# **Ministry of Finance**

**Financial Policy Department** 

# Macroeconomic Forecast Czech Republic

# **Macroeconomic Forecast of the Czech Republic**

January 2013

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

Tel.: +420 257 041 111

E-mail: macroeconomic.forecast@mfcr.cz

ISSN 1804-7971

Issued quarterly, free distribution

Electronic archive:

http://www.mfcr.cz/macroforecast

## **Table of Contents:**

Summar	ry of the Forecast	3
Risks to	the Forecast	5
Α	Forecast Assumptions	6
A.1	External Environment	6
A.2	Fiscal Policy	14
A.3	Monetary Policy and the Financial Sector	16
A.4	Exchange Rates	19
A.5	Structural Policies	21
A.6	Demographic Trends	24
В	Economic Cycle	27
B.1	Position within the Economic Cycle	27
B.2	Business Cycle Indicators	29
B.3	Business Cycle Indicators in the EU	31
С	Forecast of the Development of Macroeconomic Indicators	32
C.1	Economic Output	32
C.2	Prices	33
C.3	Labour Market	35
C.4	External Relations	36
C.5	International Comparisons	40
D	Monitoring of Other Institutions' Forecasts	41
Tables a	and Graphs:	42
C.1	Economic Output	42
C.2	Prices	49
C.3	Labour Market	53
C.4	External Relations	59
C.5	International Comparisons	64

The Macroeconomic Forecast is prepared by the Financial Policy Department of the Czech Ministry of Finance on a quarterly basis. It contains a forecast for the current and following years (i.e. until 2014) and for certain indicators an outlook for another 2 years (i.e. until 2016). 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

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

## 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 12 countries

EFSF European Financial Stability Facility

EMU Economic and Monetary Union

ESM European Stability Mechanism

EU27 EU consisting of 27 countries

GDP..... gross domestic product

HICP...... harmonised index of consumer prices

IMF ...... International Monetary Fund

LFS ...... Labour Force Survey

OECD ...... Organisation for Economic Co-operation and Development

p.p. ...... percentage point prelim. ...... preliminarily

#### **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 **January 10**, 2013. No political decisions, newly released statistics, or world financial or commodity market developments could have been taken into account after this date.

#### Notes:

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

Data from the previous forecast of October 2012 are indicated by italics. Data in the tables relating to the years 2015 and 2016 are calculated by extrapolation, indicating only the direction of possible developments, and as such are not commented upon in the following text.

# **Summary of the Forecast**

During the whole 2012, the Czech economy was probably experiencing a shallow recession, from which it is expected to emerge at the beginning of this year. However, economic recovery should be only gradual, with GDP increasing by mere 0.1% YoY. In 2013, the economy should continue to be driven by balance of goods and services surplus, though the positive contribution of net exports should be counterbalanced by a negative contribution of gross domestic expenditures.

More pronounced economic recovery should occur only in 2014, when GDP could increase by 1.4%, with positive contribution of both foreign trade and gross domestic expenditures.

We expect consumer prices to grow by 2.1% in 2013, while in 2014 the average inflation rate should reach 1.8%. Therefore, in both years it should be near the CNB inflation target. We consider the risks of both inflation acceleration and deflation to be low. This year,

the growth of consumer prices will be significantly influenced by a 1 p.p. hike in both VAT rates, effective from 1 January 2013.

Employment, which is likely to have increased by 0.4% in 2012, should stagnate both in this and the following year. However, the unemployment rate should follow a mild upward tendency; it could increase from an estimated 6.9% last year to 7.3% this year (on average for the whole year), and further on to 7.4% in 2014. Growth of the wage bill could reach 1.9% this year and 3.5% in 2014.

The current account deficit as a percentage of GDP should slightly exceed 1% and should thus remain at a low level.

Forecast risks are slightly tilted to the downside. In addition to the further development of the crisis in the euro zone, there is also the risk of low confidence in the Czech economy.

Table: Main Macroeconomic Indicators

		2010	2011	2012	2013	2014	2011	2012	2013
				Cur	rent foreca	st	Previ	ous foreca	st
Gross domestic product	growth in %, const.pr.	2.5	1.9	-1.1	0.1	1.4	1.7	-1.0	0.7
Consumption of households	growth in %, const.pr.	1.0	0.7	-3.0	-0.7	0.9	-0.6	-3.0	-0.5
Consumption of government	growth in %, const.pr.	0.5	-2.5	-0.9	-1.0	-0.9	-1.7	-1.1	-1.3
Gross fixed capital formation	growth in %, const.pr.	1.0	-0.7	-0.8	0.1	1.3	-0.9	-0.6	0.3
Cont. of foreign trade to GDP growth	p.p., const.pr.	0.5	2.0	1.4	0.7	0.3	2.7	1.8	1.0
GDP deflator	growth in %	-1.4	-0.8	1.1	0.5	0.6	-0.8	1.3	0.9
Average inflation rate	%	1.5	1.9	3.3	2.1	1.8	1.9	3.3	2.1
Employment (LFS)	growth in %	-1.0	0.4	0.4	0.0	0.0	0.4	0.0	-0.2
Unemployment rate (LFS)	average in %	7.3	6.7	6.9	7.3	7.4	6.7	6.9	7.3
Wage bill (domestic concept)	growth in %, curr.pr.	0.7	2.2	1.7	1.9	3.5	2.3	2.0	2.1
Current account / GDP	%	-3.9	-2.8	-1.6	-1.3	-1.2	-2.9	-1.3	-1.2
Assumptions:									
Exchange rate CZK/EUR		25.3	24.6	25.1	24.9	24.8	24.6	25.1	24.9
Long-term interest rates	% p.a.	3.7	3.7	2.8	2.2	2.3	3.7	2.9	2.7
Crude oil Brent	USD/barrel	80	111	112	105	102	111	113	115
GDP in Eurozone (EA-12)	growth in %, const.pr.	2.0	1.4	-0.4	-0.2	0.5	1.4	-0.5	0.3

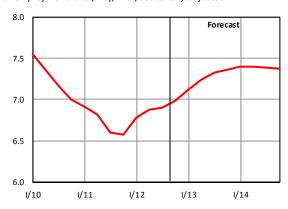
## Gradual economic recovery in 2013 and 2014

real GDP, QoQ growth in %, seasonally adjusted



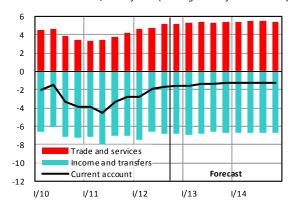
# Unemployment rate should not exceed 7.5%

unemployment rate (LFS), in %, seasonally adjusted



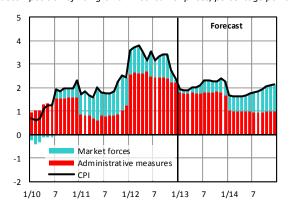
## Low current account deficit

BoP – current account, in % of GDP (moving sums of the latest 4 quarters)



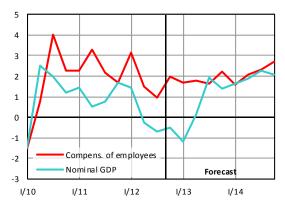
## Inflation rate close to the CNB inflation target

decomposition of YoY growth in consumer prices, percentage points



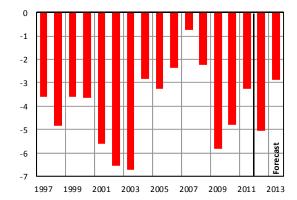
# Rising share of compensation of employees on GDP

compensation of employees and nominal GDP, growth in %



## Government sector deficit below 3% of GDP in 2013

general government balance, in % of GDP



# Risks to the Forecast

For 2013, the central scenario of the Macroeconomic Forecast inclines to a very gradual recovery of the Czech economy. In a YoY comparison, however, GDP should virtually stagnate. This stands in contrast to the October 2012 Macroeconomic Forecast that envisaged a slight growth of real GDP in 2013. The current forecast, however, assumes that the **risks are less tilted to the downside**.

As far as the assumptions of the central scenario on external environment are concerned, the **euro zone's prospects for this year have deteriorated** (just like in the Autumn 2012 European Economic Forecast of the EC). Greece is going through a deep depression, other countries in the south of the euro zone are undergoing a significant recession. Economic slump, accompanied by unemployment growth and negligible prospects for economic situation to improve soon, brings social and political unrest.

Other countries in the euro zone will not probably be able to avoid a slowdown in growth or even a shallow recession, with Germany (the most important trading partner of the Czech Republic) being no exception. This should result in a decline in demand for our exports, thus also in a decrease in the positive contribution of foreign trade to GDP growth.

Compared to the last Macroeconomic Forecast, however, a reduction of risks relating to the debt crisis in the euro zone could be seen. At the end of last year, the situation on the financial markets was gradually calming down, to which contributed e.g. the possibility of ECB's interventions on the secondary market for government bonds under the OMTs programme, launching of the ESM or reaching an agreement over the future destiny of the adjustment programme for Greece (see Chapter A.1).

In spite of this, we do not consider the situation in Greece to be sustainable in the long-term. The probability that the continuation of fiscal consolidation

under the conditions of economic depression (and taking into consideration the size of fiscal multipliers) will result, without any further concessions of official creditors, in the expected decrease in the share of government debt to GDP, is very low. The successful Greek bond buyback at least helped to considerably decrease the remaining exposure of private entities to Greek government debt, thereby lowering potential consequences of another debt write-off, should there be one.

**External risks** also **continue to prevail in the medium- term horizon**, even though the scope of these is also slightly decreasing. In the problematic countries in the south of the euro zone, positive effects of structural reforms and restructuring of the banking sector could begin to be felt. For countries currently financing the bailout programmes (or guaranteeing loans of bailout funds) for problematic countries, there is a risk of an eventual bailout loan non-repayment.

As far as internal risks are concerned, the central scenario of the forecast is accompanied by a slight deterioration of the expected decline in domestic demand in 2013. To a certain extent, **internal risks**, described in the previous forecast, **are materializing**.

The very **low level of confidence in further economic development** is persisting (see Chapter B.2). It leads to consumers' cautious behaviour and to an increase in the rate of savings to be on the safe side in case of further worsening of economic situation. Similarly, many segments of the business sector postpone some investment decisions for this reason. This factor is probably the most important reason explaining why the dynamics of the Czech economy is lagging behind those of its neighbouring countries.

Overall, it can be stated that **internal economic risks** are also slightly tilted to the downside.

# **A Forecast Assumptions**

Sources of tables and graphs: CNB, CZSO, ECB, Eurostat, Ministry of Finance of the Czech Republic, IMF, OECD, The Economist, own calculations.

## A.1 External Environment

#### **Economic output**

Contrary to the previous forecast, the outlook for the world economy is more varied. In the USA, the recovery is continuing, the outlook is no longer burdened by uncertainties connected to the presidential election, while the so-called fiscal cliff issue has also been partially resolved. In China, the growth rate has declined in conjunction with the global slowdown, however, economic output is keeping to the plan while strengthening domestic consumption is most likely opening the era of a weaker, but more stable GDP growth. In the euro zone, the situation has calmed down partially, linked to reduced risk of the Euro collapsing and escalation of the situation in Greece.

The output of the **US economy** increased in Q3 2012 by 0.7% QoQ (*versus 0.4%*). Growth was driven especially by household consumption, however, consumer confidence has slowed down over the past months. A favourable situation can be seen on the stock markets – the Dow Jones index has returned, after experiencing a decline during the 1<sup>st</sup> half of Q4, to the level around 13,000 points. The economy is probably entering a period of growth, suggested by the development of new purchase orders in industries. On the property market, house prices have been increasing now for 7 months in a row, which may be interpreted as a sign of expectation of more permanent recovery.

The Unites States are at the beginning of energetic sector expansion. Growing oil and gas production is linked to reducing energetic costs of production which should contribute to increasing USA appeal for investors. This is positively reflected in the unemployment rate which stood at 7.8% in December; the lowest rate for the last four years.

The economy is supported by the Fed's highly accommodative monetary policy. In September 2012, the Fed already started the third round of quantitative easing. Interest rates continue to be "at zero" (or within 0–0.25%) and they should remain at this level, according to an announcement by the Fed, until the unemployment rate (for the larger part likely to be of a cyclical nature) falls below 6.5%.

Uncertainty taking shape at the end of the last year due to automatic cuts in federal spending (the "fiscal

cliff") was temporarily resolved by an agreement in the Congress.

For 2013 we have kept our estimate for economic growth at 2.1%, for 2014 we expect growth at 3.0%.

The **economy of the euro zone (EA12)** showed a QoQ decline of 0.1% (*versus 0.2%*) in Q3 2012. The decline in household consumption in the first half of 2012 came to a halt in Q3. The major cause behind weak consumption and declining investments can be attributed to savings policies, which focus on public finance consolidation, and to the related growth of a tendency towards savings. Only net exports practically contributed positively to growth which was not able, however, to compensate for weak domestic consumption and investment.

There are still big differences among individual countries. The euro zone continues to be driven by Germany where, together with export, household consumption has also been increasing. However, 60% of German exports are directed to the EU. Therefore, it is a question of time when the slowdown starts to become apparent as a consequence of weak output within the rest of the euro zone and the EU as a whole. Although Germany surprised once again with its resistance towards euro zone recession, we anticipate a slowdown at the turn of 2012 and 2013. Last estimates of the German government suggest identically that the variant of a "soft landing "is expected.

The French economy, which has been *de facto* stagnating since Q2 2011, could see a slight recovery at the end of this year. The large economies of Italy and Spain and four other countries of the EA remain in recession. The British economy emerged from recession in Q3, supported, however, by one-off impulse – the Olympic Games.

The divergence in the development of the euro zone can be seen best, as usual, in the case of the unemployment rate. In November, it already increased to 11.8%, which represented a YoY increase of 1.2 p.p. The highest unemployment rate was in Spain (26.6%), followed by Greece (26.0%, however, the data relates to September), Portugal (16.3%), Ireland (14.6%), and Slovakia (14.5%). On the contrary, the unemployment rate in Germany gradually declined up to 5.4%. In addition to the economic dimension, the situation on

the labour market also assumes a political dimension. High unemployment rates have unfavourable implications e.g. for household consumption, which considerably complicates government efforts to consolidate public finances.

Graph A.1.1: **Growth of GDP in EA12**QoQ growth in % (adjusted for seasonal and working day effects)



We estimate that in 2012 the euro zone's economy decreased by 0.4% (*versus 0.5%*). This year, the economic output of the euro zone could decrease by 0.2% (*versus 0.3%*), however, in 2014 GDP could already grow by 0.5%.

In Q1 2012, YoY growth of the Polish economy started slowing down more considerably. One of the causes of the slowdown is the lowest consumption growth since the 1990s, induced by a decrease in real wages and an increase in household savings; in Q3, the slowdown turned into stagnation. Another factor is a decline in public investment and stagnation in construction (after the European Football Championship). Last but not least, Polish firms are being discouraged from investing by the weak output of the euro zone. In 2012, there was nearly 10% appreciation of złoty vis-à-vis the euro, which has unfavourable consequences for exporters. The pressure on the central bank to continue cutting rates is mounting. The economy's slowdown left its mark on the revision of the growth estimate for 2012 to 2.3% (versus 2.5%). For 2013 we expect growth at 1.9% (versus 2.9%).

In Q3 2012, QoQ growth of **the Slovak economy** reached 0.5% (*consistent with the forecast*). The economy was driven nearly exclusively by car exports. On the contrary, household consumption decreased at the end of the year. Unemployment rate, which has been rising since the beginning of 2012 despite relatively strong GDP growth, is now the fifth highest in the euro zone. Economic growth has likely peaked. We have lowered the estimate for growth in 2013 to 1.7% (*versus 2.1%*).

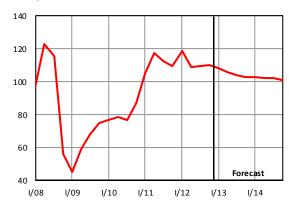
#### **Commodity prices**

In Q4 2012, the price of Brent crude oil reached an average of USD 110 per barrel (*versus USD 114*) and thus remained unchanged in comparison with Q3. In Q4 of the last year, expectations regarding the impact of quantitative easing and geopolitical risks in the Near East were not met. In 2012, the average daily price of Brent crude oil was USD 111.8 per barrel, a historically record-breaking average price of crude oil.

Compared to 2011, the prices of crude oil showed higher volatility in the last year, especially in Q1 and Q2. Generally, the trend of gradual price growth in 2009 and 2010 turned in stagnation in 2011 and 2012. In 2012, especially unrest in the Middle East, growth of marginal costs of production and, last but not least, threat of a fiscal crisis in the USA were driving price increases. Targeting the price by some important producers, especially Saudi Arabia, increasing production and reserve capacities as well as the recession in the euro zone had the opposite effect.

In 2013, we expect to see a decrease in the average daily price to USD 105 per barrel (*versus USD 115*), especially as a result of a slowdown in global demand for crude oil caused by the assumed slowdown in the global economy, the growth of production capacities (especially the USA) and possible release of strategic reserves. Rising marginal costs of production and the necessity of oil economies in the Middle East to balance their budgets should take effect against a more significant price decrease.

Graph A.1.2: **Dollar Prices of Brent Crude Oil** in USD per barrel



After a significant growth of cereals prices at the turn of last year's Q2 and Q3 resulting from unfavourable weather, gradual downward correction of prices could have been observed in the remaining part of the year. The main causes of the decline were revisions to the stock of global reserves, a decline in demand for cereals at the end of the year and higher than originally expected production of some important

producers. Nevertheless, prices have not yet reached the level of Q1 and Q2 2012. In H1 2013, we expect to see stagnation or a slight decline in prices related to an update of the stock of global reserves. For the prices in H2 2013, long-term weather forecasts and the extent of their fulfilment will be crucial.

#### Debt crisis in the euro zone

Since the publication of the October 2012 Macroeconomic Forecast, the debt crisis in the euro zone was characterized mainly by searching for (and ultimately reaching) a consensus regarding further fate of the Second Economic Adjustment Programme for Greece, the related exchange of Greek government bonds, reaching an agreement on creating the Single Supervisory Mechanism (SSM) over banks in euro zone countries and, last but not least, also ongoing restructuring of the Spanish banking sector.

After long negotiations with representatives of the IMF, the ECB and the EC (the so-called "Troika"), the first review of the adjustment programme for Greece was concluded. Compared to its original form from February 2012, certain changes to the programme have been made, reflecting both much worse than originally expected macroeconomic development and certain delay in implementing some measures. For example, there was a change to the programme's fiscal targets — Greece does not need to achieve primary surplus of 4.5% of GDP already in 2014, but as late as in 2016 (for 2014, primary surplus of 1.5% of GDP is now assumed).

However, mitigation of fiscal consolidation, together with deteriorated economic outlook, will have a negative impact on the trajectory of government sector debt that, under original assumptions, should have reached 120.5% of GDP by 2020. According to current calculations, the government sector debt should reach 175% of GDP in 2016, though it should decline to 124% of GDP by 2020 and in 2022 it should not exceed 110% of GDP. However, accomplishing these targets, i.e. ensuring sustainability of the government debt (at least "on paper"), should be helped by measures, on which the finance ministers of the euro zone agreed at the end of November.

These measures include, for instance, a decrease in interest rates on bilateral loans granted as part of the first bailout programme (Greek Loan Facility) by 1 p.p. and an extension of their maturity by 15 years; a decrease in interest rates on loans from the EFSF by 0.1 p.p., extension of maturity of these loans by 15 years and deferral of interest payments by 10 years; transfer of the income on the Eurosystem's Securities

Markets Programme portfolio of Greek government bonds to the segregated account for servicing the Greek debt; and last but not least, also the buyback of Greek debt.

The buyback offer, applying to the government bonds held by private investors (nominal value of those bonds was EUR 61.4 billion), was announced by Greece on 3 December. Those investors who had accepted this offer, received – in exchange for the Greek government bonds with face value of EUR 31.9 billion (due in 2023–2042) – six-month EFSF bills with nominal value of EUR 11.3 billion. Therefore, Greece has succeeded in accomplishing the original target of EUR 30 billion, on the other hand, it had to offer a higher price (on average 33.8% of the nominal value of bonds) than originally expected.

In reaction to the Greek debt buyback offer, the S&P agency downgraded Greece to SD (selective default). After completing the bond exchange (18 December), however, the agency increased the rating to B- (i.e. higher than the original CCC) and, in addition, it assigned stable outlook to the rating.

However, the buyback, or its success, was above all a key condition for the long postponed release of another tranche of financial aid from the second adjustment programme. The Executive Board of the IMF has not decided yet in this matter (it is expected to do so in the course of January), nevertheless, representatives of the euro zone already authorised releasing EUR 49.1 billion on 13 December. Still in December last year, Greece received EUR 34.3 billion from the EFSF (in the form of securities issued by the EFSF, EUR 16 billion went on recapitalizing banks and EUR 11.3 billion on financing the bond buyback), the remaining EUR 14.8 billion should be released during Q1 this year. Of this sum, EUR 7.2 billion devoted to bank recapitalization (aid will be provided in the form of securities issued by the EFSF) should be released in January, the remaining funds (EUR 7.6 billion) should be paid out in three sub-tranches, the release of each of which will be conditioned by the implementation of measures, on which Greece had agreed with the "Troika".

Restructuring of the Spanish banking sector is continuing in line with the Memorandum of Understanding. The banks, in which The Fund for Orderly Bank Restructuring (FROB) at the end of November had majority capital stake (BFA-Bankia, Catalunya Banc, Novagalicia Banco and Banco de Valencia), transferred problematic assets worth EUR 45 billion to the newly founded "bad bank" (Asset

Management Company for Assets Arising from Bank Restructuring; the so-called Sareb). The other banks to use state aid as part of restructuring should transfer problematic assets (max. to the value of EUR 45 billion) to the "bad bank" during the course of H1 2013.

At the end of November last year, the FROB, the Spanish central bank (Banco de España) and the EC approved restructuring plans of the aforementioned banks. In relation to this step, on 5 December the ESM issued bills and bonds with face value totalling EUR 39.5 billion. Out of this sum, the aforementioned banks at the end of December received EUR 37 billion via FROB, which will use the remaining EUR 2.5 billion to capitalize the "bad bank".

