</b>	<b>2.3</b>
<b>Methodological discrepancy <sup>2)</sup></b>	<i>bill. CZK 2010</i>	0	0	-1	0	-4	-5	-4	-4	-3	-4
<b>Real gross domestic income</b>	<i>bill. CZK 2010</i>	3 954	3 990	3 942	3 956	4 112	4 303	4 409	4 511	4 620	4 739
	<i>growth in %</i>	<b>1.0</b>	<b>0.9</b>	<b>-1.2</b>	<b>0.4</b>	<b>3.9</b>	<b>4.6</b>	<b>2.5</b>	<b>2.3</b>	<b>2.4</b>	<b>2.6</b>
<b>Contributions to GDP growth <sup>3)</sup></b>											
<b>– gross domestic expenditure</b>	<i>pp</i>	<b>1.7</b>	<b>0.2</b>	<b>-2.1</b>	<b>-0.6</b>	<b>3.2</b>	<b>4.4</b>	<b>1.5</b>	<b>2.3</b>	<b>2.2</b>	<b>2.1</b>
– consumption	<i>pp</i>	<b>0.6</b>	<b>-0.3</b>	<b>-1.0</b>	<b>0.8</b>	<b>1.1</b>	<b>1.8</b>	<b>1.9</b>	<b>1.6</b>	<b>1.4</b>	<b>1.3</b>
– household expenditure	<i>pp</i>	<b>0.5</b>	<b>0.1</b>	<b>-0.6</b>	<b>0.3</b>	<b>0.9</b>	<b>1.5</b>	<b>1.4</b>	<b>1.3</b>	<b>1.1</b>	<b>1.1</b>
– government expenditure	<i>pp</i>	<b>0.1</b>	<b>-0.5</b>	<b>-0.4</b>	<b>0.5</b>	<b>0.2</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>
<b>– gross capital formation</b>	<i>pp</i>	<b>1.2</b>	<b>0.5</b>	<b>-1.1</b>	<b>-1.3</b>	<b>2.1</b>	<b>2.6</b>	<b>-0.3</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>
– gross fixed capital formation	<i>pp</i>	<b>0.4</b>	<b>0.2</b>	<b>-0.8</b>	<b>-0.6</b>	<b>1.0</b>	<b>2.3</b>	<b>-0.1</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>
– change in stocks	<i>pp</i>	<b>0.8</b>	<b>0.3</b>	<b>-0.2</b>	<b>-0.7</b>	<b>1.1</b>	<b>0.3</b>	<b>-0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>– foreign balance</b>	<i>pp</i>	<b>0.5</b>	<b>1.8</b>	<b>1.3</b>	<b>0.1</b>	<b>-0.5</b>	<b>0.1</b>	<b>0.7</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>
– external balance of goods	<i>pp</i>	<b>0.8</b>	<b>2.0</b>	<b>1.4</b>	<b>0.1</b>	<b>-0.1</b>	<b>-0.6</b>	<b>0.6</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>
– external balance of services	<i>pp</i>	<b>-0.2</b>	<b>-0.2</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.4</b>	<b>0.7</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>Gross value added</b>	<i>bill. CZK 2010</i>	3 583	3 655	3 624	3 606	3 729	3 876	.	.	.	.
	<i>growth in %</i>	<b>2.9</b>	<b>2.0</b>	<b>-0.8</b>	<b>-0.5</b>	<b>3.4</b>	<b>3.9</b>	.	.	.	.
<b>Net taxes and subsidies on products</b>	<i>bill. CZK 2010</i>	371	378	376	375	363	399	.	.	.	.

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, own calculations

**Table C.1.2: Real GDP by Type of Expenditure – quarterly***chained volumes, reference year 2010*

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						<i>Prelim.</i>	<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>
<b>Gross domestic product</b>	<i>bill. CZK 2010</i>	996	1 074	1 093	1 112	1 022	1 106	1 106	1 134
	<i>growth in %</i>	<b>4.6</b>	<b>5.0</b>	<b>4.2</b>	<b>4.3</b>	<b>2.7</b>	<b>3.0</b>	<b>1.3</b>	<b>1.9</b>
	<i>growth in % <sup>1)</sup></i>	<b>4.6</b>	<b>5.0</b>	<b>4.8</b>	<b>4.0</b>	<b>3.0</b>	<b>2.0</b>	<b>1.6</b>	<b>1.9</b>
	<i>QoQ in % <sup>1)</sup></i>	<b>1.4</b>	<b>1.3</b>	<b>1.0</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>
<b>Private consumption expenditure <sup>2)</sup></b>	<i>bill. CZK 2010</i>	484	507	514	528	497	525	529	545
	<i>growth in %</i>	<b>3.6</b>	<b>3.3</b>	<b>2.4</b>	<b>2.9</b>	<b>2.6</b>	<b>3.5</b>	<b>2.9</b>	<b>3.2</b>
<b>Government consumption exp.</b>	<i>bill. CZK 2010</i>	189	199	201	231	194	203	205	236
	<i>growth in %</i>	<b>1.3</b>	<b>1.3</b>	<b>3.3</b>	<b>1.9</b>	<b>2.5</b>	<b>2.1</b>	<b>2.1</b>	<b>2.0</b>
<b>Gross capital formation</b>	<i>bill. CZK 2010</i>	242	308	331	310	244	311	325	297
	<i>growth in %</i>	<b>12.7</b>	<b>14.3</b>	<b>8.8</b>	<b>5.3</b>	<b>0.5</b>	<b>1.2</b>	<b>-1.9</b>	<b>-4.2</b>
<b>– gross fixed capital formation</b>	<i>bill. CZK 2010</i>	250	278	299	324	250	282	291	321
	<i>growth in %</i>	<b>5.4</b>	<b>10.5</b>	<b>10.1</b>	<b>9.5</b>	<b>-0.1</b>	<b>1.5</b>	<b>-2.4</b>	<b>-1.0</b>
<b>– change in stocks and valuables</b>	<i>bill. CZK 2010</i>	-8	29	32	-14	-6	29	33	-24
<b>Exports of goods and services</b>	<i>bill. CZK 2010</i>	854	873	852	913	904	924	895	964
	<i>growth in %</i>	<b>7.6</b>	<b>7.5</b>	<b>6.3</b>	<b>9.3</b>	<b>5.8</b>	<b>5.9</b>	<b>5.1</b>	<b>5.5</b>
<b>Imports of goods and services</b>	<i>bill. CZK 2010</i>	775	810	803	868	816	856	846	907
	<i>growth in %</i>	<b>8.9</b>	<b>8.9</b>	<b>6.8</b>	<b>8.4</b>	<b>5.3</b>	<b>5.6</b>	<b>5.4</b>	<b>4.4</b>
<b>Gross domestic expenditure</b>	<i>bill. CZK 2010</i>	916	1 013	1 045	1 069	934	1 038	1 058	1 078
	<i>growth in %</i>	<b>5.3</b>	<b>5.9</b>	<b>4.5</b>	<b>3.4</b>	<b>2.0</b>	<b>2.5</b>	<b>1.3</b>	<b>0.8</b>
<b>Methodological discrepancy <sup>3)</sup></b>	<i>bill. CZK 2010</i>	1	-1	-3	-2	0	-1	-2	-1
<b>Real gross domestic income</b>	<i>bill. CZK 2010</i>	1 003	1 079	1 099	1 122	1 040	1 117	1 117	1 135
	<i>growth in %</i>	<b>5.2</b>	<b>4.8</b>	<b>4.2</b>	<b>4.5</b>	<b>3.6</b>	<b>3.5</b>	<b>1.7</b>	<b>1.2</b>
<b>Gross value added</b>	<i>bill. CZK 2010</i>	909	974	988	1 006	931	.	.	.
	<i>growth in %</i>	<b>4.1</b>	<b>4.1</b>	<b>3.7</b>	<b>3.9</b>	<b>2.4</b>	.	.	.
	<i>growth in % <sup>1)</sup></i>	<b>4.1</b>	<b>4.2</b>	<b>4.3</b>	<b>3.5</b>	<b>2.8</b>	.	.	.
	<i>QoQ in % <sup>1)</sup></i>	<b>1.2</b>	<b>1.0</b>	<b>1.0</b>	<b>0.3</b>	<b>0.5</b>	.	.	.
<b>Net taxes and subsidies on products</b>	<i>bill. CZK 2010</i>	88	101	105	107	92	.	.	.

1) From seasonally and working day adjusted data

2) 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, own calculations

**Table C.1.3: Nominal GDP by Type of Expenditure – yearly**

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
								Forecast	Forecast	Outlook	Outlook
<b>Gross domestic product</b>	<i>bill. CZK</i>	<b>3 954</b>	<b>4 034</b>	<b>4 060</b>	<b>4 098</b>	<b>4 314</b>	<b>4 555</b>	<b>4 681</b>	<b>4 846</b>	<b>5 027</b>	<b>5 232</b>
	<i>growth in %</i>	0.8	2.0	0.6	0.9	5.3	5.6	2.8	3.5	3.7	4.1
<b>Private consumption expenditure <sup>1)</sup></b>	<i>bill. CZK</i>	<b>1 947</b>	<b>1 979</b>	<b>1 998</b>	<b>2 025</b>	<b>2 074</b>	<b>2 140</b>	<b>2 210</b>	<b>2 296</b>	<b>2 388</b>	<b>2 486</b>
	<i>growth in %</i>	1.5	1.6	1.0	1.4	2.4	3.2	3.3	3.9	4.0	4.1
<b>Government consumption exp.</b>	<i>bill. CZK</i>	<b>810</b>	<b>813</b>	<b>804</b>	<b>826</b>	<b>849</b>	<b>890</b>	<b>922</b>	<b>956</b>	<b>980</b>	<b>1 004</b>
	<i>growth in %</i>	-0.3	0.4	-1.1	2.7	2.8	4.8	3.6	3.7	2.5	2.4
<b>Gross capital formation</b>	<i>bill. CZK</i>	<b>1 074</b>	<b>1 087</b>	<b>1 063</b>	<b>1 011</b>	<b>1 116</b>	<b>1 246</b>	<b>1 237</b>	<b>1 283</b>	<b>1 338</b>	<b>1 400</b>
	<i>growth in %</i>	3.3	1.2	-2.2	-4.9	10.4	11.6	-0.7	3.7	4.3	4.6
<b>– gross fixed capital formation</b>	<i>bill. CZK</i>	<b>1 066</b>	<b>1 067</b>	<b>1 052</b>	<b>1 027</b>	<b>1 084</b>	<b>1 198</b>	<b>1 199</b>	<b>1 248</b>	<b>1 304</b>	<b>1 366</b>
	<i>growth in %</i>	0.2	0.1	-1.4	-2.4	5.5	10.5	0.1	4.1	4.5	4.7
<b>– change in stocks and valuables</b>	<i>bill. CZK</i>	<b>8</b>	<b>20</b>	<b>11</b>	<b>-16</b>	<b>32</b>	<b>48</b>	<b>38</b>	<b>35</b>	<b>34</b>	<b>34</b>
<b>External balance</b>	<i>bill. CZK</i>	<b>123</b>	<b>154</b>	<b>195</b>	<b>236</b>	<b>275</b>	<b>279</b>	<b>312</b>	<b>311</b>	<b>321</b>	<b>343</b>
<b>– exports of goods and services</b>	<i>bill. CZK</i>	<b>2 616</b>	<b>2 876</b>	<b>3 092</b>	<b>3 150</b>	<b>3 561</b>	<b>3 778</b>	<b>3 888</b>	<b>4 052</b>	<b>4 229</b>	<b>4 445</b>
	<i>growth in %</i>	13.4	9.9	7.5	1.9	13.0	6.1	2.9	4.2	4.4	5.1
<b>– imports of goods and services</b>	<i>bill. CZK</i>	<b>2 494</b>	<b>2 722</b>	<b>2 897</b>	<b>2 914</b>	<b>3 286</b>	<b>3 499</b>	<b>3 575</b>	<b>3 741</b>	<b>3 908</b>	<b>4 103</b>
	<i>growth in %</i>	15.8	9.1	6.5	0.6	12.8	6.5	2.2	4.6	4.5	5.0
<b>Gross national income</b>	<i>bill. CZK</i>	<b>3 656</b>	<b>3 728</b>	<b>3 808</b>	<b>3 854</b>	<b>4 022</b>	<b>4 255</b>	<b>4 392</b>	<b>4 557</b>	<b>4 722</b>	<b>4 903</b>
	<i>growth in %</i>	0.3	2.0	2.1	1.2	4.4	5.8	3.2	3.7	3.6	3.8
<b>Primary income balance</b>	<i>bill. CZK</i>	<b>-297</b>	<b>-305</b>	<b>-252</b>	<b>-245</b>	<b>-292</b>	<b>-299</b>	<b>-288</b>	<b>-289</b>	<b>-305</b>	<b>-329</b>

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

Source: CZSO, own calculations

**Table C.1.4: Nominal GDP by Type of Expenditure – quarterly**

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Prelim.	Estimate	Forecast	Forecast
<b>Gross domestic product</b>	<i>bill. CZK</i>	<b>1 053</b>	<b>1 143</b>	<b>1 163</b>	<b>1 196</b>	<b>1 094</b>	<b>1 183</b>	<b>1 185</b>	<b>1 218</b>
	<i>growth in %</i>	6.3	6.1	5.0	5.0	3.9	3.5	2.0	1.8
<b>Private consumption expenditure <sup>1)</sup></b>	<i>bill. CZK</i>	<b>508</b>	<b>535</b>	<b>542</b>	<b>556</b>	<b>522</b>	<b>553</b>	<b>558</b>	<b>577</b>
	<i>growth in %</i>	3.7	3.7	2.4	2.9	2.7	3.4	3.1	3.8
<b>Government consumption exp.</b>	<i>bill. CZK</i>	<b>199</b>	<b>214</b>	<b>217</b>	<b>260</b>	<b>207</b>	<b>222</b>	<b>225</b>	<b>268</b>
	<i>growth in %</i>	4.7	4.4	6.7	3.6	4.4	3.7	3.7	2.8
<b>Gross capital formation</b>	<i>bill. CZK</i>	<b>253</b>	<b>322</b>	<b>346</b>	<b>324</b>	<b>256</b>	<b>327</b>	<b>340</b>	<b>314</b>
	<i>growth in %</i>	14.9	16.5	10.1	6.3	1.1	1.3	-1.7	-3.1
<b>– gross fixed capital formation</b>	<i>bill. CZK</i>	<b>261</b>	<b>290</b>	<b>311</b>	<b>336</b>	<b>261</b>	<b>296</b>	<b>306</b>	<b>336</b>
	<i>growth in %</i>	7.4	12.7	11.5	10.3	0.2	2.0	-1.6	0.0
<b>– change in stocks and valuables</b>	<i>bill. CZK</i>	<b>-7</b>	<b>32</b>	<b>35</b>	<b>-12</b>	<b>-5</b>	<b>31</b>	<b>35</b>	<b>-22</b>
<b>External balance</b>	<i>bill. CZK</i>	<b>93</b>	<b>72</b>	<b>58</b>	<b>56</b>	<b>109</b>	<b>82</b>	<b>62</b>	<b>59</b>
<b>– exports of goods and services</b>	<i>bill. CZK</i>	<b>933</b>	<b>953</b>	<b>917</b>	<b>975</b>	<b>952</b>	<b>976</b>	<b>951</b>	<b>1 009</b>
	<i>growth in %</i>	7.4	7.2	3.7	6.1	2.0	2.4	3.7	3.5
<b>– imports of goods and services</b>	<i>bill. CZK</i>	<b>840</b>	<b>881</b>	<b>859</b>	<b>919</b>	<b>843</b>	<b>894</b>	<b>888</b>	<b>950</b>
	<i>growth in %</i>	8.0	8.9	4.3	5.0	0.4	1.4	3.5	3.4

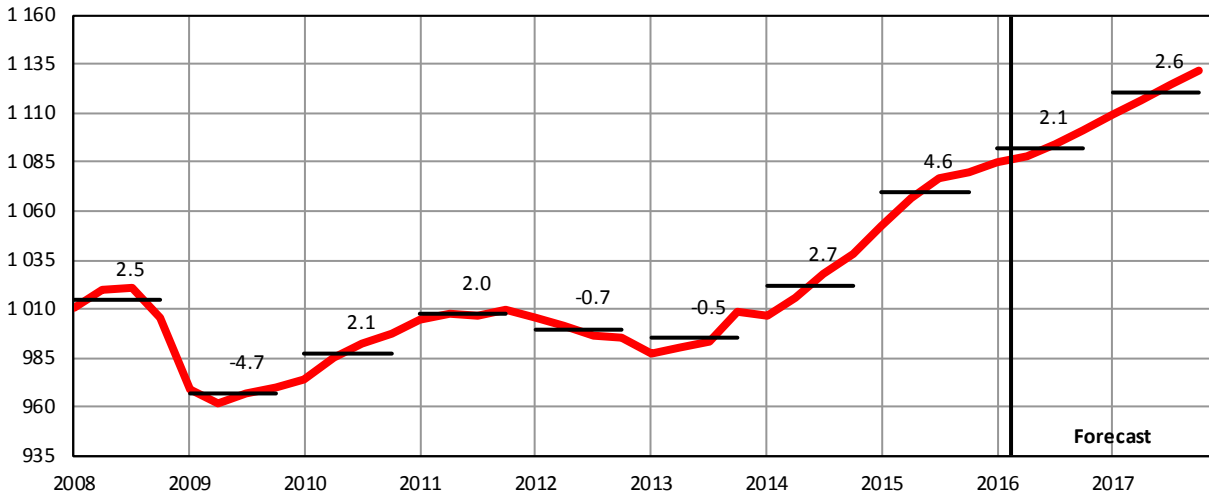
1) The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.

Source: CZSO, own calculations



### Graph C.1.1: Gross Domestic Product (real)

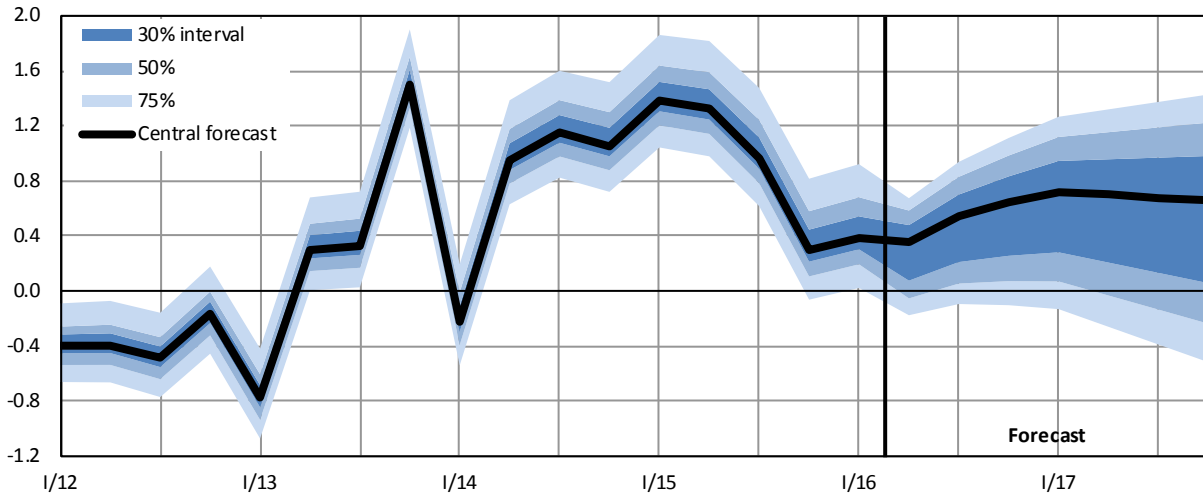
bill. CZK in const. prices of 2010, seasonally adjusted, black lines with labels show the average level and growth rate of GDP in the given year



Source: CZSO, own calculations

### Graph C.1.2: Gross Domestic Product (real)

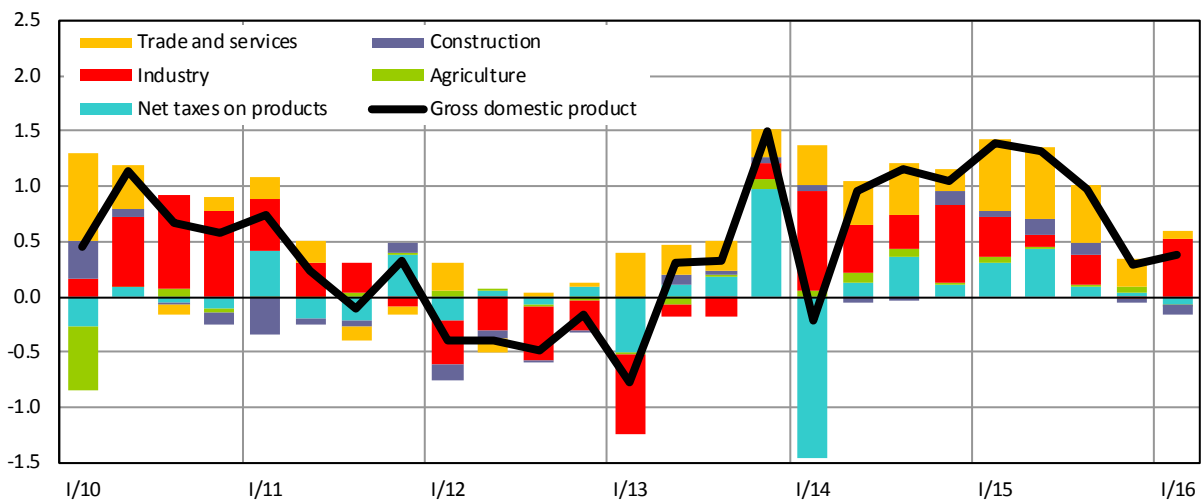
QoQ growth rate, in %, seasonally adjusted, past probability distribution reflects the actual distribution of data revisions, future probability distribution is based upon the MoF's forecasting performance



Source: CZSO, own calculations

### Graph C.1.3: Resources of Gross Domestic Product

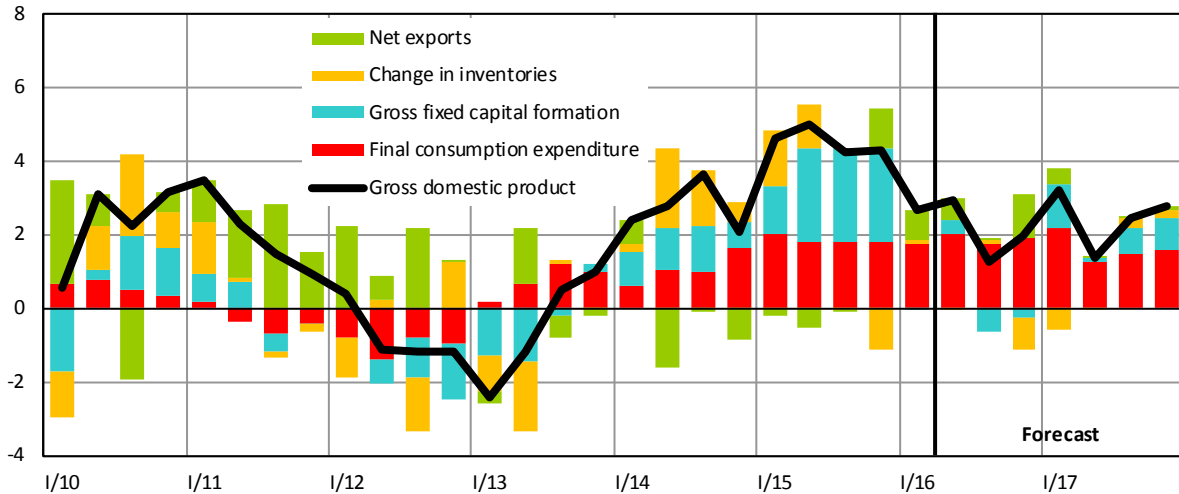
QoQ real growth rate of GDP in %, contributions of individual components in percentage points, seasonally adjusted



Source: CZSO, own calculations

### Graph C.1.4: Gross Domestic Product by Type of Expenditure

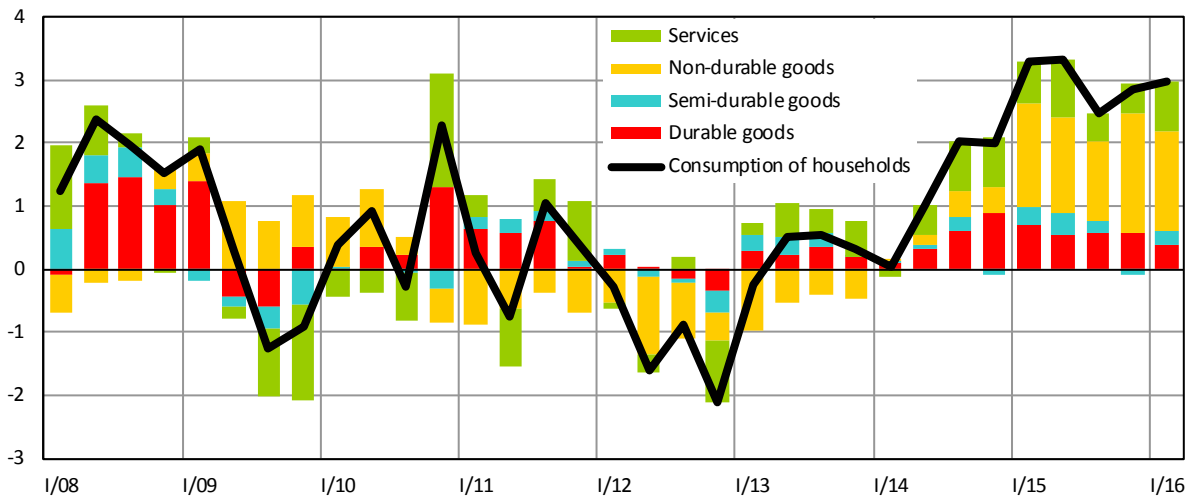
YoY real growth rate of GDP in %, contributions of individual components in percentage points



Source: CZSO, own calculations

### Graph C.1.5: Consumption of Households

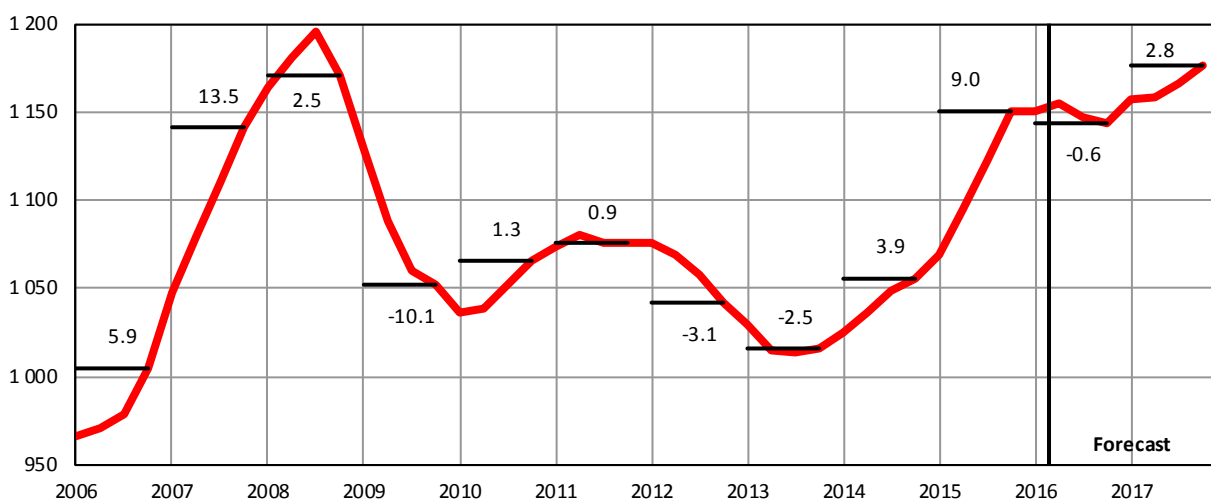
YoY real growth rate in %, contributions of individual components in percentage points



Source: CZSO, own calculations

### Graph C.1.6: Gross Fixed Capital Formation

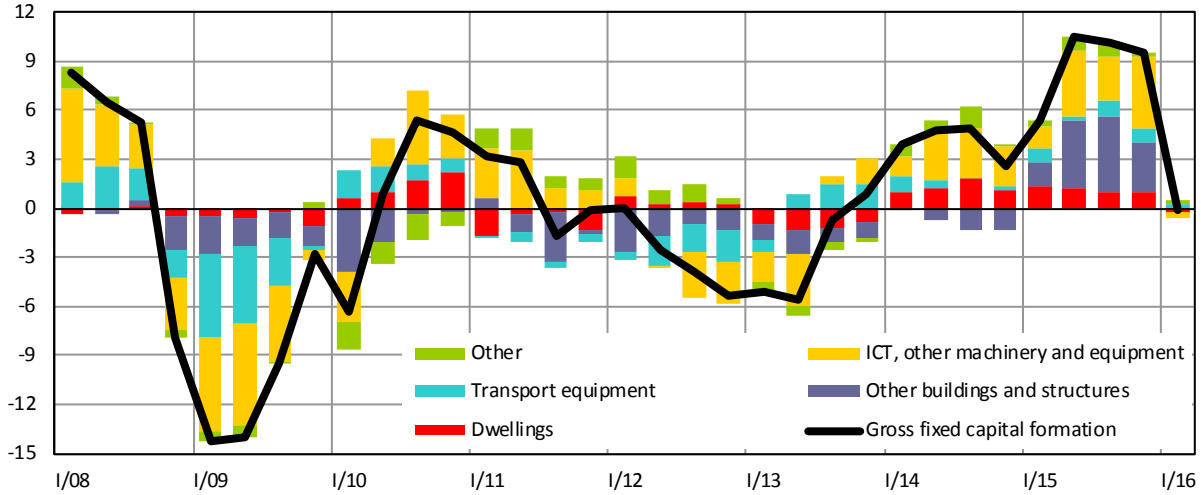
yearly moving sums, bill. CZK in const. prices of 2010, black lines with labels show the average level and growth rate of GFCF in the given year



Source: CZSO, own calculations

**Graph C.1.7: Gross Fixed Capital Formation by Type of Expenditure**

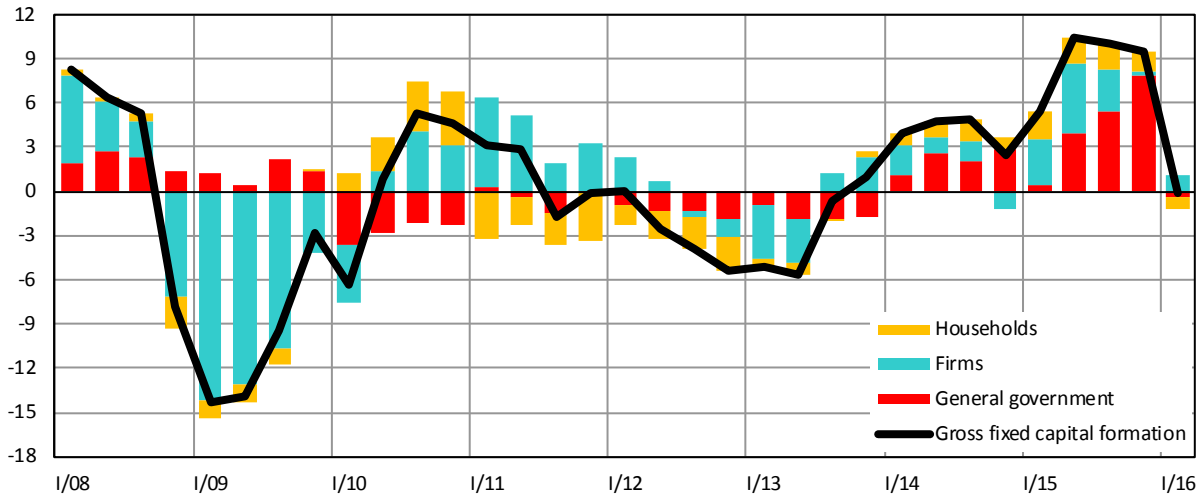
YoY real growth rate in %, contributions of individual components in percentage points



Source: CZSO, own calculations

**Graph C.1.8: Gross Fixed Capital Formation by Sector**

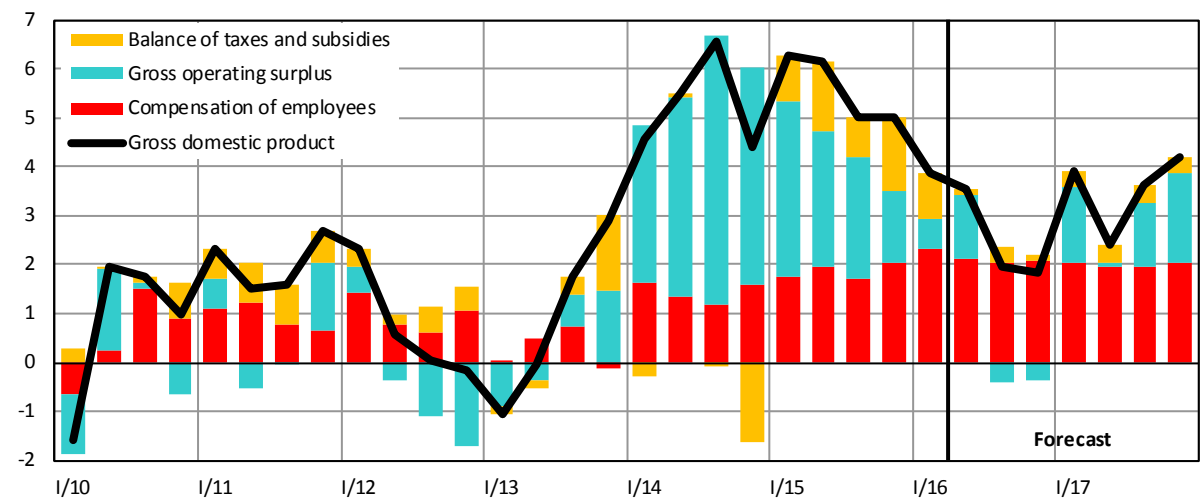
YoY real growth rate in %, contributions of individual sectors in percentage points



Source: CZSO, own calculations

**Graph C.1.9: Nominal Gross Domestic Product**

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



Source: CZSO, own calculations

**Table C.1.5: GDP by Type of Income – yearly**

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
								Forecast	Forecast	Outlook	Outlook
<b>GDP</b>	<i>bill. CZK</i>	<b>3 954</b>	<b>4 034</b>	<b>4 060</b>	<b>4 098</b>	<b>4 314</b>	<b>4 555</b>	<b>4 681</b>	<b>4 846</b>	<b>5 027</b>	<b>5 232</b>
	<i>growth in %</i>	0.8	2.0	0.6	0.9	5.3	5.6	2.8	3.5	3.7	4.1
<b>Balance of taxes and subsidies</b>	<i>bill. CZK</i>	<b>341</b>	<b>369</b>	<b>385</b>	<b>402</b>	<b>381</b>	<b>433</b>	<b>450</b>	<b>466</b>	<b>480</b>	<b>491</b>
	<i>% of GDP</i>	8.6	9.1	9.5	9.8	8.8	9.5	9.6	9.6	9.5	9.4
	<i>growth in %</i>	3.5	8.4	4.4	4.2	-5.1	13.4	3.9	3.6	3.0	2.4
<b>– Taxes on production and imports</b>	<i>bill. CZK</i>	<b>447</b>	<b>488</b>	<b>508</b>	<b>528</b>	<b>518</b>	<b>566</b>	.	.	.	.
	<i>growth in %</i>	4.0	9.2	4.1	3.9	-1.8	9.3	.	.	.	.
<b>– Subsidies on production</b>	<i>bill. CZK</i>	<b>107</b>	<b>119</b>	<b>123</b>	<b>126</b>	<b>137</b>	<b>134</b>	.	.	.	.
	<i>growth in %</i>	5.7	11.8	3.0	2.7	8.5	-2.2	.	.	.	.
<b>Compensation of employees (domestic concept)</b>	<i>bill. CZK</i>	<b>1 589</b>	<b>1 626</b>	<b>1 665</b>	<b>1 676</b>	<b>1 735</b>	<b>1 815</b>	<b>1 912</b>	<b>2 006</b>	<b>2 096</b>	<b>2 190</b>
	<i>% of GDP</i>	40.2	40.3	41.0	40.9	40.2	39.9	40.9	41.4	41.7	41.9
	<i>growth in %</i>	1.3	2.3	2.4	0.7	3.5	4.7	5.3	4.9	4.5	4.5
<b>– Wages and salaries</b>	<i>bill. CZK</i>	<b>1 209</b>	<b>1 237</b>	<b>1 269</b>	<b>1 275</b>	<b>1 321</b>	<b>1 379</b>	<b>1 453</b>	<b>1 524</b>	<b>1 592</b>	<b>1 664</b>
	<i>growth in %</i>	0.6	2.3	2.6	0.5	3.6	4.4	5.3	4.9	4.5	4.5
<b>– Social security contributions</b>	<i>bill. CZK</i>	<b>380</b>	<b>390</b>	<b>396</b>	<b>402</b>	<b>414</b>	<b>436</b>	<b>460</b>	<b>482</b>	<b>504</b>	<b>526</b>
	<i>growth in %</i>	3.7	2.5	1.6	1.4	3.1	5.4	5.3	4.9	4.5	4.5
<b>Gross operating surplus</b>	<i>bill. CZK</i>	<b>2 024</b>	<b>2 038</b>	<b>2 010</b>	<b>2 020</b>	<b>2 198</b>	<b>2 307</b>	<b>2 319</b>	<b>2 374</b>	<b>2 451</b>	<b>2 550</b>
	<i>% of GDP</i>	51.2	50.5	49.5	49.3	50.9	50.6	49.5	49.0	48.8	48.7
	<i>growth in %</i>	0.0	0.7	-1.4	0.5	8.8	5.0	0.5	2.4	3.2	4.0
<b>– Consumption of capital</b>	<i>bill. CZK</i>	<b>850</b>	<b>864</b>	<b>880</b>	<b>906</b>	<b>939</b>	<b>981</b>	<b>999</b>	<b>1 030</b>	<b>1 072</b>	<b>1 116</b>
	<i>growth in %</i>	1.0	1.7	1.8	3.0	3.6	4.5	1.8	3.1	4.1	4.1
<b>– Net operating surplus</b>	<i>bill. CZK</i>	<b>1 174</b>	<b>1 174</b>	<b>1 130</b>	<b>1 114</b>	<b>1 259</b>	<b>1 325</b>	<b>1 320</b>	<b>1 344</b>	<b>1 379</b>	<b>1 435</b>
	<i>growth in %</i>	-0.8	0.0	-3.8	-1.4	13.0	5.3	-0.4	1.8	2.6	4.0

Source: CZSO, own calculations

**Table C.1.6: GDP by Type of Income – quarterly**

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Prelim.	Estimate	Forecast	Forecast
<b>GDP</b>	<i>bill. CZK</i>	<b>1 053</b>	<b>1 143</b>	<b>1 163</b>	<b>1 196</b>	<b>1 094</b>	<b>1 183</b>	<b>1 185</b>	<b>1 218</b>
	<i>growth in %</i>	6.3	6.1	5.0	5.0	3.9	3.5	2.0	1.8
<b>Balance of taxes and subsidies</b>	<i>bill. CZK</i>	<b>90</b>	<b>114</b>	<b>119</b>	<b>110</b>	<b>100</b>	<b>115</b>	<b>123</b>	<b>111</b>
	<i>growth in %</i>	11.7	15.5	8.3	18.8	11.1	1.2	3.4	1.4
<b>Compensation of employees (domestic concept)</b>	<i>bill. CZK</i>	<b>434</b>	<b>450</b>	<b>447</b>	<b>483</b>	<b>459</b>	<b>475</b>	<b>471</b>	<b>508</b>
	<i>growth in %</i>	4.2	4.9	4.5	5.0	5.6	5.4	5.3	5.1
<b>– Wages and salaries</b>	<i>bill. CZK</i>	<b>328</b>	<b>341</b>	<b>342</b>	<b>369</b>	<b>346</b>	<b>360</b>	<b>360</b>	<b>388</b>
	<i>growth in %</i>	3.6	4.6	4.7	4.7	5.6	5.4	5.3	5.1
<b>– Social security contributions</b>	<i>bill. CZK</i>	<b>107</b>	<b>109</b>	<b>106</b>	<b>114</b>	<b>113</b>	<b>115</b>	<b>111</b>	<b>120</b>
	<i>growth in %</i>	5.9	6.1	3.6	5.9	5.6	5.4	5.3	5.1
<b>Gross operating surplus</b>	<i>bill. CZK</i>	<b>528</b>	<b>579</b>	<b>596</b>	<b>603</b>	<b>535</b>	<b>594</b>	<b>592</b>	<b>599</b>
	<i>growth in %</i>	7.2	5.4	4.8	2.8	1.2	2.6	-0.8	-0.7

Source: CZSO, own calculations

## C.2 Prices

### C.2.1 Consumer Prices

The Czech economy remains characterized by low inflation. Its causes lie in the external environment and include mainly a still considerable YoY decrease in the crude oil price and decreasing producer prices in the Euro area. In contrast, domestic factors have a pro-inflationary effect.