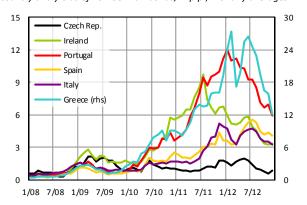
Certain progress has been made concerning the issue of the so-called banking union in the euro zone. At an extraordinary meeting held on 12 and 13 December, the finance ministers of the EU countries succeeded in approving the common position on legislative drafts through which the so-called Single Supervisory Mechanism (SSM) should be established. The SSM will consist of the ECB and national supervisory authorities of the participating countries. In close co-operation with the national supervisory authorities, the ECB should perform supervision over ca 150-180 banks in the euro zone. The conduct of supervision by the ECB is to be strictly separated from its monetary policy functions; for this purpose, a new authority - the supervisory board – is to be established within the ECB. The states outside the euro zone will also be able to participate in the SSM, based on the agreements on close co-operation. The ECB is to assume its supervisory powers on 1 March 2014 at the earliest. However, the ECB will be allowed to perform entrusted tasks immediately, provided the ESM asks the ECB for it unanimously. Negotiations with the European Parliament were initiated with the aim of approving the mentioned legal acts as soon as possible.

However, the Single Supervisory Mechanism will only be one element of the planned banking union, from which the political representation expects weakening of negative feedback loops between banks and the government sector. A necessary condition for creating the full banking union will be, among others, finding political consensus concerning the single deposit insurance system and the single framework for bank restructuring and/or resolution. Especially the last named point can appear as problematic, as restructuring of banks can be very costly, while willingness of the individual states to share these costs, on the contrary, very low.

Out of other events that have occurred since the publication of the October Forecast, let us also mention that in November, Moody's downgraded France by one notch (from the highest Aaa to Aa1, a negative outlook). Following the downgrade of France, the same agency also slashed the rating of the EFSF and the ESM by one notch, from the highest Aaa to Aa1 (the outlook in both cases was negative). However, for now it does not seem that this step would negatively influence the picture of bailout funds in the eyes of investors, at least judging from the result of the January auction of 3M bills issued by the ESM (the bid/cover ratio exceeded 3, the yield was even slightly negative!).

Since the publication of the last Forecast, the situation in the euro zone has once again calmed down slightly, as evidenced e.g. by the development of government bond yields (see Graph A.1.3). However, we cannot fully rule out the possibility of escalation of the debt crisis in the future, even though the risks have declined compared to the last forecast.

Graph A.1.3: **Spreads over German Bonds**The difference between yields of 10Y gov. bonds of the respective country and yields of 10Y German bonds, in p.p., monthly averages



The implementation risks of the second adjustment programme for Greece are considerable (political will for pushing through further austerity measures can be missing), fully meeting the programme conditions, however, goes hand in hand with continuing fiscal consolidation (though slightly more gradual), which could push Greek economy further into depression. For the sake of completeness, let us remind that the current experience of Greece with fiscal consolidation quite clearly shows that fiscal multipliers can be unpleasantly high.

The third and fourth largest economies of the euro zone, i.e. Italy and Spain, are undergoing a recession, accompanied, in the case of the latter country, with an extremely unfavourable situation on the labour market. This situation will show itself more and more, among others, in the quality of balance sheets of banks

(the growth of non-performing loans), which represent another weak point of the Spanish economy. So far, the restructuring of the Spanish banking sector has been going in line with the original plans, though one still cannot rule out the possibility of seeing some negative surprises in the future. In Italy, after Mr Monti's resignation as the Prime Minister, there is a political risk connected with the results of the early parliamentary elections scheduled for February.

Negotiations on the bailout programme for Cyprus have not yet been successfully concluded (the bailout should amount to EUR 17 billion, devoted to a large extent to recapitalizing banks, which have been affected by the "voluntary" Greek government bonds

write-off). The Cypriot economy may well be insignificant, compared to the size of the economy of the euro zone, however, a "non-agreement" over the bailout programme could send a negative signal to the financial markets.

As a small open economy with very strong links to EU countries, the Czech Republic would understandably be negatively affected by a possible escalation of the debt crisis (the impact on expectations of households and firms, decrease in foreign demand). The main advantage of the Czech Republic is, however, the high resilience of its banking sector towards negative shocks and the credibility of its fiscal policy, as evidenced e.g. by the very low yields on government bonds.

Table A.1.1: **Real Gross Domestic Product** – yearly growth in %, seasonally unadjusted data

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
								Estimate	Forecast	Forecast
USA	3.1	2.7	1.9	-0.3	-3.1	2.4	1.8	2.2	2.1	3.0
China	11.3	12.7	14.2	9.6	9.2	10.4	9.1	7.9	7.9	7.7
EU27	2.1	3.3	3.2	0.3	-4.3	2.0	1.5	-0.3	-0.1	0.6
EA12	1.7	3.2	3.0	0.3	-4.4	2.0	1.4	-0.4	-0.2	0.5
Germany	0.7	3.7	3.3	1.1	-5.1	4.2	3.0	0.9	0.6	1.9
France	1.8	2.5	2.3	-0.1	-3.1	1.7	1.7	0.1	0.1	0.5
United Kingdom	2.8	2.6	3.6	-1.0	-4.0	1.8	0.8	0.0	1.0	1.5
Austria	2.4	3.7	3.7	1.4	-3.8	2.1	2.7	0.6	0.9	1.5
Hungary	4.0	3.9	0.1	0.9	-6.8	1.3	1.6	-1.3	0.5	1.0
Poland	3.6	6.2	6.8	5.1	1.6	3.9	4.3	2.3	1.9	2.8
Slovakia	6.7	8.3	10.5	5.8	-4.9	4.2	3.3	2.5	1.7	3.0
Czech Republic	6.8	7.0	5.7	3.1	-4.5	2.5	1.9	-1.1	0.1	1.4

Graph A.1.4: **Real Gross Domestic Product** *YoY growth in %, seasonally unadjusted data* 

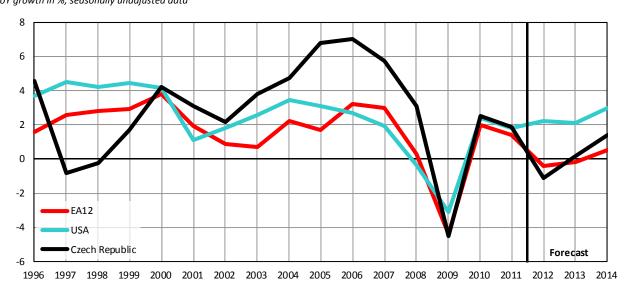


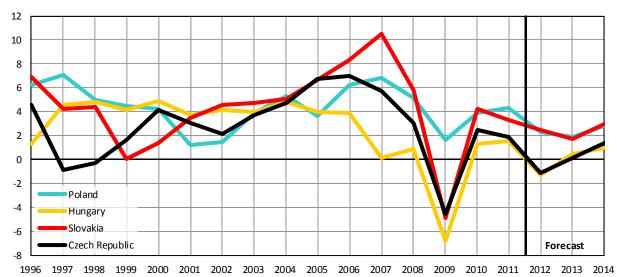
Table A.1.2: Real Gross Domestic Product – quarterly

growth in %, seasonally adjusted data

		20:	12			201	.3	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
				Estimate	Forecast	Forecast	Forecast	Forecast
USA QoC	0.5	0.3	0.7	0.5	0.4	0.6	0.6	0.7
Yo	2.4	2.1	2.5	2.0	1.9	2.2	2.1	2.3
China QoO	1.5	2.0	2.2	1.8	1.9	1.9	2.0	2.0
You	8.3	8.0	7.8	7.7	8.1	8.0	7.8	8.0
EU27 QoC	-0.1	-0.2	0.1	-0.1	-0.2	0.1	0.2	0.2
Yo	0.1	-0.3	-0.4	-0.2	-0.3	-0.1	0.0	0.3
EA12 QoC	0.0	-0.2	-0.1	-0.1	-0.2	0.0	0.1	0.2
You	-0.1	-0.5	-0.6	-0.4	-0.5	-0.4	-0.2	0.1
Germany	0.5	0.3	0.2	-0.1	-0.1	0.2	0.5	0.4
You	1.2	1.0	0.9	0.9	0.3	0.2	0.5	1.0
France QoO	0.0	-0.1	0.1	0.0	-0.2	0.1	0.2	0.2
You	0.2	0.1	0.0	0.0	-0.2	0.0	0.1	0.3
United Kingdom QoO	-0.2	-0.4	0.9	0.3	0.1	0.2	0.3	0.2
You	0.2	-0.3	0.0	0.6	1.0	1.6	0.9	0.8
Austria QoC	0.3	0.1	0.1	0.1	0.3	0.2	0.4	0.3
You	0.7	0.5	0.7	0.7	0.7	0.7	1.0	1.2
Hungary Qoo	-1.1	-0.4	-0.2	0.0	0.1	0.2	0.3	0.2
Yo	-1.3	-1.4	-1.6	-1.7	-0.4	0.1	0.6	0.8
Poland QoO	0.5	0.2	0.4	0.2	0.4	0.5	0.8	0.6
You	3.5	2.3	1.4	1.2	1.2	1.5	1.9	2.3
Slovakia QoO	0.5	0.6	0.5	0.3	0.4	0.3	0.4	0.4
You	2.9	2.6	2.5	2.0	1.8	1.6	1.4	1.5
Czech Republic Qoo	-0.6	-0.4	-0.3	0.0	0.1	0.2	0.2	0.3
You	-0.5	-1.0	-1.3	-1.3	-0.7	-0.1	0.4	0.8

Graph A.1.5: Real Gross Domestic Product – Central European economies

YoY growth in %, seasonally unadjusted data



Graph A.1.6: GDP in the Czech Republic and the neighbouring states

Q3 2008=100, seasonally adjusted data

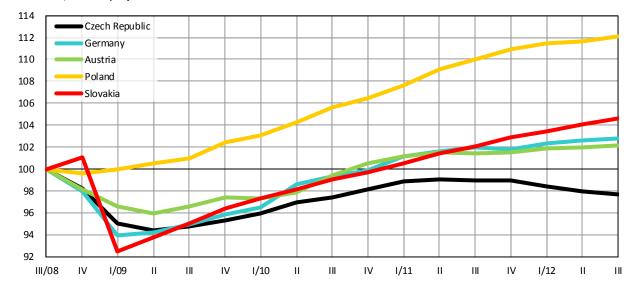


Table A.1.3: **Prices of Commodities** – yearly

spot prices

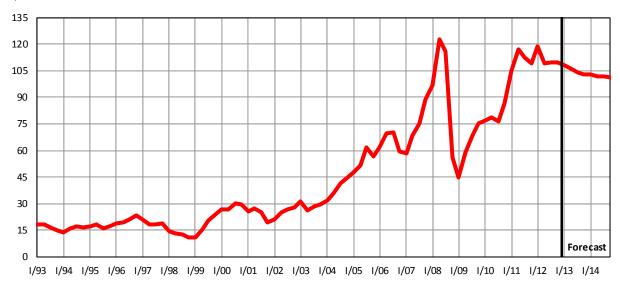
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Forecast	Forecast
Crude oil Brent	USD/barrel	54.4	65.4	72.7	97.7	61.9	79.6	111.0	111.7	105	102
	growth in %	42.0	20.1	11.2	34.4	-36.7	28.7	39.3	0.7	-5.8	-3.1
Crude oil Brent index (in CZK)	2005=100	100.0	113.3	113.3	127.9	90.5	116.7	150.6	167.8	155	149
	growth in %	32.4	13.3	-0.1	12.9	-29.3	29.0	29.0	11.4	-7.7	-3.6
Wheat	USD/t	152.4	191.7	255.2	326.0	223.6	223.7	316.2	313.3		
	growth in %	-2.8	25.8	33.1	27.7	-31.4	0.1	41.4	-0.9		
Wheat price index (in CZK)	2005=100	100.0	118.7	141.9	152.4	116.7	117.1	153.3	168.1		
	growth in %	-9.4	18.7	19.6	7.3	-23.4	0.3	30.9	9.7		

Table A.1.4: **Prices of Commodities** – quarterly *spot prices* 

			201	2			201	.3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Forecast	Forecast	Forecast	Forecast
Crude oil Brent	USD/barrel	118.5	108.9	109.5	109.8	108	106	104	103
	growth in %	13.0	-7.0	-2.7	0.5	-8.9	-2.7	-5.0	-6.2
Crude oil Brent index (in CZK)	2005=100	173.6	164.5	168.2	163.2	159	156	153	151
	growth in %	21.3	8.6	13.1	3.9	-8.4	-5.2	-9.2	-7.5
Wheat price	USD/t	278.8	269.0	349.5	355.7				
	growth in %	-15.6	-20.6	10.7	27.2				
Wheat price index (in CZK)	2005=100	146.1	145.3	192.0	189.1				
	growth in %	-9.4	-7.4	28.7	31.5			•	

# Graph A.1.7: Dollar Prices of Oil

USD/barrel



**Graph A.1.8: Koruna Indices of World Commodity Prices** 

index 2005=100



# A.2 Fiscal Policy

In comparison with the October Forecast, there has been a considerable change in the estimate of the 2012 general government sector deficit. According to the updated estimate, the government sector deficit reached CZK 193.4 billion last year, which represents 5.0% of GDP. Compared to the figures sent by the MoF as of 1 October 2012 as part of the Notification of Government Deficit and Debt, the estimate of deficit has been increased by 1.8 p.p. This deterioration, however, was caused by methodical adjustments in the accrual accounting system, namely by classification of the financial compensation to churches, amounting to CZK 59 billion (approximately 1.5% of GDP), and also by capturing the non refunded part of EU resources for the operational programmes Transport, Environment, Education for Competitiveness and the Integrated Operational Programme, totalling CZK 12.1 billion (approximately 0.3% of GDP). According to ESA95 methodology, it is essential to record both of these operations as one-off capital transfer expenses, which in full influence the deficit in 2012. These methodical adjustments have been described in more detail in the Fiscal Outlook of the Czech Republic (November 2012) on page 8.

Without the aforementioned methodical adjustments, the government deficit estimate for 2012 would be CZK 122.2 billion, i.e. by CZK 1.8 billion less than the October estimate. In proportional terms, however, the government deficit estimate would remain unchanged at 3.2% of GDP, though its structure, after taking into account new information, would change. A positive change in the subsector of the central government, caused mainly by a better result of the state budget balance (better by CZK 6.8 bln., compared to October), is to a large extent compensated by a deterioration of expected results of the health insurance companies subsector (by CZK 4.4 bln., compared to October). The estimated balance of the local government subsector is identical to that from October.

In 2012, fiscal effort (defined as a YoY change in the balance adjusted for the impact of economic cycle and one-off and temporary operations), due to deepening of the negative output gap induced by recession, probably achieved 1.0 p.p.

A change in the estimate for 2012 was made in the structure of income and expenditure items. On the

revenue side, the expected revenue from VAT was modified due to a decline in household consumption. Together with a decrease in the estimate of social security contributions, this amounts to 0.3% of GDP. On the contrary, in case of corporate income tax, expectations are by 0.1% of GDP more positive.

On the expenditure side, considerable savings of social expenditures were probably recorded (with the exception of pension insurance benefits). Savings relative to the plan are also anticipated for interest payments. Overall savings in interest payments and social benefits amount to circa 0.3% of GDP.

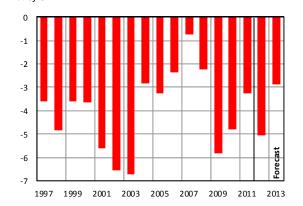
As has been the case over the last two years, a drop in government investments is also anticipated for 2012, although significantly less dramatic. In comparison with the last Forecast, the estimate was reassessed especially due to problems with recognizing outlays in various operating programmes. The drop in investment also reflects the considerable uncertainty regarding the future. As for government operating expenditures, we anticipate further drop in intermediate consumption, reflecting especially the spending freeze approved at the beginning of 2012.

The aforementioned development was in turn decisively evident in nominal expenditures on final government consumption, which in 2012 apparently stagnated or increased by 0.2%, respectively.

In 2013, the general government balance should reach -2.9% of GDP (*unchanged*), and the Czech Republic should thus meet the Maastricht criterion of the government deficit. Compared to the last forecast, for 2013 we anticipate a slightly more considerable drop in household consumption and a slower growth of the wage bill; on the other hand, however, we assume considerably lower yields of long-term government bonds (see Chapter A.3), which should generate sufficient savings in interest payments. Given the current information, we think that these effects will be mutually eliminated.

Due to the deeply negative output gap (see Chapter B.1), the structural balance should reach -1.8% of GDP, and compared to 2012, should thus improve by 0.3 p.p. In 2013, the debt quota should reach 47.8% of GDP, which would be a YoY increase of 2.6 p.p.

Graph A.2.1: Net Lending/Borrowing in % of GDP



Graph A.2.2: Government Debt in % of GDP

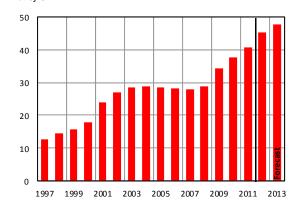


Table A.2.1: Net Lending/Borrowing and Debt

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
										Estimate	Forecast
General government balance 1)	bill. CZK	-83	-101	-80	-27	-86	-218	-183	-125	-193	-111
	% GDP	-2.8	-3.2	-2.4	-0.7	-2.2	-5.8	-4.8	-3.3	-5.0	-2.9
Cyclical balance	% GDP	-0.6	-0.1	0.6	1.2	1.0	-1.0	-0.5	-0.1	-0.8	-1.2
Cyclically adjusted balance	% GDP	-2.2	-3.1	-3.0	-1.9	-3.2	-4.8	-4.3	-3.2	-4.2	-1.6
One-off measures	% GDP	-0.7	-1.2	-0.2	-0.3	-0.1	0.3	0.0	-0.1	-2.1	0.1
Structural balance	% GDP	-1.5	-1.9	-2.8	-1.6	-3.2	-5.1	-4.3	-3.0	-2.1	-1.8
Fiscal effort <sup>2)</sup>	percent. points	4.3	-0.4	-0.8	1.1	-1.6	-2.0	0.8	1.3	1.0	0.3
Interest expenditure	% GDP	1.1	1.1	1.1	1.1	1.0	1.3	1.3	1.4	1.5	1.3
Primary balance	% GDP	-1.8	-2.2	-1.3	0.4	-1.2	-4.5	-3.5	-1.9	-3.6	-1.6
Cyclically adjusted primary balance	% GDP	-1.1	-2.1	-1.9	-0.8	-2.2	-3.6	-3.0	-1.8	-2.7	-0.4
General government debt	bill. CZK	848	885	948	1 023	1 104	1 286	1 437	1 568	1 737	1 848
	% GDP	28.9	28.4	28.3	27.9	28.7	34.2	37.8	40.8	45.2	47.8
Change in debt-to-GDP ratio	percent. points	0.4	-0.5	-0.1	-0.3	0.8	5.5	3.6	3.0	4.4	2.6

Note: Government debt consists of the following financial instruments: currency and deposits, securities other than shares excluding financial derivatives and loans. Government debt means total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government. The nominal value is considered to be an equivalent to the face value of liabilities. It is therefore equal to the amount that the government will have to refund to creditors at maturity.

1) Balance in EDP methodology, i.e. general government net lending (+)/borrowing (-) including interest derivatives.

<sup>&</sup>lt;sup>2)</sup> Change in structural balance.

# A.3 Monetary Policy and the Financial Sector

#### Monetary policy

The primary monetary policy instrument is the interest rate for **2W** repo operations, which was decreased at the beginning of November 2012 to the historical low of 0.05%. The discount rate was decreased by 0.05 p.p. to 0.05%, the Lombard rate by 0.50 p.p. to 0.25%. Due to negative macroeconomic development and having reached the zero lower bound on interest rates, the CNB is considering the possibility of interventions on the foreign exchange market. Due to the stagnation of the ECB's main refinancing rate, **the interest-rate spread** between the Czech Republic and the euro zone further deepened at the end of Q4 2012 to -0.70 p.p., while the spread relative to the US reached -0.20 to 0.05 p.p.

#### Financial sector and interest rates

The **3M PRIBOR** rate averaged 0.6% in Q4 2012 (consistent with the forecast). In 2012, it reached the average value of 1.0% (consistent with the forecast). For 2013 we forecast the value of 0.5% (unchanged), for 2014 a small increase to 0.6%.

In October 2012, the volume of deposit and repo operations fluctuated around the July values, as shown by the survey of average daily turnovers on the money market. However, the volume of derivative operations (interest rate swaps, IRSs) decreased considerably, the volume of forward rate agreements (FRAs) was very low (in July, however, zero).

Uncertainty on the interbank market, measured by the spread between 2W or 3M PRIBOR and the 2W repo rate, remains stable after accounting for the typical fluctuations accompanying changes in the 2W repo rate, between 0.4 and 0.5 p.p.

Long-term interest rates in Q4 2012 continued to decrease (to 2.1% on average per quarter), whereby once again historical lows were shifted. On average for the duration of 2012, **yields to maturity of 10-year government bonds** for convergence purposes reached 2.8% (*versus 2.9%*). We estimate that in 2013 the long-term interest rates will fluctuate around 2.2% (*versus 2.7%*). They should also remain at similarly low levels (2.3%) in 2014.

Considering the Czech Republic's very good rating (Standard & Poor's AA-, Moody's A1, Fitch Ratings A+; stable outlook for all agencies), relatively successful issues of government bonds can be expected. For 2013, the planned gross borrowing need of the government is ca CZK 230 billion, which represents a YoY drop of 25%. In the course of 2012, the reserve for financing state debt was increased by approximately CZK 65 billion, whereby a sufficient cushion was created in the event of unexpected instability on markets. It can also be expected that in the course of this year, retail savings bonds in the volume of CZK 20-40 billion will be issued. It is assumed that in the course of 2013 the share of financing on foreign markets should amount to no more than 40% of the planned annual borrowing requirement.

In October, the CNB conducted another round of examinations of credit terms and bank standards. The survey concluded that in Q3 2012 banks tightened credit standards for loans to non-financial corporations and housing loans, while those for consumer loans were not changed. For Q4 2012 the banks expected a tightening of credit standards for corporate loans, while a relaxing of those for housing loans. In November, the CNB also conducted stress tests of the banking sector (using data as of the end of Q3) which again confirmed the sufficient resilience of banks towards possible negative shocks.

The situation concerning loans in default has been stabilised, as in Q3 their share in total loans stood at 5.2% for households (0.1 p.p. less YoY) and 7.6% for non-financial corporations (0.8 p.p. less YoY). The ratio of household loans to household deposits in the Czech Republic has long been fluctuating around 65% and is approximately one-fourth lower than in the euro zone. We can observe an even more distinct difference between the Czech Republic and the euro zone in the loans to deposit ratio of non-financial corporations. In the Czech Republic this ratio is now around 120–125%, whereas in the euro zone it stands at 270–280%.

In the first half of January 2013, the Prague Stock Exchange's PX index was fluctuating above 1,050 points, i.e. almost 20% higher than a year ago.