Growth in consumer prices reached 0.1% YoY (*versus* 0.3%) in June 2016. The contribution of administrative measures was 0.1 pp and was mainly due to the contribution of excise duties.

The reduction in YoY inflation due to a decrease in the crude oil price since the end of 2014 is also well apparent from the contributions of individual divisions of the consumer basket. The contribution of the transport division has been negative since December 2014. In June 2016, it reached –0.2 pp, with fuels being cheaper by 10.2% YoY. Growth of consumer prices was even more mitigated by the food and non-alcoholic beverages division (contribution of –0.5 pp). In contrast, the alcoholic beverages and tobacco division made the highest contribution to price level growth with the contribution of 0.4 pp.

**In 2016**, the average inflation rate should reach a low level, similarly as in the last two years.

Out of the administrative measures, an increase in the excise duty on tobacco products affected consumer prices mainly in the first quarter of 2016. In the second quarter of 2016, the most significant was a decrease in natural gas prices (contribution of –0.2 pp), which the CZSO reports as a regulated price. We expect that there will be further decrease in its price in the second half of 2016. The forecast is also based on the assumption that in December 2016 the VAT rate will decrease in food services from 21% to 15%, except for alcoholic beverages. Due to the timing of this measure, however, its expected contribution to MoM inflation at the time of its introduction (–0.2 to –0.1 pp) will not quite manifest itself in the average inflation rate of 2016. The introduction of the fiscalization of cash payments will probably have an opposite and similarly marginal effect on consumer prices. We expect the contribution of administrative measures to the YoY increase in consumer prices in December 2016 to reach –0.1 pp (*versus* 0.1 pp).

A more significant acceleration of YoY inflation can be expected as late as in the fourth quarter of 2016 when YoY growth of the CZK crude oil price will probably become positive (see Chapter A.1.3). Beyond the crude oil price, the main factors of price development in 2016 will have a nearly neutral (CZK/EUR exchange rate) or a pro-inflationary effect (growing demand in

connection with a positive output gap, and rising unit labour costs).

**In 2016**, the average inflation rate should reach 0.5% (*versus* 0.6%), with a YoY increase in consumer prices of 1.0% (*versus* 1.2%) in December.

**In 2017**, inflation should increase further. At present, we do not envisage any significant factors that would have an anti-inflationary effect in 2017. Even in spite of the reversed trend of the crude oil price, however, we can see anti-inflationary risks in consumer energy prices (natural gas, electricity).

We expect that the increasing price of crude oil, growth of domestic demand amid a positive output gap, and an increase in unit labour costs will result in an increase in consumer prices. The impact of administrative measures should be approximately neutral. **In 2017**, the average inflation rate should reach 1.2% (*versus* 1.4%), with a YoY increase in consumer prices of 1.5% (*versus* 1.7%) in December. In the structure of YoY inflation in 2017, the fact that crude oil price stops decreasing and starts growing in YoY terms should mainly be apparent.

### C.2.2 Deflators

A comprehensive indicator of the price level is gross domestic product deflator, which is a resultant of gross domestic expenditure deflator and terms of trade. In the first quarter of 2016, its growth of 1.2% (*in line with the forecast*) was caused by an increase in the gross domestic expenditure deflator of 0.6% (*versus* 0.7%) and by an improvement of the terms of trade of 1.1% (*in line with the forecast*). The deflators of household consumption and gross fixed capital formation recorded lower growth compared to the forecast; in contrast, the government consumption deflator posted stronger growth.

We expect the GDP deflator to increase by 0.6% (*versus* 1.0%) in 2016. In 2017, its growth could accelerate to 1.1% (*versus* 1.3%) due to gradually increasing inflationary pressures. Terms of trade should improve by 0.3% (*versus* 0.6%) in 2016; in contrast, they should decrease by 0.2% (*versus* 0.0%) in 2017. Gross domestic expenditure deflator could increase by 0.5% (*versus* 0.7%) in 2016 and by 1.3% (*versus* 1.5%) in 2017. The main change in the forecast for 2016, i.e. the deterioration of terms of trade, is based on a higher decrease in CZK export prices due to the strengthening of the exchange rate. For 2017, we expect – in spite of lower prices of imported goods – an acceleration of consumption deflator growth reflecting growing internal inflationary factors.

Table C.2.1: Prices – yearly

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
								Forecast	Forecast	Outlook	Outlook
<b>Consumer Price Index</b>											
<b>average of a year</b>	<i>average 2005=100</i>	114.9	117.1	121.0	122.7	123.2	123.6	124.1	125.6	127.7	129.9
	<i>growth in %</i>	<b>1.5</b>	<b>1.9</b>	<b>3.3</b>	<b>1.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.5</b>	<b>1.2</b>	<b>1.6</b>	<b>1.8</b>
<b>December</b>	<i>average 2005=100</i>	115.5	118.3	121.1	122.8	122.9	123.0	124.3	126.1	128.1	130.6
	<i>growth in %</i>	<b>2.3</b>	<b>2.4</b>	<b>2.4</b>	<b>1.4</b>	<b>0.1</b>	<b>0.1</b>	<b>1.0</b>	<b>1.5</b>	<b>1.6</b>	<b>1.9</b>
<b>of which the contribution of</b>											
<b>– administrative measures <sup>1)</sup></b>	<i>percentage points</i>	<b>1.6</b>	<b>1.2</b>	<b>2.2</b>	<b>1.0</b>	<b>-0.2</b>	<b>0.1</b>	<b>-0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>
<b>– market increase</b>	<i>percentage points</i>	<b>0.7</b>	<b>1.2</b>	<b>0.1</b>	<b>0.4</b>	<b>0.3</b>	<b>0.0</b>	<b>1.1</b>	<b>1.3</b>	<b>1.4</b>	<b>1.7</b>
<b>HICP</b>	<i>average 2005=100</i>	113.7	116.2	120.3	121.9	122.4	122.8	123.3	124.7	126.6	128.8
	<i>growth in %</i>	<b>1.2</b>	<b>2.1</b>	<b>3.5</b>	<b>1.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.4</b>	<b>1.1</b>	<b>1.6</b>	<b>1.7</b>
<b>Offering prices of flats</b>											
	<i>average 2010=100</i>	100.0	95.1	96.1	97.2	100.7	106.9	.	.	.	.
	<i>growth in %</i>	<b>-4.1</b>	<b>-4.9</b>	<b>1.1</b>	<b>1.1</b>	<b>3.6</b>	<b>6.2</b>	.	.	.	.
<b>Deflators</b>											
<b>GDP</b>	<i>average 2010=100</i>	100.0	100.0	101.5	102.9	105.5	106.5	107.1	108.3	109.7	111.4
	<i>growth in %</i>	<b>-1.5</b>	<b>0.0</b>	<b>1.5</b>	<b>1.4</b>	<b>2.5</b>	<b>1.0</b>	<b>0.6</b>	<b>1.1</b>	<b>1.3</b>	<b>1.6</b>
<b>Domestic final use</b>	<i>average 2010=100</i>	100.0	101.1	102.9	103.5	104.6	105.7	106.3	107.7	109.3	111.0
	<i>growth in %</i>	<b>-0.2</b>	<b>1.1</b>	<b>1.8</b>	<b>0.5</b>	<b>1.1</b>	<b>1.1</b>	<b>0.5</b>	<b>1.3</b>	<b>1.4</b>	<b>1.6</b>
<b>Consumption of households</b>	<i>average 2010=100</i>	100.0	101.4	103.6	104.5	105.1	105.2	105.4	106.6	108.3	110.3
	<i>growth in %</i>	<b>0.5</b>	<b>1.4</b>	<b>2.2</b>	<b>0.8</b>	<b>0.6</b>	<b>0.1</b>	<b>0.2</b>	<b>1.1</b>	<b>1.6</b>	<b>1.8</b>
<b>Consumption of government</b>	<i>average 2010=100</i>	100.0	102.7	103.6	103.8	105.6	108.5	110.0	112.4	113.6	114.8
	<i>growth in %</i>	<b>-0.6</b>	<b>2.7</b>	<b>0.9</b>	<b>0.2</b>	<b>1.7</b>	<b>2.8</b>	<b>1.4</b>	<b>2.1</b>	<b>1.1</b>	<b>1.1</b>
<b>Fixed capital formation</b>	<i>average 2010=100</i>	100.0	99.2	100.9	101.1	102.7	104.1	104.8	106.1	107.7	109.5
	<i>growth in %</i>	<b>-1.1</b>	<b>-0.8</b>	<b>1.7</b>	<b>0.1</b>	<b>1.6</b>	<b>1.4</b>	<b>0.7</b>	<b>1.3</b>	<b>1.5</b>	<b>1.6</b>
<b>Exports of goods and services</b>	<i>average 2010=100</i>	100.0	100.7	103.8	105.6	109.8	108.2	105.4	104.8	104.2	104.3
	<i>growth in %</i>	<b>-1.2</b>	<b>0.7</b>	<b>3.1</b>	<b>1.7</b>	<b>4.0</b>	<b>-1.5</b>	<b>-2.6</b>	<b>-0.6</b>	<b>-0.6</b>	<b>0.1</b>
<b>Imports of goods and services</b>	<i>average 2010=100</i>	100.0	102.3	106.1	106.6	109.2	107.5	104.4	103.9	103.4	103.4
	<i>growth in %</i>	<b>0.8</b>	<b>2.3</b>	<b>3.7</b>	<b>0.5</b>	<b>2.5</b>	<b>-1.6</b>	<b>-2.9</b>	<b>-0.4</b>	<b>-0.5</b>	<b>0.0</b>
<b>Terms of trade</b>	<i>average 2010=100</i>	100.0	98.5	97.9	99.0	100.5	100.7	101.0	100.8	100.8	100.9
	<i>growth in %</i>	<b>-2.0</b>	<b>-1.5</b>	<b>-0.6</b>	<b>1.2</b>	<b>1.5</b>	<b>0.1</b>	<b>0.3</b>	<b>-0.2</b>	<b>0.0</b>	<b>0.1</b>

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

Source: CZSO, Eurostat, own calculations

**Table C.2.2: Prices – quarterly**

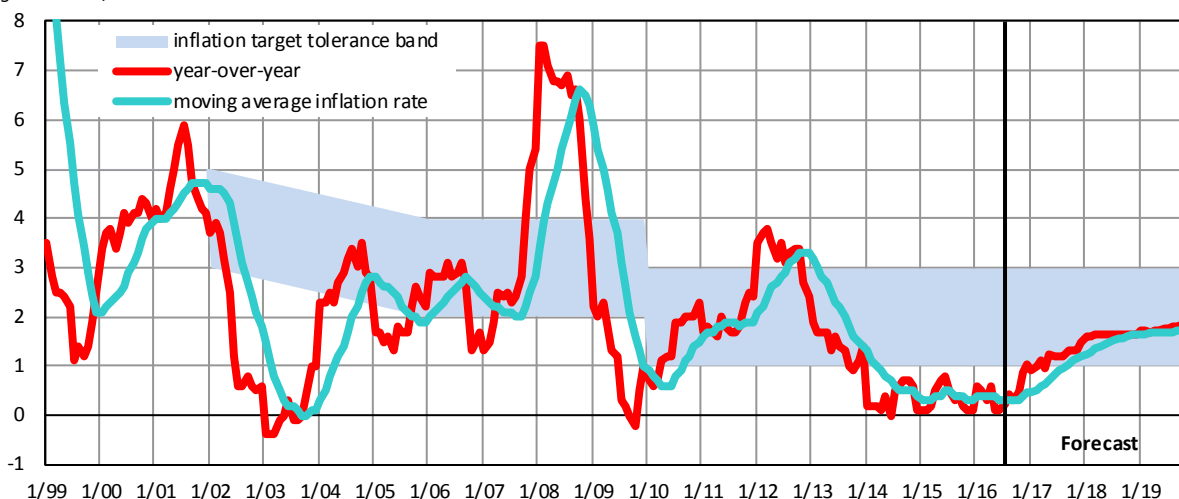
		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	
<b>Consumer Price Index</b>	average 2005=100	123.2	124.0	123.8	123.2	123.7	124.3	124.2	124.2
	growth in %	0.1	0.7	0.4	0.1	0.5	0.2	0.3	0.8
<b>of which the contribution of</b>									
– administrative measures <sup>1)</sup>	percentage points	0.2	0.3	0.2	0.1	0.2	0.2	0.1	0.0
– market increase	percentage points	-0.1	0.4	0.2	0.0	0.3	0.0	0.2	0.8
<b>HICP</b>	average 2005=100	122.3	123.3	123.0	122.4	122.9	123.6	123.3	123.3
	growth in %	0.0	0.7	0.3	0.0	0.5	0.2	0.2	0.7
<b>Offering prices of flats</b>	average 2010=100	102.9	105.6	108.1	110.9	113.4	116.5	.	.
	growth in %	3.6	5.0	6.1	9.6	10.2	10.3	.	.
<b>Deflators</b>									
<b>GDP</b>	average 2010=100	105.7	106.4	106.4	107.5	107.0	107.0	107.2	107.4
	growth in %	1.6	1.1	0.7	0.7	1.2	0.6	0.7	-0.1
<b>Domestic final use</b>	average 2010=100	104.8	105.7	105.7	106.6	105.4	106.1	106.1	107.5
	growth in %	1.3	1.4	1.0	0.6	0.6	0.3	0.4	0.8
<b>Consumption of households</b>	average 2010=100	104.9	105.5	105.4	105.2	105.0	105.4	105.5	105.8
	growth in %	0.1	0.5	0.0	0.0	0.1	-0.1	0.1	0.7
<b>Consumption of government</b>	average 2010=100	104.9	107.7	108.0	112.6	106.8	109.4	109.8	113.5
	growth in %	3.4	3.1	3.3	1.7	1.8	1.5	1.6	0.8
<b>Fixed capital formation</b>	average 2010=100	104.2	104.3	104.1	103.9	104.4	104.9	104.9	104.9
	growth in %	1.9	2.0	1.3	0.7	0.3	0.5	0.8	1.0
<b>Exports of goods and services</b>	average 2010=100	109.3	109.2	107.6	106.8	105.3	105.6	106.2	104.7
	growth in %	-0.2	-0.3	-2.5	-2.9	-3.6	-3.3	-1.3	-1.9
<b>Imports of goods and services</b>	average 2010=100	108.4	108.8	107.0	105.8	103.4	104.4	105.0	104.8
	growth in %	-0.8	0.0	-2.3	-3.1	-4.7	-4.0	-1.9	-1.0
<b>Terms of trade</b>	average 2010=100	100.8	100.4	100.6	100.9	101.9	101.1	101.1	100.0
	growth in %	0.6	-0.3	-0.1	0.3	1.1	0.7	0.5	-0.9

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

Source: CZSO, Eurostat, own calculations

**Graph C.2.1: Consumer Prices**

YoY growth rate, in %

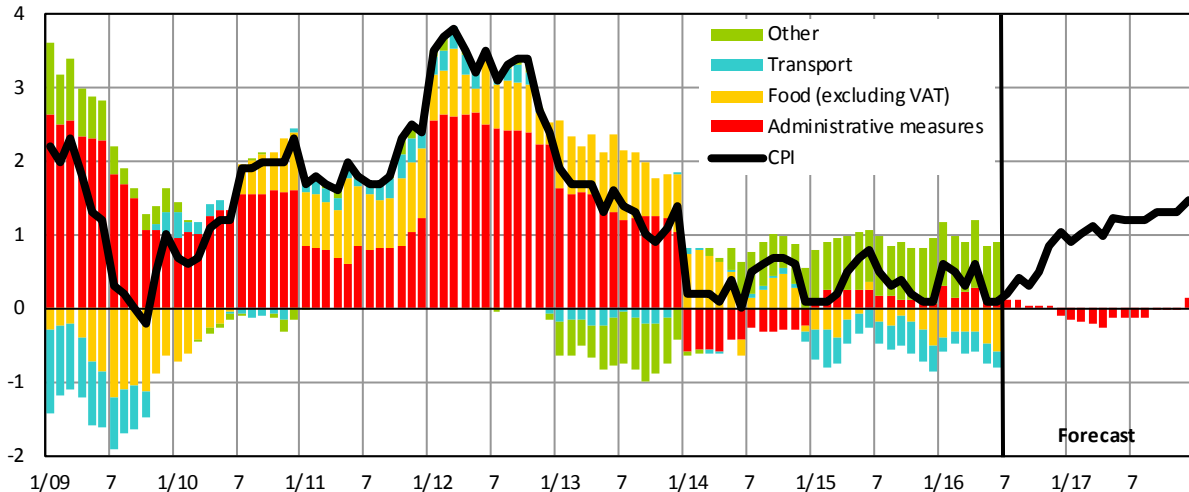


Note: For the years 2002–2005 the highlighted area represents target band for headline inflation, whereas from 2006 on it is the tolerance band of the CNB’s point target for headline inflation.

Source: CNB, CZSO, own calculations

### Graph C.2.2: Consumer Prices

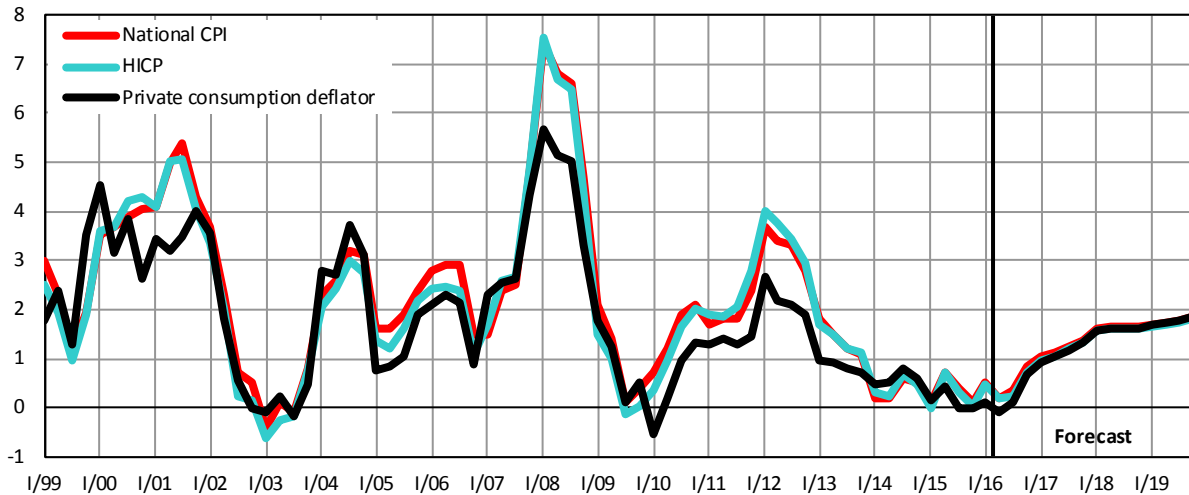
decomposition of YoY growth of CPI, contributions in pp, CPI growth rate in %, Transport excluding administrative measures and excises



Source: CZSO, own calculations

### Graph C.2.3: Indicators of Consumer Prices

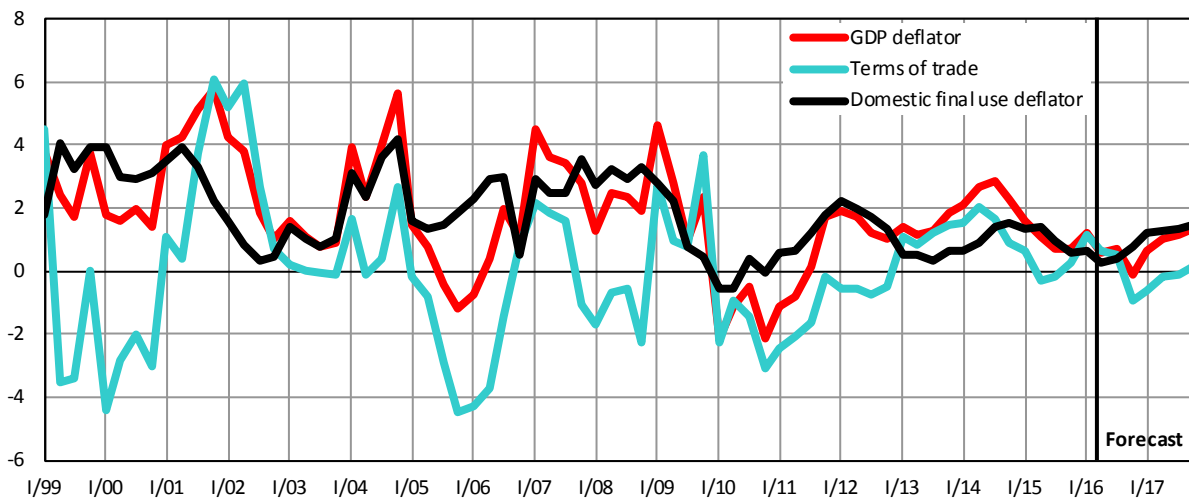
YoY growth rate, in %



Source: CZSO, Eurostat, own calculations

### Graph C.2.4: GDP Deflator

YoY growth rate, in %

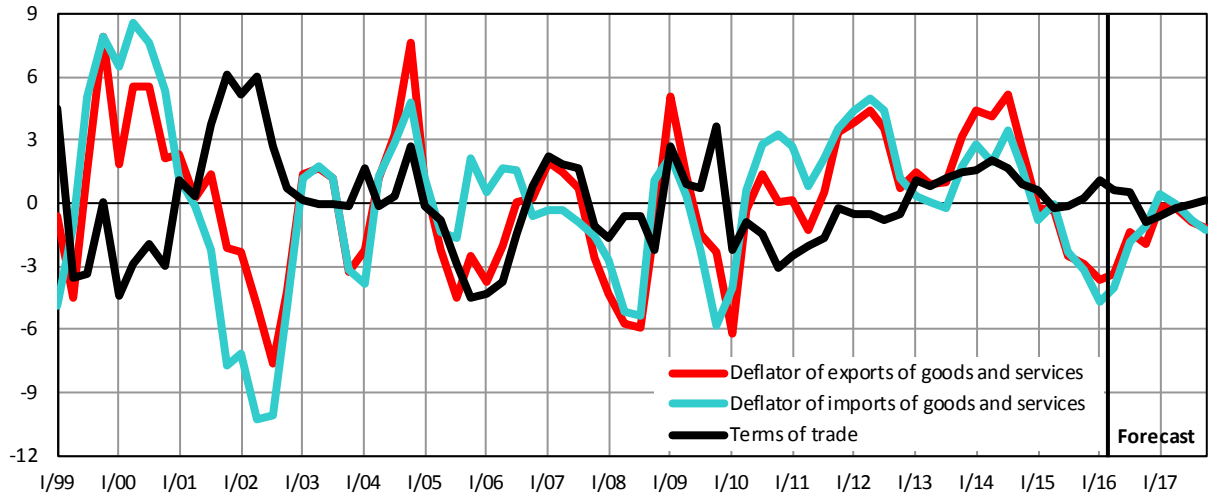


Source: CZSO, own calculations



### Graph C.2.5: Terms of Trade

YoY growth rate, in %



Source: CZSO, own calculations

## C.3 Labour Market

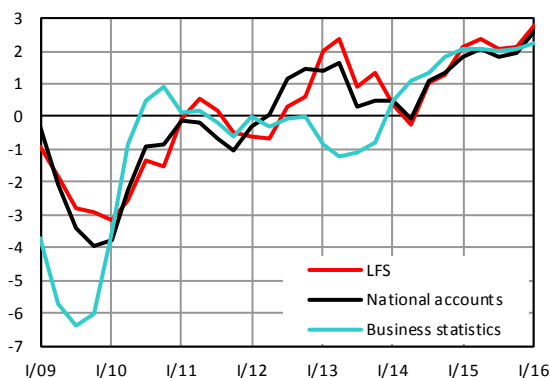
The labour market was developing much more favourably in the first quarter of 2016 than would correspond to the position in economic cycle. Considerable growth of employment, driven by the employee category, continued – employment and participation rates for the age group 15–64 years reached their new historical highs of 71.0% and 74.3%, respectively. The unemployment rate (LFS) further decreased considerably; whereas the decline in registered unemployment slowed down. The number of vacancies continued to grow considerably to values exceeding 130 thousand. These factors determined the strong growth of the wage bill and the average wage.

### C.3.1 Employment

**Employment (LFS)** grew by 2.0% YoY (*versus 0.9%*) in the first quarter of 2016. The number of employees increased by 2.8% (*versus 1.8%*), the number of entrepreneurs fell by 1.8% (*versus 3.4%*). The number of entrepreneurs without employees decreased only slightly (by 0.3%). Considering the current labour market situation, however, we can expect reductions in non-standard job positions (e.g. fake self-employment, the so-called “švarcsystém”) under the conditions of high demand for employees.

#### Graph C.3.1: Employees in Different Statistics

YoY growth rate, in %



Source: CZSO

In terms of sectors, manufacturing still contributed considerably to the growth of employment, followed by land transport, wholesale and retail trade, or real estate activities.

Given the faster than expected YoY and QoQ growth of employment in the first quarter of 2016, we revised upwards the forecast for employment growth in the remaining quarters of 2016. In 2016, employment could increase by 1.6% (*versus 0.5%*).

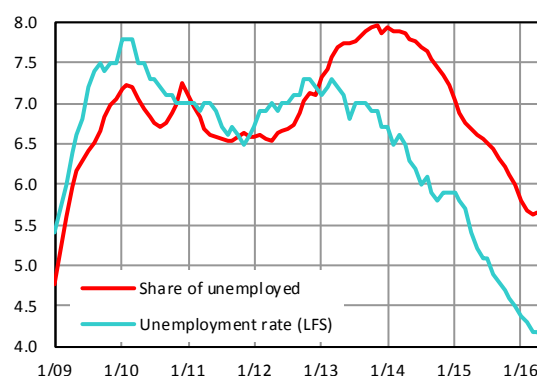
Frictions on the labour market together with the decreasing population aged 15–64 years will be reflected in the development of employment in the coming years. In 2017, employment should increase only by a negligible 0.1% (*unchanged*).

### C.3.2 Unemployment

Due to considerable economic growth, there was further reduction in the number of unemployed persons registered at labour offices (by 67 thousand YoY) as well as according to the LFS statistics (by 53 thousand YoY). A decline in the unemployment rate according to the Ministry of Labour and Social Affairs has been considerably slowing down in recent months. The relatively high long-term unemployment rate together with mismatches between supplied and demanded job positions in some professions and regions reduces the space for a further sharp decrease in the unemployment rate.

#### Graph C.3.2: Indicators of Unemployment

seasonally adjusted data, in %



Source: CZSO, Ministry of Labour and Social Affairs, own calculations  
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.

Thanks to continuing favourable macroeconomic conditions and an extraordinarily good situation on the labour market in the first half of 2016, the unemployment rate should average 4.1% (*versus 4.4%*) for the whole year, while in 2017 it should further decrease slightly to 4.0% (*versus 4.3%*).

### C.3.3 Economic Activity Rate

**Economic activity rate (15–64 year-olds)** increased by 0.4 pp YoY to 74.3% in the first quarter of 2016 (*versus growth of 0.1 pp to 74.0%*). The participation rate should continue to grow further (see Graph C.3.6), with structural factors in the form of a growing weight of cohorts with naturally high rate of economic activity (especially of those aged 40–49 years) and increasing the statutory retirement age playing a crucial role.

### C.3.4 Wages

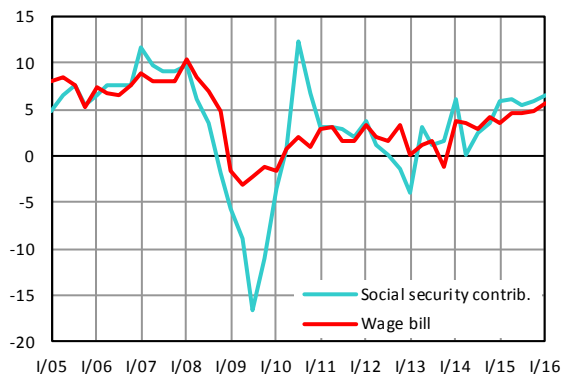
**The wage bill** (national accounts methodology, domestic concept) posted a strong 5.6% growth in the first quarter 2016 (*versus 4.2%*). Robust growth was recorded e.g. in manufacturing (7.4%), information and communication activities (10.3%) or in the section Trade, transportation, accommodation and food services (6.4%). Rise in wages in the budgetary sphere continued to manifest itself in the growth of the wage

bill in the section Public administration and defence, education, health and social work (4.5%).

According to data on the development of cash collection of the state budget, revenues from social security contributions grew strongly also in the second quarter of 2016. Therefore, favourable dynamics of the wage bill probably continued. In 2016, the wage bill could increase by 5.3% (*versus 4.5%*), which would be an acceleration of nearly 1 pp compared to 2015.

### Graph C.3.3: Collection of Social Security Contributions and Total Wage Bill

YoY growth rate, in %



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

In addition to real labour productivity, low unemployment should also work in the direction of a higher wage bill in the following period. The growing inflation rate is also expected to gradually contribute to wage growth. The average wage per employee will make the dominant contribution to growth of the wage bill; on the other hand, the contribution of the increasing number of employed persons will decrease.

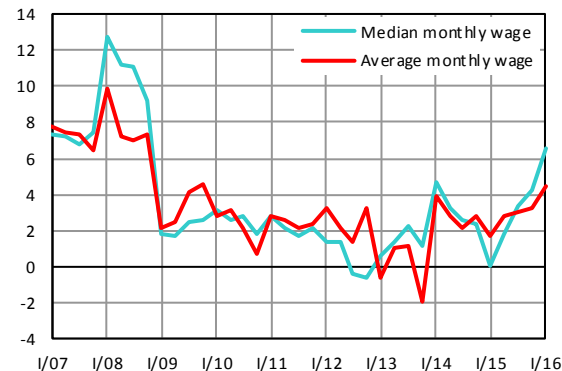
New wage negotiations, lack of disposable employees and expected growth of wages in some professions in the public sector should create additional impulse for an increased wage bill in the next year; for 2017 we expect a growth of the wage bill of 4.9% (*versus 4.6%*).

**The average wage** (business statistics, full-time equivalent) increased by 4.4% (*versus 3.7%*) in the first quarter of 2016, with the growth of wages in the business sphere mainly contributing to this outcome; however,

wages also increased in the non-business sphere. Strong growth of wages was mainly recorded in low-paid sectors, e.g. in Accommodation and food service activities (7.2%), Administrative and support service activities (6.5%) or Arts, entertainment and recreation (6.0%). Wages in manufacturing also continued to grow strongly (by 4.5%). A very high growth of the median wage (of 6.5%) is a positive signal for household consumption. For the reasons already mentioned above, the average nominal wage could increase by 4.4% in 2016 (*versus 4.3%*), which would correspond to growth of real wage of 3.9% (*versus 3.7%*) considering very low inflation. For 2017, we expect an acceleration of the average nominal wage growth to 4.7% (*versus 4.5%*); however, the average wage growth should slow down to 3.4% (*versus 3.0%*) in real terms due to the increased inflation.

### Graph C.3.4: Nominal Monthly Wage

YoY growth rate, in %



Source: CZSO

The strong growth of employment in 2016 will also have an impact on the development of real productivity that could increase by 0.6% (*versus 1.9%*) in 2016. On the contrary, real GDP growth in 2017 should be accompanied by only a slight increase in employment, and real productivity growth should thus reach 2.3% (*versus 2.5%*). Due to increasing wages, unit labour costs should grow by 2.5% (*versus 1.4%*) in 2016 and by 2.2% (*versus 1.8%*) in 2017.

Table C.3.1: Labour Market – yearly

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
								Forecast	Forecast	Outlook	Outlook
<b>Labour Force Survey</b>											
<b>Employment</b>	<i>av. in thous.persons</i>	<b>4 885</b>	<b>4 872</b>	<b>4 890</b>	<b>4 937</b>	<b>4 974</b>	<b>5 042</b>	<b>5 125</b>	<b>5 133</b>	<b>5 136</b>	<b>5 138</b>
	<i>growth in %</i>	-1.0	0.4	0.4	1.0	0.8	1.4	1.6	0.1	0.1	0.1
<b>– employees</b>	<i>av. in thous.persons</i>	<b>4 019</b>	<b>3 993</b>	<b>3 990</b>	<b>4 055</b>	<b>4 079</b>	<b>4 168</b>	<b>4 260</b>	<b>4 275</b>	<b>4 278</b>	<b>4 281</b>
	<i>growth in %</i>	-2.1	0.0	-0.1	1.6	0.6	2.2	2.2	0.3	0.1	0.1
<b>– entrepreneurs and self-employed</b>	<i>av. in thous.persons</i>	<b>866</b>	<b>880</b>	<b>901</b>	<b>882</b>	<b>895</b>	<b>874</b>	<b>865</b>	<b>858</b>	<b>857</b>	<b>857</b>
	<i>growth in %</i>	4.7	2.0	2.4	-2.1	1.5	-2.3	-1.1	-0.8	-0.1	0.0
<b>Unemployment</b>	<i>av. in thous.persons</i>	<b>384</b>	<b>351</b>	<b>367</b>	<b>369</b>	<b>324</b>	<b>268</b>	<b>221</b>	<b>216</b>	<b>212</b>	<b>209</b>
<b>Unemployment rate</b>	<i>average in per cent</i>	<b>7.3</b>	<b>6.7</b>	<b>7.0</b>	<b>7.0</b>	<b>6.1</b>	<b>5.1</b>	<b>4.1</b>	<b>4.0</b>	<b>4.0</b>	<b>3.9</b>
<b>Long-term unemployment<sup>1)</sup></b>	<i>av. in thous.persons</i>	<b>160</b>	<b>144</b>	<b>161</b>	<b>163</b>	<b>141</b>	<b>127</b>	.	.	.	.
<b>Labour force</b>	<i>av. in thous.persons</i>	<b>5 269</b>	<b>5 223</b>	<b>5 257</b>	<b>5 306</b>	<b>5 298</b>	<b>5 310</b>	<b>5 346</b>	<b>5 349</b>	<b>5 347</b>	<b>5 348</b>
	<i>growth in %</i>	-0.3	-0.2	0.7	0.9	-0.2	0.2	0.7	0.0	0.0	0.0
<b>Population aged 15–64</b>	<i>av. in thous.persons</i>	<b>7 399</b>	<b>7 295</b>	<b>7 229</b>	<b>7 154</b>	<b>7 081</b>	<b>7 026</b>	<b>6 966</b>	<b>6 912</b>	<b>6 862</b>	<b>6 819</b>
	<i>growth in %</i>	-0.4	-0.7	-0.9	-1.0	-1.0	-0.8	-0.9	-0.8	-0.7	-0.6
<b>Employment/Pop. 15–64</b>	<i>average in per cent</i>	<b>66.0</b>	<b>66.8</b>	<b>67.6</b>	<b>69.0</b>	<b>70.2</b>	<b>71.8</b>	<b>73.6</b>	<b>74.3</b>	<b>74.8</b>	<b>75.4</b>
<b>Employment rate 15–64<sup>2)</sup></b>	<i>average in per cent</i>	<b>65.0</b>	<b>65.7</b>	<b>66.5</b>	<b>67.7</b>	<b>69.0</b>	<b>70.2</b>	<b>72.0</b>	<b>72.7</b>	<b>73.2</b>	<b>73.7</b>
<b>Labour force/Pop. 15–64</b>	<i>average in per cent</i>	<b>71.2</b>	<b>71.6</b>	<b>72.7</b>	<b>74.2</b>	<b>74.8</b>	<b>75.6</b>	<b>76.7</b>	<b>77.4</b>	<b>77.9</b>	<b>78.4</b>
<b>Participation rate 15–64<sup>3)</sup></b>	<i>average in per cent</i>	<b>70.2</b>	<b>70.5</b>	<b>71.6</b>	<b>72.9</b>	<b>73.5</b>	<b>74.0</b>	<b>75.1</b>	<b>75.8</b>	<b>76.3</b>	<b>76.8</b>
<b>Registered unemployment</b>											
<b>Unemployment</b>	<i>av. in thous.persons</i>	<b>528.7</b>	<b>507.8</b>	<b>504.4</b>	<b>564.4</b>	<b>561.4</b>	<b>478.9</b>	<b>411</b>	<b>387</b>	<b>372</b>	<b>359</b>
<b>Share of unemployed<sup>4)</sup></b>	<i>average in per cent</i>	<b>7.0</b>	<b>6.7</b>	<b>6.8</b>	<b>7.7</b>	<b>7.7</b>	<b>6.6</b>	<b>5.6</b>	<b>5.4</b>	<b>5.2</b>	<b>5.0</b>
<b>Wages and salaries</b>											
<b>Average monthly wage<sup>5)</sup></b>											
<b>– nominal</b>	CZK	23 864	24 455	25 067	25 035	25 768	26 467	27 600	28 900	30 200	31 500
	<i>growth in %</i>	<b>2.2</b>	<b>2.5</b>	<b>2.5</b>	<b>-0.1</b>	<b>2.9</b>	<b>2.7</b>	<b>4.4</b>	<b>4.7</b>	<b>4.4</b>	<b>4.4</b>
<b>– real</b>	CZK 2005	20 769	20 884	20 717	20 403	20 916	21 413	22 300	23 000	23 700	24 300
	<i>growth in %</i>	<b>0.8</b>	<b>0.6</b>	<b>-0.8</b>	<b>-1.5</b>	<b>2.5</b>	<b>2.4</b>	<b>3.9</b>	<b>3.4</b>	<b>2.7</b>	<b>2.6</b>
<b>Median monthly wage</b>	CZK	20 294	20 743	20 828	21 110	21 786	22 310	.	.	.	.
	<i>growth in %</i>	<b>2.6</b>	<b>2.2</b>	<b>0.4</b>	<b>1.4</b>	<b>3.2</b>	<b>2.4</b>	.	.	.	.
<b>Wage bill</b>	<i>growth in %</i>	<b>0.6</b>	<b>2.3</b>	<b>2.6</b>	<b>0.5</b>	<b>3.6</b>	<b>4.4</b>	<b>5.3</b>	<b>4.9</b>	<b>4.5</b>	<b>4.5</b>
<b>Labour productivity</b>	<i>growth in %</i>	<b>3.4</b>	<b>2.3</b>	<b>-1.2</b>	<b>-0.8</b>	<b>2.1</b>	<b>3.3</b>	<b>0.6</b>	<b>2.3</b>	<b>2.4</b>	<b>2.4</b>
<b>Unit labour costs<sup>6)</sup></b>	<i>growth in %</i>	<b>0.0</b>	<b>0.6</b>	<b>3.0</b>	<b>0.5</b>	<b>0.6</b>	<b>-0.6</b>	<b>2.5</b>	<b>2.2</b>	<b>2.0</b>	<b>2.0</b>
<b>Compens. of employees / GDP</b>	%	<b>40.2</b>	<b>40.3</b>	<b>41.0</b>	<b>40.9</b>	<b>40.2</b>	<b>39.9</b>	<b>40.9</b>	<b>41.4</b>	<b>41.7</b>	<b>41.9</b>