Table A.3.1: Interest Rates, Deposits and Loans – yearly

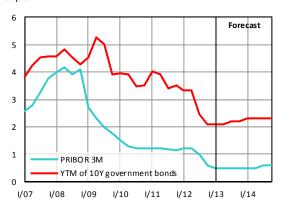
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	2.00	2.50	3.50	2.25	1.00	0.75	0.75	0.05		
Main refinancing rate ECB (end of period)	in % p.a.	2.25	3.50	4.00	2.50	1.00	1.00	1.00	0.75		
Federal funds rate (end of period)	in % p.a.	4.25	5.25	4.25	0.25	0.25	0.25	0.25	0.25		
PRIBOR 3M	in % p.a.	2.01	2.30	3.09	4.04	2.19	1.31	1.19	1.00	0.5	0.6
YTM of 10Y government bonds	in % p.a.	3.51	3.78	4.28	4.55	4.67	3.71	3.71	2.80	2.2	2.3
Households – MFI (CR, unless stated otherwi	ise)										
-interest rates on loans	in % p.a.	7.53	6.93	6.63	6.81	7.00	7.00	6.83			
-loans	growth in %	32.6	32.1	31.7	28.9	16.3	8.7	6.5			
-loans without housing loans	growth in %	28.6	28.3	27.3	25.3	19.1	8.3	6.8			
-deposits	growth in %	5.2	7.3	10.6	9.4	10.5	5.4	5.0			
-share of non-performing loans	in %	4.2	3.7	3.2	3.0	3.7	4.8	5.3			
-loans to deposits ratio	in %	33	40	48	57	60	61	62			
-loans to deposits ratio (Eurozone)	in %	94	99	99	94	89	90	90			
Non-financial firms – MFI (CR, unless stated	d otherwise)										
-interest rates on loans	in % p.a.	4.27	4.29	4.85	5.59	4.58	4.10	3.93			
-loans	growth in %	10.3	13.9	16.7	17.5	0.2	-6.5	3.3			
- deposits	growth in %	4.5	10.9	13.2	5.3	-1.7	4.8	0.9		•	
-share of non-performing loans	in %	5.7	4.5	3.8	3.6	6.2	8.6	8.5			
-loans to deposits ratio	in %	113	117	120	134	137	123	126			
-loans to deposits ratio (Eurozone)	in %	290	292	296	315	315	294	286			

Table A.3.2: Interest Rates, Deposits and Loans – quarterly

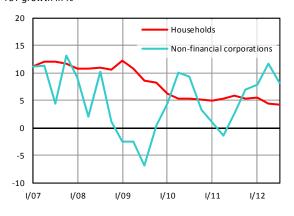
			201	2			201	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Forecast	Forecast	Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	0.75	0.50	0.50	0.05				
Main refinancing rate ECB (end of period)	in % p.a.	1.00	1.00	0.75	0.75				
Federal funds rate (end of period)	in % p.a.	0.25	0.25	0.25	0.25				
PRIBOR 3M	in % p.a.	1.20	1.23	0.98	0.59	0.5	0.5	0.5	0.5
YTM of 10Y government bonds	in % p.a.	3.34	3.31	2.46	2.09	2.1	2.1	2.2	2.2
Households – MFI (CR, unless stated otherw	ise)								
– interest rates on loans	in % p.a.	6.59	6.51	6.42					
-loans	growth in %	5.6	5.1	4.5					
-loans without housing loans	growth in %	3.9	1.5	0.6					
-deposits	growth in %	5.5	4.4	4.2					
-share of non-performing loans	in %	5.0	5.2	5.2					
-loans to deposits ratio	in %	64	64	65					
-loans to deposits ratio (Eurozone)	in %	88	88	87		•			
Non-financial firms – MFI (CR, unless stated	d otherwise)								
-interest rates on loans	in % p.a.	3.87	3.86	3.67		•			
-loans	growth in %	4.1	1.9	2.0					
-deposits	growth in %	7.8	11.6	8.3					
-share of non-performing loans	in %	8.1	7.9	7.6					
-loans to deposits ratio	in %	125	120	124				•	
-loans to deposits ratio (Eurozone)	in %	282	280	274					

## Graph A.3.1: Interest Rates

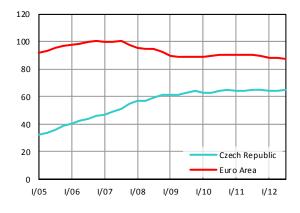
in % p.a.



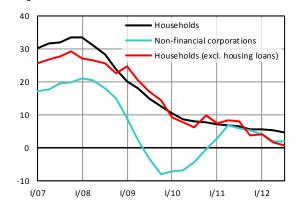
Graph A.3.3: Deposits of Households and Firms  $\it YoY\ growth\ in\ \%$ 



Graph A.3.5: Households – Loans to Deposits Ratio

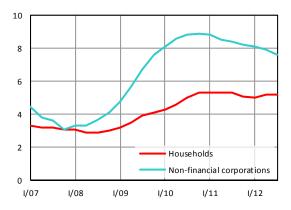


Graph A.3.2: Loans to Households and Firms YoY growth in %



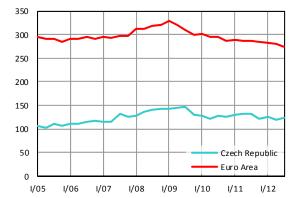
Graph A.3.4: Non-performing Loans

ratio of non-performing to total loans, in %

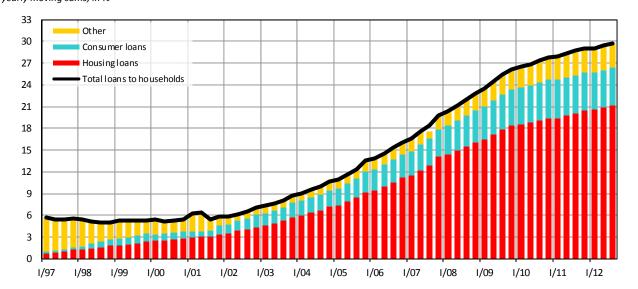


Graph A.3.6: Firms – Loans to Deposits Ratio

in %



Graph A.3.7: Ratio of Bank Loans to Households to GDP yearly moving sums, in %



# A.4 Exchange Rates

In Q4 2012, the CZK/EUR exchange rate averaged 25.17, thus strengthening by 0.4% YoY. In 2012 on average, however, the koruna weakened against the euro by 2.2%, to which a gradual reduction in the main interest rates by the Czech National Bank contributed.

Considering developments over the last year, we have adjusted the assumption on the trend trajectory of the exchange rate. In 2013, the average rate should reach 24.9 CZK/EUR, further on the koruna should be appreciating by 0.5% per year on average. In Q4 2016, i.e. on the horizon of the outlook, the exchange rate should reach on average 24.5 CZK/EUR.

A short-term risk of the adopted scenario is the CNB's announcement of the possibility of FX interventions with the purpose of CZK weakening, the persisting risk for the CZK exchange rate development subsequently represents the chance of the eurozone crisis escalation.

In the whole forecast horizon, the nominal and real exchange rates should fluctuate below the level of the previous long-term trend.

Graph A.4.1: Exchange Rate CZK/EUR quarterly averages

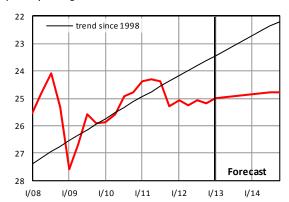


Table A.4.1: Exchange Rates – yearly

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
							Estimate	Forecast	Forecast	Outlook	Outlook
Nominal exchange rates:											
CZK / EUR	average	27.76	24.96	26.45	25.29	24.59	25.14	24.9	24.8	24.7	24.5
	appreciation in %	2.1	11.3	-5.6	4.6	2.8	-2.2	0.8	0.5	0.5	0.5
CZK / USD	average	20.31	17.06	19.06	19.11	17.69	19.59	19.2	19.1	19.0	18.9
	appreciation in %	11.3	19.0	-10.5	-0.3	8.0	-9.7	2.1	0.5	0.5	0.5
NEER	average of 2010=100	90.6	101.2	98.0	100.0	103.1	99.5	100	101	101	101
	appreciation in %	2.7	11.7	-3.2	2.1	3.1	-3.5	0.7	0.5	0.5	0.2
Real exchange rate to EA12 <sup>1)</sup>	average of 2010=100	91.9	102.3	97.8	100.0	100.8	98	98	97	97	96
	appreciation in %	3.1	11.3	-4.4	2.3	0.8	-2.4	-0.5	-0.9	-0.2	-0.4
REER	average of 2010=100	88.7	102.1	98.1	100.0	102.4					
(Eurostat, CPI deflated, 36 countries)	appreciation in %	2.9	15.1	-4.0	2.0	2.4					

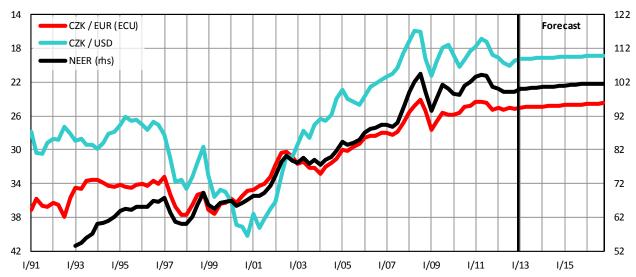
<sup>1)</sup> Deflated by GDP deflators.

Table A.4.2: Exchange Rates – quarterly

			201	12			201	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estimate	Forecast	Forecast	Forecast	Forecast
Nominal exchange rates:									
CZK / EUR	average	25.08	25.26	25.07	25.17	25.0	25.0	24.9	24.9
	appreciation in %	-2.8	-3.7	-2.7	0.4	0.3	1.2	0.5	1.1
CZK / USD	average	19.14	19.73	20.07	19.42	19.2	19.2	19.2	19.2
	appreciation in %	-6.9	-14.3	-13.9	-3.3	-0.5	2.7	4.6	1.4
NEER	average of 2010=100	100.2	99.2	99.3	99.2	100	100	100	100
	appreciation in %	-3.2	-4.8	-4.5	-1.3	-0.2	0.8	1.0	1.1
Real exchange rate to EA12	average of 2010=100	98.1	98.0	98.5	99	97	98	98	99
	appreciation in %	-2.5	-3.6	-3.1	-0.4	-1.3	-0.4	-0.7	0.2
REER	average of 2010=100	123.6	121.8						
(Eurostat, CPI deflated, 36 countries)	appreciation in %	-1.7	-3.3						

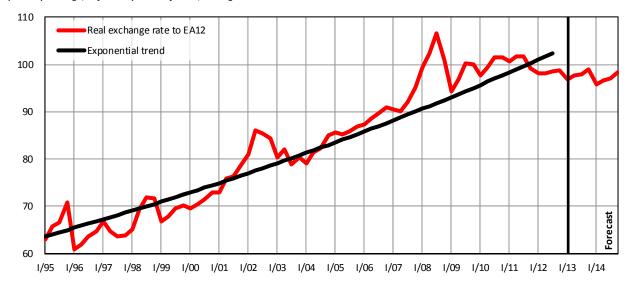
Graph A.4.2: Nominal Exchange Rates

quarterly average, average 2010=100 (rhs)



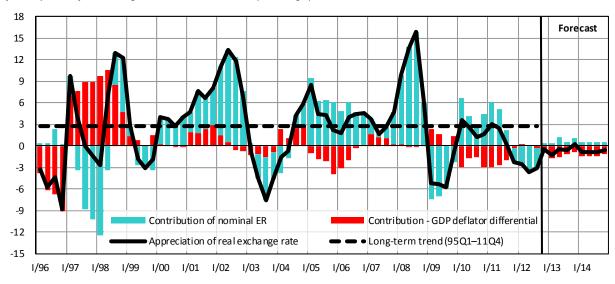
Graph A.4.3: Real Exchange Rate to EA12

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



Graph A.4.4: Real Exchange Rate to EA12

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



## A.5 Structural Policies

On 20 December 2012, the government approved draft measures to improve conditions of economy development, to support entrepreneurship and employment. The measures are especially aimed at reducing the administrative burden and making legislation more transparent, raising competitiveness, tax stimulation and prevention of tax evasions, supporting innovations and education, supporting exports and effective use of European funds.

#### **Business environment**

In order to strengthen the competitiveness and economic performance of small and medium-sized enterprises, on 12 December 2012 the government approved 2014–2020 concept of support for small and medium-sized enterprises, in which it set out five

strategic priorities (cultivation of the business environment, development of business based on supporting research, development and innovations, promoting business and innovation infrastructure, development of education for business and sustainable energy management). The measures will be financed from the EU structural funds, with national funds used as a supplement.

The purpose of an amendment to the **Insolvency Act**, which came into effect on 1 November 2012, is to prevent abuses of the insolvency law. A court is allowed to reject a creditor's petition for insolvency if it is clearly unfounded and to establish a monetary penalty for such an unfounded insolvency petition.

An amendment to the Act on the Protection of Competition, which came into effect on 1 December 2012, should more readily expose cartel agreements. Participants in cartels who cease such operations of their own accord and report other participants to the Office for the Protection of Competition will have the penalty reduced or entirely remitted. The amendment also bars companies already caught in cartel agreements from participating in public tenders and concession agreements.

#### **Taxes**

On 1 January 2013, the Act on Amendments to Tax, Insurance and Other Acts in Relation to Reducing Public Budget Deficit came into effect. Its purpose is to strengthen the revenue side of the state budget and thereby gradually reduce the public finance deficit. Lump-sum cost deductions for personal income taxes were limited to CZK 800,000 for activities included under the 40% deduction and to CZK 600,000 for the 30% deduction. At the same time, persons benefiting from deductions are not entitled to apply the tax relief in respect of child or wife. The real estate transfer tax was increased from 3% to 4% and the withholding tax on the income of non-residents from such countries with which the Czech Republic has not concluded the double taxation avoidance treaty was increased from 15% to 35%. At the same time, the entitlement to an excise tax refund on diesel fuel for agricultural purposes was at first lowered, and will be abolished from 2014.

Temporary measures valid only in 2013–2015 include introducing a 7% surcharge on personal income tax for incomes exceeding 48 times the average monthly wage, abolishing the basic personal income tax deduction for working pensioners, and cancelling the health insurance contributions cap. During this period, both VAT rates will be increased to 21% and 15%, respectively, while implementation of the uniform rate of 17.5% has been postponed until 2016.

An **amendment to the Act on Excise Taxes** raised the excise tax on cigarettes as of 1 January 2013. A further increase of excise tax will occur in 2014.

On 1 January 2013, an **amendment to the VAT Act** came into effect. The amendment has introduced the institution of an untrustworthy taxpayer, making it possible to identify higher-risk taxpayers abusing the VAT system, whose registration as VAT payers cannot be directly cancelled by the tax administrator. Entrepreneurs accepting taxable supplies from untrustworthy payers are exposed to a risk of liability for unpaid VAT. With effect from 2014, taxpayers, with

the exception of individuals with turnover of up to CZK 6 million, will be obliged to make their submissions electronically.

#### **Financial markets**

For the purpose of responsible lending and strengthening the position of the consumers, on 7 December 2012 the Chamber of Deputies approved an **amendment to the Consumer Credit Act**. From now on, a creditor will be able to provide a consumer loan only in the case that upon evaluating the consumer's creditworthiness with expert care it will be apparent that the customer is able to repay the loan. The consumer will be able to withdraw from an agreement on intermediation of a consumer loan within 14 days upon concluding it without penalty and without stating a reason for doing so.

## **Energy industry and environmental protection**

On 1 January 2013, the Act on the Conditions for Trading in Greenhouse Gas Emission Allowances came into effect. Until the end of 2012, allowances were allocated free of charge on the basis of historical emissions. In the period 2013–2020, the CR will have at its disposal 645 million allowances, out of which 342 million will be sold by auction and 303 million allocated free of charge according to reference values defined by EU regulations. The number of freely allocated allowances will be gradually decreased during this eight-year period. Allowance revenues will be converted into state budget revenues, but at least 50% of revenues will be earmarked for subsequent financing of activities related to climate protection.

On 1 January 2013, an amendment to the Act on **Energy Management**, which should lead to a decrease in the energy demands of buildings, came into effect. According to the amendment, starting from 2021 all new buildings will be constructed as buildings with almost zero energy consumption. New buildings used and owned by public authorities will have to do so already from 2019. Last but not least, the amendment regulates the mandatory energy certification of buildings. Property owners will present an energy performance certificate when selling self-contained units of existing buildings starting from 2013, and, in the case of renting, starting from 2016. Already existing residential or administrative buildings will obtain their certificates gradually over the period 2015-2019 depending on their floor space.

On 1 January 2013, the **Act on Supported Energy Sources** came into effect, concentrating into one single regulation the support for renewable resources,

secondary sources as well as the combined production of electricity and heat from renewable resources. The purpose of the act is to efficiently achieve the binding target for the share of renewable energy sources on gross final consumption to the amount of 13.5% in 2020. If, as of 30 May of a given year, the Energy Regulatory Office determines that for a certain type of energy the target defined in the National Action Plan has already been achieved, in the following two years it will not determine any support for electricity production from this source. The provision will only apply to new applicants wishing to connect power plants into the power grid. Last but not least, electricity from solar radiation produced in the facility in 2013 put into operation in 2009 and 2010 will be burdened with obligatory payments up to 28% of subsidies received.

#### **Labour Market**

On 1 January 2013, the pension reform came into force incorporating the act on pension savings and the act on supplementary pension savings that ensured the second pillar creation and at the same time transformation of the third pillar of the pension system. The newly created second pillar is financed by releasing a part of premiums for pension insurance from the first pillar, whereby the insurance rate for the first pillar of the participant of the second pillar has decreased by 3 p.p., while the participant has to add another 2 p.p. from his or her own funds. Insured persons may decide on this release prior to reaching the age of 35 years. Insured persons who are older than 35 years at the moment of launching the reform can opt out of the pay-as-you-go system no later than on 30 June 2013. Upon making their decision or when the time-limit elapses, however, it is no longer possible to change their decisions.

The old-age pension from the first pillar will consist of a basic and percentage assessment. The basic pension assessment will be paid out in full, regardless of participation in the second pillar, while the percentage assessment will be calculated in order to reflect the length of participation in the second pillar, and thus a lower premium paid out to the first pillar. Old-age pension will be paid from the second pillar in the form of life annuity, life annuity with an agreed payment for inheritance pension to the same amount for a period

of three years from the date of the participant's death or life annuity with 20 years certain, whereby a period less than 20 years lapses after the death of the recipient of the pension, the entitlement to pension payment forms part of the inheritance.

The administration of funds will be ensured by pension companies, which will be required to offer four types of funds (general, conservative, balanced and dynamic) reflecting different investment limits, portfolio structure and risk.

An amendment to the Act on Supplementary Pension Savings, which came into effect on 1 January 2013, will allow persons close to retirement age the chance to draw a pension from the system of supplementary pension savings even before reaching retirement age. Persons five years below the required age for entitlement to an old-age pension will be entitled to benefits from the third pillar. If the amount of individual payments reaches at least 30% of the average wage, the drawing of benefits will not influence the amount of pension entitlements from the first pay-as-you-go pillar or public health insurance. Participants will be motivated to save in the third pillar by a state contribution and employers by tax benefits, as contributions from employers will be exempt from income tax up to CZK 30,000 per year.

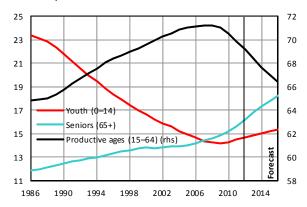
On 9 January 2013, the government approved the draft of the amendment to the Employment Act, which should contribute to liberalization of the environment in the area of agreements for a definite period of time. According to the current legal regulation, the duration of the employment relationship for a definite period of time must not exceed 3 years and from the date of the commencement of the first employment relationship it can be repeated no more than twice. In the case of serious operational reasons or reasons for a special nature of the work (seasonality in agriculture or construction), the amendment will allow repeated employing for a definite period of time without any limitation.

According to the **Constitutional Court Verdict** of 27 November 2012, the duty of the persons, who are registered as a job-seekers for a period longer than two months to perform so-called public service without entitlement to remuneration, was cancelled.

# A.6 Demographic Trends

At the end of September 2012, 10.513 million people were living in the Czech Republic. During the period from January to September 2012, the population increased by 8 thousand inhabitants. The positive migration balance reached 6 thousand and births exceeded mortality rates by 2 thousand. While the natural population growth decreased only negligibly compared to the same period of the previous year (by 3 thousand persons), the positive migration balance was lower by 8 thousand, especially due to an increase in the number of emigrants.

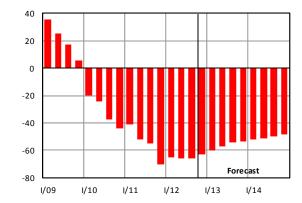
Graph A.6.1: **Groups by Age** *structure in per cent* 



In terms of the age structure the proportion of the population aged 15-64 has been sharply decreasing since 2008 and will continue to decline (see Graph A.6.1). Persons born in the very weak years in terms of the new-born population at the end of the 1990s exceed the lower limit of this age category, while the population-strong generation born after the Second World War has been incorporated among seniors.

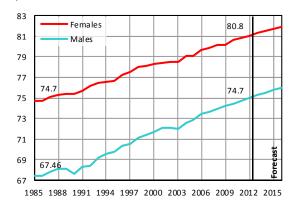
The negative impact from a decline in the working-age population on the labour supply has been compensated by effects within the age structure of the labour force, as the structural shares of age groups with a high or growing participation are increasing. Postponing the retirement age and making the labour market more flexible have the same effect. The ratio of the labour force to the working-age population has thus increased, which makes it possible to maintain a stable or even growing labour force (see Box C.3).

Graph A.6.2: **Czech Population Aged 15–64** YoY increases of quarterly averages, in thousands



On the other hand, the structural proportion of persons over 64 years of age in the total population reached 16.2% at the beginning of 2012, and according to the middle variant of the CZSO's Demographic Projection, it should increase to nearly 20% by 2020. Both the number and proportion of seniors in the population will be rising considerably due to the demographic structure and further continuation of the intensive process of increasing life expectancy.

Graph A.6.3: Life Expectancy in years



At the end of 2011, the number of old-age pensioners increased dramatically by 3.5% to reach 2.340 million people. In the course of 2012, on the contrary, it stagnated or even slightly decreased. Thus it has been proved that the increase in 2011 was a one-off matter, when potential future pensioners optimized the time of their retirement during the period of changing the rules for determining pension payments.

Table A.6.1: Demography

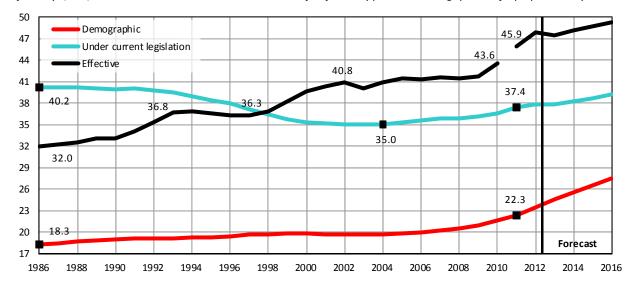
in thousands of persons

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
						Estimate	Forecast	Forecast	Outlook	Outlook
Population (January 1)	10 287	10 381	10 468	10 507	10 487	10 505	10 539	10 571	10 601	10 630
growth in %	0.4	0.9	0.8	0.4	-0.2	0.2	0.3	0.3	0.3	0.3
Age structure (January 1):										
(0–14)	1 480	1 477	1 480	1 494	1 522	1 541	1 563	1 587	1611	1631
growth in %	-1.5	-0.2	0.2	1.0	1.8	1.3	1.4	1.5	1.5	1.3
(15–64)	7 325	7 391	7 431	7 414	7 328	7 263	7 207	7 154	7 105	7 055
growth in %	0.4	0.9	0.5	-0.2	-1.2	-0.9	-0.8	-0.7	-0.7	-0.7
(65 and more)	1 482	1513	1 556	1 599	1 637	1 701	1 768	1 830	1 885	1 944
growth in %	1.8	2.1	2.9	2.7	2.4	3.9	3.9	3.5	3.0	3.1
Old-age pensioners (January 1) <sup>1)</sup>	2 024	2 061	2 102	2 147	2260	2340	2 337	2 368	2 399	2 428
growth in %	2.0	1.8	2.0	2.1		3.5	-0.1	1.3	1.3	1.2
Old-age dependency ratios (January 1, in %):										
Demographic <sup>2)</sup>	20.2	20.5	20.9	21.6	22.3	23.4	24.5	25.6	26.5	27.6
Under current legislation 3)	35.8	35.9	36.1	36.6	37.4	37.8	37.8	38.2	38.7	39.2
Effective 4)	41.6	41.5	41.8	43.6	45.9	47.9	47.4	48.2	48.8	49.3
Fertility rate	1.438	1.497	1.492	1.493	1.427	1.52	1.53	1.54	1.55	1.56
Population increase	94	86	39	-20	19	33	32	31	29	27
Natural increase	10	15	11	10	2	8	7	6	4	2
Live births	115	120	118	117	109	114	113	112	110	109
Deaths	105	105	107	107	107	106	106	106	106	107
Net migration	84	72	28	16	17	25	25	25	25	25
Immigration	104	78	40	31	23					
Emigration	21	6	12	15	6					
Census difference	х	х	х	-46	х	х	х	х	х	х

<sup>1)</sup> 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.

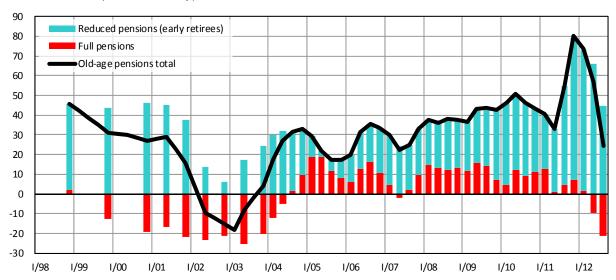
## Graph A.6.4: Dependency Ratios

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



Graph A.6.5: Old-Age Pensioners

absolute increase over a year in thousands of persons



Note: Transfer of disability pensions to old-age pensions for people over 64 years in 2010 is not included.

# **B** Economic Cycle

Sources of tables and graphs: CNB, CZSO, EC, Eurostat, own calculations

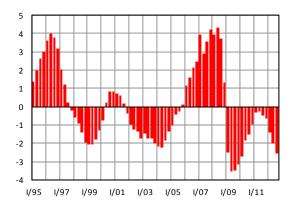
# **B.1** Position within the Economic Cycle

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

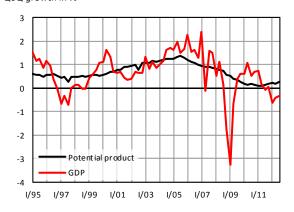
Under current conditions, when abrupt changes in the level of economic output have occurred, it is very difficult to distinguish the influence from deepening of the negative output gap from a slowing in PP growth. The results of these calculations display high instability and should be treated with caution.

Graph B.1.1: Output Gap

in % of potential GDP



Graph B.1.3: **Potential Product and GDP** *QoQ growth in %* 

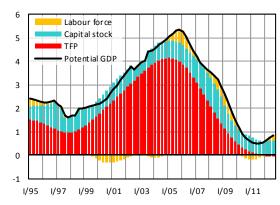


Graph B.1.5: Capacity Utilisation in Industry

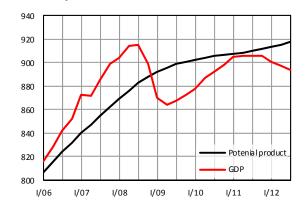
90 88 86 84 82 80 78 76 1/95 1/97 1/99 1/01 1/03 1/05 1/07 1/09 1/11

**Graph B.1.2: Potential Product Growth** 

in %, contributions in percentage points



Graph B.1.4: Levels of Potential Product and GDP in bill. CZK of 2005



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

YoY growth in %

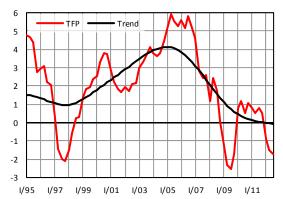


Table B.1: Output Gap and Potential Product

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
											Q1-3
Output gap	per cent	-1.7	-1.9	-0.4	1.9	3.7	3.3	-3.2	-1.8	-0.4	-2.0
Potential product	growth in %	4.2	4.7	5.2	4.9	3.9	3.3	2.0	0.9	0.5	0.7
Contributions:											
Trend TFP	perc. points	3.7	4.1	4.1	3.6	2.7	1.7	0.8	0.3	0.1	0.0
Fixed assets	perc. points	0.5	0.7	8.0	0.9	1.1	1.2	8.0	0.6	0.6	0.6
Participation rate	perc. points	-0.2	-0.2	0.2	0.2	-0.2	0.0	0.3	0.2	0.3	0.7
Demography 1)	perc. points	0.2	0.2	0.2	0.2	0.3	0.4	0.1	-0.2	-0.4	-0.5

<sup>1)</sup> Contribution of growth of working-age population (15–64 years)

Since the deep recession at the turn of 2008 and 2009, the Czech economy has constantly been in a negative **output gap**. With the modest recovery after the end of the recession, the gap was gradually reduced to -0.3% in Q2 2011, although the onset of a shallow recession in 2012 caused the output gap to deepen once again to -2.6% in Q3 2012.

The Czech economy has not yet overcome the level of the peak of the previous economic cycle in Q3 2008. Due to a long period without significant economic growth, YoY growth of **potential product** has got below 1% since 2010 according to our calculations. However, we believe that these estimates may underestimate the reality.

The PP component most seriously affected is **total factor productivity** (TFP). TFP was 3.0% lower in Q3 2012 than at the peak of the cycle in Q3 2008. The recession in the course of 2012 showed itself in renewal of QoQ declines. The TPF trend component, derived using the Hodrick-Prescott filter, is therefore stagnating. The fact that the labour production factor is entered into the calculation according to the number

of employed persons (which has grown slightly, even in spite of the recession) and not according to the number of hours worked (which has fallen dramatically, see Chapter C.3) may play a certain role here.

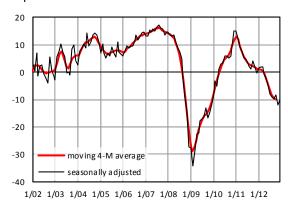
A drop in investment activity led to a decline in **capital stock's** contribution from 1.2 p.p. in 2008 to 0.6 p.p. in 2010–2012.

The **labour supply** has been affected by the decrease in the number of working-age inhabitants, which results from the process of population ageing as well as from a significant drop in immigration versus the situation recorded during in 2006–2008. In Q1 to Q3 2012, demographical development slowed down PP growth by 0.5 p.p. Nevertheless, the size of the labour force is not only not decreasing, but rather is even increasing relatively quickly (in Q3 2012 by 1.0% YoY), since the positive participation trend, measured as the ratio of the labour force to the number of inhabitants at the age of 15–64 years, has accelerated and, with a contribution of 0.7 p.p., has become the most significant factor for PP growth.

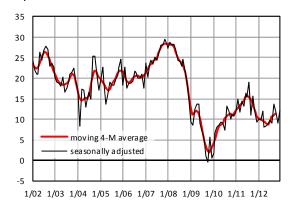
# **B.2** Business Cycle Indicators

Business cycle indicators express respondents' views as to the current situation and short-term outlook and serve to identify in advance possible turning points in the economic cycle. Their main advantage lies in the quick availability of results reflecting a wide range of influences shaping the expectations of economic entities.<sup>1</sup>

**Graph B.2.1: Industrial Confidence Indicator** 



Graph B.2.3: Retail Trade Confidence Indicator



**Graph B.2.5: Consumer Confidence Indicator** 



**Graph B.2.2: Construction Confidence Indicator** 



Graph B.2.4: Selected Services Confidence Indicator



Graph B.2.6: Aggregate Confidence Indicator



For the business cycle research methodology, see CZSO: http://www.czso.cz/eng/redakce.nsf/i/business\_cycle\_surveys.

Business cycle indicators have continued to develop in a predominantly negative manner, also during Q4 2012.

In industry the assessment of overall and foreign demand was predominantly negative in Q4 2012, however, as compared to Q3 there was a slight decrease in negative assessments in the case of foreign demand. The economic situation of businesses was assessed positively in Q4 2012, but as compared to the previous quarter, the number of positive responses decreased. The three-month and six-month outlook for the economic situation for Q4 2012 has slightly improved, as compared to Q3. In the three-month outlook, the assessment of overall demand basically stagnated QoQ, however, the assessment of foreign demand improved slightly. However, respondents' negative responses still outweigh positive ones. The three-month outlook for employment decreased slightly, which corresponds to the development of the outlook for overall and foreign demand.

As regards the results of a business cycle survey, the worst situation can be found in the construction **industry**. The assessment as to the outlook for total demand was unambiguously negative in Q4 2012, while slight deterioration was recorded in comparison with Q3.

According to respondents in the sector of **trade**, in Q4 2012 (in comparison with the previous period) the assessment of the current economic situation slightly deteriorated. The three-month and six-month outlooks for the economic situation more or less stagnated compared to Q3.

The assessment of the current economic situation in selected sectors of **services** increased negligibly in Q4 2012. The assessment of the economic situation in the six-month outlook and expected development of the number of employees in the following three months, also as compared to Q3, showed an improvement.

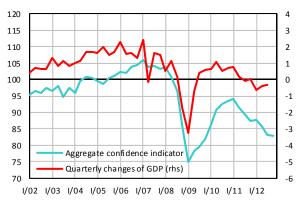
**Consumer** confidence continued to be very low, despite a slight QoQ growth of the indicator occured.

The composite confidence indicator witnessed further decline in Q4 2012, as compared to the previous quarter (Graph B.2.6). Using regression analysis, we quantified the relationship between development of the composite confidence indicator and QoQ increase of real GDP. The relationship between QoQ increments of GDP and lagged values of the composite indicator is relatively weak. Without the lag, the correlation between these two time series is ca 60%. The

regression relationship between QoQ increments of GDP and the composite indicator (without lag) makes it possible to at least use the existing composite indicator published in advance of quarterly national accounts. Below we have presented only a qualitative graphical appraisal. It is clear that for Q4 2012 the composite confidence indicator signalled a further QoQ drop in GDP.

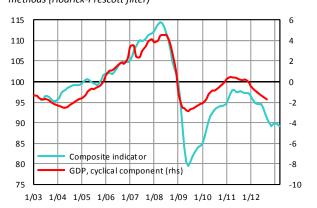
Graph B.2.7: Aggregate confidence indicator and QoQ GDP growth

2005=100 (lhs), QoQ GDP growth in % (rhs)



For Q3 2012 the composite leading indicator correctly signalled a drop in the relative cyclical component of GDP, which was confirmed based on data published in December 2012. For Q4 2012 the indicator further signalled a drop in the relative cyclical component of GDP. Considering the fact that trend dynamics can be regarded as constant in the short term, the conclusion for QoQ dynamics of GDP in Q4 2012 is in line with observations resulting from comparison of QoQ changes in GDP with the composite confidence indicator. According to the composite indicator, the relative cyclical component should slightly fall in Q1 2013.

Graph B.2.8: **Composite Leading Indicator** average 2005=100 (lhs), in % of GDP (rhs) synchronized with cyclical component of GDP based on statistical methods (Hodrick-Prescott filter)



# **B.3** Business Cycle Indicators in the EU

The composite confidence indicator published by the European Commission stagnated in Q4 2012 for the whole of the EU. A strongly negative sentiment prevailed in all components of the indicator. In a QoQ comparison, respondents' evaluation in the sector of services and retail trade improved; on the contrary, confidence of consumers and industrial businesses slightly deteriorated. For Q4 2012 the composite indicator signals a QoQ drop in real GDP in EU27.

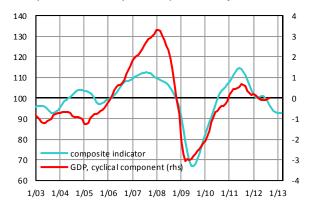
In the Czech Republic's selected trading partner countries, the composite confidence indicator development was differentiated in Q4 2012 (see Graph B.3.2). While in Germany and Italy the indicator

Graph B.3.1: Aggregate confidence indicator and GDP growth in EU27

indicator – quarterly averages, QoQ growth in %, sa data



Graph B.3.3: **EU – composite leading indicator** monthly data, 2005=100, cyclical component in % of trend GDP

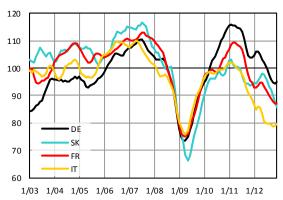


increased slightly after its previous decline, in France its decline rates slowed down considerably. However, this was not the case of Slovakia where a sharp decrease continued.

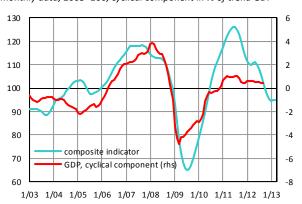
The composite leading indicator signals stabilization of the relative cyclical component of GDP for Q1 2013 (after its decline in Q4 2012) both in the whole of the EU and in Germany. Considering the stable dynamics of the potential product in the short time, supported by the estimate of output gap for 2013 by the European Commission, the stabilization of the relative cyclical component can be explained by the economic growth in Q1 2013.

**Graph B.3.2: Aggregate confidence indicator, selected trading partner countries** 

3-month moving averages



Graph B.3.4: **Germany – composite leading indicator** monthly data, 2005=100, cyclical component in % of trend GDP



# **C** Forecast of the Development of Macroeconomic Indicators

Sources of tables and graphs: CZSO, Eurostat

# **C.1** Economic Output

# Latest development of GDP

Seasonally adjusted GDP fell by 0.3% (*versus 0.2%*) QoQ in Q3 2012. In YoY comparison, GDP<sup>2</sup> decreased by 1.6% (*versus 1.4%*).

Economic output declined QoQ for the third time in a row, and the economy was therefore in recession from the beginning of 2012. (The revision of GDP data altered the assessment of the last recession's duration. The CZSO refined the data on the QoQ change in GDP in Q4 2011 from a decline of 0.2% to stagnation, whereby the start of the recession was pushed on from mid-2011 to the beginning of 2012.) This development was also confirmed by QoQ declines in the gross value added (GVA).

Gross domestic expenditures declined YoY in Q3 2012 due to drop in household consumption by 2.4% (*versus 2.9%*) and in gross capital formation by 9.9% (*versus 2.6%*), with change in inventories reducing economic output by 1.8 p.p. – i.e. by more than was the overall decline in GDP. Government consumption increased slightly by 0.1% YoY (*versus 1.8% decline*).

When evaluating the mentioned deviations, it is necessary to take into consideration that quarterly national accounts were revised following the revision of annual national accounts published in September 2012. While the YoY decline in household consumption in Q2 2012 in the September edition of quarterly national accounts amounted to 3.5%, it reached 3.1% in the December issue. Gross capital formation with YoY decline of 6.5% in Q2 2012 according to the September data was revised to 1.4% in the December edition. This comes mainly as a result of a different view regarding the development of the gross fixed capital formation. As such it gives further evidence for considerable variability of the gross fixed capital formation time series.

The difference between our estimate for Q3 2012 gross capital formation and the data was caused by a strong YoY decline in inventories. Because of its construction, however, the "real-time" interpretation of a change in inventories and valuables is very difficult. Given the low state of confidence in further development, it can reflect economizing behaviour of the corporate sector. However, as additional information becomes available,

this item might be subject to considerable revisions in the following publications of quarterly accounts<sup>3</sup>.

Exports grew by 4.0% (*versus 3.6%*) YoY in Q3 2012 and imports increased by 0.7% (*versus 2.1%*) YoY. A positive impact of foreign trade on GDP development was thus higher, as compared to the estimate in the last forecast. The reason might have been stronger than expected negative impact of very weak domestic demand on export dynamics.

Foreign trade contributed positively to GDP growth despite further deterioration in the terms of trade, which was reflected in YoY decline in real gross domestic income (RGDI) by 2.0% (*versus 2.3%*). As compared to gross domestic product, YoY decline in RGDI was deeper.

Nominal GDP decreased YoY in Q3 2012, by 0.7% (*versus 0.2%*), while the main cause of this deviation was a considerably higher YoY decline in inventory increments in nominal terms of CZK 20 billion, which decreased the nominal GDP by 2.1 p.p. Thus in nominal terms, the change in inventories was a dominant factor in the GDP decline.

With regard to the income structure of GDP in Q3 2012, compensation to employees increased by 0.9% (*versus 1.6%*) and the gross operating surplus dropped by 3.4% (*versus 2.1%*). The development was qualitatively in line with the forecast, nevertheless the balance of taxes and subsidies recorded considerably higher dynamics with a growth of 5.8% (*versus 1.3%*).

#### **Forecast for GDP**

The forecast for GDP and its expenditure components is influenced qualitatively by the same key risk factors as in the October Forecast, however we consider the uncertainty resulting from the debt crisis of some European economies to be somewhat lower.

We assume that the Czech economy stagnated in Q4 2012 in QoQ terms. For 2012 as a whole, GDP decreased by 1.1% (*versus 1.0%*). For 2013 we forecast GDP stagnation, eventuallyslight growth of 0.1% (*versus 0.7%*). For 2014 we expect GDP to grow by 1.4%. We are lowering our growth forecast for 2013 due to both higher decrease in gross domestic expenditures and lower contribution of the foreign

<sup>&</sup>lt;sup>2</sup> Unless stated otherwise, data presented in the text are not adjusted seasonally and for work days.

For example, a change in inventory for Q2 2012 was made more accurate upwards to an extent exceeding 1% of quarterly GDP.

trade balance to GDP growth with respect to clearly weaker growth (also demand) prospects for the euro zone. We assume that household consumption will decrease by 0.7% (*versus 0.5%*) this year.

We believe that the decline in household consumption in 2012 was caused by both the negative development of households' real disposable income and by the observed growth of the savings rate. We are lowering our forecast for 2013 mainly with regard to a decrease in dynamics of real compensations to employees (and also the real average gross wage). We also expect to see further YoY pick up of the savings rate in the segment of households with relatively higher incomes. Concerning external sources of consumption financing, in 2012 we observed very low dynamics in consumer loan growth. In principle we also expect to see similar behaviour of households and banks in 2013. While we believe that for companies (see below) the main cause of low dynamics of is a weak demand for loans, for households the situation is less obvious. We can also probably anticipate a limited offer of loans from banks, mainly in a segment with relatively lower incomes. We expect household consumption to increase by 0.9% in 2014, particularly due to recovery of disposable income. That will be supported by the economy's better overall condition, as compared to 2013.

We estimate that government consumption decreased by 0.9% (*versus 1.1%*) in 2012. In line with the fiscal consolidation strategy, we expect to see a real decline in government consumption by 1.0% in 2013 (*versus 1.3%*) and further 0.9% drop in 2014.

With weak domestic demand, uncertainty around foreign demand prospects and existing utilization of production capacities, the need of companies to invest in physical capital are considerably limited. Low dynamics of internal sources of financing of investment

# C.2 Prices

#### **Consumer prices**

The average inflation rate in 2012 amounted to 3.3% (consistent with the forecast).

YoY growth of consumer prices reached 2.4% (*versus* 2.6%) in December 2012 and was nearly exclusively made up by the administrative measures contributing 2.2 p.p., of which the impact of changes in indirect taxes accounted for 1.2 p.p. and the influence of changes in regulated prices accounted for 1.0 p.p. With respect to contributions of individual segments of the consumer basket to the YoY inflation, housing (1.0 p.p.)

projects and poor contribution of governmental investment due to the already mentioned fiscal consolidation can be reagarded as another reason for weak investment activity. Growth of external sources of financing (loans) is rather limited, mainly - in our view – because of low demand of companies for loans to finance investment projects. We estimate that gross capital formation in 2012 decreased in real terms by 3.3% (versus 4.1%) with a drop in the gross fixed capital formation of 0.8% (versus 0.6%). For 2013 we anticipate practical stagnation, eventuallya slight growth of 0.1% in gross capital formation (versus growth of 0.9%) and gross fixed capital formation (versus growth of 0.3%). In 2014, gross capital formation could increase by 3.2% and gross fixed capital formation by 1.3%. Considering the structure of investment, we expect negative development, especially in building investments.

A negative contribution of gross domestic expenditures to the GDP growth should be, similarly to 2012, mitigated this year by the positive contribution of foreign trade. For 2013 we anticipate growth of 3.0% (*versus 3.5%*) in exports and imports to pick up by 2.3% (*versus 2.5%*). A lower resulting positive contribution of foreign trade to the GDP growth in 2013 results mainly from deterioration of the prospects of foreign demand for domestic production.

We expect modification of the GDP growth structure in 2014, in the sense that the positive contribution of gross domestic expenditures due to recovery of household consumption and investment will be higher than the positive contribution of net exports.

We estimate that the nominal GDP in 2012 stagnated (*versus growth of 0.3%*). For 2013 we predict the nominal GDP to grow by 0.6% (*versus 1.6%*), for 2014 by 2.0%.

and food and non-alcoholic beverages (0.8 p.p.) continued to contribute most in December.