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, own calculations

**Table C.3.2: Labour Market – quarterly**

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast
<b>Labour Force Survey</b>									
<b>Employment</b>	<i>av. in thous. persons</i>	<b>4 988</b>	<b>5 044</b>	<b>5 060</b>	<b>5 076</b>	<b>5 087</b>	<b>5 130</b>	<b>5 142</b>	<b>5 141</b>
	<i>YoY growth in %</i>	1.3	1.7	1.3	1.2	2.0	1.7	1.6	1.3
	<i>QoQ growth in %</i>	0.4	0.3	0.1	0.3	1.0	0.2	0.0	0.0
<b>– employees</b>	<i>av. in thous. persons</i>	<b>4 116</b>	<b>4 161</b>	<b>4 189</b>	<b>4 205</b>	<b>4 231</b>	<b>4 261</b>	<b>4 277</b>	<b>4 272</b>
	<i>growth in %</i>	2.1	2.4	2.0	2.1	2.8	2.4	2.1	1.6
<b>– entrepreneurs and self-employed</b>	<i>av. in thous. persons</i>	<b>872</b>	<b>883</b>	<b>872</b>	<b>871</b>	<b>855</b>	<b>869</b>	<b>865</b>	<b>870</b>
	<i>growth in %</i>	-2.3	-1.7	-2.1	-3.1	-1.9	-1.6	-0.8	-0.2
<b>Unemployment</b>	<i>av. in thous. persons</i>	<b>317</b>	<b>262</b>	<b>257</b>	<b>237</b>	<b>231</b>	<b>216</b>	<b>220</b>	<b>217</b>
<b>Unemployment rate</b>	<i>average in per cent</i>	<b>6.0</b>	<b>4.9</b>	<b>4.8</b>	<b>4.5</b>	<b>4.3</b>	<b>4.0</b>	<b>4.1</b>	<b>4.0</b>
<b>Long-term unemployment <sup>1)</sup></b>	<i>av. in thous. persons</i>	<b>145</b>	<b>122</b>	<b>125</b>	<b>115</b>	<b>106</b>	.	.	.
<b>Labour force</b>	<i>av. in thous. persons</i>	<b>5 306</b>	<b>5 306</b>	<b>5 318</b>	<b>5 313</b>	<b>5 318</b>	<b>5 346</b>	<b>5 362</b>	<b>5 358</b>
	<i>growth in %</i>	0.5	0.5	0.2	-0.2	0.2	0.8	0.8	0.8
<b>Population aged 15–64</b>	<i>av. in thous. persons</i>	<b>7 050</b>	<b>7 037</b>	<b>7 017</b>	<b>7 001</b>	<b>6 990</b>	<b>6 972</b>	<b>6 959</b>	<b>6 945</b>
	<i>growth in %</i>	-0.7	-0.7	-0.8	-0.8	-0.9	-0.9	-0.8	-0.8
<b>Employment/Pop. 15–64</b>	<i>average in per cent</i>	<b>70.8</b>	<b>71.7</b>	<b>72.1</b>	<b>72.5</b>	<b>72.8</b>	<b>73.6</b>	<b>73.9</b>	<b>74.0</b>
	<i>increase over a year</i>	1.4	1.7	1.5	1.4	2.0	1.9	1.8	1.5
<b>Employment rate 15–64 <sup>2)</sup></b>	<i>average in per cent</i>	<b>69.4</b>	<b>70.2</b>	<b>70.5</b>	<b>70.8</b>	<b>71.0</b>	<b>72.0</b>	<b>72.3</b>	<b>72.5</b>
	<i>increase over a year</i>	1.4	1.5	1.2	1.1	1.6	1.9	1.8	1.6
<b>Labour force/Pop. 15–64</b>	<i>average in per cent</i>	<b>75.3</b>	<b>75.4</b>	<b>75.8</b>	<b>75.9</b>	<b>76.1</b>	<b>76.7</b>	<b>77.1</b>	<b>77.2</b>
	<i>increase over a year</i>	0.9	0.9	0.7	0.5	0.8	1.3	1.3	1.3
<b>Participation rate 15–64 <sup>3)</sup></b>	<i>average in per cent</i>	<b>73.9</b>	<b>73.9</b>	<b>74.2</b>	<b>74.2</b>	<b>74.3</b>	<b>75.1</b>	<b>75.5</b>	<b>75.6</b>
	<i>increase over a year</i>	0.8	0.7	0.4	0.1	0.4	1.3	1.3	1.4
<b>Registered unemployment</b>									
<b>Unemployment</b>	<i>av. in thous. persons</i>	<b>546.0</b>	<b>481.9</b>	<b>451.2</b>	<b>436.4</b>	<b>459</b>	<b>408</b>	<b>388</b>	<b>388</b>
<b>Share of unemployed <sup>4)</sup></b>	<i>average in per cent</i>	<b>7.5</b>	<b>6.6</b>	<b>6.2</b>	<b>6.0</b>	<b>6.3</b>	<b>5.6</b>	<b>5.3</b>	<b>5.3</b>
<b>Wages and salaries</b>									
<b>Average monthly wage <sup>5)</sup></b>									
<b>– nominal</b>	CZK	25 361	26 279	26 051	28 142	26 480	27 400	27 200	29 400
	<i>growth in %</i>	<b>1.7</b>	<b>2.8</b>	<b>3.1</b>	<b>3.2</b>	<b>4.4</b>	<b>4.2</b>	<b>4.4</b>	<b>4.6</b>
<b>– real</b>	CZK 2005	20 585	21 193	21 043	22 843	21 407	22 000	21 900	23 700
	<i>growth in %</i>	<b>1.6</b>	<b>2.1</b>	<b>2.6</b>	<b>3.1</b>	<b>4.0</b>	<b>4.0</b>	<b>4.0</b>	<b>3.7</b>
<b>Median monthly wage</b>	CZK	21 154	22 064	22 383	23 639	22 533	.	.	.
	<i>growth in %</i>	<b>0.0</b>	<b>1.8</b>	<b>3.3</b>	<b>4.3</b>	<b>6.5</b>	.	.	.
<b>Wage bill</b>	<i>growth in %</i>	<b>3.6</b>	<b>4.6</b>	<b>4.7</b>	<b>4.7</b>	<b>5.6</b>	<b>5.4</b>	<b>5.3</b>	<b>5.1</b>

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.

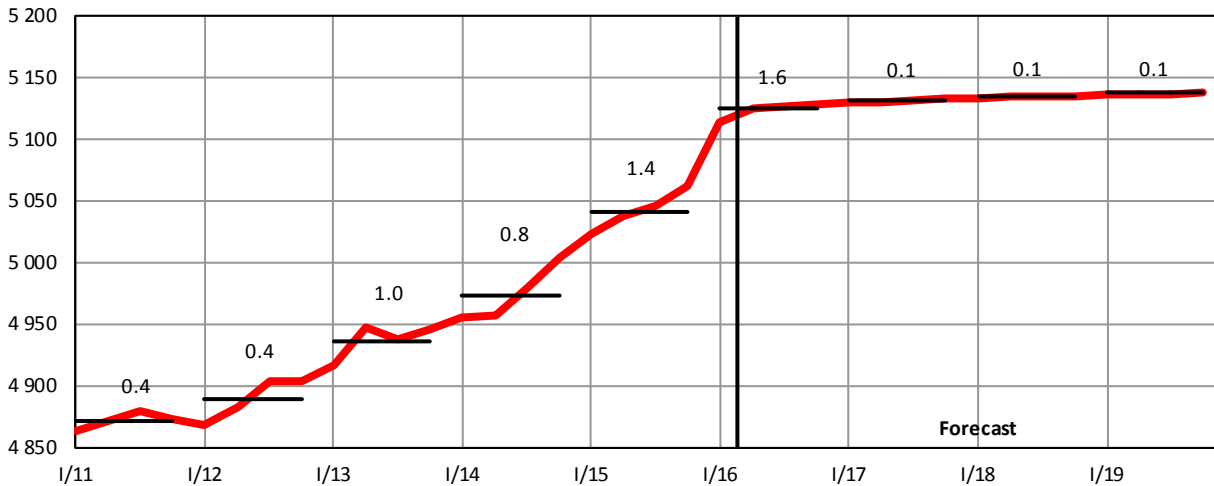
4) Share of available job seekers aged 15 to 64 years in the population of the same age.

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

Source: CZSO, Ministry of Labour and Social Affairs, own calculations

### Graph C.3.5: Employment (LFS)

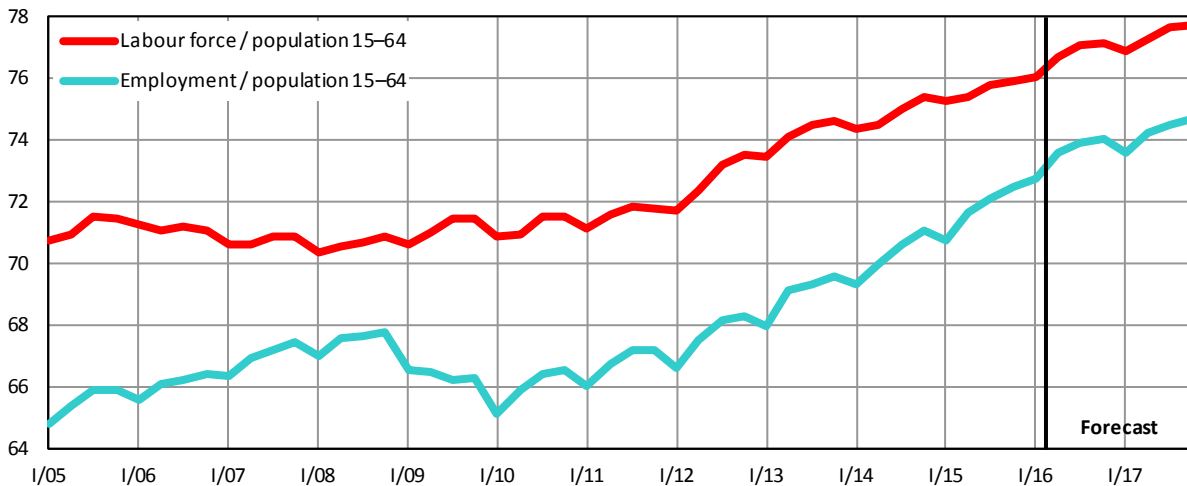
seasonally adjusted data, in thousands of persons, black lines with labels show the average level and growth rate of employment in the given year



Source: CZSO, own calculations

### Graph C.3.6: Ratio of Labour Force and Employment to Population Aged 15–64

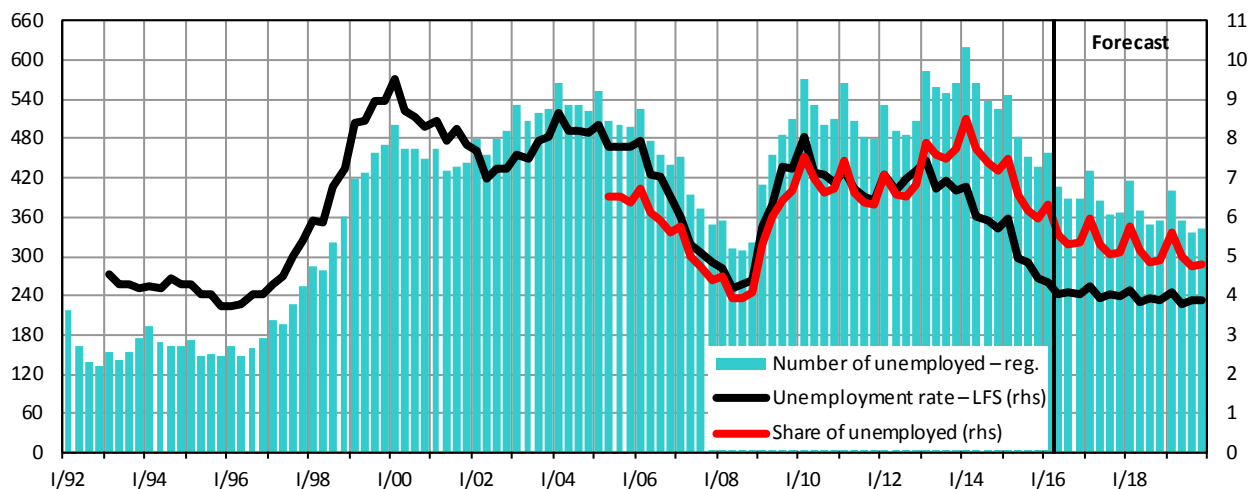
in %



Source: CZSO, own calculations

### Graph C.3.7: Unemployment

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

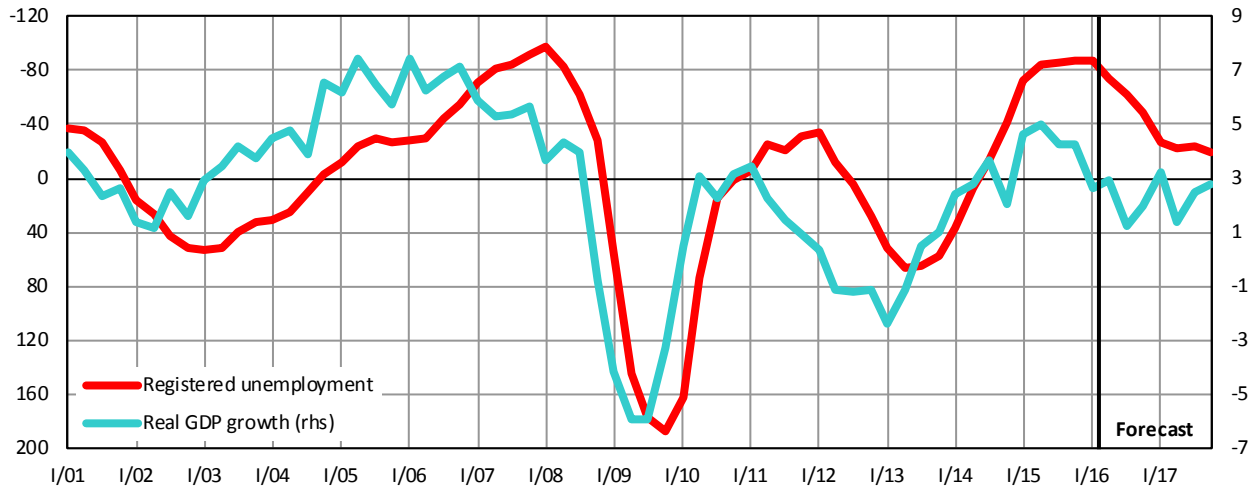


Note: Share of unemployed (Ministry of Labour and Social Affairs) is defined as a share of available job seekers aged 15 to 64 years in the population of the same age.

Source: CZSO, Ministry of Labour and Social Affairs, own calculations

### Graph C.3.8: Economic Output and Unemployment

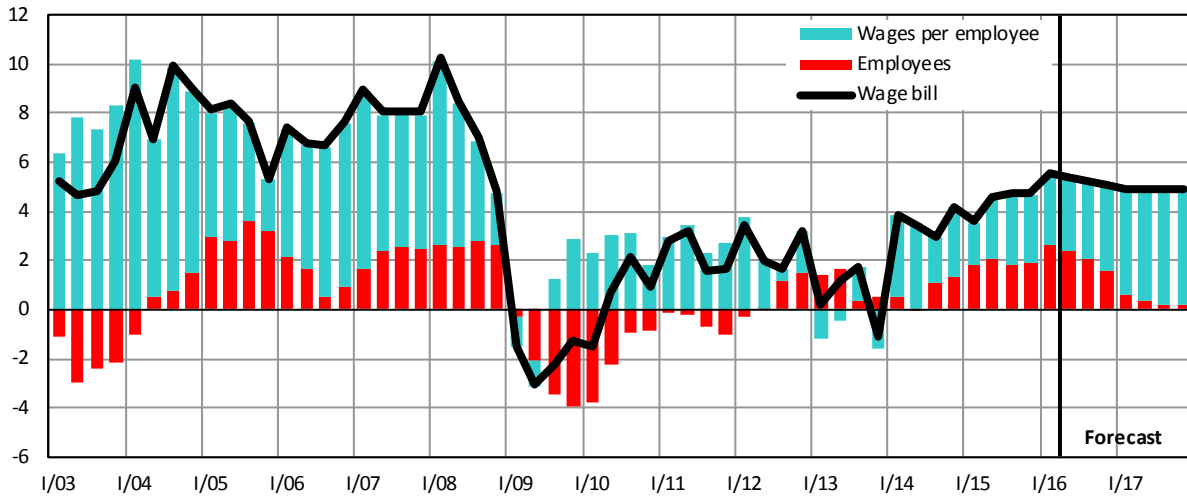
YoY real GDP growth rate in %, change in unemployment in thousands of persons