In line with the previous forecast, Q4 2012 brought about slowdown in YoY inflation. The prices of food and non-alcoholic beverages increased, on the contrary, the prices of fuels decreased from their historical peaks in September.

In spite of an increase in both VAT rates, **the year 2013** should be characterized by slight inflation. Neither oil prices nor exchange rate development will have a considerable impact on its dynamics (see Chapters A.1 and A.4). The main anti-inflation factors will be weak

domestic demand, the Czech economy position in the negative output gap and the labour market situation.

Right at the beginning of 2013, most administrative measures will affect the CPI. In addition to an increase in both VAT rates by 1.0 p.p. to 15% and 21% (contribution of 0.7 p.p.), the growth of certain regulated prices must be considered. For example, it refers to an increase in prices for heat, electricity, water and sewer rates in total (contributions of 0.1 p.p. each) or an increase in administrative fees. Uncertainty is associated with changes in prices for solid waste collection. In the course of 2013, an increase in the consumer tax on cigarettes should be gradually reflected in CPI (contribution of 0.1 p.p.). Similar to 2012, administrative measures will contribute approximately three quarters of the inflationary effect in 2013, as such they should contribute 1.7 p.p. (versus 1.6 p.p.) to YoY growth of consumer prices in December 2013.

YoY inflation should be slowed down further in Q1 2013, as compared to Q4 2012. The **average inflation rate in 2013** should reach 2.1% (*unchanged*) with a YoY growth in December of 2.3% (*unchanged*). In spite of the fact that the situation on the world food commodities markets calmed down as compared to the summer months of 2012, we continue in including food prices — especially with regard to the development of domestic prices of agricultural producers — on the of anti-inflation risks side of the forecast.

Last year, the long lasting process of rent deregulation was completed. This will be shown from the beginning of 2013 by a decrease in fixed weight of regulated prices in the consumer basket from 18.7% to 17.5%.

In 2014, inflation should already be swayed by administrative measures to a lesser extent. Similarly to 2013, another increase in the consumer tax on cigarettes should contribute to inflation with 0.1 p.p. We expect the average inflation rate to reach 1.8% in 2014 with a YoY growth of consumer prices at 2.1% in December.

Even in spite of slightly increased inflation in 2012 and very loose monetary policy, we consider inflation expectations to be stabilized.

#### **Deflators**

The gross domestic expenditure (GDE) deflator, which is a comprehensive indicator of domestic inflation, grew by 1.3% (versus 2.0%) YoY in Q3 2012. The rise was caused mainly by other than the forecast development of the household consumption deflator, which grew in Q3 2012 only by 1.8% (versus 3.3%) YoY, i.e. substantially less than the level of inflation according to CPI. At the same time, this figure was made more accurate, for example for Q2 2012 from 3.4% to 2.0%. As revealed by the revised data from the quarterly national accounts of December 2012, it is likely that it refers to a more permanent loss of the so far relatively clear link between relative changes in the household consumer deflator on one hand and relative changes in CPI on the other. We assume that it is a consequence of applying a more detailed data base in estimating the household consumer deflator in annual national accounts (the impact of this step could be seen for the first time in September 2012 with the publishing of annual national accounts) which is also now taken into consideration in the quarterly national accounts. In the outlook, we anticipate convergence of both indicators.

We expect the GDE deflator to grow by 1.4% (*versus 2.2%*) in 2012. For 2013 we forecast deflator growth by 1.0% (*versus 1.8%*).

The value of the **implicit GDP deflator** increased by 0.9% (*versus 1.2%*) YoY in Q3 2012. A higher growth of the gross domestic expenditure deflator compared to a growth of the implicit GDP deflator in Q3 2012 relates to a worsening of terms of trade by 0.6% (*versus 1.2%*). Once again this deviation was caused by a change of the data base. A YoY decline in terms of trade for Q2 2012 was revised for goods from 1.2% to 0.7%, for services from a decline of 2.2% to a growth of 1.0%.

In 2012 we assume that the GDP deflator grew by 1.1% (*versus* 1.3%) and in 2013 we forecast its growth at 0.5% (*versus* 0.9%).

### C.3 Labour Market

The data for the first three quarters of 2012 and data available for Q4 indicate considerable impact of the economic recession on the labour market; which has thus far to a large extent resisted its consequences. Seasonally adjusted unemployment is increasing, but employment, thanks to its growth, at the first sight defies other indicators. The price for the increase of employment, however, was a decline in the working hours fund, productivity and a further real decrease in wages.

#### **Employment**

According to the Labour Force Survey (LFS<sup>4</sup>), **employment** surprisingly grew by 0.5% (*versus 0.0%*) YoY in Q3 2012, and by 0.4% QoQ after the seasonal adjustment. The increase was recorded in primary and tertiary sectors, while the secondary sector essentially stagnated.

Contrary to the previous two quarters, not only a YoY increase in the number of entrepreneurs without any employees was ascertained, but also an increase in employees of 0.3% (*versus decline of 0.8*%). Under the conditions of recession, this change in behaviour on the supply and demand sides can be explained by the continuing efforts of viable enterprises to maintain the highest number of high-quality employees as long as possible as well as by increased preference of employees for securing at least minimal work-related incomes. This can be further evidenced by another decrease in the number of hours worked per employee (according to national accounts by 3.7% YoY).

A still increasing number of formally self-employed persons most likely leads to the extension of the "false self-employment" which is fiscally unfavourable for the state budget.

Beside to the results from the first three quarters, the reason for improving our forecast for employment growth in 2012 to 0.4% (*versus 0.0%*) is also the expectation for continuing growth of self-employment and the above-described change in behaviour on both sides of the labour market. This should lead to a further decline in the number of worked hours and an increase in the share of part-time work. Based on this assumption, we are also changing the forecast of employment. We expect employment to stagnate (*versus decline of 0.2%*) in 2013 and also in 2014.

<sup>4</sup> The data from LFS is provided in the text, graphs and tables after 2011 in a row after recalculation to 2011 census. The **employment rate** (ages 15–64) increased in Q3 2012 YoY by 0.9 p.p. to 67.1%, thus continuing in its strong growth. This growth was caused both by a decrease in the potential work force and higher working activity, especially of individuals over the age of 45 years.

The **economic activity rate** (aged 15–64) grew YoY by 1.3 p.p. to 72.1% in Q3 2012, thus reaching its highest level since 1999. This result points out the increased interest of the population, in light of the worsening economic situation of households, to engage in work as a consequence of a need to compensate for current or anticipated losses in terms of real disposable income. Reasons for the constantly growing rate of economic activity are specified in Box C.3.

#### Unemployment

The tendency towards unemployment growth lasting since May 2012 was confirmed unambiguously by seasonally adjusted registered unemployment in Q4 2012. An interesting view is provided by flows of unemployed persons. In spite of the recession lasting over a year now, a decrease in the number of newly registered unemployed persons, which has already reached the 2007 level, when the economy grew by 6%, continues. On the contrary, unemployment growth is caused by a decline in the number of placed job applicants which has nearly reached its minimum from the recession in 2009. An unavoidable consequence of this situation is the extension of the average period of unemployment to values which are record-breaking in terms of the history of the modern market economy in the Czech Republic.



Graph C.3.1: Flows in Registered Unemployment 12month moving sums, thousands of persons

At the same time, the rise in the share of available and partially working job applicants supports increased efforts of the unemployed to actively find solutions to their problems. However, the increase in registered

01/10

01/11

01/12

01/09

600

550

500

01/06

01/07

01/08

unemployment is caused by a sharp decline in the creation of new jobs and apparently also by limited capacities of employment agencies in looking after the unemployed. We assume that the cancellation of non-paid public service by the Constitutional Court will also lead to additional pressure on increasing registered unemployment.

The **unemployment rate** according to LFS (aged 15+) reached 7.0% (*consistent with the forecast*) in Q3 2012, which represents a YoY increase of 0.4 p.p.

In line with the previous forecast, we expect that the economic decline of 2012 will show itself in a YoY increase of unemployment only with a delay. In 2013, unemployment rate may increase to 7.3% (*unchanged*); in 2014, it may go slightly up to 7.4%, as a result of only moderate economic growth.

#### Wages

Slowdown in wage bill growth and the average wage growth basically corresponded with the situation of prolonged economic recession and the shift of preferences of both employers and employees towards maintaining employment.

When converting to full-time work equivalents, the nominal **average wage** (in enterprises) increased by 1.4% (*versus 2.3%*) in Q3 2012 to CZK 24,514. However, its growth further differentiated, both in terms of sectors and its amount – higher increases were mostly found in sectors with high wages (information and communication activities, finance and

insurance sector) as well as in the sectors with a selective wage increase (education, health care). High management bonuses also contributed to an increase in the so defined average wage; approx. 2/3 of employees in the file of company survey fall below this wage.

As a consequence of reducing working hours due to lack of orders, continuing "wage optimization" by increasing the share of self-employed persons and stagnation of salaries in the public sector, we expect to see a moderate increase to the average nominal wage by 2.2% in 2012 (versus 2.4%) and by 2.0% in 2013 (versus 2.5%). We estimate that in 2012 there was a real decrease in the overall average wage by 1.1% (versus 0.9%), for 2013 we anticipate seeing a slight decrease of 0.1% (versus growth of 0.4%). Under the condition of economic recovery and partial compensation for an increase in the health insurance rate paid by employees carried out by the employers, for 2014 we anticipate growth of the average nominal wage at 3.6%.

In Q3 2012, **the wage bill** (national accounts, domestic concept) increased by 0.6% YoY (*versus 1.6%*), with wage bill growth in manufacturing (the most important sector in terms of volume) amounting to 1.5%.

We estimate that the wage bill increased by 1.7% (*versus 2.0%*) in 2012. As a consequence of bleaker economic outlook and the assumption of slower wage growth with employment stagnation, we are lowering our forecast for 2013 to 1.9% (*versus 2.1%*).

#### Box C.3: Why does the participation rate grow so much in the Czech Republic?

The share of the economically active (the sum of all employed and unemployed individuals) in the working-age population – i.e. the rate of economic activity or participation rate – has been increasing continuously since Q1 2009. Traditional approaches of economic theory assume that in the period of economic crisis the participation rate should decrease due to the fact that a part of the labour force becomes inactive. Such an assumption has been confirmed by many empirical studies. Classical channels can be the decision of unemployed individuals to stop seeking work actively, whereby they will not fulfil the definition of unemployment any more and will become "discouraged"; women on maternity leave can have fewer chances of finding a new job or returning to their original work and will extend the period allocated for childcare; young people may decide to continue with their studies, on the contrary, older people may retire earlier.

Therefore, the question is why the participation rate of the age group 15–64 increased in the Czech Republic from 69.6% in Q1 2009 to 72.1% in Q3 2012, in spite of the "first" recession at the turn of 2008 and 2009 and the "second" recession during the last year. One of possible theoretical explanations is the so-called added worker effect, whereby households are trying to compensate for their unfavourable financial situation through increased labour supply. Let us use as an example the situation when one of the spouses becomes unemployed and the other subsequently shortens or terminates maternity leave and either actively seeks a job or finds one. In both cases, therefore, he or she fulfils the definition of an economically active person.

In addition, specific structural and demographical factors play a role in the case of the Czech Republic. We will try to describe them in detail in the following sections. Graph 1 shows the participation rates by five-year wide age groups. The reverse U-shape is typical for most developed countries. The main reason for low participation at both tails of the graph includes studies or old-age pension.

This picture can also help to illustrate the potential impact of changes in age structure which are important for a detailed assessment of participation developments. In several recent years, for example, the share of the 40–44 year population has been increasing, i.e. at the age with naturally a very high participation rate: these individuals have already finished their studies or have grown-up children and at the same time the number of early pensioners still reaches low values here. At the same time, however, the share of the 60–64 population range is also increasing in the Czech Republic where the participation rate is naturally low. As such, there are several contradictory tendencies.

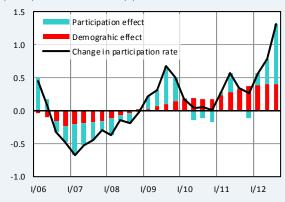
The total impact of the change in the demographic structure on the change of participation rate may be quantified based on the identity below.  $A_t$  is the number of active inhabitants ages 15–64,  $P_t$  is the total number of inhabitants ages 15–64, index i represents individual five-year age groups,  $w_i$  is the share of the number of inhabitants of the given age group in the population ages 15–64. A YoY change in the participation rate can therefore be decomposed into the demographic effect, for which the participation rates of age groups are fixed and the demographic structure is the only change, and the "participation effect", where – on the contrary – the age group is constant and the individual participation rates change.

$$\frac{A_{t}}{P_{t}} - \frac{A_{t-4}}{P_{t-4}} = \underbrace{\sum_{i=1}^{10} \left(w_{i,t} - w_{i,t-4}\right)}_{\text{demographic effect}} + \underbrace{\sum_{i=1}^{10} w_{i,t-4} \left(\frac{A_{i,t}}{P_{i,t}} - \frac{A_{i,t-4}}{P_{i,t-4}}\right)}_{\text{participation effect}}, \text{ where } w_{i,t} = \frac{P_{i,t}}{P_{t}}$$

Graf 1: Participation rate in the CR by age groups in %, data for Q3 2012



Graf 2: Decomposition of participation rate changes participation rate 15–64, in p.p.



Graph 2 presents the results of this decomposition. It is apparent that changes in the demographic structure have already been acting favourably since 2009 for the total indicator of change in the participation rate of individuals aged 15–64 years. Even if the participation rates of individual age groups remain constant, a YoY change in the demographic structure resulted in a YoY increase in the 15–64 participation rate in Q3 2012 of ca 0.4 p.p.

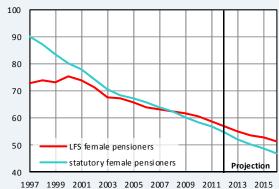
If we move away from these demographic impacts and choose to only analyse the "participation effect", it is apparent from Graph 2 that this indicator has been behaving anti-cyclically since 2006. At present, we perceive as one of the most probable explanations of this phenomenon to be the already described efforts of households to compensate for decreasing real incomes by higher involvement on the labour market. The cautious microeconomic behaviour of households which is apparent on several relevant indicators, especially on an increase in the savings rate.

In addition to short-term issues, a number of structural aspects in a longer term also play an important rolewith respect to the total participation rate. The most important of them is increasing the statutory retirement age which also has a considerable impact on the real retirement age. Graph 3 illustrates this development in women ages 55–64. It is apparent that a decreasing share of statutory female pensioners in this age group is reflected by a decreasing share of non-active women according to the LFS on account of/by virtue of old-age or disability pensions. As the share of statutory female pensioners according to the valid legislation will continue to decrease in the following years, similar

development can also be expected according to the LFS, i.e. also "in reality". Very similar relationship can also be observed in the male population.

Graph 3: Female pensioners aged 55-64

share on female population aged 55–64, in %



Graph 4: Participation rate 15–64 in selected states in %, data for 2011



We can carry out a similar projection for all reasons of non-activity. In total, eight of them have been recorded within LFS; in addition to old-age and disability pensioners, also education, care of family members, etc. After carrying out the projection according to age groups and both sexes, structural changes could result in an increase to the participation rate for the group of 15–64 years up to 73.5% in 2016. As part of this development, one dominant factor is merely the increase in the participation rate from the 55–64 age category.

This value would represent the historically highest level of the participation rate in the Czech Republic. In the European context, however, it would not be exceptional – the Czech Republic would get approximately to the level of Spain in 2011. Contrary to the European countries with the highest participation rate, the Czech Republic still has considerable "reserves", especially in the 60–64 years age group, and further in women aged 25–35, traditionally due to taking longer parental leave.

### C.4 External Relations

(a balance of payments perspective)

In Q3 2012, the external imbalance, expressed as the ratio of the current account balance to GDP, reached -1.7% (*versus* -1.4%) on an annual basis, and thus improved YoY by 1.6 p.p. The improvement was due to the results of the trade balance (improvement of 1.8 p.p.) and the income balance (improvement of 0.8 p.p.). The remaining current account items slightly deteriorated; the balance of services by 0.4 p.p. and the balance of transfers by 0.5 p.p.

After a strong growth of export markets<sup>5</sup> in 2010 and 2011 (by 11.5% or 7.2%, respectively), the dynamics slowed down in 2012 in connection with a decline in world trade to the estimated 1.3% (*versus 1.9%*). We also anticipate poor growth of export markets in 2013 amouting to 1.5% (*versus 2.4%*). For 2014 we anticipate a slight recovery of the world economy, accompanied by the growth of export markets of 2.8%. We also expect slowdown in the export performance growth indicating a change in the share of the volume of Czech goods on foreign markets, from the estimated 3.4% (*versus 2.6%*) in 2012 to 1.4% (*versus 0.8%*) in 2013 and 1.0% in 2014.

In spite of a considerable decline in external demand, Czech foreign trade has been achieving good results. However, the dynamics of export and import growth have been gradually decreasing. In Q3 2012, while exports (moving sums of the last four quarters) went up by 8.0%, imports grew only by 5.2%. Therefore, with export growth outpacing the growth of imports, trade balance surplus increased. A less-than-average growth of exports to EU countries of 5.5% was partially compensated by strong export growth to the countries of the Commonwealth of Independent States<sup>6</sup> (by 41.2%) and developing countries (by 14.8%). In 2013 and partially also in 2014, we expect strengthening impacts of unfavourable development of the external environment and further slowdown in the growth rates for trade. We estimate that in 2012 the trade balance surplus reached 3.9% of GDP (unchanged); for the following two years, thanks to the fact that exports were slightly ahead of imports, we anticipate an increase in the trade balance surplus to 4.4% (versus 4.1%) and 4.7% of GDP.

In annual terms, the fuels balance deficit (SITC 3) reached 4.8% of GDP (*versus 4.9%*) in Q3 2012. We estimate that for the whole of 2012 the deficit reached 4.9% of GDP (*versus 5.0%*). considering the oil price scenario we expect to see prices of raw materials decreasing in the course of 2013 and 2014, meaning the fuel balance deficit will go down. It could decrease to 4.6% of GDP (*versus 5.0%*) in 2013 and further to 4.2% of GDP in 2014.

The balance of the services surplus in Q3 2012 dropped in annual terms by 0.4 p.p. YoY to 1.4% of GDP (unchanged). In spite of a growing active balance on transportation services and tourism balance since the end of 2011, the total surplus of the balance of services has been decreasing in connection with a strongly increasing deficit on the balance of so-called other services. It especially concerned an increase in the importing of services in research and development, securing, intermediation of trade and services for businesses with foreign participation within the group. We estimate that in 2012 the services balance reached 1.3% of GDP (versus 1.2%). For 2013 and 2014 we expect to see a further slight decline in a surplus in the balance of services to ca 1.0% of GDP (versus 1.2%) and 0.8% of GDP.

The deficit in the income balance, which includes the reinvested and repatriated profits of foreign investors, had shown an improving tendency since mid-2011. With a considerable increase to the outflow of investment gains in the form of dividends paid out to foreign owners of domestic direct investment, however, in Q3 2012 the deficit deepened again. We estimate that for the whole 2012 the balance of services showed a deficit of 6.6% of GDP (versus 6.4%). In spite of improvement in the balance between wage incomes of Czech employees abroad and wage expenditures on foreign employees employed in the Czech Republic, we rather expect to see a slight increase in the income balance deficit, which we estimate at 6.8% of GDP (versus 6.5%) for this year and at 6.9% of GDP for 2014.

Under the given circumstances we assume that there will be further improvement in the current account balance in 2013, to -1.3% of GDP (*versus* -1.2%). The forecast for 2014 is -1.2% of GDP. A current account deficit at this level poses no risks of macroeconomic imbalances.

Weighted average of the growth of goods imports by the seven most important trade partner countries (Germany, Slovakia, Poland, Austria, France, the United Kingdom, and Italy).

The organization including 9 out of 15 former union republics of the Soviet Union (Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldavia, Russia, Tajikistan, and Uzbekistan).

## C.5 International Comparisons

Comparisons for the period up to and including 2011 are based on Eurostat statistics. Since 2012, our own calculations have been used on the basis of real exchange rates.

Using the purchasing power parity method, comparisons of economic output for individual countries within the EU are made in PPS (purchasing power standards). PPS is an artificial currency unit expressing a quantity of goods that can be bought on average for one euro on EU27 territory after converting the exchange rate for countries using currency units other than the euro. Using updated Eurostat data, the purchasing power parity of the Czech Republic in 2011 was CZK 18.09/PPS compared to the EU27 or CZK 17.23/EUR compared to the EA12.

In 2009, as a result of deep recession, the level of GDP per capita adjusted by current purchasing power parity declined in all monitored countries, with the exception of Poland. While most states gradually recovered from the crisis, the absolute economic level has already continued to fall for the fifth year in a row in Greece. A slight decrease also occurred in Portugal in 2011 and 2012 and in Slovenia in 2012. In addition to the decrease in the absolute level, the relative economic level vis-à-vis the EA12 also declined in all aforementioned countries. The biggest decline has been observed in Greece where the total decrease in 2009–2012 reached 16 p.p. On the contrary, the economic level is increasing most quickly, compared to the average of the EA12 countries, in the Baltic states. However, after 2011 the speed of their real convergence slowed down considerably.

In the Czech Republic, the economic level of GDP per capita as adjusted to current purchasing power parity was approximately 20,300 PPS in 2012, corresponding to 74% of economic output in the EA12. After a period of convergence when in 2000–2007 the relative economic level of the Czech Republic, compared to the

EA12 countries, increased by 13 p.p., either stagnation or just a very slight growth of the relative economic level has been apparent since 2010. Nevertheless, in 2011 it surpassed the economic level of Greece and once again also that of Portugal.

An alternative way of calculating GDP per capita by means of 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 approx. EUR 14,600 in 2012, i.e. approximately half the level of the EA12. Due to the expected growth of real GDP, which should exceed growth in the EA12 countries, and slight appreciation of the koruna, we expect to see a gradual slight increase in both absolute and relative levels.

Looking at price levels, the **comparative price level of GDP** in the Czech Republic decreased by 2 p.p. in 2012, thus reaching 68% of the EA12 average. The expected stagnation of the price level in 2013 and 2014 should help maintain competitiveness of the Czech economy.

## **D** Monitoring of Other Institutions' Forecasts

The Ministry of Finance of the Czech Republic monitors macroeconomic forecasts of other institutions engaged in forecasting future development of the Czech economy. Forecasts of 11 institutions are continuously monitored from publicly available data sources. Of these, six institutions are domestic (CNB, Ministry of Labour and Social Affairs, domestic banks and investment companies) and others are foreign (European Commission, OECD, IMF, etc.). The forecasts are summarised in the following table.