Source: CZSO, Ministry of Labour and Social Affairs, own calculations

### Graph C.3.9: Wage Bill – nominal, domestic concept

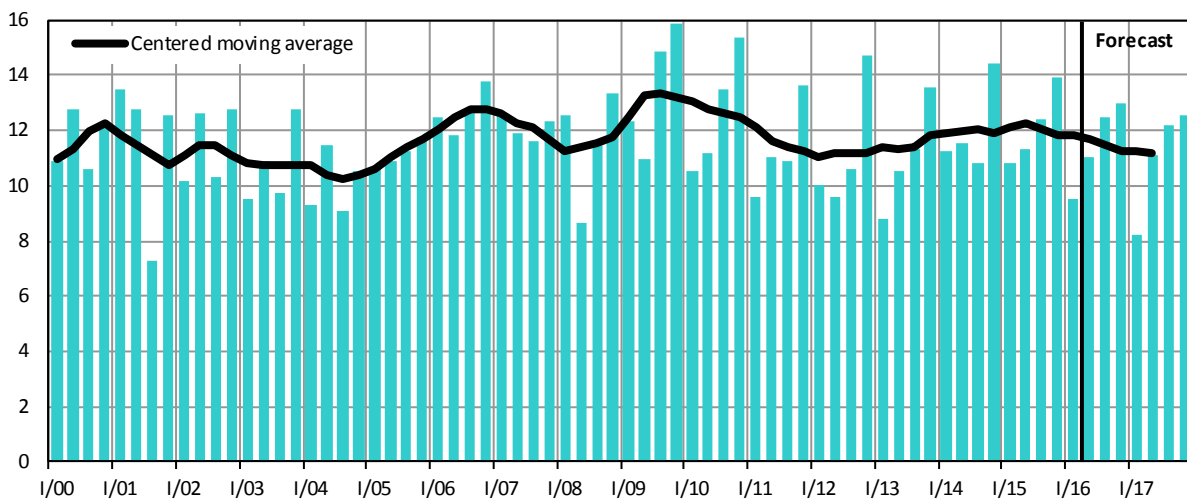
YoY growth rate, in %



Source: CZSO, own calculations

### Graph C.3.10: Gross Savings Rate of Households

in % of disposable income



Source: CZSO, own calculations

**Table C.3.3: Income and Expenditures of Households – yearly**

SNA methodology – national concept

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
										Forecast	Forecast
<b>Current income</b>											
<b>Compensation of employees</b>	bill.CZK	<b>1 593</b>	<b>1 553</b>	<b>1 585</b>	<b>1 627</b>	<b>1 669</b>	<b>1 692</b>	<b>1 760</b>	<b>1 847</b>	<b>1 944</b>	<b>2 036</b>
	growth in %	5.8	-2.5	2.0	2.6	2.6	1.3	4.0	5.0	5.2	4.8
<b>Gross operating surplus and mixed income</b>	bill.CZK	<b>657</b>	<b>686</b>	<b>685</b>	<b>674</b>	<b>654</b>	<b>645</b>	<b>662</b>	<b>684</b>	<b>684</b>	<b>694</b>
	growth in %	4.0	4.5	-0.2	-1.7	-2.9	-1.3	2.6	3.3	0.0	1.5
<b>Property income received</b>	bill.CZK	<b>177</b>	<b>158</b>	<b>152</b>	<b>153</b>	<b>147</b>	<b>158</b>	<b>166</b>	<b>162</b>	<b>156</b>	<b>157</b>
	growth in %	9.8	-11.0	-3.5	0.5	-4.0	7.8	5.1	-2.4	-4.2	1.2
<b>Social benefits not-in-kind</b>	bill.CZK	<b>493</b>	<b>535</b>	<b>542</b>	<b>553</b>	<b>567</b>	<b>563</b>	<b>576</b>	<b>590</b>	<b>604</b>	<b>621</b>
	growth in %	4.7	8.6	1.2	2.1	2.4	-0.6	2.2	2.6	2.3	2.9
<b>Other current transfers received</b>	bill.CZK	<b>143</b>	<b>141</b>	<b>140</b>	<b>139</b>	<b>151</b>	<b>146</b>	<b>160</b>	<b>181</b>	<b>186</b>	<b>192</b>
	growth in %	13.2	-1.4	-1.0	-0.5	8.6	-3.1	9.2	13.3	2.9	3.0
<b>Current expenditure</b>											
<b>Property income paid</b>	bill.CZK	<b>31</b>	<b>19</b>	<b>23</b>	<b>21</b>	<b>15</b>	<b>21</b>	<b>16</b>	<b>18</b>	<b>17</b>	<b>16</b>
	growth in %	11.2	-36.7	17.7	-8.5	-27.2	40.5	-24.3	10.8	-5.2	-3.0
<b>Curr. taxes on income and property</b>	bill.CZK	<b>145</b>	<b>140</b>	<b>137</b>	<b>156</b>	<b>158</b>	<b>166</b>	<b>177</b>	<b>183</b>	<b>197</b>	<b>207</b>
	growth in %	-9.9	-3.0	-2.6	13.8	1.6	4.9	6.9	3.0	8.1	4.8
<b>Social contributions</b>	bill.CZK	<b>637</b>	<b>603</b>	<b>621</b>	<b>640</b>	<b>654</b>	<b>670</b>	<b>696</b>	<b>735</b>	<b>767</b>	<b>808</b>
	growth in %	3.3	-5.3	2.9	3.0	2.3	2.4	3.8	5.6	4.4	5.3
<b>Other current transfers paid</b>	bill.CZK	<b>146</b>	<b>143</b>	<b>141</b>	<b>145</b>	<b>154</b>	<b>140</b>	<b>150</b>	<b>168</b>	<b>168</b>	<b>168</b>
	growth in %	12.1	-1.6	-1.6	3.2	6.2	-9.3	6.9	12.0	-0.1	0.0
<b>Gross disposable income</b>	bill.CZK	<b>2 106</b>	<b>2 168</b>	<b>2 182</b>	<b>2 184</b>	<b>2 206</b>	<b>2 208</b>	<b>2 285</b>	<b>2 362</b>	<b>2 424</b>	<b>2 502</b>
	growth in %	7.4	3.0	0.7	0.1	1.0	0.1	3.5	3.4	2.6	3.2
<b>Final consumption</b>	bill.CZK	<b>1 887</b>	<b>1 891</b>	<b>1 920</b>	<b>1 952</b>	<b>1 970</b>	<b>1 997</b>	<b>2 044</b>	<b>2 110</b>	<b>2 179</b>	<b>2 263</b>
	growth in %	7.9	0.2	1.5	1.7	0.9	1.3	2.4	3.2	3.3	3.9
<b>Change in share in pension funds</b>	bill.CZK	<b>24</b>	<b>17</b>	<b>15</b>	<b>16</b>	<b>15</b>	<b>35</b>	<b>35</b>	<b>35</b>	<b>36</b>	<b>39</b>
<b>Gross savings</b>	bill.CZK	<b>243</b>	<b>295</b>	<b>278</b>	<b>248</b>	<b>250</b>	<b>246</b>	<b>276</b>	<b>288</b>	<b>281</b>	<b>278</b>
<b>Capital transfers</b>											
(income (-) / expenditure (+))	bill.CZK	<b>-25</b>	<b>-25</b>	<b>-29</b>	<b>-25</b>	<b>-21</b>	<b>-13</b>	<b>-32</b>	<b>-13</b>	<b>-19</b>	<b>-23</b>
<b>Gross capital formation</b>	bill.CZK	<b>219</b>	<b>212</b>	<b>230</b>	<b>198</b>	<b>183</b>	<b>181</b>	<b>195</b>	<b>218</b>	<b>221</b>	<b>228</b>
	growth in %	2.8	-3.1	8.8	-13.9	-7.8	-1.3	8.3	11.4	1.6	2.8
<b>Change in financial assets and liab.</b>	bill.CZK	<b>47</b>	<b>106</b>	<b>75</b>	<b>73</b>	<b>87</b>	<b>77</b>	<b>110</b>	<b>81</b>	<b>78</b>	<b>71</b>
<b>Real disposable income</b>	growth in %	<b>2.5</b>	<b>2.1</b>	<b>0.1</b>	<b>-1.3</b>	<b>-1.2</b>	<b>-0.8</b>	<b>2.9</b>	<b>3.3</b>	<b>2.4</b>	<b>2.1</b>
<b>Gross savings rate</b>	%	<b>11.5</b>	<b>13.6</b>	<b>12.7</b>	<b>11.4</b>	<b>11.3</b>	<b>11.1</b>	<b>12.1</b>	<b>12.2</b>	<b>11.6</b>	<b>11.1</b>

Source: CZSO, own calculations



## C.4 External Relations

The current account balance to GDP<sup>1</sup> ratio reached 1.4% (*versus 1.0%*) in the first quarter of 2016, which was a QoQ improvement of 0.5% of GDP. The current account remains in surplus.

Export markets have been growing already since the first quarter of 2013; however, their growth slowed down again in the first quarter of 2016, specifically to 3.6% (*versus 3.9%*). Given the change in assumptions about GDP growth of our main trading partners and the development of import intensity, we expect slower growth of export markets compared to the previous forecast. Export markets should thus increase by 4.0% (*versus 4.7%*) in 2016 and by 3.9% (*versus 5.6%*) in 2017.

Export performance (the indicator of a change in the market share of Czech goods on foreign markets) that increased by 1.9% in 2015 amid considerably uneven development in individual quarters is no longer supported by the weakening of the CZK/EUR exchange rate. In the first quarter of 2016, export performance increased by 2.4%, its growth thus slowed down by 2.0 pp compared to the fourth quarter of 2015. For 2016, we expect a slight slowdown of export performance growth to 1.7% (*versus 1.2%*). The expected leaving of the regime of using the exchange rate as an additional monetary policy instrument around mid-2017 will weigh on growth of export performance, which could increase only by 0.9% (*versus 0.5%*) in 2017.

Quarterly growth rates of foreign trade in nominal terms (balance of payments methodology) have had a decreasing tendency since the beginning of 2014. Moreover, import growth exceeded export growth in 2015 and the surplus on the trade balance stagnated or decreased – in YoY terms it was 0.5% of GDP lower in 2015 (after the GDP revision, which increased its nominal level). With only slightly improved terms of trade, this development was influenced by increasing domestic demand driving imports – by strong growth of investment and here especially by government investment activity, in addition to consumption. Since the fourth quarter, the relation of export and import growth dynamics has reversed and the surplus on the balance of goods started increasing again, especially in the important group SITC 7 (Machinery and transport equipment).

The dominant factor still influencing terms of trade of foreign trade in goods is the low crude oil price. An improvement of the terms of trade into positive values since September 2015 has so far been confirmed in 2016. In relation to the scenario of crude oil price

development, the deficit on the fuel balance (SITC 3), which reached 2.3% of GDP in the first quarter of 2016, should decrease to 2.0% of GDP in 2016. For 2017, we already expect YoY growth of the CZK crude oil price, and thus also a deepening of the deficit on the SITC 3 balance to 2.2% of GDP.

According to current data, the balance of goods reached a surplus of 4.9% of GDP (*versus 4.8%*) in the first quarter of 2016, which was 0.3% of GDP less in YoY terms. With respect to the aforementioned (including the impact of the GDP revision), we left our forecast of the surplus on the balance of goods at 5.1% of GDP in 2016. In connection with the scenario of crude oil price growth we expect only a slight deterioration to 4.9% of GDP (*versus 5.0%*) in 2017.

Since the second quarter of 2015, the surplus of the balance of services has been increasing and reached 1.7% of GDP (*in line with the forecast*) in the first quarter of 2016, improving by 0.4% of GDP YoY. With the continuing economic growth, the growth rates of exports and imports of services are expected to be nearly identical in the following period. Imports of services related to the leasing of JAS-39 Gripen aircrafts will not be important in terms of the total volumes. In 2016 and 2017, the surplus on the balance of services should reach, identically, 1.7% of GDP (*unchanged in both years*).

The surplus on the current account increased by 1.0% of GDP YoY in the first quarter of 2016. This was due to improvement of the deficit on the primary income balance of 1.5% of GDP and the already mentioned increase in the surplus on the balance of services on one side, and a decrease in the surplus on the balance of goods (0.3% of GDP) and secondary incomes (0.7% of GDP) on the other. The primary income deficit reached 5.0% of GDP in the first quarter of 2016 (*versus 5.4%* – here it is appropriate to mention the usual tendency of revisions towards deterioration) and its improvement was caused by a lower outflow of income from foreign direct investment to foreign owners (in particular dividends amid a slowdown of profitability growth) and by a gradually improving surplus of compensation of employees. This balance shows a high volatility over time related to the cyclical development of the economy. In the last period, pressures on wage growth have been strengthening. This will affect the distribution of GDP into net profits of companies and compensation of employees. Therefore, we expect, basically, an unchanged primary income deficit in the following two years. This deficit could reach 5.0% of GDP (*versus 5.4%*) in 2016 and 5.1% of GDP (*versus 5.4%*) in 2017.

<sup>1</sup> All quarterly data in relation to GDP are stated in yearly moving sums.

In the aforementioned context we assume that the current account remains in surplus that could reach 1.5% of GDP (*versus 1.1%*) in 2016. In 2017, the surplus is expected to decrease slightly to 1.2% of GDP (*versus 1.0%*).

A risk to external business relations in the forecast horizon is mainly the so-called Brexit and the related uncertainties, and therefore also likely turbulences on the financial markets, that can negatively influence mutual trade exchange (for more detail see Box A.1).

**Table C.4.1: Balance of Payments – yearly**

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
										Forecast	Forecast
<b>Goods and services</b>	<i>bill.CZK</i>	85	147	119	157	201	237	275	286	319	318
	<i>% GDP</i>	<b>2.1</b>	<b>3.7</b>	<b>3.0</b>	<b>3.9</b>	<b>5.0</b>	<b>5.8</b>	<b>6.4</b>	<b>6.3</b>	<b>6.8</b>	<b>6.6</b>
<b>– goods</b>	<i>bill.CZK</i>	-4	65	40	75	124	167	220	211	240	236
	<i>% GDP</i>	<b>-0.1</b>	<b>1.7</b>	<b>1.0</b>	<b>1.9</b>	<b>3.0</b>	<b>4.1</b>	<b>5.1</b>	<b>4.6</b>	<b>5.1</b>	<b>4.9</b>
<b>– services</b>	<i>bill.CZK</i>	89	82	78	81	78	70	56	75	79	82
	<i>% GDP</i>	<b>2.2</b>	<b>2.1</b>	<b>2.0</b>	<b>2.0</b>	<b>1.9</b>	<b>1.7</b>	<b>1.3</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>
<b>Primary income</b>	<i>bill.CZK</i>	-148	-217	-250	-223	-238	-249	-261	-244	-235	-247
	<i>% GDP</i>	<b>-3.7</b>	<b>-5.5</b>	<b>-6.3</b>	<b>-5.5</b>	<b>-5.9</b>	<b>-6.1</b>	<b>-6.0</b>	<b>-5.3</b>	<b>-5.0</b>	<b>-5.1</b>
<b>Secondary income</b>	<i>bill.CZK</i>	-12	-19	-11	-18	-27	-10	-7	-1	-15	-15
	<i>% GDP</i>	<b>-0.3</b>	<b>-0.5</b>	<b>-0.3</b>	<b>-0.5</b>	<b>-0.7</b>	<b>-0.2</b>	<b>-0.2</b>	<b>0.0</b>	<b>-0.3</b>	<b>-0.3</b>
<b>Current account</b>	<i>bill.CZK</i>	-75	-89	-142	-85	-63	-22	7	41	69	57
	<i>% GDP</i>	<b>-1.9</b>	<b>-2.3</b>	<b>-3.6</b>	<b>-2.1</b>	<b>-1.6</b>	<b>-0.5</b>	<b>0.2</b>	<b>0.9</b>	<b>1.5</b>	<b>1.2</b>
<b>Capital account</b>	<i>bill.CZK</i>	26	51	38	13	53	82	32	106	49	57
	<i>% GDP</i>	<b>0.6</b>	<b>1.3</b>	<b>1.0</b>	<b>0.3</b>	<b>1.3</b>	<b>2.0</b>	<b>0.7</b>	<b>2.3</b>	<b>1.0</b>	<b>1.2</b>
<b>Net lending/borrowing</b>	<i>bill.CZK</i>	-49	-38	-104	-72	-10	61	40	148	118	114
	<i>% GDP</i>	<b>-1.2</b>	<b>-1.0</b>	<b>-2.6</b>	<b>-1.8</b>	<b>-0.3</b>	<b>1.5</b>	<b>0.9</b>	<b>3.2</b>	<b>2.5</b>	<b>2.3</b>
<b>Financial account</b>	<i>bill.CZK</i>	-43	-72	-122	-75	12	68	63	194	.	.
	<i>bill.CZK</i>	-36	-38	-95	-47	-121	7	-80	27	.	.
<b>– direct investments</b>	<i>bill.CZK</i>	9	-159	-150	-6	-55	-93	90	-164	.	.
<b>– portfolio investments</b>	<i>bill.CZK</i>	3	1	5	4	-9	-5	-6	-5	.	.
<b>– financial derivatives</b>	<i>bill.CZK</i>	-59	62	77	-9	116	-30	-14	-15	.	.
<b>– other investments</b>	<i>bill.CZK</i>	40	61	41	-17	80	188	73	351	.	.
<b>– reserve assets</b>	<i>bill.CZK</i>									.	.
<b>International investment position</b>	<i>bill.CZK</i>	-1 534	-1 726	-1 823	-1 823	-1 864	-1 695	-1 578	-1 396	.	.
	<i>% GDP</i>	<b>-38.2</b>	<b>-44.0</b>	<b>-46.1</b>	<b>-45.2</b>	<b>-45.9</b>	<b>-41.4</b>	<b>-36.6</b>	<b>-30.7</b>	.	.
<b>Gross external debt</b>	<i>bill.CZK</i>	1 862	1 956	2 164	2 312	2 434	2 733	2 946	3 132	.	.
	<i>% GDP</i>	<b>46.4</b>	<b>49.9</b>	<b>54.7</b>	<b>57.3</b>	<b>60.0</b>	<b>66.7</b>	<b>68.3</b>	<b>68.8</b>	.	.

Source: CNB, CZSO, own calculations

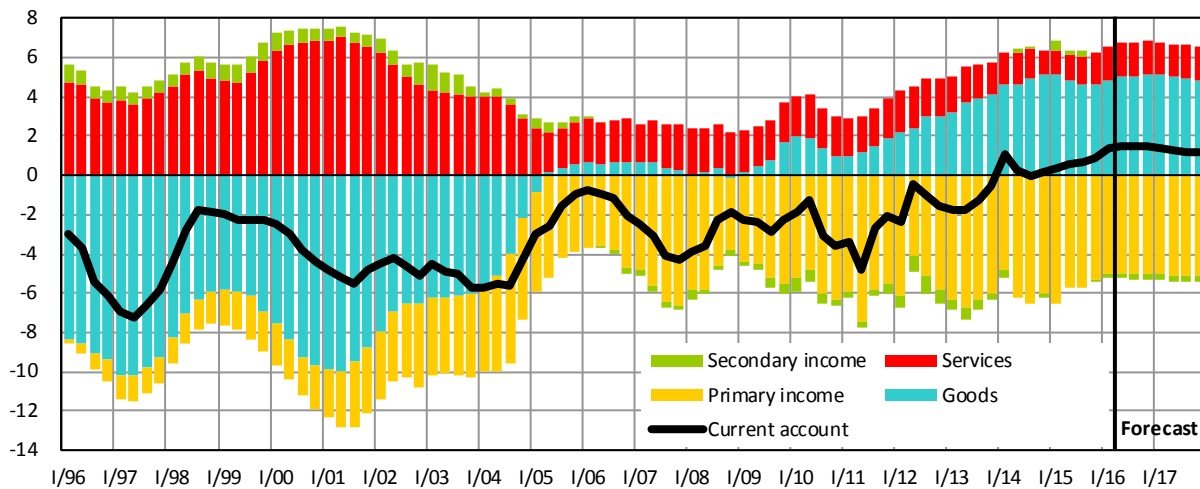
**Table C.4.2: Balance of Payments – quarterly**  
moving sums of the latest 4 quarters

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	
<b>Goods and services</b>	bill.CZK	279	275	272	286	301	311	316	319
– goods	bill.CZK	225	216	207	211	224	233	237	240
– services	bill.CZK	54	59	66	75	77	78	79	79
<b>Primary income</b>	bill.CZK	-285	-256	-259	-244	-230	-231	-233	-235
<b>Secondary income</b>	bill.CZK	23	7	15	-1	-8	-11	-13	-15
<b>Current account</b>	bill.CZK	18	26	29	41	63	70	70	69
<b>Capital account</b>	bill.CZK	42	94	99	106	94	79	64	49
<b>Net lending/borrowing</b>	bill.CZK	59	119	128	148	157	148	134	118
<b>Financial account</b>	bill.CZK	84	158	163	194	191	.	.	.
– direct investments	bill.CZK	-58	-19	12	27	29	.	.	.
– portfolio investments	bill.CZK	121	75	-13	-164	-246	.	.	.
– financial derivatives	bill.CZK	-4	1	-3	-5	-3	.	.	.
– other investments	bill.CZK	-61	-34	-156	-15	-53	.	.	.
– reserve assets	bill.CZK	86	135	322	351	464	.	.	.
<b>International investment position</b>	stock in bill.CZK	-1 388	-1 383	-1 468	-1 396	-1 266	.	.	.
<b>Gross external debt</b>	stock in bill.CZK	2 958	2 971	3 194	3 132	3 177	.	.	.

Source: CNB, CZSO, own calculations

**Graph C.4.1: Current Account**

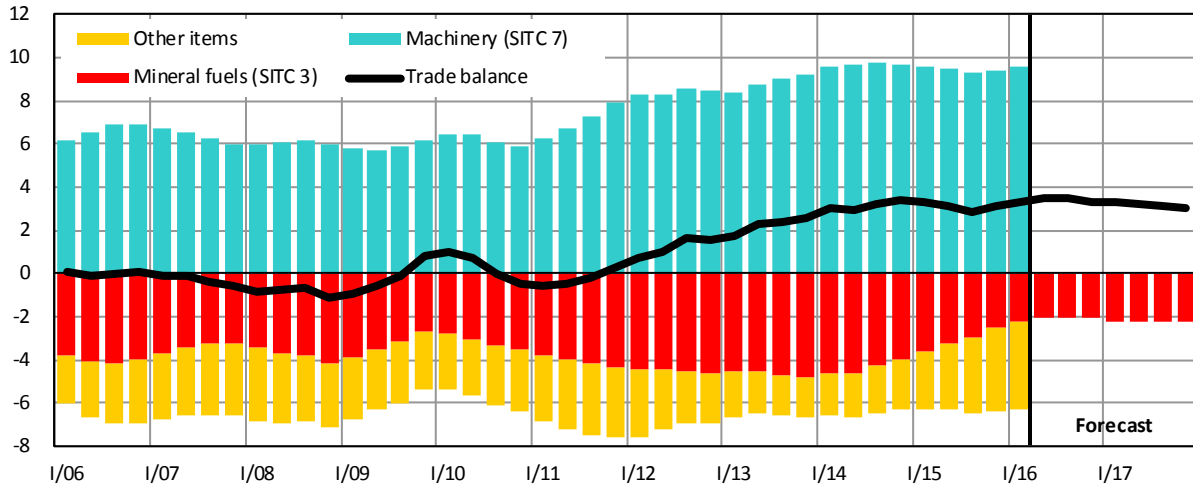
moving sums of the latest 4 quarters, in % of GDP, trade and service balances in BoP definitions



Source: CNB, CZSO, own calculations

### Graph C.4.2: Balance of Trade (national concept)

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

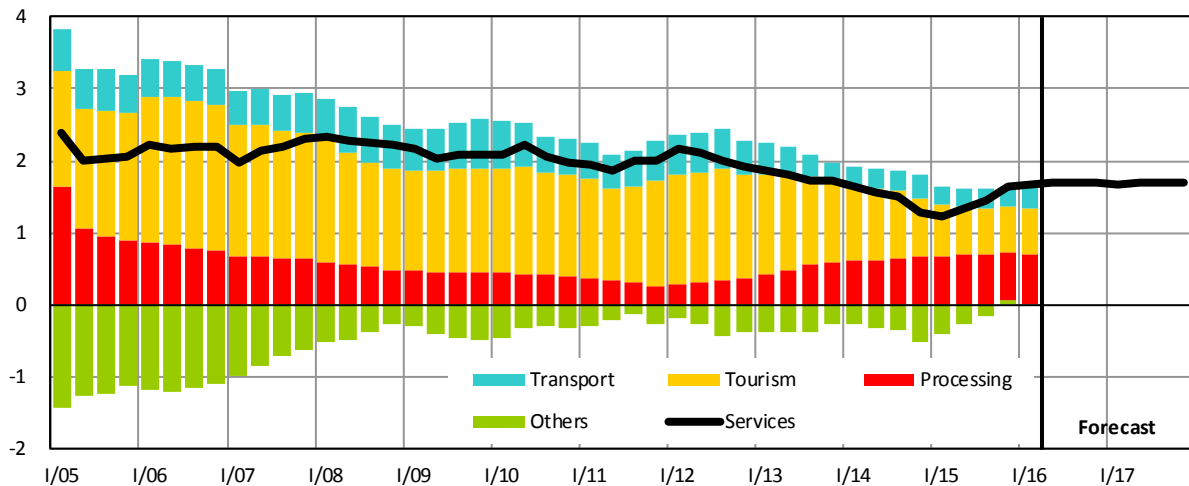


Note: The data in the chart show imports in cif methodology. For this reason, the chart is not comparable with Tables C.4.1 and C.4.2, where imports are in fob methodology. Trade balance in the national concept (unlike in the BoP methodology in Tables C.4.1 and C.4.2) does not include the import of JAS-39 Gripen fighter jets in the fourth quarter of 2015 amounting to CZK 9.9 bill., i.e. 0.2% of GDP.

Source: CZSO, own calculations

### Graph C.4.3: Balance of Services

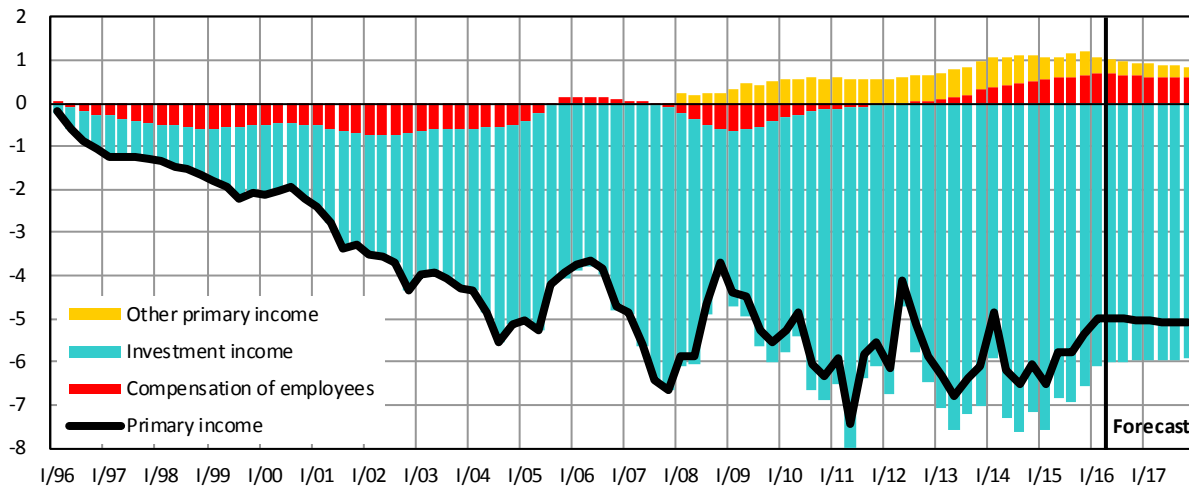
moving sums of the latest 4 quarters, in % of GDP



Source: CNB, CZSO, own calculations

### Graph C.4.4: Balance of Primary Income

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



Source: CNB, CZSO, own calculations

**Table C.4.3: Decomposition of Exports of Goods – yearly**

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
										Forecast	Forecast
<b>GDP</b> <sup>1)</sup>	<i>average of 2005=100</i>	100.8	96.5	100.0	103.4	104.3	105.1	107.1	109.2	111	114
	<i>growth in %</i>	<b>1.7</b>	<b>-4.2</b>	<b>3.6</b>	<b>3.4</b>	<b>0.9</b>	<b>0.8</b>	<b>1.9</b>	<b>2.0</b>	<b>2.0</b>	<b>1.9</b>
<b>Import intensity</b> <sup>2)</sup>	<i>average of 2005=100</i>	98.7	92.0	100.0	104.0	103.1	104.7	107.5	111.0	113	115
	<i>growth in %</i>	<b>0.0</b>	<b>-6.7</b>	<b>8.7</b>	<b>4.0</b>	<b>-0.8</b>	<b>1.5</b>	<b>2.7</b>	<b>3.3</b>	<b>1.9</b>	<b>2.0</b>
<b>Export markets</b> <sup>3)</sup>	<i>average of 2005=100</i>	99.5	88.8	100.0	107.5	107.6	110.1	115.1	121.3	126	131
	<i>growth in %</i>	<b>1.7</b>	<b>-10.7</b>	<b>12.6</b>	<b>7.5</b>	<b>0.1</b>	<b>2.3</b>	<b>4.6</b>	<b>5.4</b>	<b>4.0</b>	<b>3.9</b>
<b>Export performance</b>	<i>average of 2005=100</i>	96.8	96.9	100.0	102.4	106.6	104.9	109.6	111.7	114	115
	<i>growth in %</i>	<b>2.5</b>	<b>0.2</b>	<b>3.2</b>	<b>2.4</b>	<b>4.1</b>	<b>-1.6</b>	<b>4.4</b>	<b>1.9</b>	<b>1.7</b>	<b>0.9</b>
<b>Real exports</b>	<i>average of 2005=100</i>	96.3	86.1	100.0	110.1	114.8	115.5	126.1	135.4	143	150
	<i>growth in %</i>	<b>4.2</b>	<b>-10.5</b>	<b>16.1</b>	<b>10.1</b>	<b>4.2</b>	<b>0.6</b>	<b>9.2</b>	<b>7.4</b>	<b>5.7</b>	<b>4.9</b>
<b>1 / NEER</b>	<i>average of 2005=100</i>	98.9	102.2	100.0	97.1	100.6	102.9	108.1	108.2	105	104
	<i>growth in %</i>	<b>-10.5</b>	<b>3.4</b>	<b>-2.2</b>	<b>-2.9</b>	<b>3.6</b>	<b>2.3</b>	<b>5.1</b>	<b>0.1</b>	<b>-2.6</b>	<b>-0.9</b>
<b>Prices on foreign markets</b>	<i>average of 2005=100</i>	102.4	99.3	100.0	103.8	103.5	102.7	101.4	99.8	100	100
	<i>growth in %</i>	<b>6.3</b>	<b>-3.1</b>	<b>0.8</b>	<b>3.8</b>	<b>-0.4</b>	<b>-0.7</b>	<b>-1.2</b>	<b>-1.6</b>	<b>-0.1</b>	<b>0.1</b>
<b>Exports deflator</b>	<i>average of 2005=100</i>	101.2	101.4	100.0	100.8	104.0	105.6	109.7	108.0	105	104
	<i>growth in %</i>	<b>-4.9</b>	<b>0.2</b>	<b>-1.4</b>	<b>0.8</b>	<b>3.2</b>	<b>1.5</b>	<b>3.8</b>	<b>-1.5</b>	<b>-2.7</b>	<b>-0.8</b>
<b>Nominal exports</b>	<i>average of 2005=100</i>	97.4	87.2	100.0	111.0	119.4	122.0	138.3	146.2	150	156
	<i>growth in %</i>	<b>-0.9</b>	<b>-10.5</b>	<b>14.7</b>	<b>11.0</b>	<b>7.5</b>	<b>2.2</b>	<b>13.4</b>	<b>5.8</b>	<b>2.8</b>	<b>4.0</b>

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, own calculations

**Table C.4.4: Decomposition of Exports of Goods – quarterly**

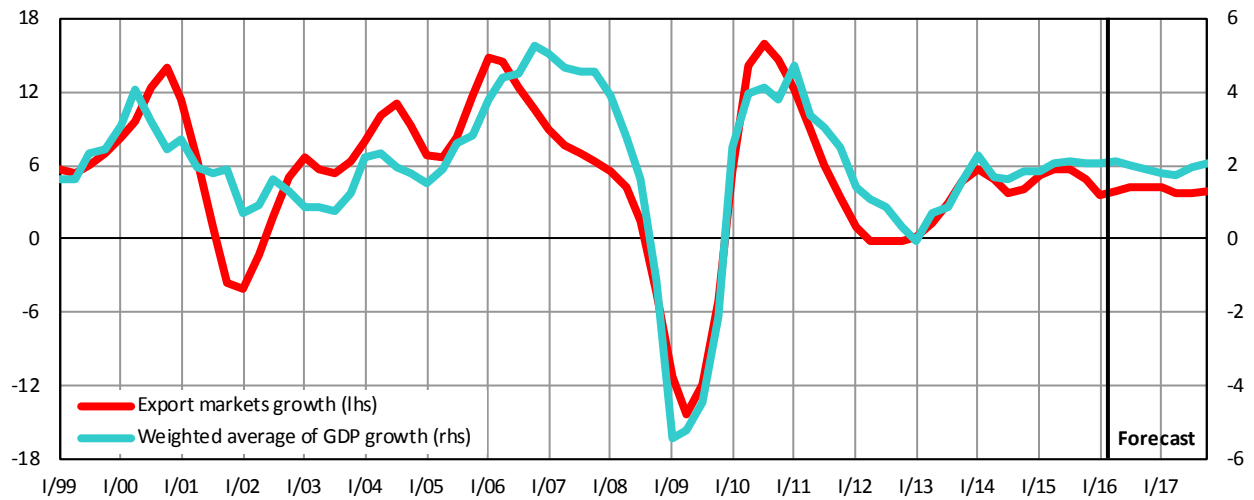
		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	
<b>GDP</b> <sup>1)</sup>	<i>average of 2010=100</i>	108.5	109.0	109.4	110.0	110.7	111	112	112
	<i>growth in %</i>	<b>1.8</b>	<b>2.0</b>	<b>2.1</b>	<b>2.1</b>	<b>2.0</b>	<b>2.1</b>	<b>2.0</b>	<b>1.9</b>
<b>Import intensity</b> <sup>2)</sup>	<i>average of 2010=100</i>	110.2	111.0	111.3	111.6	111.9	113	114	114
	<i>growth in %</i>	<b>3.4</b>	<b>3.6</b>	<b>3.5</b>	<b>2.8</b>	<b>1.5</b>	<b>1.7</b>	<b>2.1</b>	<b>2.2</b>
<b>Export markets</b> <sup>3)</sup>	<i>average of 2010=100</i>	119.6	120.9	121.8	122.8	123.9	126	127	128
	<i>growth in %</i>	<b>5.3</b>	<b>5.7</b>	<b>5.7</b>	<b>4.9</b>	<b>3.6</b>	<b>3.8</b>	<b>4.2</b>	<b>4.2</b>
<b>Export performance</b>	<i>average of 2010=100</i>	112.2	111.9	107.8	114.7	114.9	114	109	116
	<i>growth in %</i>	<b>2.2</b>	<b>0.9</b>	<b>0.0</b>	<b>4.4</b>	<b>2.4</b>	<b>2.3</b>	<b>1.1</b>	<b>1.0</b>
<b>Real exports</b>	<i>average of 2010=100</i>	134.2	135.3	131.3	140.9	142.4	144	138	148
	<i>growth in %</i>	<b>7.6</b>	<b>6.6</b>	<b>5.7</b>	<b>9.5</b>	<b>6.1</b>	<b>6.2</b>	<b>5.4</b>	<b>5.2</b>
<b>1 / NEER</b>	<i>average of 2010=100</i>	109.1	109.8	107.1	106.8	105.5	105	105	105
	<i>growth in %</i>	<b>1.4</b>	<b>2.0</b>	<b>-1.6</b>	<b>-1.4</b>	<b>-3.4</b>	<b>-4.2</b>	<b>-1.5</b>	<b>-1.3</b>
<b>Prices on foreign markets</b>	<i>average of 2010=100</i>	100.0	99.4	100.3	99.5	99.3	100	100	99
	<i>growth in %</i>	<b>-1.6</b>	<b>-2.1</b>	<b>-0.9</b>	<b>-1.6</b>	<b>-0.7</b>	<b>0.4</b>	<b>0.0</b>	<b>-0.2</b>
<b>Exports deflator</b>	<i>average of 2010=100</i>	109.2	109.2	107.4	106.4	104.8	105	106	105
	<i>growth in %</i>	<b>-0.2</b>	<b>-0.2</b>	<b>-2.5</b>	<b>-3.1</b>	<b>-4.1</b>	<b>-3.8</b>	<b>-1.5</b>	<b>-1.5</b>
<b>Nominal exports</b>	<i>average of 2010=100</i>	146.5	147.6	141.0	149.8	149.1	151	146	155
	<i>growth in %</i>	<b>7.3</b>	<b>6.4</b>	<b>3.1</b>	<b>6.2</b>	<b>1.8</b>	<b>2.2</b>	<b>3.8</b>	<b>3.6</b>

See notes to Table C.4.3.

Source: CNB, CZSO, Eurostat, own calculations

**Graph C.4.5: GDP and Imports of Goods in Main Partner Countries**

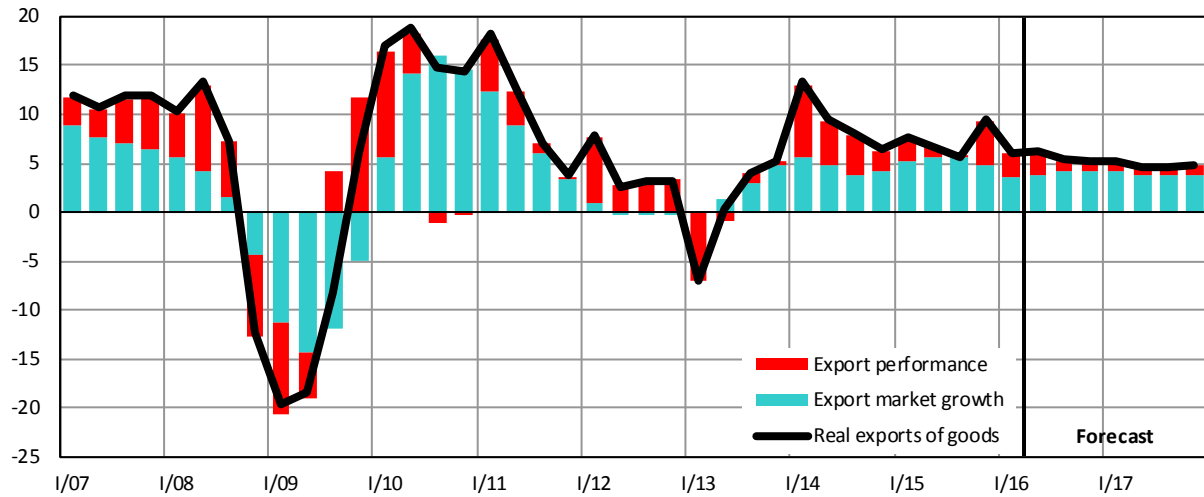
YoY growth rate, in %



Source: Eurostat, own calculations

**Graph C.4.6: Real Exports of Goods**

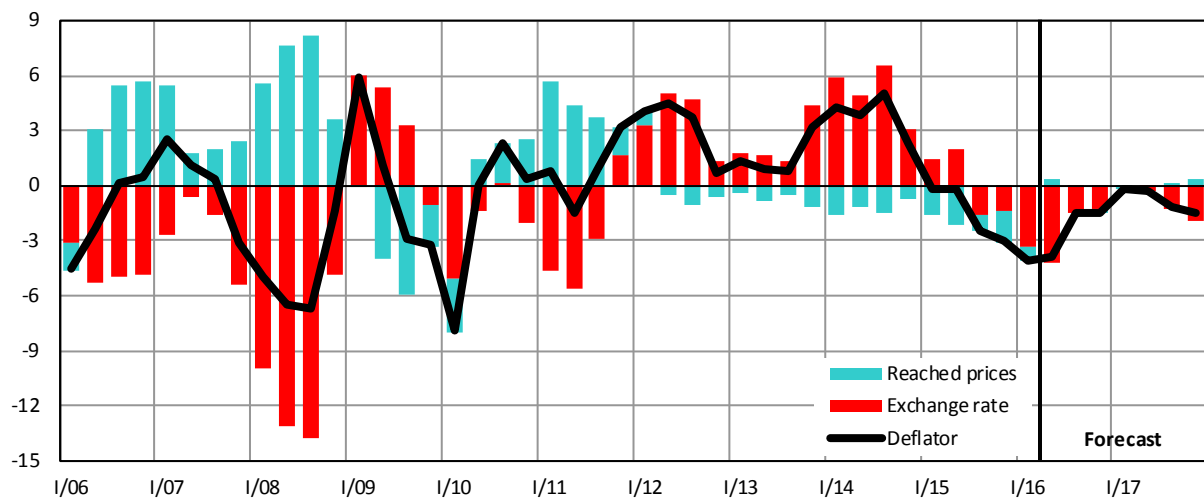
decomposition of YoY growth, in %



Source: CZSO, Eurostat, own calculations

**Graph C.4.7: Deflator of Exports of Goods**

decomposition of YoY growth, in %



Source: CNB, CZSO, own calculations

## C.5 International Comparisons

Comparisons for the period up to and including 2014 are based on Eurostat statistics. Since 2015, our own calculations on the basis of real exchange rates have been used.

Using the purchasing power parity method, comparisons of economic output for individual countries within the EU are made in purchasing power standards (PPS). PPS is an artificial currency unit expressing a quantity of goods that can be bought on average for one euro in the EU28 territory after converting the exchange rate for countries using currency units other than the euro.

In 2015, the level of GDP per capita converted by **current purchasing power parity** increased in all monitored countries. However, there was a slight decrease in relative economic level towards the EA12 countries in Greece, Estonia, Lithuania, Croatia and Portugal. In the Czech Republic, the purchasing power parity was 17.29 CZK/PPS compared to the EU28 and 17.00 CZK/EUR compared to the EA12. The economic level was circa 25,000 PPS, corresponding to 81% of the economic level in the EA12. In 2016 and 2017, the relative economic level of the Czech Republic should increase gradually up to 83% of the EA12 average in 2017, thanks to stronger economic growth in the Czech Republic than in the EA12.

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. 50% of the EA12 level. Higher economic growth will result in a gradual increase in the relative level up to 52% of the EA12 average in 2017.

When comparing price levels, the **comparative price level of GDP** in the Czech Republic increased by 1 pp in 2015, thus reaching 62% of the EA12 average. In the coming years, the comparative price level of GDP should increase slightly up to 63% in 2017, which will continue to help the competitiveness of the Czech economy.

Through the decomposition of GDP per capita into individual components<sup>2</sup> (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 C.5.5 and C.5.6.

**Labour productivity** in the monitored countries has been increasing in the long run; however, its level is still relatively low compared to the EA12 average. Although the economic crisis slowed down labour productivity growth, its absolute level did not decrease in any of the monitored countries in 2008–2015. In the given period, however, a decrease in the relative level of labour productivity to the EA12 countries was seen in Greece and Slovenia, whereas increases in the relative level in Poland, Latvia, Lithuania and Estonia exceeded 6 pp. In the Czech Republic, after a five-year period of stagnation, labour productivity started growing again in 2014, reaching 65% of the EA12 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 and Lithuania. The highest slump (by 15%) was seen in Greece due to a 19% decrease in the number of hours worked. In contrast, the relative level of the labour market component has long been exceeding the EA12 average in all countries, with the exception of Slovakia; in the case of Estonia, Latvia and Poland 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 21<sup>st</sup> 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 EA12 average, however, the demographic component is still higher in all monitored countries; it exceeded the EA12 average by 10 pp in Slovakia in 2015.