Sources of tables and graphs: Ministry of Finance's own calculations.

Table D.1: Consensus Forecast

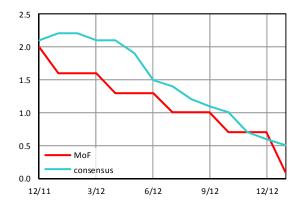
			January 2013		January 2013
		min.	тах.	consensus	MoF forecast
Gross domestic product (2013)	growth in %, const.pr.	-0.2	1.0	0.5	0.1
Gross domestic product (2014)	growth in %, const.pr.	1.4	3.4	2.1	1.4
Average inflation rate (2013)	%	1.9	2.5	2.2	2.1
Average inflation rate (2014)	%	0.9	2.3	1.7	1.8
Average monthly wage (2013)	growth in %	1.9	2.8	2.4	2.0
Average monthly wage (2014)	growth in %	1.6	3.5	2.5	3.6
Current account / GDP (2013)	%	-2.2	-0.5	-1.5	-1.3
Current account / GDP (2014)	%	-2.1	0.0	-1.4	-1.2

Forecasts of the monitored institutions on average envisage a mild recovery of the Czech economy. GDP could increase by 0.5% this year; growth should subsequently accelerate to 2.1% in 2014. The forecast of the MoF is more conservative for both years.

Consumer price growth should slow down. The monitored institutions anticipate an average inflation rate for 2013 and 2014 of 2.2% or 1.7%, respectively. The forecast of the MoF is in line with both estimates.

According to the forecasts of the monitored institutions, the average wage should increase approx. by 2.5% in both 2013 and 2014. The forecast of the

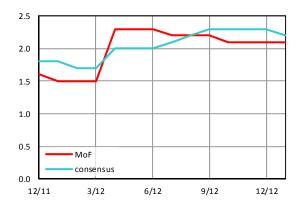
Graph D.1: **Forecast of Real GDP Growth for 2013** *in %; the horizontal axis shows the month, in which the monitoring was conducted* 



MoF for 2013 is more conservative, however, it anticipates a quicker growth in terms of the average wage for 2014. Different assumptions on the fiscal consolidation trajectory and taking into consideration the approved tax modifications in 2014 perhaps provides an explanation for the different opinion of the

According to the monitored institutions, the current account deficit on the balance of payments should be around 1.5% of GDP both in 2013 and 2014, thus remaining on a sustainable level, posing no risks of macroeconomic imbalances. The forecast of the MoF is in line with those of the other institutions.

Graph D.2: **Forecast of Average Inflation Rate for 2013** *in %; the horizontal axis shows the month, in which the monitoring was conducted* 



# **Tables and Graphs:**

#### **Economic Output C.1**

Sources: CZSO, MoF estimates

Table C.1.1: Real GDP by Type of Expenditure – yearly

chained volumes, reference year 2005

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
						Prelim.	Estimate	Forecast	Forecast	Outlook	Outlook
Gross domestic product	bill. CZK 2005	3526	3635	3471	3558	3625	3584	3589	3639	3727	3824
	growth in %	5.7	3.1	-4.5	2.5	1.9	-1.1	0.1	1.4	2.4	2.6
Private consumption exp. 1)	bill. CZK 2005	1673	1720	1724	1741	1753	1701	1690	1705	1741	1784
	growth in %	4.2	2.8	0.2	1.0	0.7	-3.0	-0.7	0.9	2.1	2.5
Government consumption exp.	bill. CZK 2005	666	674	701	704	687	680	674	668	672	674
	growth in %	0.4	1.2	4.0	0.5	-2.5	-0.9	-1.0	-0.9	0.7	0.3
Gross capital formation	bill. CZK 2005	1051	1071	855	904	907	877	878	906	937	967
	growth in %	15.5	1.9	-20.2	5.8	0.3	-3.3	0.1	3.2	3.5	3.2
- Gross fixed capital formation	bill. CZK 2005	964	1004	893	901	894	888	888	900	923	952
	growth in %	13.2	4.1	-11.0	1.0	-0.7	-0.8	0.1	1.3	2.6	3.1
-Change in stocks and valuables	bill. CZK 2005	87	68	-38	3	12	-11	-10	6	14	15
Exports of goods and services	bill. CZK 2005	2541	2642	2354	2719	2975	3109	3201	3328	3490	3678
	growth in %	11.2	4.0	-10.9	15.5	9.4	4.5	3.0	4.0	4.9	5.4
Imports of goods and services	bill. CZK 2005	2402	2467	2169	2511	2680	2753	2816	2923	3060	3217
	growth in %	12.8	2.7	-12.1	15.8	6.7	2.7	2.3	3.8	4.7	5.1
Gross domestic exp.	bill. CZK 2005	3390	3465	3288	3357	3353	3265	3247	3283	3353	3428
	growth in %	6.6	2.2	-5.1	2.1	-0.1	-2.6	-0.6	1.1	2.1	2.2
Methodological discrepancy 2)	bill. CZK 2005	-3	-6	7	0	-17	-30	-37	-45	-53	-63
Real gross domestic income	bill. CZK 2005	3488	3562	3441	3481	3506	3452	3440	3480	3565	3663
	growth in %	6.3	2.1	-3.4	1.2	0.7	-1.5	-0.3	1.1	2.5	2.7
Contribution to GDP growth 3)											
- Gross domestic expenditure	percent. points	6.4	2.2	-5.0	2.0	-0.1	-2.5	-0.5	1.0	2.0	2.1
-consumption	percent. points	2.1	1.6	0.9	0.6	-0.2	-1.7	-0.5	0.3	1.2	1.3
<ul> <li>household expenditure</li> </ul>	percent. points	2.1	1.4	0.1	0.5	0.4	-1.5	-0.3	0.5	1.1	1.3
-government expenditure	percent. points	0.1	0.2	8.0	0.1	-0.5	-0.2	-0.2	-0.2	0.1	0.1
– gross capital formation	percent. points	4.3	0.6	-5.9	1.4	0.1	-0.8	0.0	0.8	0.8	0.8
-gross fixed capital formation	percent. points	3.4	1.1	-3.0	0.2	-0.2	-0.2	0.0	0.3	0.6	0.7
-change in stocks	percent. points	0.9	-0.5	-2.9	1.2	0.2	-0.6	0.0	0.4	0.2	0.0
- Foreign balance	percent. points	-0.7	0.9	0.5	0.5	2.0	1.4	0.7	0.3	0.4	0.5
<ul><li>external balance of goods</li></ul>	percent. points	-1.1	0.5	0.5	0.4	2.3	1.9	1.1	0.6	0.4	0.4
external balance of services	percent. points	0.4	0.4	0.0	0.1	-0.3	-0.6	-0.4	-0.2	0.0	0.1

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

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

Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.

Calculated on the basis of prices and structure of the previous year with perfectly additive contributions.

Table C.1.2: **Real GDP by Type of Expenditure** – quarterly chained volumes, reference year 2005

			201	2			201	.3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Estimate	Forecast	Forecast	Forecast	Forecast
Gross domestic product	bill. CZK 2005	852	902	902	928	841	901	914	933
	growth in %	-0.2	-1.6	-1.6	-1.1	-1.3	-0.1	1.3	0.5
	growth in % 1)	-0.5	-1.0	-1.3	-1.3	-0.7	-0.1	0.4	0.8
	quart.growth in % 1)	-0.6	-0.4	-0.3	0.0	0.1	0.2	0.2	0.3
Private consumption exp.	bill. CZK 2005	406	423	433	440	401	420	430	439
	growth in %	-2.8	-3.1	-2.4	-3.5	-1.2	-0.9	-0.5	-0.2
Government consumption exp.	bill. CZK 2005	160	167	166	187	159	166	164	184
	growth in %	-1.9	-1.6	0.1	-0.3	-0.2	-0.3	-1.4	-1.8
Gross capital formation	bill. CZK 2005	189	228	227	232	174	227	241	236
	growth in %	-1.8	-1.4	-9.9	0.7	-8.2	-0.6	6.0	1.7
-Gross fixed capital formation	bill. CZK 2005	200	221	223	244	200	220	223	245
	growth in %	1.7	0.4	-2.9	-1.8	0.1	-0.3	0.1	0.3
-Change in stocks and valuables	bill. CZK 2005	-10	7	5	-12	-26	7	18	-9
Exports of goods and services	bill. CZK 2005	787	782	756	785	812	803	776	810
	growth in %	7.4	3.2	4.0	3.4	3.2	2.7	2.7	3.2
Imports of goods and services	bill. CZK 2005	679	690	674	711	693	705	690	729
	growth in %	5.1	2.6	0.7	2.7	2.0	2.1	2.4	2.6
Methodological discrepancy	bill. CZK 2005	-11	-8	-6	-5	-12	-10	-8	-7
Real gross domestic income	bill. CZK 2005	818	868	870	896	802	863	878	898
	growth in %	-0.4	-2.0	-2.0	-1.6	-2.0	-0.6	0.9	0.2

<sup>1)</sup> From seasonally and working day adjusted data

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

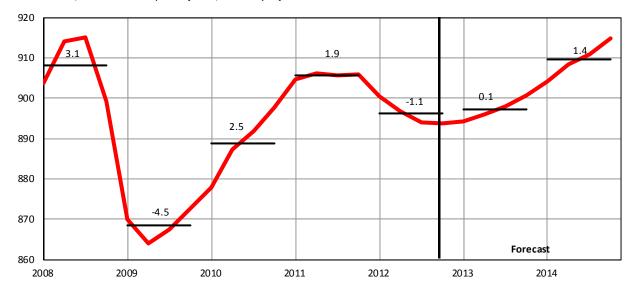
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
						Prelim.	Estimate	Forecast	Forecast	Outlook	Outlook
Gross domestic product	bill. CZK	3663	3848	3759	3800	3841	3840	3863	3939	4086	4238
	growth in %	9.2	5.1	-2.3	1.1	1.1	0.0	0.6	2.0	3.7	3.7
Private consumption	bill. CZK	1748	1883	1902	1926	1950	1927	1932	1970	2044	2119
	growth in %	7.3	7.8	1.0	1.3	1.2	-1.2	0.3	2.0	3.8	3.6
Government consumption	bill. CZK	726	759	809	807	793	795	798	794	811	820
	growth in %	4.6	4.6	6.6	-0.2	-1.8	0.2	0.4	-0.5	2.1	1.2
Gross capital formation	bill. CZK	1092	1114	896	946	944	920	927	963	1001	1041
	growth in %	17.6	2.0	-19.5	5.5	-0.3	-2.5	0.8	3.9	3.9	4.0
-Gross fixed capital formation	bill. CZK	990	1031	926	933	917	919	929	949	981	1019
	growth in %	15.0	4.2	-10.2	0.7	-1.6	0.2	1.1	2.1	3.4	3.8
- Change in stocks and valuables	bill. CZK	102	83	-30	14	26	1	-2	14	20	23
External balance	bill. CZK	97	92	152	120	155	198	206	212	230	258
-Exports of goods and services	bill. CZK	2498	2480	2216	2525	2787	3004	3105	3245	3427	3634
	growth in %	11.3	-0.7	-10.7	13.9	10.4	7.8	3.3	4.5	5.6	6.1
-Imports of goods and services	bill. CZK	2401	2388	2064	2406	2632	2806	2899	3033	3196	3376
	growth in %	12.0	-0.5	-13.6	16.5	9.4	6.6	3.3	4.6	5.4	5.6
Gross national income	bill. CZK	3401	3668	3508	3515	3572	3599	3615	3681	3799	3923
	growth in %	6.9	7.8	-4.3	0.2	1.6	0.7	0.5	1.8	3.2	3.2
Primary income balance	bill. CZK	-261	-180	-251	-285	-269	-241	-248	-259	-287	-315

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

			201	2			201	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Estimate	Forecast	Forecast	Forecast	Forecast
Gross domestic product	bill. CZK	903	965	966	1006	893	966	985	1020
	growth in %	1.4	-0.3	-0.7	-0.5	-1.2	0.1	1.9	1.4
Private consumption	bill. CZK	458	480	491	498	455	480	494	503
	growth in %	-0.7	-1.2	-0.7	-2.1	-0.6	-0.1	0.7	1.1
Government consumption	bill. CZK	182	193	192	228	184	195	193	227
	growth in %	0.0	-0.3	0.7	0.5	1.0	1.0	0.1	-0.3
Gross capital formation	bill. CZK	198	240	239	244	185	238	254	250
	growth in %	-1.1	-0.2	-9.3	1.5	-6.7	-0.6	6.5	2.6
-Gross fixed capital formation	bill. CZK	206	229	230	254	208	230	233	258
	growth in %	2.3	1.7	-1.9	-0.8	1.0	0.6	1.3	1.4
-Change in stocks and valuables	bill. CZK	-8	11	8	-11	-23	8	21	-8
External balance	bill. CZK	66	52	44	37	70	53	44	40
<ul><li>Exports of goods and services</li></ul>	bill. CZK	754	756	729	766	784	779	751	792
	growth in %	11.4	7.3	7.5	5.3	3.9	3.0	3.0	3.5
-Imports of goods and services	bill. CZK	688	704	685	729	714	726	706	753
	growth in %	9.4	7.2	4.7	5.3	3.7	3.1	3.2	3.2

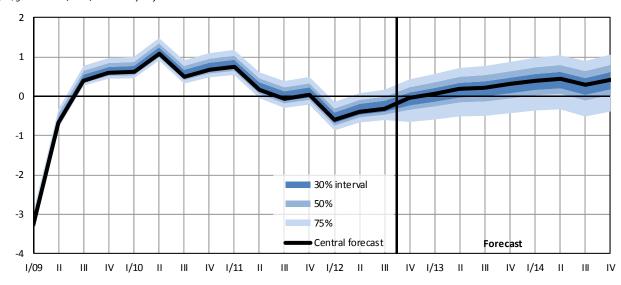
### Graph C.1.1: Gross Domestic Product (real)

chained volumes, bill. CZK in const. prices of 2005, seasonally adjusted



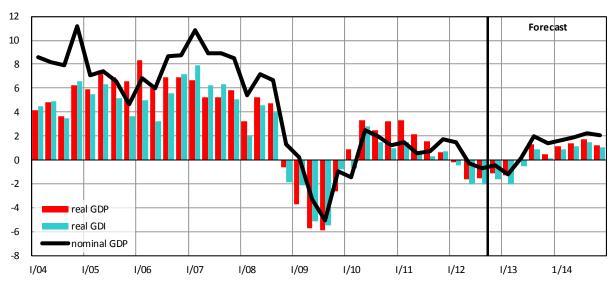
Graph C.1.2: Gross Domestic Product (real)

QoQ growth rate, in %, seasonally adjusted



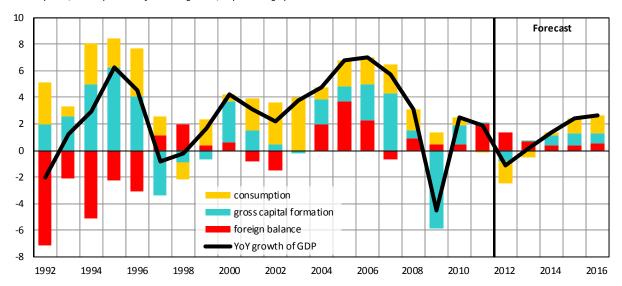
**Graph C.1.3:** Gross Domestic Product and Real Gross Domestic Income

YoY growth rate, in %



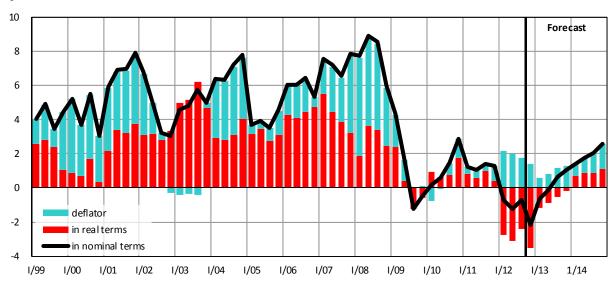
Graph C.1.4: Gross Domestic Product – contributions to YoY growth

in constant prices, decomposition of the YoY growth, in percentage points



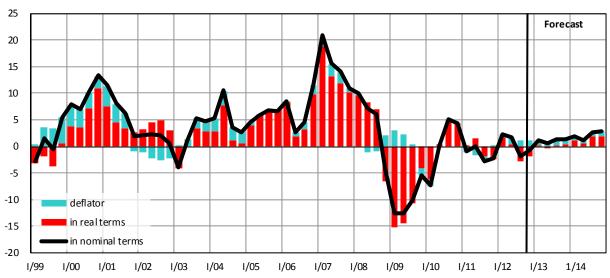
Graph C.1.5: Private Consumption (incl. NPISH)

YoY growth rate, in %



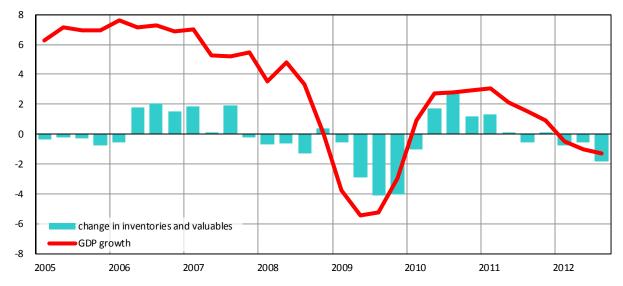
**Graph C.1.6:** Gross Fixed Capital Formation

YoY growth rate, in %



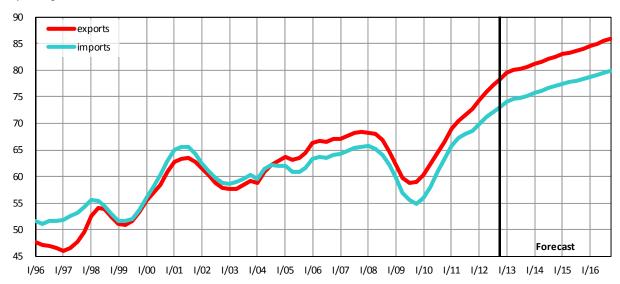
Graph C.1.7: Change in Inventories and Valuables (real)

seasonally adjusted, contributions to YoY growth of GDP in p.p.



Graph C.1.8: Ratio of Exports and Imports of Goods and Services to GDP (nominal)

yearly moving sums, in %



Graph C.1.9: GDP - Income Structure

yearly moving sums, in %

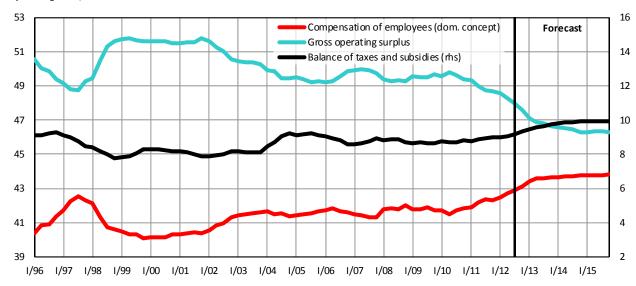


Table C.1.5: **GDP by Type of Income** – yearly

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
							Estimate	Forecast	Forecast	Outlook	Outlook
GDP	bill. CZK	3663	3848	3759	3800	3841	3840	3863	3939	4086	4238
	growth in %	9.2	5.1	-2.3	1.1	1.1	0.0	0.6	2.0	3.7	3.7
Balance of taxes and subsidies	bill. CZK	327	335	325	334	345	358	375	392	404	417
	growth in %	13.9	2.5	-3.1	2.8	3.1	3.9	4.9	4.4	3.2	3.2
-Taxes on production and imports	bill. CZK	407	419	425	434	453	466	485	502	516	530
	growth in %	12.0	2.9	1.4	2.1	4.3	3.0	4.0	3.6	2.7	2.7
-Subsidies on production	bill. CZK	80	84	100	100	108	108	109	110	111	113
	growth in %	4.8	4.4	19.5	-0.4	8.6	0.1	1.0	1.0	1.0	1.0
Compensation of employees	bill. CZK	1513	1617	1567	1589	1626	1656	1687	1724	1791	1864
	growth in %	8.6	6.8	-3.0	1.4	2.3	1.9	1.8	2.2	3.9	4.1
<ul><li>Wages and salaries</li></ul>	bill. CZK	1140	1226	1201	1209	1235	1257	1281	1326	1377	1432
	growth in %	8.3	7.5	-2.1	0.7	2.2	1.7	1.9	3.5	3.8	4.0
-Social security contributions	bill. CZK	373	390	367	380	391	400	406	398	414	431
	growth in %	9.4	4.7	-6.1	3.7	2.8	2.3	1.5	-2.0	4.1	4.2
Gross operating surplus	bill. CZK	1822	1896	1866	1876	1871	1825	1801	1824	1891	1957
	growth in %	9.0	4.1	-1.6	0.5	-0.3	-2.4	-1.3	1.3	3.7	3.5
<ul><li>Consumption of capital</li></ul>	bill. CZK	644	680	710	720	733	755	770	787	811	835
	growth in %	6.8	5.6	4.4	1.5	1.8	3.0	2.0	2.2	3.0	3.0
<ul><li>Net operating surplus</li></ul>	bill. CZK	1178	1216	1156	1156	1138	1070	1031	1036	1080	1122
	growth in %	10.3	3.2	-4.9	-0.1	-1.6	-5.9	-3.7	0.6	4.2	3.8

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

			201	2			201	.3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Estimate	Forecast	Forecast	Forecast	Forecast
GDP	bill. CZK	903	965	966	1006	893	966	985	1020
	growth in %	1.4	-0.3	-0.7	-0.5	-1.2	0.1	1.9	1.4
Balance of taxes and subsidies	bill. CZK	77	93	102	86	81	98	107	91
	growth in %	1.1	2.3	5.8	6.0	5.0	4.7	4.5	5.4
Compensation of employees	bill. CZK	399	409	407	442	405	416	414	451
	growth in %	3.1	1.5	0.9	1.9	1.7	1.8	1.6	2.2
-Wages and salaries	bill. CZK	301	310	309	337	306	316	315	345
	growth in %	3.0	1.4	0.6	1.9	1.7	1.8	2.0	2.2
-Social security contributions	bill. CZK	98	99	98	104	99	101	99	107
	growth in %	3.4	1.8	2.2	1.9	1.7	1.8	0.4	2.2
Gross operating surplus	bill. CZK	428	462	457	478	407	452	464	478
	growth in %	0.0	-2.3	-3.4	-3.7	-4.9	-2.3	1.6	-0.1