<sup>2</sup> GDP per capita can be written as follows:

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

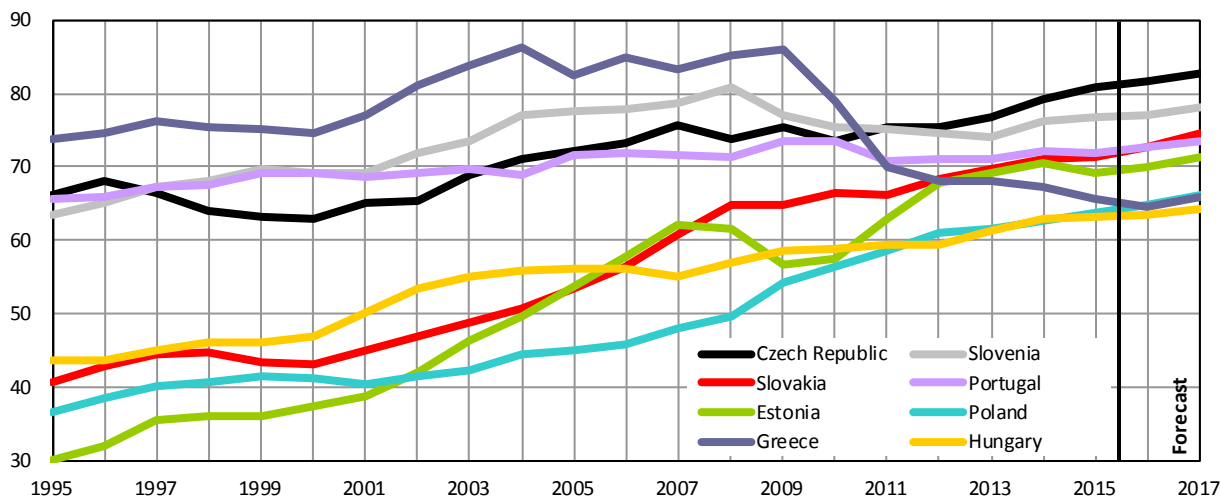
**Table C.5.1: GDP per Capita – Using Current Purchasing Power Parities**

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
											Forecast	Forecast
Czech Republic	PPS	21 100	20 200	20 600	21 600	21 800	22 300	23 500	25 000	25 800	26 700	
	EA12=100	74	75	74	75	75	77	79	81	82	83	
Slovenia	PPS	23 100	20 700	21 100	21 500	21 500	21 500	22 600	23 700	24 400	25 300	
	EA12=100	81	77	75	75	74	74	76	77	77	78	
Slovakia	PPS	18 500	17 300	18 600	19 000	19 700	20 200	21 100	22 000	23 000	24 100	
	EA12=100	65	65	66	66	68	70	71	71	73	74	
Portugal	PPS	20 400	19 700	20 500	20 300	20 500	20 600	21 400	22 200	23 000	23 800	
	EA12=100	71	74	73	71	71	71	72	72	73	74	
Lithuania	PPS	16 200	13 800	15 300	17 000	18 500	19 600	20 600	21 100	22 300	23 500	
	EA12=100	57	51	55	59	64	67	69	68	70	73	
Estonia	PPS	17 600	15 200	16 100	18 000	19 600	20 000	20 900	21 400	22 200	23 100	
	EA12=100	62	57	58	63	68	69	70	69	70	71	
Poland	PPS	14 200	14 500	15 700	16 800	17 600	17 900	18 600	19 700	20 500	21 400	
	EA12=100	50	54	56	59	61	62	63	64	65	66	
Greece	PPS	24 300	23 100	22 100	20 100	19 600	19 700	19 900	20 300	20 500	21 300	
	EA12=100	85	86	79	70	68	68	67	66	65	66	
Hungary	PPS	16 300	15 700	16 500	17 100	17 200	17 700	18 600	19 500	20 100	20 800	
	EA12=100	57	59	59	59	59	61	63	63	63	64	
Latvia	PPS	15 500	12 800	13 300	14 700	16 000	16 600	17 500	18 500	19 400	20 400	
	EA12=100	54	48	47	51	55	57	59	60	61	63	
Croatia	PPS	16 400	15 000	14 900	15 500	15 900	15 800	16 100	16 700	17 300	17 900	
	EA12=100	58	56	53	54	55	55	54	54	55	55	

Source: AMECO, CZSO, Eurostat, own calculations

**Graph C.5.1: GDP per Capita – Using Current Purchasing Power Parities**

EA12=100



Source: AMECO, CZSO, Eurostat, own calculations



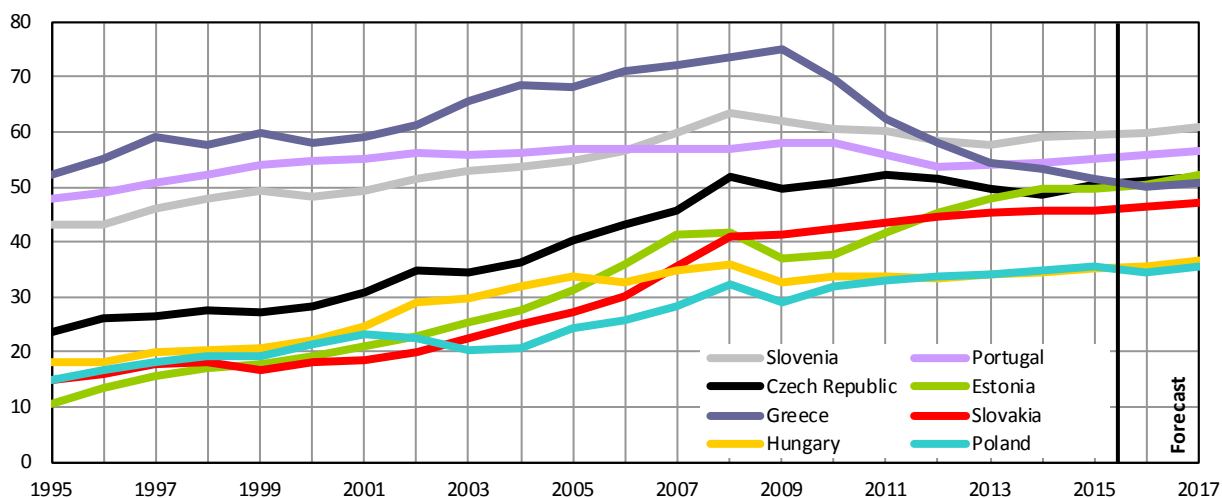
**Table C.5.2: GDP per Capita – Using Current Exchange Rates**

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
											Forecast	Forecast
Slovenia	EUR	18 800	17 700	17 700	18 000	17 500	17 400	18 100	18 700	19 200	20 000	
	EA12=100	63	62	60	60	58	58	59	59	60	61	
	Comparative price level EA12=100	78	80	80	80	78	78	78	77	77	78	
Portugal	EUR	16 900	16 600	17 000	16 700	16 000	16 300	16 700	17 300	17 900	18 600	
	EA12=100	57	58	58	56	53	54	54	55	56	56	
	Comparative price level EA12=100	80	79	79	79	75	76	76	77	77	77	
Czech Republic	EUR	15 400	14 100	14 900	15 600	15 400	15 000	14 900	15 800	16 400	17 000	
	EA12=100	52	49	51	52	51	50	49	50	51	52	
	Comparative price level EA12=100	70	66	69	69	68	65	61	62	62	63	
Estonia	EUR	12 300	10 600	11 000	12 500	13 600	14 400	15 200	15 600	16 200	17 100	
	EA12=100	42	37	38	42	45	48	50	50	50	52	
	Comparative price level EA12=100	68	65	66	67	67	69	70	72	72	73	
Greece	EUR	21 800	21 400	20 300	18 600	17 300	16 500	16 300	16 200	16 100	16 700	
	EA12=100	74	75	69	62	58	55	53	52	50	51	
	Comparative price level EA12=100	86	87	88	89	85	80	79	79	78	77	
Slovakia	EUR	12 200	11 800	12 400	13 000	13 400	13 600	13 900	14 400	14 900	15 600	
	EA12=100	41	41	42	44	45	45	46	46	46	47	
	Comparative price level EA12=100	63	64	64	66	66	65	64	64	64	64	
Lithuania	EUR	10 200	8 500	9 000	10 300	11 200	11 800	12 400	12 800	13 500	14 400	
	EA12=100	34	30	31	34	37	39	41	41	42	44	
	Comparative price level EA12=100	61	58	56	58	58	58	58	59	60	60	
Latvia	EUR	11 200	8 700	8 500	9 800	10 800	11 300	11 800	12 300	12 900	13 700	
	EA12=100	38	31	29	33	36	38	39	39	40	41	
	Comparative price level EA12=100	69	64	61	64	65	65	65	65	65	66	
Hungary	EUR	10 700	9 300	9 800	10 100	10 000	10 200	10 600	11 100	11 400	12 000	
	EA12=100	36	33	34	34	33	34	35	35	36	36	
	Comparative price level EA12=100	63	56	57	57	56	55	55	56	56	57	
Poland	EUR	9 600	8 300	9 400	9 900	10 100	10 200	10 700	11 100	11 100	11 700	
	EA12=100	32	29	32	33	34	34	35	35	35	36	
	Comparative price level EA12=100	65	54	57	56	55	55	56	56	54	54	
Croatia	EUR	11 200	10 500	10 500	10 400	10 300	10 200	10 200	10 400	10 800	11 200	
	EA12=100	38	37	36	35	34	34	33	33	34	34	
	Comparative price level EA12=100	65	65	67	64	63	62	61	61	61	61	

Source: AMECO, CZSO, Eurostat, own calculations

**Graph C.5.2: GDP per Capita – Using Current Exchange Rates**

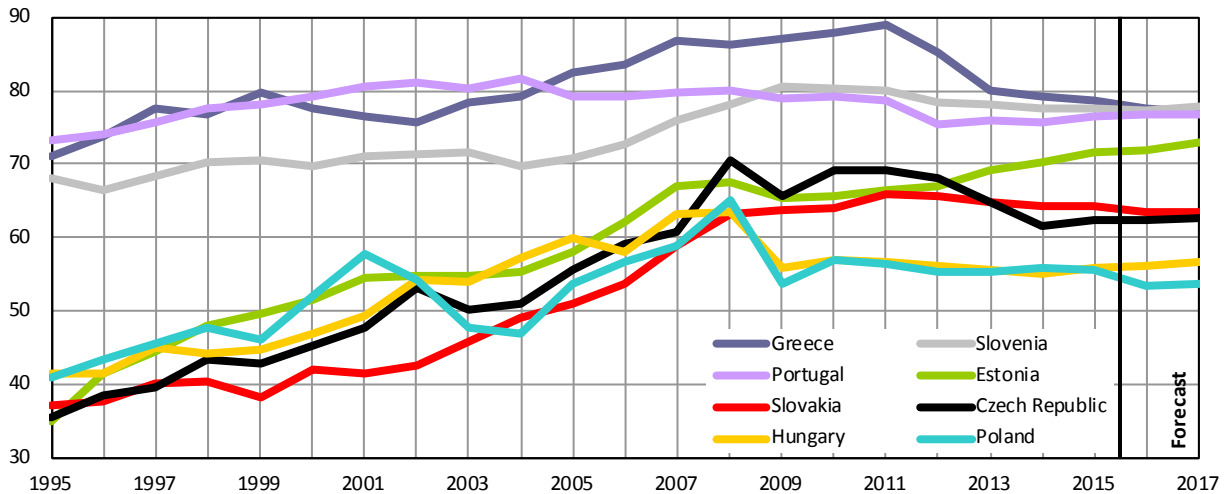
EA12=100



Source: AMECO, CZSO, Eurostat, own calculations

**Graph C.5.3: Comparative Price Level of GDP per Capita**

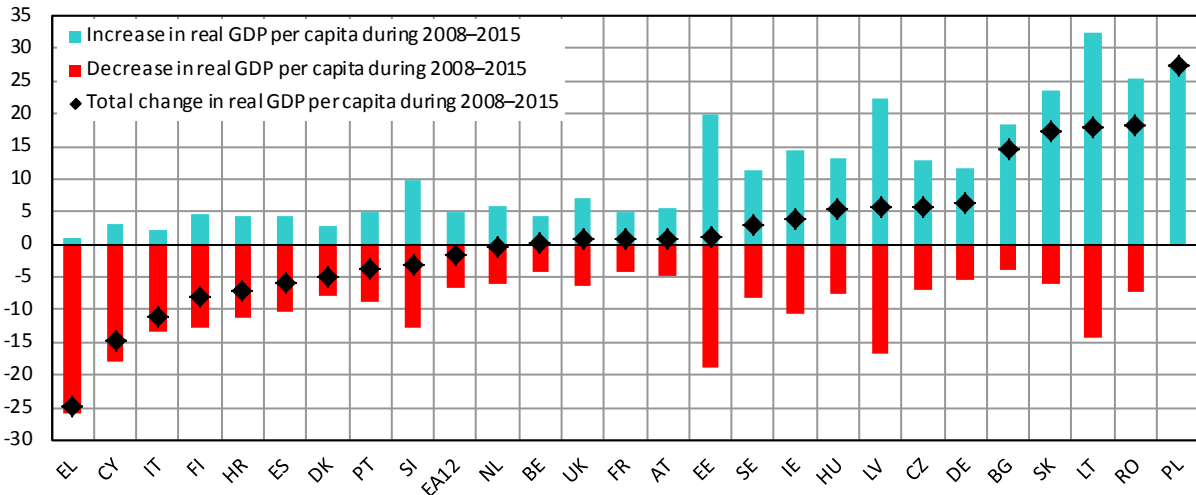
EA12=100



Source: AMECO, CZSO, Eurostat, own calculations

**Graph C.5.4: Change in Real GDP per Capita during 2008–2015**

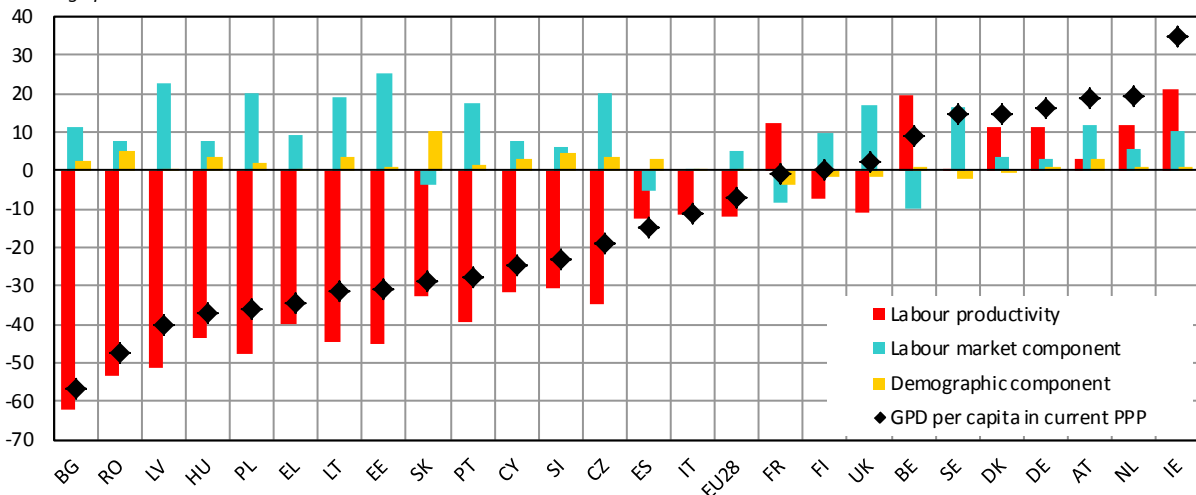
growth in %



Source: Eurostat, own calculations

**Graph C.5.5: Current PPP Adjusted GDP per Capita Level Relative to the EA12 Average in 2015**

in percentage points

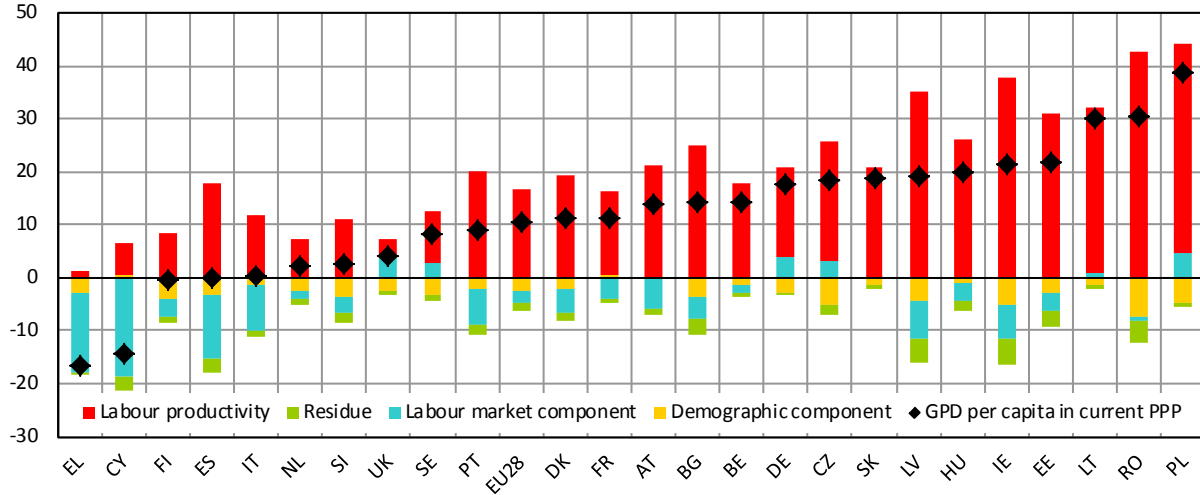


Note: The labour market component is defined as the ratio of total hours worked to working-age (15–64) population, the demographic component is the ratio of the working-age to total population.

Source: Eurostat, own calculations

**Graph C.5.6: Change in Current PPP Adjusted GDP per Capita during 2008–2015**

*growth in %*



Source: Eurostat, own calculations

## D 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 14 institutions are monitored. Out of these, 9 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 D.1.

**Table D.1: Summary of the Monitored Forecasts**

		June 2016			July 2016
		min.	max.	average	MoF forecast
<b>Gross domestic product (2016)</b>	<i>growth in %, const.pr.</i>	<b>2.0</b>	<b>2.8</b>	<b>2.4</b>	<b>2.2</b>
<b>Gross domestic product (2017)</b>	<i>growth in %, const.pr.</i>	<b>2.1</b>	<b>3.4</b>	<b>2.6</b>	<b>2.4</b>
<b>Average inflation rate (2016)</b>	%	<b>0.4</b>	<b>1.3</b>	<b>0.7</b>	<b>0.5</b>
<b>Average inflation rate (2017)</b>	%	<b>1.3</b>	<b>2.2</b>	<b>1.7</b>	<b>1.2</b>
<b>Average monthly wage (2016)</b>	<i>growth in %</i>	<b>3.9</b>	<b>4.3</b>	<b>4.0</b>	<b>4.4</b>
<b>Average monthly wage (2017)</b>	<i>growth in %</i>	<b>3.5</b>	<b>5.1</b>	<b>4.1</b>	<b>4.7</b>
<b>Current account / GDP (2016)</b>	%	<b>0.0</b>	<b>2.0</b>	<b>1.1</b>	<b>1.5</b>
<b>Current account / GDP (2017)</b>	%	<b>-0.4</b>	<b>1.5</b>	<b>0.8</b>	<b>1.2</b>

Source: forecasts of individual institutions, own calculations

According to the institutions' estimates, real GDP growth should reach 2.4% in 2016 and 2.6% in 2017. The MoF's forecast is slightly more conservative compared to the average of the monitored forecasts.

According to the institutions' estimates, the average inflation rate should reach 0.7% in 2016 and 1.7% in 2017. According to the MoF's forecast, the return to the CNB's 2% target should be considerably slower.

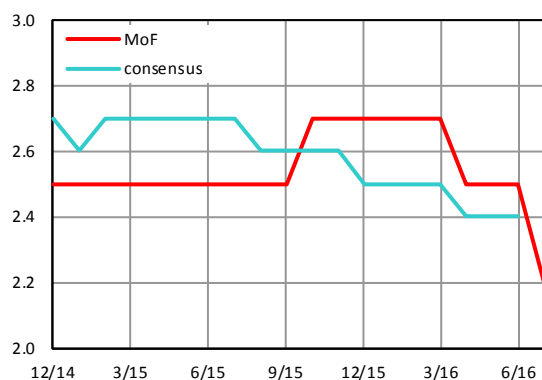
According to the monitored institutions' forecasts, the nominal average wage should increase by 4.0% in 2016

and 4.1% in 2017. According to the MoF's forecast, the average wage growth should be slightly higher due to the favourable labour market situation and reach 4.4% in 2016 and 4.7% in 2017.

In the opinion of the monitored institutions, the current account of the balance of payments should reach a slight surplus of 1.1% of GDP in 2016 and 0.8% of GDP in 2017. The MoF's forecast expects marginally higher surpluses, specifically 1.5% of GDP in 2016 and 1.2% of GDP in 2017.

**Graph D.1: Forecast of Real GDP Growth for 2016**

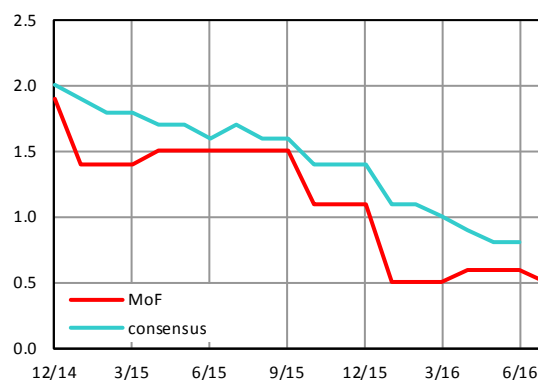
in %; the horizontal axis shows the month, in which the monitoring was conducted



Source: forecasts of individual institutions, own calculations

**Graph D.2: Forecast of Average Inflation Rate for 2016**

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



Source: forecasts of individual institutions, own calculations

**Ministry of Finance of the Czech Republic**

Economic Policy Department

Letenska 15

118 10 Prague 1

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