## **C.2** Prices

Sources: CZSO, Eurostat, MoF estimates

Table C.2.1: Prices - yearly

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
							Estimate	Forecast	Forecast	Outlook	Outlook
Consumer Price Index											
average of a year	average 2005=100	105.4	112.1	113.3	115.0	117.2	121.0	123.6	125.9	128.4	129.9
	growth in %	2.8	6.3	1.0	1.5	1.9	3.3	2.1	1.8	2.0	1.1
December	average 2005=100	107.9	111.8	112.9	115.5	118.3	121.1	123.9	126.5	129.0	130.7
	growth in %	5.4	3.6	1.0	2.3	2.4	2.4	2.3	2.1	2.0	1.3
-of which contribution of											
administrative measures 1)	percentage points	2.2	4.3	1.0	1.6	1.2	2.2	1.7	1.0	0.8	-0.1
market increase	percentage points	3.3	-0.7	0.0	0.7	1.2	0.1	0.6	1.2	1.2	1.4
HICP	average 2005=100	105.1	111.7	112.4	113.7	116.2	120.3	123.0	125.3	127.9	129.4
	growth in %	3.0	6.3	0.6	1.2	2.1	3.5	2.2	1.9	2.1	1.2
Offering prices of flats	average 2005=100	131.6	162.4	157.9	151.6	144.4	145.1				
	growth in %	20.8	23.4	-2.8	-4.0	-4.8	0.5				•
Deflators											
GDP	average 2005=100	103.9	105.9	108.3	106.8	106.0	107.1	107.6	108.3	109.6	110.8
	growth in %	3.3	1.9	2.3	-1.4	-0.8	1.1	0.5	0.6	1.3	1.1
Domestic final use	average 2005=100	105.2	108.4	109.7	109.6	110.0	111.5	112.6	113.5	115.0	116.1
	growth in %	2.8	3.1	1.2	-0.1	0.3	1.4	1.0	0.8	1.3	1.0
Consumption of households	average 2005=100	104.5	109.5	110.3	110.6	111.2	113.2	114.3	115.5	117.4	118.7
	growth in %	2.9	4.8	0.8	0.3	0.5	1.8	1.0	1.1	1.6	1.1
Consumption of government	average 2005=100	108.9	112.6	115.4	114.6	115.5	116.8	118.4	118.9	120.6	121.6
	growth in %	4.1	3.4	2.5	-0.7	0.7	1.2	1.4	0.4	1.4	0.9
Fixed capital formation	average 2005=100	102.7	102.8	103.7	103.5	102.6	103.6	104.6	105.4	106.3	107.0
	growth in %	1.6	0.1	1.0	-0.3	-0.9	1.0	1.0	0.8	0.8	0.7
Exports of goods and services	average 2005=100	98.3	93.9	94.1	92.9	93.7	96.6	97.0	97.5	98.2	98.8
	growth in %	0.1	-4.5	0.3	-1.3	0.9	3.2	0.4	0.5	0.7	0.6
Imports of goods and services	average 2005=100	99.9	96.8	95.2	95.8	98.2	101.9	102.9	103.8	104.5	104.9
	growth in %	-0.7	-3.1	-1.7	0.7	2.5	3.8	1.0	0.8	0.7	0.5
Terms of trade	average 2005=100	98.4	97.0	98.9	96.9	95.4	94.8	94.2	94.0	94.0	94.1
	growth in %	0.8	-1.4	2.0	-2.0	-1.6	-0.6	-0.6	-0.3	0.0	0.2

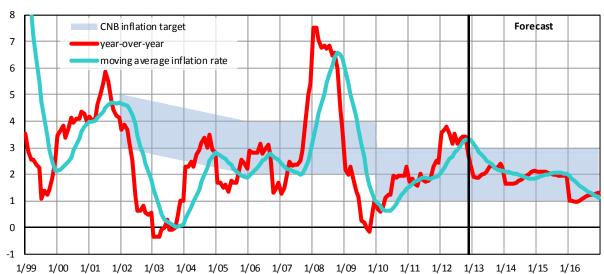
Note: The outlook for 2016 is in line with current legislation, assuming VAT rates unification at 17.5% effective from January 1, 2016 <sup>1)</sup> The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.

Table C.2.2: Prices – quarterly

			201	.2			201	.3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estimate	Forecast	Forecast	Forecast	Forecast
Consumer Price Index	average 2005=100	120.7	121.1	121.1	121.1	123.0	123.6	123.9	124.0
	growth in %	3.7	3.4	3.3	2.8	1.9	2.0	2.3	2.3
contr. of administrative measur	es percentage points	2.6	2.6	2.4	2.3	1.8	1.8	1.8	1.8
contribution of market increase	percentage points	1.1	0.8	0.9	0.5	0.1	0.3	0.5	0.6
HICP	average 2005=100	119.9	120.4	120.4	120.5	122.3	123.0	123.2	123.4
	growth in %	4.0	3.8	3.4	3.0	2.0	2.1	2.3	2.4
Offering prices of flats	average 2005=100	143.7	146.1	144.9	145.7				
	growth in %	-2.4	1.2	1.0	2.5				
GDP deflator	average 2005=100	106.0	107.0	107.1	108.3	106.1	107.2	107.7	109.3
	growth in %	1.6	1.4	0.9	0.6	0.1	0.2	0.6	0.9
Domestic final use deflator	average 2005=100	110.6	111.4	111.4	112.5	111.6	112.2	112.5	113.9
	growth in %	1.7	1.6	1.3	1.1	0.9	0.7	1.0	1.2
Terms of trade	average 2005=100	94.5	94.8	94.9	95.1	93.6	94.2	94.4	94.7
	growth in %	-0.3	-0.5	-0.6	-0.8	-1.0	-0.6	-0.5	-0.4

**Graph C.2.1: Consumer Prices** 

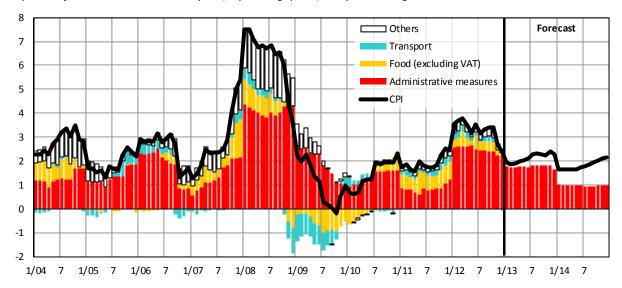
YoY growth rate, in %



 $Note: The\ outlook\ for\ 2016\ is\ in\ line\ with\ current\ legislation,\ assuming\ VAT\ rates\ unification\ at\ 17.5\%\ effective\ from\ January\ 1,\ 2016\ and\ the property of the propert$ 

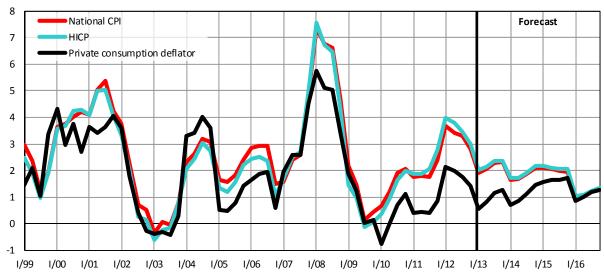
#### **Graph C.2.2: Consumer Prices**

decomposition of the YoY increase in consumer prices, in percentage points, Transport excluding administrative measures and excises



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

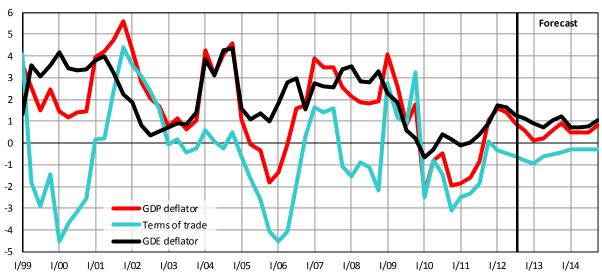
YoY increases, in %



 $Note: The\ outlook\ for\ 2016\ is\ in\ line\ with\ current\ legislation,\ assuming\ VAT\ rates\ unification\ at\ 17.5\%\ effective\ from\ January\ 1,\ 2016\ and\ 17.5\%\ effective\ from\ 17.5\%\ effe$ 

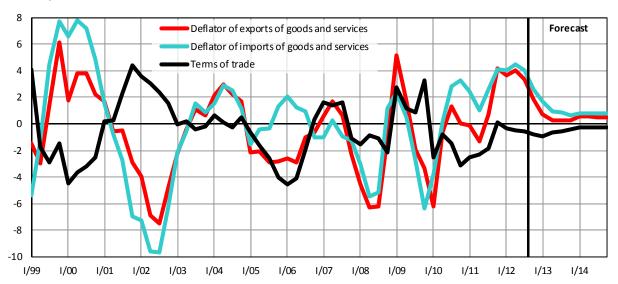
Graph C.2.4: GDP Deflator

YoY indices of final domestic use deflator and terms of trade, in %



### Graph C.2.5: Terms of Trade

YoY increases, in %



#### **Labour Market C.3**

Sources: CZSO, Ministry of Industry and Trade, Ministry of Labour and Social Affairs, MoF estimates

Table C.3.1: **Employment** – yearly

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
		2007	2008	2009	2010	2011		Forecast		Outlook	Outlook
Labour Force Survey							LStilliate	TOTECUSE	TOTECUSE	Outlook	Outlook
Employment	av. in thous.persons	4922	5002	4934	4885	4872	4892	4894	4891	4897	4905
Employment	growth in %	1.9	1.6	-1.4	-1.0	0.4	0.4	0.0	0.0	0.1	0.2
-employees	av. in thous.persons	4125	4196	4107	4019	3993	3990	3987	3982	3984	3990
-employees	growth in %	1.9	1.7	-2.1	-2.1	0.0	-0.1	-0.1	-0.1	0.1	0.1
– enterpreneurs and	av. in thous.persons	797	807	827	866	880	902	906	909	913	915
self-employed	growth in %	2.2	1.2	2.5	4.7	2.0	2.6	0.4	0.3	0.3	0.3
	-					***************************************					
Unemployment	av. in thous.persons	276	230	352	384	351	362	383	390	374	343
Unemployment rate	average in per cent	5.3	4.4	6.7	7.3	6.7	6.9	7.3	7.4	7.1	6.5
Labour force	av. in thous.persons	5198	5232	5286	5269	5223	5254	5277	5282	5271	5248
	growth in %	0.0	0.7	1.0	-0.3	-0.2	0.6	0.4	0.1	-0.2	-0.4
Population aged 15-64	av. in thous.persons	7347	7410	7431	7399	7295	7231	7174	7124	7074	7024
	growth in %	0.5	0.9	0.3	-0.4	-0.7	-0.9	-0.8	-0.7	-0.7	-0.7
Employment/Pop. 15-64	average in per cent	67.0	67.5	66.4	66.0	66.8	67.7	68.2	68.7	69.2	69.8
Employment rate 15-64 <sup>1)</sup>	average in per cent	66.1	66.6	65.4	65.0	65.7	66.6	67.1	67.5	68.1	68.7
Labour force/Pop. 15-64	average in per cent	70.8	70.6	71.1	71.2	71.6	72.7	73.6	74.1	74.5	74.7
Participation rate 15-64 <sup>2)</sup>	average in per cent	69.8	69.7	70.1	70.2	70.5	71.6	72.4	73.0	73.3	73.5
SNA											
Employment (domestic concept	av. in thous.persons	5086	5204	5111	5059	5072	5090	5090	5087	5093	5102
	growth in %	2.1	2.3	-1.8	-1.0	0.3	0.4	0.0	0.0	0.1	0.2
Hours worked	bill. hours	9.12	9.37	9.09	9.16	9.28	9.10	9.07	9.06	9.06	9.06
	growth in %	1.3	2.7	-3.0	0.8	1.3	-1.9	-0.3	-0.1	-0.1	0.0
Hours worked / employment	hours	1793	1800	1778	1811	1830	1788	1782	1781	1778	1776
	growth in %	-0.8	0.4	-1.2	1.9	1.0	-2.3	-0.3	0.0	-0.2	-0.1
Registered unemployment											
Unemployment	av. in thous.persons	392.8	324.6	465.6	528.7	507.8	504.7	557	558	531	485

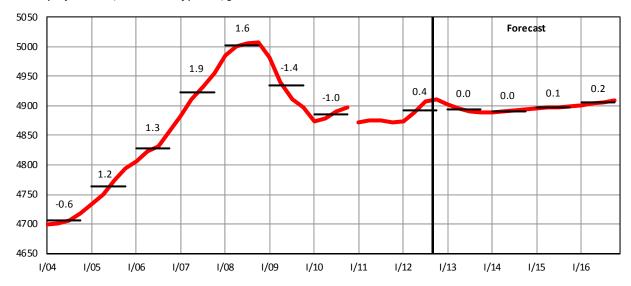
The indicator does not include employment over 64 years.
 The indicator does not include labour force over 64 years.

Table C.3.2: **Employment** – quarterly

			201	2			201	.3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estimate	Forecast	Forecast	Forecast	Forecast
Labour Force Survey									
Employment	av. in thous. persons	4835	4888	4921	4926	4863	4895	4903	4914
	YoY growth in %	0.1	0.2	0.5	0.8	0.6	0.1	-0.4	-0.2
	QoQ growth in %	0.0	0.3	0.4	0.1	-0.2	-0.1	-0.1	0.0
-employees	av. in thous. persons	3937	3980	4027	4016	3957	3983	4005	4004
	growth in %	-0.6	-0.6	0.3	0.6	0.5	0.1	-0.5	-0.3
-entrepreneurs and	av. in thous. persons	898	908	894	910	906	912	898	910
self-employed	growth in %	3.1	4.3	1.4	1.6	0.9	0.5	0.5	0.0
Unemployment	av. in thous.persons	369	351	368	360	390	372	390	380
Unemployment rate	average in per cent	7.1	6.7	7.0	6.8	7.4	7.1	7.4	7.2
Labour force	av. in thous. persons	5204	5239	5288	5286	5253	5267	5293	5294
	growth in %	0.0	0.2	1.0	1.2	0.9	0.5	0.1	0.2
Population aged 15–64	av. in thous. persons	7255	7238	7222	7208	7194	7181	7168	7154
	growth in %	-0.9	-0.9	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7
Employment/Pop. 15-64	average in per cent	66.6	67.5	68.1	68.3	67.6	68.2	68.4	68.7
	increase over a year	0.6	0.8	1.0	1.1	1.0	0.6	0.3	0.3
Employment rate 15–64	average in per cent	65.6	66.5	67.1	67.3	66.5	67.1	67.3	67.6
	increase over a year	0.6	0.8	0.9	1.2	0.9	0.6	0.2	0.3
Labour force/Pop. 15-64	average in per cent	71.7	72.4	73.2	73.3	73.0	73.3	73.8	74.0
	increase over a year	0.6	0.8	1.4	1.5	1.3	1.0	0.6	0.7
Participation rate 15-64	average in per cent	70.7	71.3	72.1	72.2	71.9	72.2	72.7	72.9
	increase over a year	0.6	0.8	1.3	1.5	1.2	0.9	0.6	0.6
<u>SNA</u>									
Employment (domestic concept)	av. in thous. persons	5022	5085	5127	5127	5049	5090	5106	5115
	growth in %	0.2	0.3	0.3	0.7	0.5	0.1	-0.4	-0.2
Hours worked	bill. hours	2.41	2.38	2.06	2.26	2.40	2.37	2.05	2.25
	growth in %	-0.4	-2.9	-3.4	-1.2	-0.5	-0.3	-0.4	-0.2
Hours worked / employment	hours	480	467	401	440	475	466	401	441
	growth in %	-0.6	-3.1	-3.7	-1.9	-1.0	-0.4	0.0	0.1
Registered unemployment									
Unemployment	av. in thous. persons	531	494	486	508	577	557	547	548

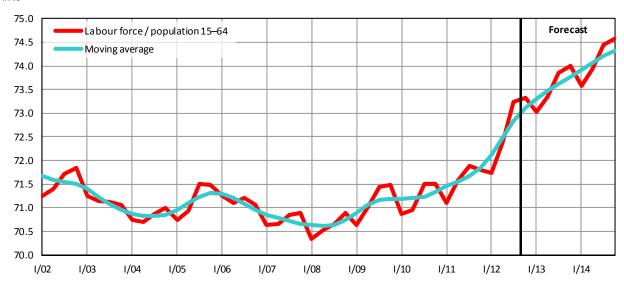
### Graph C.3.2: Employment (LFS)

seasonally adjusted data, in thousands of persons, growth rates in %



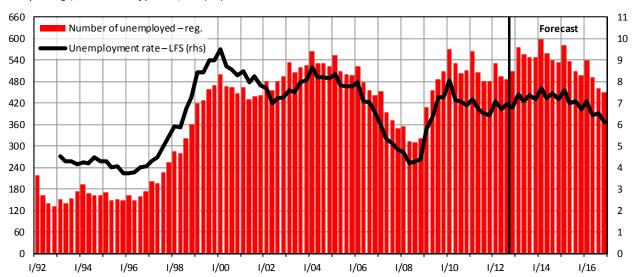
Graph C.3.3: Ratio of Labour Force to Population Aged 15–64

in %



Graph C.3.4: Unemployment

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



**Graph C.3.5: Economic Output and Unemployment** 

YoY increase of real GDP in %. Change in unemployment in thousands of persons

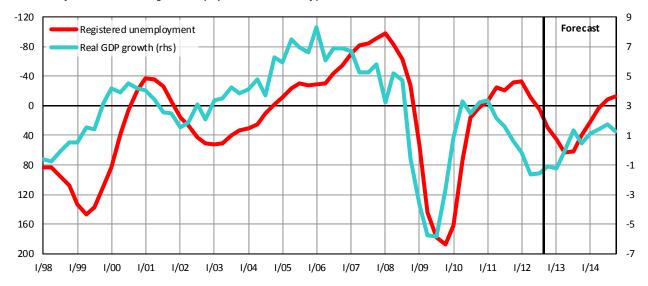
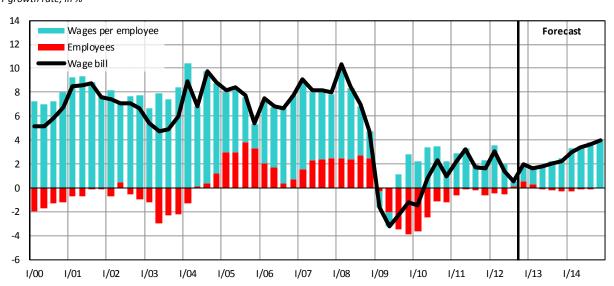


Table C.3.3: Labour Market – analytical indicators

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
									Estimate	Forecast	Forecast
Compensation per employee											
-nominal	growth in %	3.8	6.0	6.3	4.2	-0.6	3.6	2.7	2.0	1.9	2.3
-real	growth in %	1.9	3.4	3.3	-2.0	-1.7	2.1	0.8	-1.3	-0.2	0.5
Wage bill	growth in %	7.3	7.2	8.3	7.5	-2.1	0.7	2.2	1.7	1.9	3.5
Average monthly wage 1)											
-nominal	CZK	18 336	19 536	20 947	22 592	23 353	23 858	24 433	25 000	25 500	26 400
	growth in %	5.0	6.5	7.2	7.9	3.4	2.2	2.4	2.2	2.0	3.6
-real	CZK 2005	18 336	19 053	19 865	20 147	20 610	20 753	20 850	20 600	20 600	21 000
	growth in %	3.1	3.9	4.3	1.4	2.3	0.7	0.5	-1.1	-0.1	1.8
Labour productivity	growth in %	4.6	5.6	3.5	0.8	-2.8	3.5	1.6	-1.5	0.1	1.4
Unit labour costs 2)	growth in %	-0.7	0.4	2.6	3.4	2.2	0.0	1.1	3.5	1.8	0.9
Compensations of employees / GDP	%	41.7	41.6	41.3	42.0	41.7	41.8	42.3	43.1	43.7	43.8

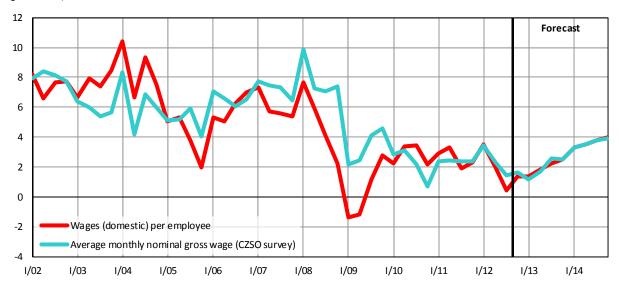
<sup>1)</sup> New time series: average wage is derived from full-time-equivalent employers in the entire economy.
2) Ratio of nominal compensation per employee to real productivity of labour.

Graph C.3.6: Wage Bill - nominal, domestic concept YoY growth rate, in %



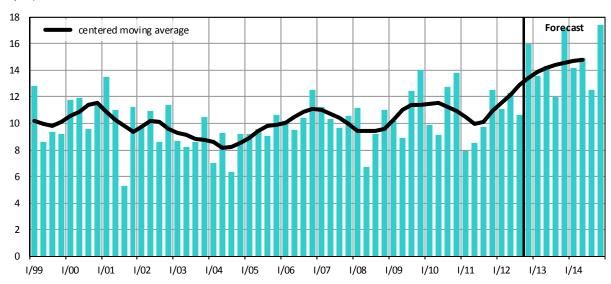
### Graph C.3.7: Average Nominal Wage

YoY growth rate, in %



**Graph C.3.8: Gross Savings Rate of Households** 

in % of disposable income



 $\label{thm:come} \mbox{Table C.3.4: } \mbox{\bf Income and Expenditures of Households} - \mbox{\it yearly} \\ \mbox{\it SNA methodology} - \mbox{\it national concept} \\$ 

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
		***************************************							Estimate	Forecast	Forecast
<u>Current income</u>											
Compensation of employees	bill.CZK	1302	1397	1510	1597	1557	1589	1627	1661	1693	1729
	growth in %	6.5	7.3	8.1	5.8	-2.5	2.1	2.4	2.1	1.9	2.1
Gross operating surplus	bill.CZK	515	538	570	587	616	629	606	602	602	608
and mixed income	growth in %	1.3	4.4	6.0	3.0	5.0	2.0	-3.6	-0.6	0.0	1.0
Property income received	bill.CZK	135	150	155	167	155	144	141	152	157	162
	growth in %	13.0	11.5	3.1	8.2	-7.3	-7.0	-2.6	8.3	3.0	3.0
Social benefits not-in-kind	bill.CZK	386	422	471	495	536	542	554	566	584	597
	growth in %	5.1	9.1	11.6	5.1	8.4	1.1	2.1	2.3	3.1	2.3
Other current transfers received	bill.CZK	104	113	122	137	137	135	135	138	143	149
	growth in %	4.5	8.9	7.8	11.8	0.5	-1.8	-0.3	2.5	4.0	4.0
Current expenditure											
Property income paid	bill.CZK	19	21	26	30	18	22	21	21	21	21
	growth in %	-6.6	10.6	26.5	12.8	-38.1	20.5	-3.4	-2.1	-1.0	0.0
Curr. taxes on income and property	bill.CZK	144	144	160	146	141	126	148	144	147	150
	growth in %	1.7	0.4	11.0	-8.6	-3.7	-10.6	17.3	-2.5	1.9	2.2
Social contributions	bill.CZK	515	564	618	638	605	622	640	656	672	691
	growth in %	6.5	9.6	9.5	3.4	-5.3	2.8	2.9	2.5	2.5	2.7
Other current transfers paid	bill.CZK	109	119	132	143	140	140	141	146	149	152
	growth in %	4.7	9.4	11.0	8.3	-2.1	0.0	0.2	3.7	2.0	2.0
Gross disposable income	bill.CZK	1657	1771	1891	2025	2097	2128	2112	2153	2190	2232
	growth in %	5.6	6.9	6.8	7.1	3.5	1.5	-0.8	1.9	1.7	1.9
Final consumption	bill.CZK	1516	1604	1720	1857	1874	1899	1922	1898	1904	1941
	growth in %	3.8	5.9	7.2	8.0	1.0	1.3	1.2	-1.2	0.3	2.0
Change in share in pension funds	bill.CZK	19	23	26	24	17	15	16	17	28	40
Gross savings	bill.CZK	160	190	197	193	240	244	206	271	314	331
Capital transfers											
(income (-) / expenditure (+))	bill.CZK	-31	-31	-36	-29	-28	-33	-29	-25	-22	-22
Gross capital formation	bill.CZK	158	178	203	209	201	221	194	183	176	169
	growth in %	13.2	12.4	14.2	3.0	-3.8	10.1	-12.3	-5.7	-4.0	-4.0
Change in financial assets and liab.	bill.CZK	34	43	30	12	66	55	40	112	160	184
Real disposable income	growth in %	4.7	5.3	3.7	2.2	2.7	1.2	-1.3	0.1	0.8	0.8
Gross savings rate	%	9.7	10.7	10.4	9.5	11.4	11.5	9.8	12.6	14.3	14.8

## **C.4** External Relations

Sources: CNB, CZSO, Eurostat, MoF estimates

Table C.4.1: Balance of Payments – yearly

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Forecast	
Balance of goods and services	bill.CZK	86	108	106	100	161	129	160	200	208	215
balance of trade 1)	bill.CZK	49	59	47	26	87	54	94	151	171	184
of which mineral fuels (SITC 3) <sup>2)</sup>	bill.CZK	-111	-139	-124	-167	-107	-138	-177	-187	-178	-167
balance of services	bill.CZK	38	49	59	74	74	75	66	49	37	30
Balance of income	bill.CZK	-128	-165	-255	-175	-250	-285	-272	-255	-262	-273
– compensation of employees	bill.CZK	4	3	-4	-19	-11	-1	-3	2	3	3
-investment income	bill.CZK	-132	-168	-251	-156	-239	-284	-269	-258	-266	-276
Balance of transfers	bill.CZK	11	-11	-8	-6	-1	9	2	-7	4	10
Current account	bill.CZK	-31	-67	-157	-81	-89	-147	-109	-62	-50	-48
Capital account	bill.CZK	6	10	22	27	51	33	15	19	21	23
Financial account	bill.CZK	160	100	125	92	143	174	88			
-foreign direct investments	bill.CZK	280	90	179	36	38	95	75			
-portfolio investments	bill.CZK	-81	-27	-57	-9	159	150	6			
- other investments	bill.CZK	-38	36	3	65	-53	-71	7			
Change in reserves	bill.CZK	93	2	16	40	61	41	-17		•	•
International investment position	bill.CZK	-837	-1084	-1418	-1545	-1728	-1830	-1895			
Gross external debt	bill.CZK	1144	1196	1377	1630	1639	1767	1873	1889	1906	1906
Balance of goods and services / GDP	per cent	2.8	3.2	2.9	2.6	4.3	3.4	4.2	5.2	5.4	5.4
Current account / GDP	per cent	-1.0	-2.0	-4.3	-2.1	-2.4	-3.9	-2.8	-1.6	-1.3	-1.2
Financial account / GDP	per cent	5.1	3.0	3.4	2.4	3.8	4.6	2.3		•	
IIP / GDP	per cent	-26.9	-32.3	-38.7	-40.2	-46.0	-48.2	-49.3			
Gross external debt / GDP 3)	per cent	36.7	35.7	37.6	42.3	43.6	46.5	48.8	49	49	48

<sup>1)</sup> Imports – fob since May 2004
2) Imports – cif
3) Ratio of external debt (in CZK) at the end of period to GDP (in CZK)

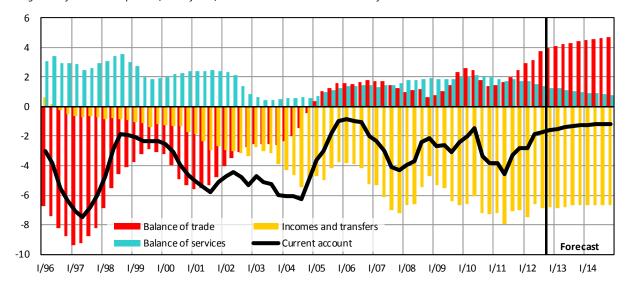
Table C.4.2: Balance of Payments – quarterly

moving sums of the latest 4 quarters

			201	2			201	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estimate	Forecast	Forecast	Forecast	Forecast
Balance of goods and services	bill.CZK	181	182	198	200	204	205	205	208
- balance of trade	bill.CZK	114	122	145	151	157	161	164	171
of which mineral fuels (SITC 3)	bill.CZK	-182	-180	-182	-187	-189	-186	-182	-178
<ul> <li>balance of services</li> </ul>	bill.CZK	66	59	54	49	47	44	41	37
Balance of income	bill.CZK	-290	-244	-252	-255	-257	-258	-260	-262
-compensation of employees	bill.CZK	-1	1	4	2	3	4	4	3
-investment income	bill.CZK	-289	-246	-256	-258	-260	-262	-264	-266
Balance of transfers	bill.CZK	0	-9	-12	-7	-7	-2	4	4
Current account	bill.CZK	-109	-72	-65	-62	-60	-54	-51	-50
Capital account	bill.CZK	15	15	18	19	19	20	20	21
Financial account	bill.CZK	133	51	80					
-foreign direct investments	bill.CZK	94	108	157					
<ul><li>portfolio investments</li></ul>	bill.CZK	71	57	87					
- other investments	bill.CZK	-31	-114	-163					
Change in reserves	bill.CZK	42	4	16					
International investment position	bill.CZK	-1980	-1975	-2034					
Gross external debt	bill.CZK	1916	1926	1887	1889	1873	1881	1906	1906

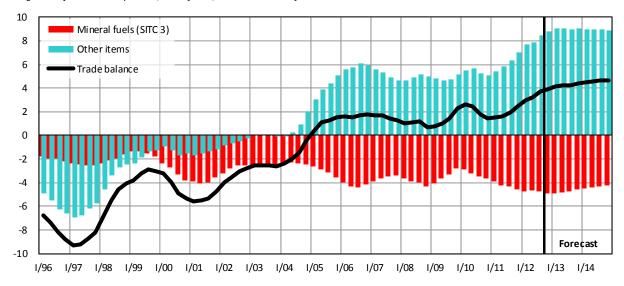
Graph C.4.1: Current Account

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



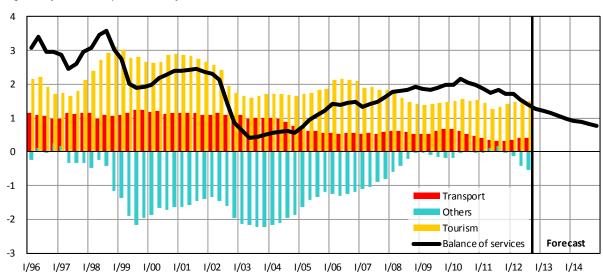
Graph C.4.2: Balance of Trade (exports fob, imports cif)

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



Graph C.4.3: Balance of Services

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



Graph C.4.4: Balance of Income

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



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

		2005	2006	2007	2000	2000	2010	2011	2012	2012	2014
		2005	2006	2007	2008	2009	2010	2011	2012	2013 Forecast	2014
									Estimate	rorecust	rorecust
GDP 1)	average of 2005=100	100.0	104.3	108.9	110.5	106.0	109.6	112.6	114	114	116
	growth in %	2.2	4.3	4.4	1.5	-4.1	3.4	2.7	0.9	0.6	1.4
Import intensity 2)	average of 2005=100	100.0	107.8	110.1	110.0	103.0	111.1	115.9	116	117	119
	growth in %	5.6	7.8	2.1	-0.1	-6.3	7.8	4.4	0.4	0.9	1.4
Export markets 3)	average of 2005=100	100.0	112.5	119.9	121.5	109.2	121.7	130.5	132	134	138
	growth in %	8.0	12.5	6.6	1.3	-10.2	11.5	7.2	1.3	1.5	2.8
Export performance	average of 2005=100	100.0	101.3	105.9	107.6	105.6	110.2	113.6	118	119	120
	growth in %	2.5	1.3	4.5	1.6	-1.8	4.4	3.1	3.4	1.4	1.0
Real exports	average of 2005=100	100.0	114.0	126.9	130.7	115.3	134.2	148.3	155	160	166
	growth in %	10.7	14.0	11.4	3.0	-11.8	16.4	10.5	4.7	3.0	3.8
1 / NEER	average of 2005=100	100.0	95.4	93.0	83.2	86.0	84.2	81.7	85	84	84
	growth in %	-5.6	-4.6	-2.6	-10.5	3.4	-2.2	-2.9	3.6	-0.6	-0.5
Prices on foreign markets	average of 2005=100	100.0	103.1	106.1	112.8	108.8	109.5	113.8	113	114	115
	growth in %	3.1	3.1	2.9	6.3	-3.6	0.7	3.9	-0.5	0.7	1.0
Exports deflator	average of 2005=100	100.0	98.4	98.6	93.8	93.6	92.2	93.0	96	96	96
	growth in %	-2.6	-1.6	0.2	-4.9	-0.3	-1.5	0.9	3.0	0.1	0.5
Nominal exports	average of 2005=100	100.0	112.2	125.1	122.7	107.7	123.7	138.0	149	153	160
	growth in %	7.7	12.2	11.6	-2.0	-12.2	14.9	11.6	7.9	3.0	4.3

Weighted average of GDP of the seven most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France and Italy.

Index of ratio of real imports of goods to real GDP.

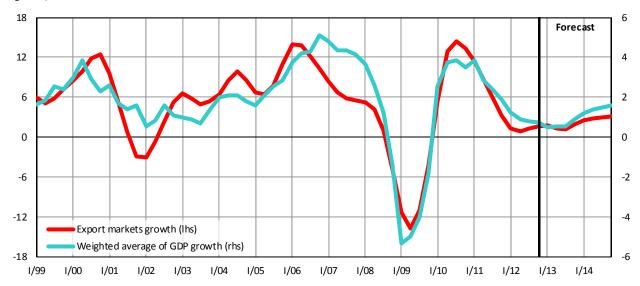
Weighted average of imports of goods of the main partners.

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

			201	.2			201	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estimate	Forecast	Forecast	Forecast	Forecast
GDP	average of 2005=100	113.3	113.5	113.8	114	114	114	114	115
	growth in %	1.2	0.9	0.8	0.7	0.5	0.5	0.5	0.9
Import intensity	average of 2005=100	115.5	116.3	116.8	117	117	117	118	118
	growth in %	0.1	0.0	0.5	0.9	1.2	0.7	0.7	1.0
Export markets	average of 2005=100	130.9	132.0	132.9	133	133	134	135	135
	growth in %	1.3	0.9	1.3	1.6	1.7	1.3	1.2	1.8
Export performance	average of 2005=100	121.8	118.9	112.8	117	124	121	114	118
	growth in %	6.3	2.7	2.9	1.8	1.5	1.4	1.4	1.4
Real exports	average of 2005=100	159.4	157.0	149.9	155	165	161	154	160
	growth in %	7.7	3.7	4.2	3.4	3.2	2.7	2.7	3.3
1 / NEER	average of 2005=100	84.1	84.8	84.8	85	84	84	84	84
	growth in %	3.3	5.1	4.8	1.4	0.2	-0.8	-0.9	-1.1
Prices on foreign markets	average of 2005=100	113.3	113.2	112.7	114	113	114	114	115
	growth in %	0.4	-1.0	-1.5	0.0	0.2	0.8	0.9	1.0
Exports deflator	average of 2005=100	95.2	96.0	95.6	97	96	96	96	96
	growth in %	3.7	4.0	3.2	1.4	0.4	0.0	0.0	-0.1
Nominal exports	average of 2005=100	151.8	150.7	143.5	150	157	155	147	155
	growth in %	11.7	7.8	7.5	4.9	3.7	2.7	2.6	3.2

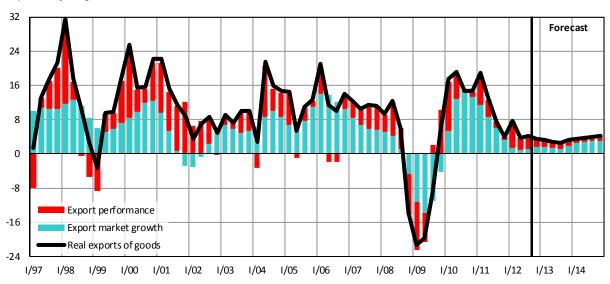
Graph C.4.5: GDP and Imports of Goods in Main Partner Countries

YoY growth, in %



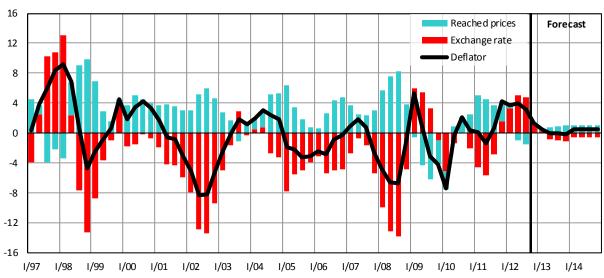
Graph C.4.6: Real Exports of Goods

decomposition of YoY growth, in %



Graph C.4.7: Deflator of Exports of Goods

decomposition of YoY growth, in %



# **C.5** International Comparisons

Sources: Eurostat, OECD, IMF, MoF estimates

Table C.5.1: GDP p.c. – using current purchasing power parities

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
									Forecast	
Slovenia PPS	19 700	20 700	22 100	22 700	20 300	20 500	21 000	20 800	20 700	21 200
EA12=100	79	79	80	83	79	77	77	75	74	75
Czech Republic PPS	17 800	18 900	20 700	20 200	19 400	19 500	20 200	20 300	20 700	21 300
EA12=100	72	73	75	74	75	73	74	74	74	75
Slovakia PPS	13 500	15 000	16 900	18 100	17 100	17 900	18 400	19 000	19 600	20 500
EA12=100	55	57	62	66	66	67	67	69	71	72
Portugal PPS	17 900	18 700	19 600	19 500	18 800	19 700	19 500	19 100	19 200	19 700
EA12=100	72	72	72	71	73	74	71	69	69	69
Greece PPS	20 400	21 800	22 500	23 100	22 100	21 400	20 100	19 100	18 500	18 900
EA12=100	82	84	82	84	86	80	73	69	67	67
Estonia PPS	13 800	15 600	17 500	17 200	14 700	15 500	16 900	17 500	18 400	19 400
EA12=100	56	60	64	63	57	58	62	64	66	68
Lithuania PPS	11 900	13 100	14 800	15 400	12 900	14 100	16 600	17 400	18 300	19 400
EA12=100	48	50	54	56	50	53	60	63	66	68
Poland PPS	11 500	12 300	13 600	14 100	14 200	15 400	16 300	16 900	17 500	18 300
EA12=100	46	47	50	51	55	58	60	61	63	64
Hungary PPS	14 200	14 900	15 400	16 000	15 300	15 900	16 500	16 500	16 900	17 400
EA12=100	57	57	56	58	59	59	60	60	61	61
Latvia PPS	10 800	12 200	13 900	14 100	12 000	12 300	14 700	15 700	16 600	17 600
EA12=100	44	47	50	51	47	46	54	57	60	62

Graph C.5.1: GDP p.c. – using current purchasing power parities  $\it EA12=100$ 

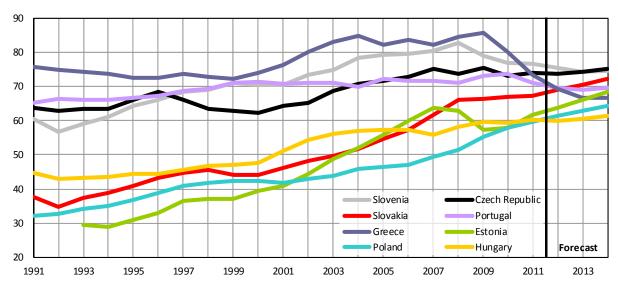
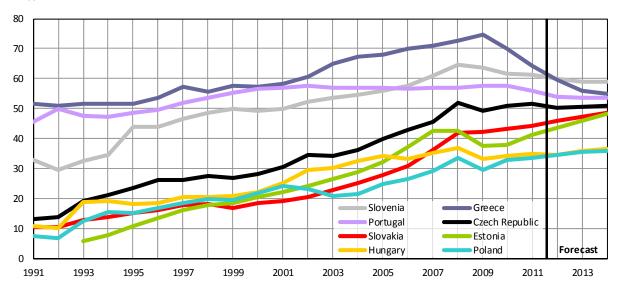


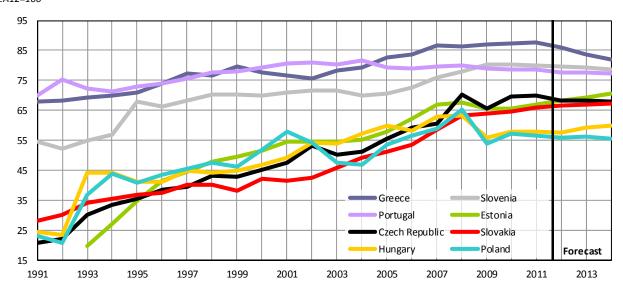
Table C.5.2: GDP p.c. – using current exchange rates

			2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Estimate	Forecast	Forecast
Slovenia		EUR	14 400	15 500	17 100	18 400	17 400	17 400	17 600	17 400	17 200	17 500
		EA12=100	56	58	61	65	63	62	61	60	59	59
	Comparative price level	EA12=100	71	73	76	78	80	80	80	80	79	79
Greece		EUR	17 400	18 700	19 900	20 800	20 500	19 600	18 500	17 300	16 300	16 300
		EA12=100	68	70	71	73	75	70	64	60	56	55
	Comparative price level	EA12=100	83	84	87	86	87	87	88	86	84	82
Portugal		EUR	14 600	15 200	16 000	16 200	15 800	16 200	16 100	15 600	15 700	16 000
		EA12=100	57	57	57	57	58	58	56	54	54	54
	Comparative price level	EA12=100	79	79	80	80	79	78	78	78	78	77
Czech Republic		EUR	10 200	11 500	12 800	14 800	13 500	14 300	14 900	14 600	14 800	15 200
		EA12=100	40	43	46	52	49	51	52	50	51	51
	Comparative price level	EA12=100	56	59	61	70	66	70	70	68	68	68
Slovakia		EUR	7 100	8 300	10 200	11900	11 600	12 100	12 700	13 300	13 800	14 500
		EA12=100	28	31	36	42	42	43	44	46	47	49
	Comparative price level	EA12=100	51	54	59	63	64	65	66	67	67	67
Estonia		EUR	8 300	10 000	12 000	12 100	10 300	10 700	11 900	12 600	13 400	14 400
		EA12=100	32	37	43	42	37	38	41	43	46	48
	Comparative price level	EA12=100	58	62	67	68	65	66	67	68	69	71
Lithuania		EUR	6 100	7 100	8 500	9 700	8 000	8 400	10 200	10 800	11 500	12 300
		EA12=100	24	27	30	34	29	30	35	37	39	41
	Comparative price level	EA12=100	50	53	56	61	58	57	58	59	60	61
Latvia		EUR	5 600	7 000	9 200	10 100	8 200	8 100	9 800	10 700		12 200
		EA12=100	22	26	33	35	30	29	34	37	39	41
	Comparative price level	EA12=100	50	56	65	69	64	62	64	65	66	66
Hungary		EUR	8 800	8 900	9 900	10 500	9 100	9 700	10 000	10 000	10 500	10 900
		EA12=100	34	33	35	37	33	34	35	35	36	37
	Comparative price level	EA12=100	60	58	63	63	56	58	58	58	59	60
Poland		EUR	6 400	7 100	8 200	9 500	8 100	9 300	9 700	10 000	10 400	10 700
		EA12=100	25	27	29	33	30	33	34	34	35	36
	Comparative price level	EA12=100	54	57	59	65	54	57	56	56	56	56

Graph C.5.2: **GDP p.c. – using current exchange rates** *EA12=100* 

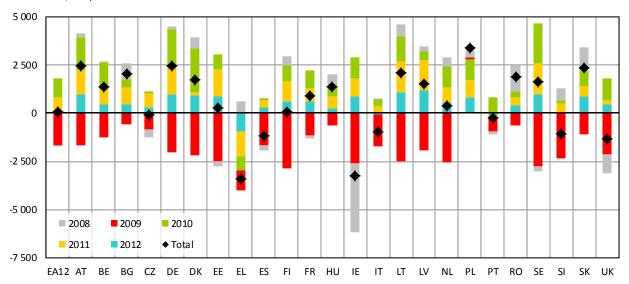


Graph C.5.3: Index of Comparative Price Level of GDP p.c.  $\it EA12=100$ 



Graph C.5.4: Impact of the crisis on GDP p.c. (using purchasing power parities)





external environment, fiscal policy, monetary policy and the financial sector, exchange rates, structural policies, demographic trends, position within the economic cycle, business cycle indicators, econom rates, structural policies, demographic trends, position within the economic cycle, business cycle indicators, economic output, prices, labour market, external relations, international comparisons, monitori

## Ministry of Finance of the Czech Republic

Financial Policy Department Letenska 15 118 10 Prague 1

http://www.mfcr.cz